

Guidelines on the Legislative Framework for **Civil Registration, Vital Statistics and Identity Management Systems**

Department of Economic and Social Affairs Statistics Division

Studies in Methods

Series F No. 123

Guidelines on the Legislative Framework for Civil Registration, Vital Statistics and Identity Management



United Nations New York, 2023

Department of Economic and Social Affairs

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Acknowledgements

The present publication was prepared by United Nations Statistics Division and Vital Strategies, with financial support from the Bloomberg Data for Health Initiative.

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Contents

page

v

		lgements	iii 1			
	luction					
I. Overview of civil registration, vital statistics and			_			
identity management systems.			5			
A. Introduction			5 6			
	В.	Concepts and definitions				
	C.	Principles of civil registration and national identity management	8			
		1. Principles of civil registration	9			
		2. Principles of national identity management	15			
	D.	Functions of civil registration and national identity management	17			
		1. Legal and administrative function	19			
		2. Statistical function.	20			
		3. Identity function	21			
	E.	Vital events	23			
	F.	Identity management and identity life cycle				
	G.	Interoperability	29			
	H.	Accountability and governance	33			
		1. Monitoring and inspection	33			
		2. Recourse and remedy	35			
II.	Human rights and civil registration, vital statistics and					
		identity management systems				
	Α.	Rights-based approach to legal frameworks for civil registration,				
		vital statistics and identity management	37			
	В.	Right to register vital events	40			
	C.	Human rights that may depend on the registration of vital events	41			
	D.	Protection of vulnerable populations	48			
III.		titutional arrangements for civil registration, vital statistics				
		d identity management systems	53			
		Centralized versus decentralized systems	53			
	В.	Single versus multiple lead agencies	54			
	C.	Ministry versus autonomous agency	56			
	D.	Power to issue regulations and to delegate authority	57			
	Е.	Role of the health sector	59			
		1. Informant function	60			
		2. Certification of cause of death	60			
	F.	Role of the police, medical and legal officers and emergency services	62			

page

H. Role of the courts 64 1. Amendments and corrections to civil registration and identity records. 64 2. Appeals 65 I. Inter-agency cooperation 65 J. Financial resources 67 IV. Legislative framework 69 A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions and administrative infrastructure 75 C. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration of birth 81 1. Registration of death 96 3. Registration of death 97 4. Registration of death 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management principles and life cycle 127 1. Identity management summary 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency		G.	Role of custodians of funeral, burial and cremation facilities	63		
identity records		H.				
2. Appeals 65 I. Inter-agency cooperation 65 J. Financial resources 67 IV. Legislative framework 69 A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration of birth 81 1. Registration of fetal death 96 3. Registration of death 97 4. Registration of marriage 115 5. Registration of amarriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management principles and life cycle 127 1. Identity management summary 136 2. Submission procedures 140 3. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 138 1. United statistics 141 3. C				64		
I. Inter-agency cooperation 65 J. Financial resources 67 IV. Legislative framework 69 A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration of birth 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of death 97 5. Registration of death 97 4. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar. 124 8. Fees 125 D. Identity management principles and life cycle 127 1. Identity management summary 137 2. Submission procedures 140 3. Udentity management summary 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Sub			•	65		
J. Financial resources 67 IV. Legislative framework 69 A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration of birth 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Dota protection and dissemination of vital statistics reports 142		I.		65		
IV. Legislative framework 69 A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission register summary 141 4. Data protection and privacy during transmission to		_				
A. Introduction 69 B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration of birth 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death. 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Fees 140 3. Submission frequency 141	IV.	,				
B. General provisions and administrative infrastructure 71 1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of death 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Oracity cond statistical information to the statistics authority 142			-			
1. General provisions 71 2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of death 97 4. Registration of dissolution of marriage or civil union 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 4. Vital statistics to be derived from civil registration data 141 2. Submission of vital statistics 143 4. Publication and d						
2. Civil registration, vital statistics and identity management infrastructure 75 C. Civil registration 81 1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of death 97 4. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Numission of statistical information to the statistics authority 142 3. Compilation of vital statistics 143 4. Public		р.	-			
C. Civil registration			2. Civil registration, vital statistics and identity management			
1. Registration of birth 81 2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of marriage 115 5. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Vital statistics 141 1. Vital statistics to be derived from civil registration data 141 2. Submission of statistical information to the statistics authority 142 3. Compilation of vital statistics 143 4. Publication and d		C				
2. Reporting of fetal death 96 3. Registration of death 97 4. Registration of marriage 115 5. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Vital statistics to be derived from civil registration data 141 7. Vital statistics on the dissemination of vital statistics reports 142 3. Compilation of vital statistics 143 4. Publication and dissemination of vital statistics reports 145 5. Vital statistics summary 145		C.				
3. Registration of death. 97 4. Registration of marriage. 115 5. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar. 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Vital statistics to be derived from civil registration data 141 1. Vital statistics to be derived from civil registration data 141 2. Submission of statistical information to the statistics authority 142 3. Compilation of vital statistics 143 4. Publication and dissemination of vital statistics reports 145 5. Vital statisti			-			
4. Registration of marriage 115 5. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar. 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 6. Submission of statistical information to the statistics authority 141 7. Vital statistics to be derived from civil registration data 141 1. Vital statistics authority 142 3. Compilation of vital statistics 143 4. Publication and dissemination of vital statistics reports 145 5. Vital statistics summary 145 6. Data protection, privacy and security						
5. Registration of dissolution of marriage or civil union. 119 6. Corrections and amendments to the record 121 7. Submission of local registrar records to national registrar. 124 8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees. 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency. 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 1. Vital statistics 141 2. Submission of statistical information to the statistics authority 141 3. Compilation of vital statistics 143 4. Publication and dissemination of vital statistics reports 143 5. Vital statistics summary 143 6. Data protection, privacy and security 146 1. United Nations Personal Data Protection and Privacy Principles. 146			-			
6. Corrections and amendments to the record						
7.Submission of local registrar records to national registrar.1248.Fees125D.Identity management .1271.Identity management principles and life cycle1272.Fees1363.Identity management summary137E.Population register1381.Information to be submitted to the population register1382.Submission procedures1403.Submission frequency1414.Data protection and privacy during transmission to and storage in the population register1415.Population register summary1411.Vital statistics1412.Submission of statistical information to the statistics authority1423.Compilation of vital statistics1434.Publication and dissemination of vital statistics reports1455.Vital statistics summary1456.Data protection, privacy and security1461.United Nations Personal Data Protection and Privacy Principles.146						
8. Fees 125 D. Identity management 127 1. Identity management principles and life cycle 127 2. Fees 136 3. Identity management summary 137 E. Population register 138 1. Information to be submitted to the population register 138 2. Submission procedures 140 3. Submission frequency 141 4. Data protection and privacy during transmission to and storage in the population register 141 5. Population register summary 141 1. Vital statistics 141 2. Submission of statistical information to the statistics authority 142 3. Compilation of vital statistics 143 4. Publication and dissemination of vital statistics reports 145 5. Vital statistics summary 145 6. Data protection, privacy and security 146 1. United Nations Personal Data Protection and Privacy Principles 146						
D.Identity management1271.Identity management principles and life cycle1272.Fees.1363.Identity management summary137E.Population register1381.Information to be submitted to the population register1382.Submission procedures1403.Submission frequency1414.Data protection and privacy during transmission to and storage in the population register1415.Population register summary1416.Submission of statistical information to the statistics authority1423.Compilation of vital statistics1434.Publication and dissemination of vital statistics reports1455.Vital statistics summary1456.Data protection, privacy and security1461.United Nations Personal Data Protection and Privacy Principles146						
1. Identity management principles and life cycle1272. Fees.1363. Identity management summary137E. Population register1381. Information to be submitted to the population register1382. Submission procedures1403. Submission frequency1414. Data protection and privacy during transmission to and storage in the population register1415. Population register summary1416. Vital statistics1417. Vital statistics to be derived from civil registration data1417. Submission of statistical information to the statistics authority1427. Compilation and dissemination of vital statistics reports1457. Vital statistics summary1457. Optication and dissemination of vital statistics reports1457. Vital statistics summary1457. Vital statistics summary1467. United Nations Personal Data Protection and Privacy Principles146		П				
2.Fees.1363.Identity management summary137E.Population register1381.Information to be submitted to the population register1382.Submission procedures1403.Submission frequency1414.Data protection and privacy during transmission to and storage in the population register1415.Population register summary141F.Vital statistics1411.Vital statistics1412.Submission of statistical information to the statistics authority1423.Compilation of vital statistics1434.Publication and dissemination of vital statistics reports1455.Vital statistics summary145G.Data protection, privacy and security1461.United Nations Personal Data Protection and Privacy Principles.146		D.				
3. Identity management summary137E. Population register1381. Information to be submitted to the population register1382. Submission procedures1403. Submission frequency1414. Data protection and privacy during transmission to and storage in the population register1415. Population register summary141F. Vital statistics1411. Vital statistics1412. Submission of statistical information to the statistics authority1423. Compilation of vital statistics1434. Publication and dissemination of vital statistics reports1455. Vital statistics summary1456. Data protection, privacy and security1461. United Nations Personal Data Protection and Privacy Principles146						
 E. Population register						
1.Information to be submitted to the population register		F				
2.Submission procedures1403.Submission frequency1414.Data protection and privacy during transmission to and storage in the population register1415.Population register summary141F.Vital statistics1411.Vital statistics to be derived from civil registration data1412.Submission of statistical information to the statistics authority1423.Compilation of vital statistics1434.Publication and dissemination of vital statistics reports1455.Vital statistics summary145G.Data protection, privacy and security1461.United Nations Personal Data Protection and Privacy Principles146		ц.				
3.Submission frequency.1414.Data protection and privacy during transmission to and storage in the population register .1415.Population register summary .141F.Vital statistics .1411.Vital statistics to be derived from civil registration data .1412.Submission of statistical information to the statistics authority .1423.Compilation of vital statistics .1434.Publication and dissemination of vital statistics reports .1455.Vital statistics summary .145G.Data protection, privacy and security .1461.United Nations Personal Data Protection and Privacy Principles .146						
 4. Data protection and privacy during transmission to and storage in the population register			-			
storage in the population register1415. Population register summary141F. Vital statistics1411. Vital statistics to be derived from civil registration data1412. Submission of statistical information to the statistics authority1423. Compilation of vital statistics1434. Publication and dissemination of vital statistics reports1455. Vital statistics summary145G. Data protection, privacy and security1461. United Nations Personal Data Protection and Privacy Principles146				141		
 F. Vital statistics				141		
 Vital statistics to be derived from civil registration data			5. Population register summary	141		
 Submission of statistical information to the statistics authority		F.	Vital statistics	141		
statistics authority				141		
 Compilation of vital statistics Publication and dissemination of vital statistics reports Vital statistics summary 145 G. Data protection, privacy and security 146 United Nations Personal Data Protection and Privacy Principles 146 				142		
 4. Publication and dissemination of vital statistics reports						
 5. Vital statistics summary			-			
G. Data protection, privacy and security			-			
1. United Nations Personal Data Protection and Privacy Principles. 146		G				
		э.				
			 Data protection, privacy and security summary 	153		

page

	H.	Co	mpliance, enforcement, rights and remedies	154		
		1.	Monitoring and inspection	154		
		2.	Administrative and judicial review	155		
		3.	Offences and penalties	156		
		4.	Revenue to fund the system	157		
		5.	Compliance, enforcement, rights and remedies summary	157		
	I.	Tra	insitional provisions	158		
V.	an	Other laws and policies that support civil registration, vital statistics and identity management systems: incentives, medical profession training and technology				
	A.	-	entives for institutional compliance	159 160		
	B. Creating individual demand for identity credentials			160		
	D. С.		eating individual demand for civil registration	160		
	C.	1.	Birth registration	162		
		1. 2.	Death registration	162		
		2. 3.	C C	164		
	Л		Marriage and divorce registration	165		
	D. E.	-	proving cause of death information	166		
Annex		гас		100		
Anne		comp	nended information for birth, death and fetal death registration	169		
B			nended information for marriage and divorce registration	109		
-				175		
010550	ar y .	• • • • •		175		
Boxes						
			ralia: increasing indigenous birth registration rates through online	12		
		•	ladesh: good refugee registration practices	13		
			ray: birth registration of children of refugees and migrants	14		
			nisation for Economic Co-operation and Development Privacy			
		0	elines	18		
ļ			bean Union General Data Protection Regulation	19		
(6	Princ	iples on Identification for Sustainable Development	20		
			tan: increasing birth registration through the identification system.	23		
8			ity documents for transgender persons in Costa Rica	28		
(9 Estonian electronic identity system. 		29			
10		Pacific islands and the need for cross-border information-sharing 3				
1			an residence registration system	30		
12			e: Electronic Data Exchange of Civil Status Data (COMEDEC)	31		
13			ia: separate functional databases	32		
14			inology in international human rights	39		
15			integration of civil registration and identity management	56		
10			lishment by Peru of an autonomous entity: RENIEC	56		
-	•	Lotac				

17 United States Model State Vital Statistics Act and Model State Vital Statistics Regulations 58

10		page 63		
18	8 8 7			
19	Inter-agency coordination mechanisms for civil registration and vital statistics in the Philippines and Chile	66		
20	Hierarchy of laws			
21	Informants for birth registration			
22	Unique personal identifier	86		
23	Malawi: issuance of a unique personal identifier, integrated birth registration and identity systems	87		
24	Chile: security features in the production of certified copies by the Civil Registration and Identification Service	89		
25	Intersex birth registration	92		
26	Informants for death registration	98		
27	Civil registration and disaster preparedness	105		
28	Minnesota Protocol on the Investigation of Potentially Unlawful Death	111		
29	Child marriage	116		
30	Mongolia: transfer of records online and offline	125		
31	Uganda: waiving of fees for vulnerable non-citizens	126		
32	Republic of Korea: intelligible digit sequence	129		
33	Norway: revising the character sequence for the Norwegian personal identity number	130		
34	Malawi point system	132		
35	Ecuador: deactivation of identity in the population register	136		
36	Sweden: population register	139		
37	Ecuador: civil register, population register and residence register	139		
38	Incomplete data methods: indirect techniques	143		
39	Canada: internal review mechanisms for vital statistics	144		
40	Pacific islands: tabulation of vital statistics in countries with small populations.	145		
41	Norway: vital statistics microdata for research	150		
42	Norway: instant access to microdata via the domain microdata.no	151		
43	Chile: cooperation between the Civil Registry Service and the Ministry of Education	162		
44	Pacific islands: increasing civil registration through incentives and cooperation	165		

Introduction

1. The Statistics Division of the United Nations has been mandated with the development of the methodological framework for civil registration and vital statistics since the inception of the United Nations as an intergovernmental organization. In furtherance of this mandate, a series of international standards, guidelines, principles and recommendations have been developed and adopted by the relevant United Nations bodies – the Statistical Commission and the Economic and Social Council. The most recent revision of these guidelines was adopted in 2014 in the form of the *Principles and Recommendations for a Vital Statistics System, Revision 3* (United Nations publication, Sales No. E.13.XVII.10).

2. As companion guides to the *Principles and Recommendations for a Vital Statistics System, Revision 3*, the Statistics Division has developed a series of handbooks on civil registration and vital statistics systems, which deal with important aspects of civil registration and vital statistics improvement. In addition to the present *Guidelines on the Legislative Framework for Civil Registration, Vital Statistics and Identity Management Systems*, the series includes two handbooks on civil registration and vital statistics systems, respectively entitled:

- (a) Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1 (United Nations publication, 2018, Sales No. E.18.XVII.18););
- (b) Handbook on Civil Registration, Vital Statistics and Identity Management Systems: Communication for Development (United Nations publication, Sales No. E.21.XVII.10).

The present Guidelines update and replace the 1998 Handbook on Civil Registra-3. tion and Vital Statistics Systems: Preparation of a Legal Framework (United Nations publication, Sales No. E.98.XVII.7), which was based on previous revisions of the Principles and Recommendations. These Guidelines are intended to complement the Principles and Recommendations for Vital Statistics System, Revision 3 and the handbooks on civil registration and vital statistics. Citations to relevant portions of the Principles and Recommendations and various handbooks are provided throughout these Guidelines. In addition, these Guidelines present a topic not fully elaborated upon in pervious handbooks - that of identity management. The 2030 Agenda for Sustainable Development, agreed upon by all States Members of the United Nations in September 2015, recognizes the importance of addressing the global identity gap and contains a specific target within the Sustainable Development Goals - target 16.9 - to provide legal identity for all, including birth registration, by 2030. As reflected in indicator 16.9.1 related to that target, birth registration should be the primary means for the granting of legal identity, and civil registration remains the "gold standard" by which legal identity should be maintained by Member States.¹ In accordance with this goal, these Guidelines recommend and present a holistic and integrated approach to civil registration, vital statistics and national identity management.

4. The purpose of the present *Guidelines on the Legislative Framework for Civil Registration, Vital Statistics and Identity Management Systems* is to offer a tool for developing a strong rights-based legal framework for civil registration, vital statistics

United Nations and World Bank, "Principles of legal identity in the context of the 2030 Agenda for Sustainable Development", working paper, Identification for Development Programme, series 1, September 2018, paras. 2 and 14.

1

and identity management systems. The establishment of such systems in the laws of a country serve a number of important purposes. It makes specific agencies responsible for civil registration, vital statistics and identity management functions. It specifies standards and quality control procedures for the collection and use of the records and information collected through the system and guarantees the privacy and security of those records. The legislative framework also offers a consistent and structured basis for performing all the tasks associated with the legal uses of the records of events and identification. In short, the legislative framework gives the system an essential foundation to be able to operate successfully throughout the country. This foundation, in turn, allows individuals to realize numerous human rights enshrined in international conventions that stem from civil registration and the provision of legal identity.

5. These Guidelines provide overarching principles and elaborate in detail the legislative framework critical for implementing international recommendations, with a focus on ensuring a holistic and integrated approach to civil registration, vital statistics and identity management. There is great diversity in how countries organize and structure their civil registration, vital statistics and identity management systems owing to differences in government structures, culture and traditions, and socioeconomic conditions. The principles and concepts presented in these Guidelines can, however, be adapted to the culture, traditions and legal systems of all countries, in a manner consistent with existing and chosen structures. Throughout these Guidelines, examples are presented demonstrating how the concepts have been put into practice in countries with diverse cultures, traditions and legal systems. These national practices are presented to provide a starting point for discussion among policymakers on how to adapt the principles and concepts to their own country conditions, rather than being put forward as examples to be copied wholesale by other countries.

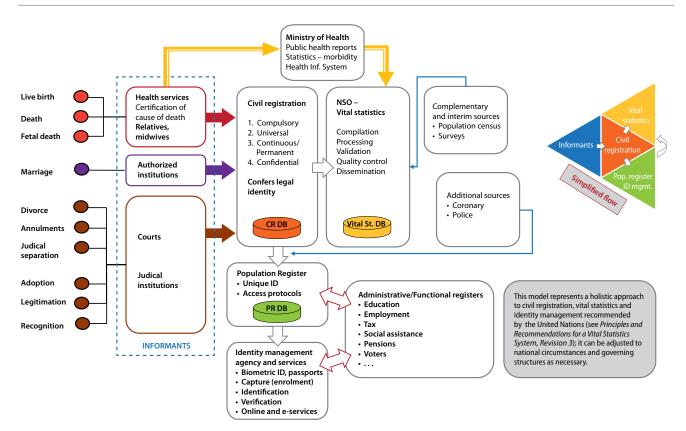
6. These Guidelines recommend and present a framework for integrated systems, where the civil registration system provides input into the vital statistics system and the identity management system, as graphically presented in the figure below. The principles and concepts on civil registration and vital statistics can, however, also be used and followed by countries that lack a national identity management system. Moreover, a country's systems need not be electronically linked to apply these principles. The principles can be adopted in countries that maintain manual systems that have not yet been digitized, or where parts of the country do not yet have sufficient computer or Internet resources to digitize in those specific locations.

7. In addition to this introductory chapter, the material in these Guidelines is presented in five chapters, starting with broad concepts, followed by more detailed discussions of best practices and policy options:

- Chapter I presents an overview of civil registration, vital statistics and identity management systems, including: concepts and definitions; principles of civil registration and identity management; functions of civil registration and national identity management systems; types of vital events; identity management and identity life cycle; interoperability between civil registration, vital statistics and identity management systems; and accountability and governance.
- Chapter II provides an overview of the importance of civil registration and identity management to the realization of human rights, including not only civil and political rights but also economic, social and cultural rights.
- Chapter III explores the wide diversity of institutional arrangements that exist globally for civil registration, vital statistics and identity management systems, and focuses on how institutional arrangements can support the effective and efficient functioning of those systems.

- Chapter IV provides detailed guidance on elements that should be included in civil registration, vital statistics and identity management legislation and regulations to support comprehensive civil registration coverage, meaningful vital statistics compilation and dissemination, and strong identity management that provides for robust legal identity, protects privacy and promotes security. The chapter discusses in greater detail the topics introduced in previous chapters. It outlines best practices and policy options for: civil registration; identity management; a population register, compilation and dissemination of vital statistics; data protection, privacy and security; compliance, enforcement, rights and remedies; and transitional provisions. While the chapter presents a comprehensive framework for legislation addressing civil registration, vital statistics and identity management systems, it is not necessary for a country to include all these concepts in one comprehensive piece of legislation. These concepts may be applied and integrated into one or more new or existing pieces of distinct legislation governing the civil registration system, the vital statistics system and the identity management system.
- Lastly, chapter V addresses other laws that can support civil registration, vital statistics and identity management systems by providing incentives that help to increase rates of civil and identity credential registration, as well as improving the quality of information in the system.

Civil registration, vital statistics and identity management systems



Chaper I Overview of civil registration, vital statistics and identity management systems

A. Introduction

8. Strong civil registration, vital statistics and identity management systems are fundamental to the effective, efficient and fair functioning of governments. A well-functioning national civil registration system, being continuous, permanent, compulsory and universal, is the best source of data for generating vital statistics and therefore should be the foundation of the vital statistics system. Information submitted during the registration of vital events provides essential data for national and regional planning for a variety of social service programmes; including family planning and mother and child health services programmes; infectious and non-communicable disease control programmes; education, public housing and social security programmes; and infrastructure and development programmes.

9. Likewise, a civil registration system with complete national coverage provides the strongest foundation for a national identity management system. Birth registration establishes legal identity and provides the entry point into the national identity management system through the issuance of a birth certificate – the foundational document necessary to establish a person's identity. While special procedures may be needed for migrants, refugees and others who were not born in the country and may lack a legally valid birth certificate from their country of origin, birth registration should be the primary means for the granting of legal identity for those born in the country. Being able to prove one's identity is essential to enjoying many of the human rights embodied in international declarations and conventions. In addition, proof of identity is required to benefit from numerous government programmes and private sector services. Death registration provides the legal basis for closing an identity in the system, which is crucial to preventing identity theft and fraud.

10. Throughout these Guidelines, when reference is made to "identity registration", "identity credentials" and "identity management", the reference is to a national identification system. A national identification system is a foundational identification system that provides the necessary credentials for establishing identity to the population for public administration and a wide variety of public and private sector transactions, services and derivative credentials.² Countries may also maintain other functional identification systems that are created for a particular service or transaction – such as voting, tax administration, social programmes and transfers – and issue associated functional identification systems that may exist in a country; they rather address national identification systems and the holistic integration of those systems with civil registration and vital statistics systems.

11. The present chapter provides an overview of civil registration, vital statistics and identity management systems, including: concepts and definitions that will be used throughout these Guidelines; overarching principles of civil registration and identity

- ² World Bank. ID Enabling Environment Assessment, (Washington, D.C., 2017), p. 9.
- lbid., p. 10.

management systems; the functions of civil registration and identity management systems; types of vital events; the life cycle of identity management; interoperability between civil registration, vital statistics and identity management systems; and accountability and governance.

B. Concepts and definitions

12. "Civil registration" is defined as the continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements.⁴ A "vital event" is the occurrence of a live birth, death, fetal death, marriage, divorce, annulment, judicial separation, adoption, legitimation, or recognition of parenthood.⁵

13. "Civil registration" is a government service with legal, statistical and identity management functions. For legal purposes, the process establishes the fact of occurrence of vital events and provides legal documentation for such events in the form of a certificate.⁶ A "certificate" is a document, in paper or electronic format, issued by the registrar and containing all or part of the exact information contained on the original vital record, and which, when issued by the registrar, has the full force and effect of the original vital record.⁷

14. The information recorded in a country's civil registration system is the foundation for its vital statistics system.⁸ "Vital statistics" constitute the collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves, and of the person and persons concerned.⁹ Vital statistics are incidence statistics, not prevalence statistics, providing a measure on a current basis of the occurrence of certain types of vital events to members of a specified population during a specified period.¹⁰ Vital statistics provide timely and critical information on the population in a country and should be used by policymakers and the public to make informed policy decisions, in conjunction with other demographic and social statistics.

15. The steps involved in civil registration of a vital event are as follows: first, "notification", when an informant or notifier reports or notifies the vital event to the civil registrar; second, "registration", when the civil registrar verifies the details of a vital event and records it in the official civil register (which constitutes official registration of the event) and, third, "certification", when the civil registrar issues an official copy containing some or all of the vital event information contained in the register. The distinction between an informant and a notifier is the following: an "informant" is the individual or institution whose responsibility, designated by law, is to report to the registrar the fact of the occurrence of a vital event and to provide all the information on and all the characteristics of the event. On the basis of such a report, the event may be legally registered by the registrar.¹¹ A "notifier" is the individual appointed by the local registrar to act as intermediary between the local registrar and the informant in providing all the information on and all the characteristics of an event that is to be legally registered by the local registrar.¹²

16. Health providers play a critical role in the civil registration system. Heads of health institutions and other authorized health professionals act as informants or notifiers of the occurrence of births, fetal deaths and deaths that occur in health institutions or under the care of a health professional, providing information regarding the characteristics of the event and the persons involved in the event. For example, for a birth in a health institution, the health institution provides information on the characteristics of the birth, the newborn and the parent or parents. For a death in a health institution, the health institution on the characteristics of the deceased

- ⁴ Principles and Recommendations for a Vital Statistics System, Revision 3 (United Nations, 2014), para. 279.
- ⁵ Ibid., para. 207.
- Civil registration establishes a person's civil status. Civil status generally refers to a person's legal status in a society, including marital status (i.e., never married, married, widowed and not remarried, divorced and not remarried, married but legally separated, de facto union) and age (i.e., minority/ majority). Civil status may determine a person's legal capacity to act - for example, the capacity to marry or consent to sex - and obligations, rights and duties between persons, such as between spouses and between parent and child.
- ⁷ United States, Department of Health and Human Services, Centers for Disease Control and Prevention, Model State Vital Statistics Act and Model State Vital Statistics Regulations, 2011 Revision, sect. 2.c.
- ⁸ Principles and Recommendations for a Vital Statistics System, Revision 3, p. 202.
- ⁹ Ibid., para. 1.
- ¹⁰ Ibid., para. 281.
- ¹¹ Ibid., p. 204.
- ¹² Ibid., p. 205.

and the cause of death. Health institutions are responsible for ensuring that all deaths occurring within the institution have a "medical certification of cause of death", that is, the completion by a medically trained person of a death certificate that includes the cause of death according to the International Statistical Classification of Diseases and Related Health Problems (ICD) certification standards. The International Classification of Diseases is a classification system maintained by the World Health Organization (WHO) for coding diseases, signs, symptoms and other factors causing morbidity and mortality. It is used worldwide for morbidity and mortality statistics and is designed to promote international comparability in the collection, processing, classification and presentation of statistics.

17. Civil registration is carried out continuously, is compulsory and is a service provided to the entire population, making it the best source of data for vital statistics. The national registrar must therefore be required to share vital event data with the national statistics authority on a timely basis. This data-sharing must be conducted in accordance with law to protect the personal privacy and the security of the data.

The civil registration system is also the foundation for the identity manage-18. ment system. An individual's legal identity is established through birth registration, which provides evidence of their identity in the form of a birth certificate. The United Nations Legal Identity Expert Group, established in 2015, adopted a working definition of legal identity as follows: "legal identity" is defined as the basic characteristics of an individual's identity, for example, name, sex, place and date of birth conferred through registration and the issuance of a certificate by an authorized civil registration authority following the occurrence of birth. In the absence of birth registration, legal identity may be conferred by a legally recognized identification authority; this system should be linked to the civil registration system to ensure a holistic approach to legal identity from birth to death. Legal identity is retired by the issuance of a death certificate by the civil registration authority upon registration of death. In the case of refugees, Member States are primarily responsible for conferring legal identity and issuing identity papers. The responsibility for conferring legal identity on refugees may also be entrusted to an internationally recognized and mandated authority.

19. A birth certificate is used as the foundation document for all other identification credentials subsequently issued by the national identity management authority. A "credential" is a document, object, or data structure that vouches for the identity of a person through some method of trust and authentication.¹³ While there should be procedures for obtaining identity documents for persons who lack birth registration, these procedures should include facilitating the delayed registration of birth for those born in the country. For immigrants, refugees and others not born in the country, alternative procedures or documents may be needed for entrance into the identity management system. An individual's identification credentials are permanently retired with the registration of death.

20. While there is a lack of an internationally agreed definition of "identity management", the term most commonly refers to producing legally valid proof of identity to each individual and maintaining systems for managing information and documents associated with one's identity, which may include individual biometrics. The identity life cycle has four stages: first, registration, including enrolment and validation; second, issuance of identity credentials; third, authentication for service delivery or transactions; and fourth, identity management, which entails updating identity attributes in the system, including invalidating the identity credential for fraud or security reasons, or retiring an identity credential after an individual's death¹⁴ (see sect. F below for an in-depth discussion on the identity life cycle). ¹³ World Bank. *ID Enabling Environment Assessment*, p. 62.

⁴ World Bank, Catalog of Technical Standards for Digital Identification Systems (Washington, D.C., 2018), pp. 4–6. 21. "Enrolment" involves capturing and recording in the national identity management system key identity attributes from a person who claims a certain identity, which may include biographical data (for example, name, date of birth, sex, address) and biometrics (for example, photos, fingerprints, iris scan). "Validation" involves checking the attributes presented against existing data. The validation process ensures that the identity exists (in other words, that the person is alive) and is claimed by one person (it is unique in the database).

In many countries, information collected through the civil registration system 22. and identity management system is submitted to and stored in a population register. The term "population register" was defined in 1969, in the United Nations publication entitled Methodology and Evaluation of Population Registers and Similar Systems, as "an individualized data system, that is, a mechanism of continuous recording, and/or of coordinated linkage, of selected information pertaining to each member of the resident population of a country in such a way as to provide the possibility of determining up-to-date information concerning the size and characteristics of that population at selected time intervals".¹⁵ The population register is the product of a continuous process in which notifications of certain events, which may have been recorded originally in different administrative systems, are automatically linked to it on a current basis.¹⁶ In many countries, the population register may also contain information pertaining to persons who are not usual residents of the country (e.g., citizens residing abroad), although the selected information regarding the non-resident population may be more limited than for the resident population.

23. A firm understanding of the terms defined above is important for comprehension of these Guidelines. There are, however, many other terms used throughout these Guidelines with which the reader should be familiar. For a complete list of definitions of terms used in these Guidelines, readers are referred to the glossary.

C. Principles of civil registration and national identity management

24. In order to effectively fulfil its legal, statistical and identity management functions, civil registration must be compulsory, universal, continuous and permanent. In addition, because people provide a wide variety of information to the civil registration system, including information that may be highly sensitive, the information collected and stored in the civil registration system must be kept confidential. Sharing of this information should be only by consent or in accordance with law.

25. The principles of continuity, permanence and universality also apply to national identity registration. The principle of compulsoriness, however, need not always apply, as identity registration for purposes of a national identity card (or other credential) and entry into a population register is not compulsory in many countries. As with the civil registration system, the identity management system stores personal information that must be kept confidential. This principle has been elaborated in internationally recognized principles of data protection and privacy that many countries apply to identity management systems.

26. The present section discusses how the principles of compulsoriness, universality, continuity and permanence apply to the civil registration and identity management systems. It also addresses how the principle of confidentiality and the principle of data protection and privacy apply to civil registration and identity management systems, respectively.

¹⁵ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 454.

¹⁶ Ibid.

1. Principles of civil registration

27. **Compulsoriness:** Civil registration must be compulsory in respect of its legal, statistical and identity management functions. From the legal and identity management perspective, birth registration establishes and provides the official record of a person's existence and thereby establishes legal identity. Registration of other vital events, such as marriage, divorce, adoption and death, establishes and provides the official record of a person's civil status. From the statistical perspective, civil registration provides reliable information on the vital events registered. Accordingly, a country's civil registration system must be compulsory in order to assure its completeness, accuracy and effectiveness in relation to these functions.¹⁷

28. The compulsory obligations must apply to everyone with responsibilities in the civil registration system, including institutional entities as well as individuals. As civil registration is an essential government service that should be universally provided to the entire population of the country, the onus for timely and complete registration of all vital events occurring within the territory should be placed on the government. This onus falls not only on civil registrars but also government agencies that control facilities where vital events occur or are otherwise responsible for vital event information. This includes, but is not limited to, the health sector, law enforcement, emergency services, and coroners and other officers in the medical-legal system.¹⁸

29. The health sector is particularly important. Placing responsibility on heads of health facilities, doctors, nurses, midwives and other authorized health professionals to report or notify all vital events that occur in health facilities or under the supervision of a health professional helps to ease the burden of registration for individuals and boosts the rates of civil registration. Other types of institutions where vital events may occur, such as prisons, should also bear a responsibility to report or notify vital events that occur in those facilities. Depending on the circumstances surrounding an unnatural or suspicious death, responsibility may be placed on emergency services, coroners or other medical-legal officers for ensuring registration of death. For each type of vital event and occurrence, compulsory obligations should be clearly placed on a specified institution and individual.

30. To ensure compliance by authorized officials and institutional entities with these obligations, there must be a legal basis for enforcement. The civil registration law should provide penalties for deliberate failure to register a notified vital event by a duly authorized local registrar.¹⁹ Institutions in which vital events occur, such as hospitals and prisons, should also face penalties for deliberate failure to notify the civil registration agency of the occurrence of a vital event within the institution. Of course not all failures in notification are deliberate, and therefore a collaborative partnership with a system of supportive supervision and monitoring is also necessary. Such a system may even be more effective than a system of fines and penalties, in part because the infrastructure required to adjudicate fines and penalties may not be available (owing to overworked court systems, appeals procedures, collection of fines and other impediments). A good system of reporting, monitoring and feedback - for example, regular reports from those obliged to notify vital events (such as health facilities, community health workers or funeral homes) that are compared against birth and death registers - may be more effective in addressing system failures. See section H.1 below, on accountability and governance, for a more detailed discussion on monitoring and inspection.

31. While health institutions play an important role in civil registration, not all vital events occur within health facilities or with medical assistance. Indeed, in many countries, a large percentage of births and deaths occur outside health facilities and without

¹⁷ Ibid., para. 294.

- A country's medicallegal system may include coroners, medical examiners, investigators, forensic doctors and pathologists, and other medical and legal professionals. A coroner is responsible for the investigation of deaths by external causes occurring within a specific jurisdiction. Depending on the jurisdiction, a coroner may be an elected or appointed official, and may be a legal or a medical professional. By contrast, a medical examiner is usually an appointed official whose duties are similar to a coroner but who is generally required to have specific medical training (such as pathology) and is qualified to conduct medical examinations and autopsies. Some jurisdictions use a coroner system, while others use a medical examiner system. For those that use a coroner system, the coroner is responsible for overseeing the inquiry by a medical examiner, forensic pathologist or other trained professionals.
- ¹⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 294.

medical supervision. Accordingly, in some instances, the law may place responsibility to report a vital event on an individual. Yet the existence of a civil registration law will not, in itself, ensure that the general public reports the occurrence of vital events. The imposition of some form of penalty on individuals who fail to register the occurrence of a vital event has historically not contributed to higher registration rates. In many instances it can serve as a disincentive, in particular for delayed and late registrations, as individuals will be reluctant to report a vital event after the time period provided by law if they will be penalized. For that reason, other laws and policies should provide incentives for individuals to comply with the civil registration law.²⁰ For example, if a birth certificate is required for enrolment in primary school, parents are more likely to ensure the birth registration of their children. Death registration can be tied to collection of pensions and social benefits by surviving next of kin. While essential services should not be denied on the grounds of lack of registration, these types of laws and policies can help to facilitate registration (see chap. V for a detailed discussion on various forms of incentives).

Universality: In order to ensure that maximum value is derived from the civil 32. registration system by both individuals and users of vital records and statistics information, registration services must be provided to all individuals within the territory of a country. Civil registration plays an important role in implementing and realizing many of the human rights embodied in international declarations and conventions. As discussed in more detail in chapter II, there are two categories of human rights that involve civil registration: first, human rights that require States to ensure that vital events are registered, for example, the right to be registered and named, pursuant to article 7 of the Convention on the Rights of the Child; and second, human rights whose exercise may depend on the vital events having been registered, for example, the right to access to justice and the right to an education, both of which may hinge on proof of identity.²¹ In order to protect these rights, civil registration requirements must apply to the entire population in the country, without discrimination or distinction based on subnational geography; racial, ethnic or religious group; sex; status as a member of a nomadic, displaced, native, indigenous or aboriginal population; status as a refugee, asylum-seeker or foreign national born in the country, or temporary worker; or any other characteristic.22

33. There are a number of actions that a country can take to help to achieve universal civil registration. Countries should remove barriers to access, such as complicated and lengthy registration processes, provide a no-fee service and ensure that registration offices are sufficient in number and accessible to all. In addition, registrars should be authorized to conduct outreach and institute special procedures to reach vulnerable and marginalized populations. Registrars must also understand that the provision of civil registration services does not necessarily confer citizenship and therefore civil registration should not be denied on these grounds.²³

34. To help to achieve universal registration, countries should strive to make the registration process as simple and efficient as possible. This means making the registration process easy for individuals. One of the most effective ways of doing this is to require coordination with the health sector. The health sector should be responsible for notifying all vital events that occur in health facilities and under the supervision of health professionals, as this removes the burden of registration from the individual. In instances where individuals are required to report on a vital event, the process should be simple and not require multiple trips to the registrar to register and to obtain certificates. To speed up registration processing, steps should be taken to facilitate direct, official communications between the different registries – local and consular – and with the central register.

²⁰ Ibid., para. 295.

²¹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 287.

²² Ibid., para. 296.

²³ See Handbook on Civil Registration, Vital Statistics and Identity Management Systems: Communication for Development, 2022, for more on demand creation. 35. In order to facilitate the correction of errors, local registrars should be authorized to correct obvious clerical errors or mistakes.²⁴ Requiring court procedures for such errors slows down the registration service, which should be provided to individuals promptly and at reasonable cost. Authorizing local registrars to correct errors facilitates a civil register that is up to date and accurate (see chap. IV, sect. C.6, for a discussion on corrections and amendments to civil registration records).

36. No fee should be charged for the timely registration of a live birth, marriage, divorce, fetal death or death.²⁵ Many countries have seen rates of registration rise with the introduction of free registration. Minor corrections required as a result of clerical errors discovered at the time of registration, burial or cremation should also be permitted free of charge.²⁶ An original certificate should be issued free of charge.²⁷ As the certificate serves as proof of registration and civil status, obtaining the certificate is arguably the incentive for registration. For that reason, fees for certificates can potentially be a disincentive for registration and lead to underregistration of vital events, often in marginalized and vulnerable communities. To that end, countries should provide the first copy of the certificate free of charge in order to help to achieve registration completeness.

37. Fees may apply in cases of late or delayed registration of vital events, with the fee related to the extent of the delay; however, fees for late or delayed registration may further disincentivize registration, especially in countries with low registration rates. Similarly, fees may apply for amendments, such as name changes, legitimations, adoptions and the establishment of filiation; policymakers should, however, consider whether fees for these types of amendments would depress rates of amendments, leading to inaccuracy in the records. If fees are applied in these instances, policymakers should consider instituting a fee waiver process for those for whom a fee is a hardship.

38. The powers and duties assigned to local civil registrations are also key to the achievement of universal registration. Local civil registrars should play an active rather than a passive role, in order to facilitate the achievement of universality. To do this, the civil registration legislation must authorize civil registrars to conduct outreach and institute special procedures as needed. Civil registrars should be empowered to inform the public of its obligations and the importance of civil registration. This should include implementing mass publicity programmes in vernacular languages and securing support from local leaders to inform local opinion.

39. For certain segments of the population that are vulnerable or marginalized, it may be necessary to establish special procedures for the registration of vital events. Where there are factors related to distance, terrain or transportation that make it difficult for informants or families to visit the registration office to register vital events, registrars should be authorized and have the resources to establish mobile units to make regular rounds within their jurisdiction, which would enable households to register vital events.²⁸ They should also be authorized and have the resources to establish registration centres in camps for refugees or internally displaced persons and to translate registration documents into indigenous or foreign languages as needed (see box 1 for a description of how the New South Wales Registry of Births, Deaths and Marriages in Australia implemented online birth registration and increased rates of birth registration in aboriginal communities).

40. Vital events that occur to refugees in a host country must be registered in the host country's civil registration system, just like other vital events that occur in the country. In some instances, these events have been registered only in the host country's functional refugee register and not the civil register. In other instances, the Office of the United Nations High Commissioner for Refugees (UNHCR) undertakes the

- ²⁴ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 144–148.
- ²⁵ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 364.

²⁶ Ibid.

²⁷ Ibid.

²⁸ Ibid., para. 329.

registration of refugees on behalf of the country, using its own population registration and identity management system. If registration initially takes place through that system or in a refugee register, the host country must ensure that a copy of the vital event registration information is submitted to the civil registrar for recording in the host country's civil register (see box 2 for an example of good refugee registration practices in Bangladesh). Host countries should also strive to provide replacement documentation for those who have lost documentation while fleeing their home country.²⁹

41. One barrier to universal registration in some countries has been a misconception that birth registration somehow confers citizenship. This has caused some registrars to refuse to register the births of children born to migrants, refugees, asylum-seekers, stateless persons and foreign nationals. The nationality laws of States

Box 1

Australia: increasing indigenous birth registration rates through online registration

The New South Wales Registry of Births, Deaths and Marriages officially launched its online birth registration system in April 2018. When a baby is born, the health facility or the midwife who attended the birth submits a notice of birth to the Registry. In addition, the new parents receive a flyer in a so-called "parent pack" that provides them with the simple steps needed to complete the registration of their baby. The registration information can be submitted on a number of devices, including a tablet, desktop, laptop and certain mobile telephones. The flyer, which is available in multiple languages on the Registry's website, replaces the paper birth registration application form that was previously included in the parent pack.

The online system guides parents through a logical step-by-step process ensuring that all the information is captured correctly and accurately, continuously improving the integrity of the birth register. When a parent or guardian submits their online application, the Registry's system attempts to automatically match it to the notice of birth submitted by a hospital or midwife. If all the information is correct, the match takes place and a birth registration is created. If the parent or guardian has also applied for a birth certificate, the certificate will print automatically once a successful birth registration has been made in the Registry system. Registrations that do not automatically match or require further investigation will come up as a "task" in the system, prompting the Registry to explore further.

The online system has been used to increase the rate of birth registration in aboriginal communities. Aboriginal communities traditionally had low birth registration rates. Recognizing this, the Registry launched a campaign, called "Our Kids Count", to improve registration rates in indigenous communities. In order to gain insights to inform the campaign, focus groups were conducted with an Aboriginal community to explore the perceived barriers to birth registration, which included: lack of understanding of the process and paper birth registration form; a sense of apprehension toward the Government in the light of past experience; the misconception that the hospital completes registration; the misconception that registration costs money; and a fear of potential sanctions for late registration.

The campaign developed booklets, posters, videos, a "plain English" version of the paper birth registration statement and other resources. The campaign was launched through outreach to over 200 indigenous organizations and individuals. Initial results show the campaign to be a success. From April 2018 (with the launch of online registration and Our Kids Count) to the end of 2018, there was a huge increase in the number of Aboriginal births registered of over 70 per cent from the previous 12 months and 101 per cent since 2016.

²⁹ See the 2018 report of the United Nations High Commissioner for Refugees, part II: "Global compact on refugees" (A/73/12 (Part II)), para. 82. set out the criteria for citizenship and should be consistent with States' relevant obligations under international law, including the child's right to a nationality enshrined in article 7 of the Convention on the Rights of the Child and other international human rights treaties. Acquisition of citizenship does not necessarily coincide with country of birth, and birth registration does not confer the right to citizenship in the country of birth unless so stipulated in national law. A birth certificate, however, is official evidence of the facts of a birth – including place of birth and parentage – and, as such, is important documentary evidence that enables people to establish their citizenship or nationality in accordance with the provisions of national law. In accordance with international law, States must provide birth registration to all, regardless of citizenship or nationality. It is important that registrars understand this obligation and not refuse registration to any segment of the population on the basis of citizenship (see box 3 for an example of good practices for birth registration of children of refugees and migrants in Norway).

42. Continuity and permanence: A civil registration system must be both continuous - in that registration is continuously ongoing - and permanent, in that data collected through the civil registration system are permanently saved. Registration maintained for short periods of time and then allowed to lapse will have adverse consequences. For example, lapses in registration will result in lack of issuance of certificates, thus depriving the population of the possibility to exercise basic human rights and access to services. Lapses will also result in a lack of data and measurements that are useful, either as current incidence statistics or as indicators of changes over time. The continuity and permanence of the civil registration system require the existence of an agency with administrative stability, whose operation is not limited by the factor of time. Permanence is contingent upon the authority given to the civil registration administration through the enactment of a civil registration law. Permanence of the system is a requirement for the continuity of registration of vital events and collection of data that underpins the production of vital statistics, which is necessary for a meaningful understanding of current figures as well as trends in vital statistics measurements.30

43. Experience has shown civil registration to be the only reliable method for obtaining a continuous and current record of events occurring throughout a given period. Complementary data sources, such as population censuses and in-depth household surveys, have also been employed to evaluate and enrich vital statistics data and to gather information on demographic and epidemiological processes that complement the information obtained through civil registration. There is no substitute, however,

³⁰ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 297.

Box 2

Bangladesh: good refugee registration practices

In 2016, the Bangladesh Department of Local Government extended the 2004 Birth and Deaths Registration Act to 18,564 children of registered refugees living in the Kutupalong and Nayapara camps who were born in Bangladesh between 1 January 1992 and 30 June 2016. The data on these children were held in a functional registration system for refugees operated by a government office, the Refugee Relief and Repatriation Commission, and UNHCR. By April 2017, more than 60 per cent of the backlog of these cases had been registered in the country's digitized civil registry, the Birth and Death Registration System. With technical support from UNHCR, children born to registered refugees after 30 June 2016 are now directly registered by local civil registration system.

Box 3

Norway: birth registration of children of refugees and migrants

Norway has universal birth registration and every child born in Norway is issued a national identity number and registered in the Population Register. Birth registration happens automatically after notification from the health sector and an identity number is issued shortly thereafter.

Children born to refugees, migrants and all other persons who are not citizens of Norway have their birth registered and are issued a national identity number, just as Norwegian citizens are, regardless of the legal status of their parents. These children will, however, not have status in the population register as "resident" in Norway; they will have status only as "birth registered". This also applies to cases where the parents do not hold a legal permit to stay, or have an ongoing application to the immigration authorities for a residence and work permit. "Residency" in the population register can be obtained at a later date if the requirements in the register are met, but the identity number and the birth registration will be valid even without residency.

Residency as defined and used by the population register is a legal status indicating an individual's intention of staying in Norway for six months or more. People can thus live in Norway without being resident, but be registered in the population register with a temporary identity number (known as a "D-number"). Residency in this sense has a different meaning from having a permit from the immigration authorities. If residency is later granted, the D-number is annulled and a permanent national identity number issued, although a temporary identity number is never issued for birth registration, even for births to non-residents. Thus, a child can have a different type of identity number from that of their parents.

for the availability of continuous information on vital events based on their timely civil registration. This mandate by law to be continuous and permanent distinguishes the civil registration method from other methods of gathering data about the population.³¹

44. **Confidentiality:** A variety of information is collected about individuals through civil registration. Some data, when identified about a specific individual, may be highly personal and sensitive. In order to promote the provision of complete and accurate data to the system, the confidentiality of the information must be protected, meaning that those who provide information must rest assured that it will be used only for the purposes prescribed by law or in aggregated form so that individuals are not identifiable. Confidentiality provisions, however, should not interfere with administrative procedures.³²

45. Confidentiality provisions in legislation and their implementing regulations should not be so rigid as to exclude the use of vital event records for properly authorized research purposes, or to inhibit the application of modern statistical approaches such as data linkage and small area analyses. Confidentiality provisions should be drafted to ensure that records can be used for such purposes without publicly disclosing the identity and characteristics of the parties involved.³³ The use of vital events data for political purposes or activities detrimental to public well-being should be prohibited.

46. There is also a need to protect the privacy of individuals and their family when issuing certificates. Requests for certificates of birth, death or other vital events should be granted only to interested parties – such as the registrant, a spouse, parent, or child of the registrant, or next of kin – or their legal representatives. Legislation should clearly define who is an interested party for purposes of requesting a certificate. To further protect privacy, certificates need not include some or all of the statistical infor-

³¹ Ibid., paras. 28–29 and 280–281.

³² Ibid., para. 298.

³³ Ibid., para. 299.

mation captured in the civil register about a particular vital event.³⁴ For example, a death certificate need not include information on cause of death, which can be sensitive information. A birth certificate need not include information on the marital status of the parents. The information to be included in a birth and death certificate is discussed further in chapter IV, section C.1 on registration of birth (paras. 285–289), and section C.3 on registration of death (paras. 351–354).

2. Principles of national identity management

47. Many of the same principles that apply to civil registration likewise apply to national identity management. National identity management systems must be continuous and permanent to be effective. They should be universal, in that everyone in the population of the country should have the right to register for and obtain a national identity credential or some other means to prove their legal identity. Unlike civil registration, however, identity registration and obtaining of a national identity credential are not compulsory in all countries, as explained further below. Owing to the sensitivity of personal data contained in identity management systems, which may include biometric data, the confidentiality and protection of these data are extremely important, just as they are with information collected during civil registration. The principles that guide the protection and privacy" principles, rather than "confidentiality". The application of these principles in national identity management systems is discussed below.

48. **Compulsoriness:** Compulsoriness is not necessarily a principle of identity credential registration and identity management. Country practices vary on whether registering for and obtaining a national identity card or other credential are mandatory, voluntary, or even possible. For example, as of 2017, among the member States of the Organization for Security and Cooperation in Europe (OSCE) there were 40 that issued a national identity card that is mandatory for the adult population as official proof of identity,³⁵ while in 9 States, a national identity card was provided upon request.³⁶ Eight member States of OSCE do not issue a national identity card at all. Instead, other forms of identification are issued for sectoral purposes and, in combination with other documents, can be used as proof of identity.³⁷ While all countries have some form of identity management, many countries do not maintain a national population register. This is often the case in countries with decentralized governments and countries where a national form of identity credential is not required. Where there is no national identity credential, a number of government agencies, such as the passport agency or social services, may take on identity management functions.

49. Universality: While birth registration establishes identity, the provision of legally valid proof of identity enables people unequivocally to prove their identity. As with a birth certificate, an identity document or credential need not confer citizenship, but is essential for individuals to benefit from numerous government and private sector services and to exercise their human rights. To that end, countries that provide a national identity card or other credential must provide some form of legal identification to all residents, regardless of citizenship or nationality or other basis for discrimination, just as they must provide universal civil registration. Moreover, even countries that do not provide a national identity card or credential must ensure some means by which all individuals within the entire population of the country are able to provide legally valid proof of their identity by pre-defined means. This is essential in order for all individuals within the territory of the country to exercise their human rights and enjoy the services and benefits to which they are entitled.

³⁴ Ibid.

Those 40 countries are: Albania, Armenia, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Georgia, Germany, Greece, Hungary, Iceland, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Luxembourg, Malta, Mongolia, Montenegro, Netherlands, North Macedonia, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia, Slovakia, Slovenia, Spain, Tajikistan, Turkey, Ukraine and Uzbekistan. See Organization for Security and Cooperation in Europe, Compendium of Good Practices in Identity Management in the OSCE Region, **OSCE Office for Democratic** Institutions and Human Rights (Warsaw, 2017), p. 41.

- ³⁶ Those countries are: Austria, Finland, France, Italy, Lithuania, Monaco, Norway, Sweden and Switzerland. Ibid., p. 41.
- ³⁷ Those countries are: Andorra, Canada, Denmark, Ireland, Turkmenistan, United Kingdom of Great Britain and Northern Ireland, United States of America. Ibid., p. 40.

50. Countries that have compulsory identity credential registration should provide the identity credential free of charge or have a predefined fee waiver process for those who cannot afford registration. This is important to ensure that those who cannot afford registration are not penalized for failing to register. If obtaining a national identity credential is voluntary, countries may charge a fee for the credential. Countries should, however, consider providing the credential free of charge or at a nominal fee, as the identity credential, even if non-mandatory, can be essential for benefiting from many public and private services and exercising human rights.

51. **Continuity and permanence:** As with civil registration, the efficient and effective administration of an identity management system requires that an agency or entity be authorized and mandated to oversee, maintain and update the system without time bounds, such as a sunset clause, that limits the life of the agency. Information regularly transmitted from the civil registration system to the identity management system ensures that information in the identity management system is complete and current, in particular with regard to births and deaths. Continuously ongoing identity credential registration (usually at a specified age) adds additional layers of information to the identity management system, which also keeps it current. While an individual identity credential may expire (and be renewed), an individual's identity record is continuously updated and kept permanently. An identity management system may store data from civil registration and identity credential registration, and possibly other sources, in a population register, which is also keep permanently. Thus, as with civil registration systems, identity management systems are continuous and permanent.

52. Data protection and privacy: The privacy rights of individuals in relation to identity management systems are evolving. While privacy principles apply to personal data stored in paper-based systems, the digitization of data has given rise to new concerns due to the volume of personal data collected, used and stored. These concerns include the range of analytics involving personal data; the value and global availability of personal data; and threats to personal privacy from hacking and other unauthorized access and use. Recognizing the need for protection of personal data, the United Nations adopted the Personal Data Protection and Privacy Principles in October 2018, which apply to all personal data stored or processed by, or on behalf of, the United Nations system organizations in carrying out their mandated activities.

53. The United Nations Personal Data Protection and Privacy Principles are as follows:

- Fair and legitimate processing: The United Nations system organizations should process personal data in a fair manner, in accordance with their mandates and governing instruments and on the basis of any of the following: (i) the consent of the data subject; (ii) the best interests of the data subject, consistent with the mandates of the United Nations system organization concerned; (iii) the mandates and governing instruments of the United Nations system organization concerned; or (iv) any other legal basis specifically identified by the United Nations system organization concerned.
- 2. Purpose specification: Personal data should be processed for specified purposes, which are consistent with the mandates of the United Nations system organization concerned and take into account the balancing of relevant rights, freedoms and interests. Personal data should not be processed in ways that are incompatible with such purposes.
- 3. Proportionality and necessity: The processing of personal data should be relevant, limited and adequate to what is necessary in relation to the specified purposes of personal data processing.

- 4. **Retention:** Personal data should only be retained for the time that is necessary for the specified purposes.
- 5. Accuracy: Personal data should be accurate and, where necessary, up to date, to fulfil the specified purposes.
- 6. Confidentiality: Personal data should be processed with due regard to confidentiality.
- 7. Security: Appropriate organizational, administrative, physical and technical safeguards and procedures should be implemented to protect the security of personal data, including against or from unauthorized or accidental access, damage, loss or other risks presented by data processing.
- 8. Transparency: Processing of personal data should be carried out with transparency to the data subjects, as appropriate and whenever possible. This should include, for example, provision of information about the processing of their personal data as well as information on how to request access, verification, rectification and/or deletion of that personal data, insofar as the specified purpose for which personal data are processed is not frustrated.
- **9. Transfers:** In carrying out its mandated activities, a United Nations system organization may transfer personal data to a third party, provided that, under the circumstances, the United Nations system organization satisfies itself that the third party affords appropriate protection for the personal data.
- **10.** Accountability: United Nations system organizations should have adequate policies and mechanisms in place to adhere to these Principles.

54. While the Personal Data and Privacy Principles apply to data collected, stored and processed by the United Nations, the concepts outlined in these Principles may be applied to the civil registration, vital statistics and identity management system (see chap. IV, sect. F on vital statistics for details). In recent years, many countries and organizations have adopted their own data protection principles and rules, with concepts similar to those contained in the United Nations Personal Data and Privacy Principles. In 2013, the Organisation for Economic Co-operation and Development (OECD) adopted its Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (Privacy Guidelines), which updated previous guidelines from 1980, in recognition that the environment in which traditional privacy principles were implemented had undergone significant changes. These Privacy Guidelines are applicable to public and private data collectors. In April 2016, the European Union adopted the General Data Protection Regulation, which came into force in May 2018 and applies to both public and private data collectors. The World Bank and key partners developed Principles on Identification for Sustainable Development, centred on the themes of inclusion, design and governance, that frame their work on digital identification for development. For the principles contained in the OECD Privacy Guidelines, the European Union General Data Protection Regulation, and the Principles on Identification for Sustainable Development, see boxes 4, 5 and 6.

D. Functions of civil registration and national identity management

55. The civil registration system has three basic functions of roughly equal importance: first, a legal and administrative function which consists of registering vital events and keeping records that constitute the source of civil status; second, a statistical function, which assumes that the registration offices have been entrusted under law with collecting statistical information on each of the events to be entered or reported

Box 4

Organisation for Economic Co-operation and Development Privacy Guidelines

The OECD Privacy Guidelines contain the following set of eight principles:

1. Collection Limitation Principle: There should be limits to the collection of personal data and any such data should be obtained by lawful and fair means and, where appropriate, with the knowledge or consent of the data subject.

2. Data Quality Principle: Personal data should be relevant to the purposes for which they are to be used, and, to the extent necessary for those purposes, should be accurate, complete and kept up to date.

3. Purpose Specification Principle: The purposes for which personal data are collected should be specified not later than at the time of data collection and the subsequent use limited to the fulfilment of those purposes or such others as are not incompatible with those purposes and as are specified on each occasion of change of purpose.

4. Use Limitation Principle: Personal data should not be disclosed, made available or otherwise used for purposes other than those specified in accordance with paragraph 3 except:

- (a) with the consent of the data subject; or
- (b) by the authority of law.

5. Security Safeguards Principle: Personal data should be protected by reasonable security safeguards against such risks as loss or unauthorised access, destruction, use, modification or disclosure of data.

6. Openness Principle: There should be a general policy of openness about developments, practices and policies with respect to personal data. Means should be readily available of establishing the existence and nature of personal data, and the main purposes of their use, as well as the identity and usual residence of the data controller.

7. Individual Participation Principle: Individuals should have the right:

- (*a*) to obtain from a data controller, or otherwise, confirmation of whether or not the data controller has data relating to them;
- (b) to have communicated to them, data relating to them
 - (i) within a reasonable time,
 - (ii) at a charge, if any, that is not excessive,
 - (iii) in a reasonable manner, and
 - (iv) in a form that is readily intelligible to them;
- (c) to be given reasons if a request made under subparagraphs (a) and (b) is denied, and to be able to challenge such denial;
- (*d*) to challenge data relating to them and, if the challenge is successful, to have the data erased, rectified, completed or amended.

8. Accountability Principle: A data controller should be accountable for complying with measures which give effect to the principles stated above.

as input to the country's vital statistics; and, third, the identity management function, which assumes that civil registration provides continuous and accurate input into an identity management system or population register. The identity management system also serves a legal and identity function, the legal function being the provision of credentials that enable an individual to prove their identity, and the identity management function being the maintenance of a system for managing information and credentials associated with an identity.

Box 5 European Union General Data Protection Regulation

Article 5 of the General Data Protection Regulation, which applies to public and private data collectors, requires that personal data be:

- (a) Processed lawfully, fairly and in a transparent manner in relation to the data subject ("lawfulness, fairness and transparency");
- (b) Collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes; further processing for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes shall, in accordance with article 89 (1), not be considered to be incompatible with the initial purposes ("purpose limitation");
- Adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed ("data minimization");
- (d) Accurate and, where necessary, kept up to date; every reasonable step must be taken to ensure that personal data that are inaccurate, having regard to the purposes for which they are processed, are erased or rectified without delay ("accuracy");
- (e) Kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the personal data are processed; personal data may be stored for longer periods insofar as the personal data will be processed solely for archiving purposes in the public interest, scientific or historical research purposes or statistical purposes in accordance with article 89 (1) subject to implementation of the appropriate technical and organizational measures required by this Regulation in order to safeguard the rights and freedoms of the data subject ("storage limitation");
- (f) Processed in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures ("integrity and confidentiality").

1. Legal and administrative function

56. A primary purpose of civil registration is to furnish legal instruments – certificates of vital events – that enable people to prove the facts relating to their existence, identity, and personal and family situation. A certificate issued by the civil registration system has the full force and effect of the original vital record and is legally valid proof of the vital event. Proof of a vital event is often required to enjoy public or private sector services and for the fulfilment of basic rights. For example, a birth certificate may be required to enrol in primary school. A death certificate and marriage certificate may be required for an individual to obtain the pension benefits or life insurance proceeds of a deceased spouse.

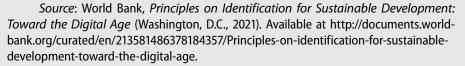
57. In addition to registering and certifying vital events, the legal function of civil registration in some countries may also include a role for the registrar as public attestor or notary public. In this role, registrars may be assigned legal powers to enable them to assist in creating certain legal documents by administering oaths and attesting to signatures. For example, in civil marriages, most countries authorize registrars to certify that the parties have the legal capacity to marry and also to authorize the celebration of the marriage. Recognition of filiation out of wedlock is permitted if the interested party makes an express declaration of filiation in the presence of the registrar.

Box 6

Principles on Identification for Sustainable Development

Recognizing that proof of identity is essential for an individual to participate fully in society and the economy, the World Bank, through its Identification for Development Initiative (ID4D), facilitated a global effort to develop a set of shared principles that are fundamental to maximizing the benefits of identification systems for sustainable development. The Principles on Identification for Sustainable Development are as follows:

	PRINCIPLES
INCLUSION: UNIVERSAL COVERAGE AND ACCESSIBILITY	 Ensure universal access for individuals, free from discrimination. Remove barriers to access and use.
DESIGN: ROBUST, SECURE, RESPONSIVE AND SUSTAINABLE	 Establish a trusted—unique, secure, and accurate—identity. Create a responsive and interoperable platform. Use open standards and prevent vendor and technology lock-in. Protect privacy and agency through system design. Plan for financial and operational sustainability.
GOVERNANCE: BUILDING TRUST BY PROTECTING PRIVACY AND USER RIGHTS	 Protect personal data, maintain cyber security, and safeguard people's rights through a comprehensive legal and regulatory framework. Establish clear institutional mandates and accountability. Enforce legal and trust frameworks through independent oversight and adjudication of grievances.



58. A primary function of a national identity management system is to provide identity credentials that enable people to prove their identity – in other words, to prove that they are who they say they are – and to reduce the risk of another person misusing a person's identity. These identity credentials may be required to benefit from government or private sector services.

2. Statistical function

59. Civil registration is the foundation for vital statistics, which, in turn constitute the collection of statistics on vital events in the lifetime of a person along with relevant characteristics of the events themselves and of the person and persons concerned. Vital statistics provide crucial information on the population of a country.³⁸ Informed government decision-making and socioeconomic planning require timely data on the size and

³⁸ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 1. characteristics of a country's population. Vital statistics and their subsequent analysis and interpretation are essential for setting targets and evaluating social and economic plans, including the monitoring of health and population intervention programmes, and the measurement of important demographic indicators, such as life expectancy at birth and the infant mortality rate. It is difficult for governments to plan, implement and evaluate social and economic development programmes without having access to continuous vital statistics from the civil register. Censuses at best provide periodic estimates and sample surveys are representative only at the national level and for large regions.

60. The statistics authority should compile vital statistics from the civil registration data. The civil registration system, in comparison to other methods of data collection, enjoys the advantage of being mandated by law to be continuous, permanent, compulsory and universal. It therefore has the ability to capture particulars of an event at the time it occurs, facilitating current and accurate data collection.³⁹ In addition, vital statistics derived from the civil registration system may include annual statistics from the smallest civil divisions, which no other data-collection system can provide. They therefore constitute the ideal source from which to derive accurate, complete, timely and continuous information on vital events. When civil registration input does not exist or is deficient, some countries may have recourse to a population census or a household sample survey to estimate the necessary vital statistics through retrospective questions on fertility, mortality and nuptiality. Fertility, mortality and nuptiality statistics may also be collected by instituting sample registration areas. In some countries, vital statistics needed for planning purposes rely on these additional sources of data, together with the application of indirect techniques of demographic estimation. It must be stressed that, even though population censuses, sample surveys and sample registration may provide estimates of the levels of fertility, mortality, fetal mortality, marriage and divorce, and, in the case of sample registration, estimates for mortality events by cause of death, they are not a substitute for a civil registration system, since they cannot provide such details over regular annual intervals and with universal coverage.⁴⁰

61. The compilation of vital statistics should generally attain two goals: first, the provision of total monthly or quarterly summary counts of vital events on a time schedule prompt enough to provide information for health intervention and population estimation programmes, administrative uses or other needs; and second, the production of detailed annual tabulations of each type of vital event cross-classified by its demographic and socioeconomic characteristics.⁴¹ (For a detailed discussion of presentation and dissemination of vital statistics see the *Principles and Recommendations for a Vital Statistics System, Revision 3*, paras. 257–270.) Note, however, that countries with very small populations may need to reconsider the frequency of tabulation based on their specific circumstances (see box 40, "Pacific islands: tabulation of vital statistics in countries with small populations" in chap. IV).

62. Publication of vital statistics reports offer government agencies and other users a dependable source of vital statistics data and provide the vital statistics agency with visibility in terms of its fulfilment of national needs, its purpose and its importance to society. Accordingly, legislation should mandate that the statistics authority publish and disseminate vital statistics reports and data on a regular basis, such as monthly, quarterly and annually.⁴²

3. Identity function

63. Civil registration is also the foundation for national identity management. The civil register should be the instrument underpinning a person's civil identification record. The United Nations Expert Group on Legal Identity has affirmed: "As reflected

³⁹ Ibid., paras. 80–81.

⁴⁰ Ibid., para. 29.

⁴¹ Ibid., para. 38.

⁴² Ibid., paras. 258–273, for a discussion on the presentation of results and data dissemination. ⁴³ United Nations and World Bank, "Principles of legal identity in the context of the 2030 Agenda for Sustainable Development", Principle II.

44 Ibid., para. 10.

- ⁴⁵ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 65–71.
- A unique personal identifier is sometimes referred to as a "personal identification number" (PIN). In the Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, the term used is "PIN". Here the term "unique personal identifier" is used to avoid confusion in later chapters. Some of the country examples of identity management systems discussed herein use both a unique personal identifier and a PIN. For example, in Estonia, all persons are assigned a unique personal identifier at birth and later in life are assigned two PINs that are attached to their identity credential for purposes of authentication. To distinguish between these two types of character sequences, "unique personal identifier" is used herein for the character sequence assigned to all persons in the population and "PIN" to refer to a personal identification number used for authentication.
- ⁴⁷ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 401.

in SDG Indicator 16.9.1, birth registration should be the primary means for the granting of legal identity, and civil registration remains the 'gold standard' by which legal identity should be maintained by Member States."⁴³ National identification systems that are not tied to birth registration exclude children and may undermine the civil registration system. Identification systems that enrol people at older ages fail to ensure that children's rights and services are properly supported through legal identity at birth and up-to-date data on this segment of the population for planning purposes. The lack of any formal linking of the civil register and identity register will make it more difficult to confirm the identity of those registered in the national identity system.⁴⁴ In addition, identity management systems that are not based on civil registration face challenges in updating the population register; a national identity system has limited ability to update the population register upon death and no ability to provide information on other vital events, including adoption, marriage and divorce. In addition, because identity credential systems operate on the principle of limited data collection, they provide no data for vital statistics.

64. Accordingly, a person's legal identity should be established through birth registration, which provides evidence of that person's identity in the form of a birth certificate. The birth certificate is then used as a foundation document for all other identification documents subsequently issued. When that person's death is registered, his or her legal identity is retired. Nevertheless, in order to uphold the right to identity for all, there may be need for special procedures to assist those whose births were not registered. For those born in the country and whose birth has not been registered, the process of identity registration should concurrently facilitate delayed birth registration. Similarly, if refugees, migrants, stateless persons and other persons born outside the country do not have legally valid birth certificates, they should be provided with alternative means to obtain identity credentials.

65. When each new vital event for an individual is registered, the civil registration authority will submit this information to the population register. While other sources also feed information into the population register, the civil registration system is uniquely positioned to provide reliable input and continuous updating of the facts of births, deaths, adoptions, legitimations, recognitions, marriages, divorces, annulments and judicial separations, and changes of name or sex. An efficient connection with the civil registration authority is therefore a fundamental element for the proper functioning of the population register.⁴⁵

A unique personal identifier⁴⁶ may be assigned to each individual at the time 66. of that individual's birth registration. Issuing the unique personal identifier at birth can incentivize birth registration thanks to the variety of uses of the unique personal identifier. For those not born in the country, unique personal identifier assignment comes at the time they enter into the identity management system for the first time (for example, upon immigration). This number may then be used in all subsequent civil registration and identity records of the person concerned, and also in a wide variety of other documentation acquired by individuals during their lifetime (passport, national identification card, driver's licence, voter card and others).⁴⁷ Data protection measures should be taken, however, when using a unique personal identifier to link across databases (see paras. 96 and 97 below). At the time of, or some time after, an individual's entry into the identity management system, the identity management authority will add layers of additional and relevant information, which may include a photograph, fingerprints and other biometrics. This is usually done when issuing identity credentials. These credentials may then allow individuals to access government and private sector services by giving these services assurance that the person is who they claim to be. For a full discussion on the life cycle of identity management, see section F below.

Box 7 Pakistan: increasing birth registration through the identification system

The Pakistan national identification system covers up to 98 per cent of the adult population and is close to reaching universal coverage. This high coverage is attributable to the many requirements put in place to encourage people to register; for example, an identity card is necessary to obtain a passport or open a bank account. The birth registration rate, however, remains low. Therefore the country is committed to using the electronic identification system to help to increase birth registration.

The National Database and Registration Authority, the national body responsible for the identity system, collaborates with the union councils – the smallest jurisdiction under provincial government – which are in charge of birth registration, enabling the councils to use the Authority's infrastructure, such as its mobile vans. The Authority has hired female drivers to register children in areas reserved for women. It has also taken advantage of the high rate of mobile telephone penetration and designed a mobile application to preregister births. Furthermore, the Authority has provided computers and software and incentivized registration by offering grants from the Benazir Income Support Programme for women. This collaboration has helped to boost the rate of birth registration.⁴⁸

67. Where identity credential registration rates are greater than civil registration rates, the identity management system can be used to strengthen the civil registration system. For example, in Pakistan, where almost all of the population has a national identity credential but birth registration remains low, the national authority responsible for the identity system is using its resources to help to increase birth registration (see box 7 for efforts by Pakistan to increase birth registration through the electronic identity (e-ID) system). While this is a commendable effort to increase birth registration, it does not, however, replace a strong civil registration system, which provides continuous updates not only on births, but also deaths, marriage, divorce, adoption, legitimation and recognition. Death registration is particularly important; without this information, identities are never retired from the system, leaving the system vulnerable to fraud and containing inaccurate content.

E. Vital events

The vital events that should be recorded for legal and statistical purposes are the 68. following: live birth, fetal death, death, marriage, divorce, annulment, judicial separation, adoption, legitimation and recognition. Cause of death, while not a vital event in itself (death is the vital event), should ideally be recorded for statistical and legal purposes when a death is registered; lack of information on cause of death should not, however, prevent death registration. Not every country records all vital events or publishes the statistics for registered events, although this remains an ultimate goal. Some countries do not vet have the means or feel the need to register each kind of vital event. In order to facilitate the establishment or the improvement of the civil registration system, an order of registration priority is assigned to vital events. Those of higher priority are live births, deaths, fetal deaths, marriages and divorces. Top priority should be given to live births and to deaths because they are fundamental to the assessment of population growth and of the health of the population. Recording of fetal deaths and their characteristics should be granted the next highest priority, in particular because of their value to the understanding of fertility and pregnancy outcomes.⁴⁹

69. Each vital event or occurrence on which registration information is to be collected should be defined in the civil registration legislation and those definitions should ⁴⁸ Secure Identity Alliance, Civil Registration Consolidation Through Digital Identity Management (Paris, 2015), p. 28.

⁴⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 290–291. be aligned with the definitions set forth by the United Nations. The definitions used in civil registration, vital statistics and identity management should be standardized to ensure interoperability of the civil registration, vital statistics and identity management systems. The definitions established by the United Nations are as follows:⁵⁰

Live birth: The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered live born (all live-born infants should be registered and counted as such, irrespective of gestational age or whether alive or dead at the time of registration, and if they die at any time following birth, they should also be registered and counted as deaths);

Death: The permanent disappearance of all evidence of life at any time after live birth has taken place (postnatal cessation of vital functions without capability of resuscitation). (This definition excludes fetal deaths, which are defined separately below);

Fetal death: Death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles (note that this definition broadly includes all terminations of pregnancy other than live births, as defined above);⁵¹

Marriage: The act, ceremony or process by which the legal relationship of spouses is constituted. The legality of the union may be established by civil, religious or other means as recognized by the laws of each country. Countries may wish to expand this definition to cover civil unions if they are registered; in such cases, registered partnership usually refers to a legal construct, registered with the public authorities according to the laws of each country, that leads to legal conjugal obligations between two persons;

Divorce: The final legal dissolution of a marriage, that is, that separation of spouses which confers on the parties the right to remarriage under civil, religious and/or other provisions, according to the laws of each country. In case a country recognizes registered partnerships, a legal dissolution of a registered partnership refers to the legal final dissolution of such a partnership, according to national laws, conferring on the parties the right to re-enter into another partnership or marriage;

Annulment: The invalidation or voiding of a marriage by a competent authority, according to the laws of each country, which confers on the parties the status of never having been married to each other;

Judicial separation: The disunion of married persons, according to the laws of each country, without conferring on the parties the right to remarry; Adoption: The legal and voluntary taking and treating of the child of other parents as one's own, insofar as provided by the laws of each country;

Legitimation: The formal investing of a person with the status and rights of a person born in wedlock, according to the laws of each country;

Recognition: The legal acknowledgement, either voluntarily or compulsorily, of the paternity of a child born out of wedlock.

⁵⁰ Ibid., para. 2.

The legal requirements for the registration of fetal deaths vary from country to country. WHO recommends reporting late fetal deaths (or third-trimester stillbirths) at ≥1000g birth weight, \geq 28 completed weeks of gestation and \geq 35cm body length. While birth weight and gestational age are closely linked, they cannot be used interchangeably, since there is a range of so-called "normal" birth weights for a given gestational age and gender, with substantial regional variations. Accordingly, a gestational age threshold has been recommended as a single parameter because it is a better predictor of viability than birth weight, and information about gestational age is more likely to be available than birth weight for stillbirths. See World Health Organization, Making Every Baby Count: Audit and Review of Stillbirths and Neonatal Deaths (Geneva, 2016), p. 18.

70. The civil registration legislation should list the vital events for which registration is compulsory. If this list does not include all the events defined above, the legislation could include a provisional clause to provide for the possibility of subsequently extending the list of events to be registered. This allows the list of vital events for which registration is compulsory to be expanded later if appropriate. For example, if a country initially wishes to register only births and deaths, owing to resource limitations or for other reasons, the legislation could authorize the registration authority to expand the list of vital events to include, for example, fetal deaths, marriages and divorces, at a later date.

F. Identity management and identity life cycle

71. While the civil registration system provides for legal registration and certification of vital events, it is not designed to securely link the identity information in the register with a specific person. For example, when adults present a birth certificate it is difficult to know with a high level of assurance whether the document is truly theirs without the benefit of additional information. The addition of some form of biometric information, such as a facial image, fingerprints or other information unique to the identity holder, when linked with the civil registration information, is one way to increase the level of assurance. That identity information can be recorded on a secure medium that can then be used for identification purposes; to verify that the person claiming a certain identity is indeed that person.⁵²

72. **Identity management:** This refers to producing legally valid proof of identity for all individuals and maintaining systems for managing information and documents associated with their identity, which may include individual biometrics. Identity management authorities must make numerous decisions on how to manage identity information, including decisions regarding technological specifications, as well as legal and administrative procedures. The present section is not intended to provide technological advice; indeed, technology specifications should not be included in civil registration, vital statistics and identity management legislation in order to avoid locking into a particular type of technology, which makes a system unable to benefit from technological advances. Rather, the present section is meant to introduce key concepts of identity management and highlight areas that require policy decisions by lawmakers. These key concepts are further elaborated in chapter IV, section D, identity management.

73. While there is a wide variety of country practices and systems for identity management, there are many elements common to identity management systems globally, including the assignment of a unique personal identifier and the life cycle of identity. For countries that use a unique personal identifier, each person is assigned such an identifier at birth registration, or at identity registration at a later age. A unique personal identifier is assigned to only one person, and a person should have only one such identifier within a jurisdiction. (It is, however, possible for people who are residents or citizens of more than one jurisdiction to have a unique personal identifier in more than one jurisdiction.) A unique personal identifier is assigned to an individual for life and generally cannot be changed except under specified circumstances, such as identity theft. While the unique personal identifier is unique, it is difficult to know with a high level of assurance that the person presenting a unique personal identifier is its true owner without additional confirmation. The creation of a digital identity increases this level of assurance. For a national identity system, individuals usually register for a digital identity between the ages of 15 and 18 years.

74. **Digital identity:** This term describes a set of electronically captured and stored attributes and credentials that can uniquely identify a person.⁵³ Digital identities are

⁵² Organization for Security and Cooperation in Europe, Compendium of Good Practices in Identity Management in the OSCE Region (Paris, 2017), p. 40.

⁵³ World Bank, Technical Standards for Digital Identity (Washington, D.C., 2017), p. 2.

55 Ibid.

- ⁵⁶ Alan Gelb and Julia Clark, "Identification for development: the biometrics revolution", Working Paper 315, Center for Global Development (Washington, D.C., 2013), p. 9.
- ⁵⁷ World Bank, Identification for Development: Strategic Framework, 2016, p. 11.
- ⁵⁸ Anil Jain and others, "Fingerprint recognition of young children", *Technical Report*, Michigan State University, September 2016, p. 1.
- ⁵⁹ Preliminary Discussion Paper on the Future of Identification and Development, Center for Global Development, p. 54.
- ⁶⁰ World Bank, Technical Standards for Digital Identity, pp. 3–4.

created and used as part of a life cycle that includes four fundamental stages: first, registration, including enrolment and validation; second, issuance of documents or credentials; third, authentication for service delivery or transactions;⁵⁴ and fourth, identity management, which includes updating identity attributes in the system, such as invalidating the identity credential for either fraud or security reasons, or retiring an identity credential in the case of the individual's death.

75. Enrolment: This process involves capturing and recording, in the identity management system, key identity attributes from a person who claims a certain identity, which may include biographical data (e.g., name, date of birth, sex, address, email), biometrics (e.g., fingerprints, iris scan), along with other attributes. The specific attributes captured during this phase, and the method used to capture them, have important implications for the trustworthiness of the identity and also its utility and interoperability with other identity systems.⁵⁵ For example, some individuals may have biometrics that are hard to capture, either because of faulty equipment or physical characteristics. The latter may include, for example, worn fingerprints in the case of rural and manual workers, or unreadable prints in the case of the very old. Cataract surgery can hinder iris recognition.⁵⁶ In addition, while national identification systems are increasingly using biometrics, there are risks attached to relying on biometrics. Unlike other forms of digital credentialling, when biometric security is breached the damage is long-lasting. You can change your password after a breach but you cannot change your fingerprints.57

76. As previously stated, a person's entry into the identity system occurs at birth with birth registration, which often is accompanied by the assignment of a unique personal identifier. Enrolment and validation for purposes of obtaining an identity credential may, however, often occur at a later age because biometric information of very young children may not have sufficient salient features to identify a child. This is changing with the development of new technologies.⁵⁸ While the typical age for adult enrolment is between 15 and 18 years, younger children have been successfully enrolled using biometrics. India's Unique Identifier programme takes biometrics from the age of 5, re-registering children at the age of 15. In an initiative to fight child trafficking, Mexico has successfully identified some 14 million children from the age of 5 using iris, fingerprints and face.⁵⁹ The accuracy and validity of early-age biometric collection are still, however, being tested. If biometrics are used in a national identification system, policymakers must decide at what age an individual's biometrics are to be collected.

77. **Identity registration validation:** Once the person has claimed an identity during enrolment, this identity is then validated by checking the attributes presented against existing data, such as information in the civil register and other databases. The validation process ensures that the identity exists (that the person is alive) and is claimed by one person (it is unique in the database). In modern digital identity systems, uniqueness often is ensured through a de-duplication process using biometric data.⁶⁰

78. **Issuance:** A registered identity goes through an issuance or credentialling process, where identity providers may issue a variety of credentials (for example, unique personal identifiers, smart cards, or subscriber identification module (SIM) cards enabled with public key infrastructure (PKI) technology). For an identity to be considered digital, the credentials issued must be electronic, in the sense that they store and communicate data electronically. Common types of electronic credentials fall into three categories: first, something you know (e.g., a password); second, something you have (e.g., an identification card, a mobile telephone or a cryptographic key); or third, something you are (e.g., a fingerprint or other biometric data).⁶¹ Types of electronic

credential systems include smart cards, 2D bar code cards, mobile identity and identity in a central store or on the cloud, such as an identity number and biometrics (see chap. IV, sect. D for more details on these types of systems).

79. Technology changes swiftly. The types of biometrics and credentials that a country wishes to use, or that are widely available for use, will change over time. For example, current biometrics may include a photograph and fingerprints; future biometrics may include an iris scan or voice or vein recognition. A country's digital credentials may currently be in the form of a smart card or SIM card; the future may be a smart watch or currently unforeseen formats.⁶² Legislation should therefore be written broadly to provide enough flexibility to account for future technological advancements. In this case, legislation might require the attachment of biometrics to a legal identity through the issuance of a digital credential. Moreover, the age of collection, the type of biometrics and the system of credentials should be addressed in regulations, which are easier to amend as technology advances.

80. The information contained on the face of, or accessible from, a credential has important implications. Credentials that contain personal information, such as citizenship, residency status, or ethnicity, may increase the risks of discrimination, profiling and social exclusion. They may also increase the risk that such information is shared unintentionally or with persons who have a legitimate interest in only some of the data from the credential. While such information may be stored in an identity management system or population register and made available to authorized officials, information that identifies a person as belonging to a certain segment of the population does not necessarily need to be visible in, or accessible from, a credential. While there may be legitimate reasons for issuing identity credentials with this information, policymakers should carefully consider whether those reasons outweigh the potential risks.

81. Similarly, policymakers may wish to consider not having a "sex" or "gender" data field on an identity card or other credential. For transgender people and people who identify as neither male nor female, an identity card that indicates "sex" or "gender", or a unique personal identifier that contains a sex-specific digit, may be incongruent with their gender identity. Gender-incongruent identification exposes people to a range of negative outcomes, from denial of employment, housing and public benefits, to harassment and physical violence. Many transgender people, however, have gender-incongruent identification credentials due to the complicated and lengthy processes needed to change name and gender in the identification system. Leaving "sex" or "gender" off identity cards or other credentials and avoiding sex-specific digits in a unique personal identifier alleviates this situation. Alternatively, policymakers should consider simplifying the process for changing name, sex and gender on identity cards or other credentials, such as removing proof of surgery and court order requirements.

82. The design of a national identity credential intended purely for domestic use is regulated under a country's own laws. If, however, a national identity credential is also intended to be used as an international travel document, the design of the national identity credential is regulated by international standards set by the International Civil Aviation Organization (ICAO). As at 2017, in 40 of 57 OSCE member States, national identity cards had been designed according to ICAO specifications, which means that they contain a machine-readable zone on the card. Among those 40 States, there were 20 that had added a contact chip to their identity cards to facilitate other in-country processes. The content of the contact chip is mainly used in the issuing country for identity verification and e-services. To support facilitated cross-border travel, 13 States also had a contactless chip that was designed according to ICAO specifications and contained the same information as is stored in an e-passport.⁶³

⁶² See Netherlands National Office for Identity Data, Ministry of the Interior and Kingdom Relations, "Identity management in 2030", (The Hague, 2015), p. 12.

⁶³ Organization for Security and Cooperation in Europe, Compendium of Good Practices in Identity Management in the OSCE Region, p. 41.

Box 8

Identity documents for transgender persons in Costa Rica

In 2016, the civil registrar issued a decree allowing transgender persons to request identification documents that reflected their self-defined gender identity, including the option of a "known as" field to incorporate a name that differs from the person's registration name. Starting in 2018 and following an advisory opinion on gender identity from the Inter-American Court of Human Rights, the civil registrar removed the sex marker from all identification documents and also from web searches in order to eliminate any stigma for transgender persons.

Authentication: Authentication is the process of verifying the claimed identity 83. against the registered identity information;⁶⁴ in other words, the process by which people prove that they are who they say they are. Once people have been registered and credentialled, they can use their digital identity to access benefits and services to which they are entitled. Authentication should not be confused with "authorization", which involves determining whether a person has a right to a particular service.⁶⁵ Authentication is under consideration here, not authorization. If entitled, individuals may use their unique personal identifier number to pay taxes through an e-government portal or to get access to health services; or they may use their identity card to verify their identity and open a bank account. In order to gain access to services, the user must be authenticated using one or more factors that, like credentials, generally fall into one of three categories - something you know, something you have, or something you are. Authentication using these attributes can occur through various pathways, including smart cards, mobile identity or identity in a central store or on the cloud (see chap. IV, sect. D, for further details on these systems).

84. As with the issuance of credentials, policymakers will need to determine the factors used in authentication and whether one or more factors are used, based on the level of assurance required. Authentication does not necessarily involve biometrics. For example, while Estonia uses biometrics to de-duplicate, biometrics are not used to authenticate identity. Instead, Estonia uses a smart identity card with two digital certificates to authenticate identity (see box 9 for details).

Identity management - retirement and archiving: Throughout the life cycle, 85. identity management authorities will continuously update information in the identity management system from information provided by the civil register and other registers. When a death is registered, the civil registration authority must transmit this information to the identity management authority so that the identity management authority may retire or deactivate the unique personal identifier and the identity credential of the deceased individual. This information should also be shared with the population register. This is an important step in preventing the fraudulent use of the identity of the deceased. It also alerts other agencies that may be linked to the identity management system or population register - such as tax and pension authorities that the identity is no longer active. Accordingly, the law should require the national registrar to transmit death registration information including, at a minimum, name and unique personal identifier, and any other information that will allow the deceased to be matched to an identity in the system. Data pertaining to identities that are retired should be permanently archived. Generally, unique personal identifiers are not reused, or are reused only after 50-100 years.

86. Generally, a unique personal identifier belongs to an individual for life and is not retired or deactivated until death. There are, however, limited circumstances other

- ⁶⁴ World Bank, Technology Landscape for Digital Identification (Washington, D.C., 2018), p. 6.
- ⁶⁵ Ibid., p. 7.

Box 9 Estonian electronic identity system

The Estonian electronic identity (e-ID) system, launched in 2002, is underpinned by a State-held population register, which provides all citizens and other residents with an 11-digit unique personal identifier. In addition to the unique personal identifier, the database contains each person's name, sex, date of birth, place of birth, address history, citizenship and legally recognized relationships. Each person is also issued an email account to provide an electronic address. The personal identifier is used universally by State agencies and by a number of private entities to identify users and link them to their records within their respective systems (medical history, police records and others). Enrolment is compulsory for citizens and residents at the age of 15. Biometrics (face and 10 fingerprints) are taken to ensure against duplicate enrolments but they are not used for authentication. Authentication is effected through a smart identity card containing a microchip with two digital certificates: one for authenticating the holder with a PIN called PIN1, and the other for digital signing, which requires a separate PIN called PIN2. PIN1 is a minimum fourdigit number and PIN2 is a minimum five-digit number. Both are completely under the control of the user. Authentication consists in a match-on-card process, meaning that the PIN is matched against the information stored on the card rather than against the central database. Digital signatures and authentication are legally equivalent to handwritten signatures and face-to-face identification in Estonia and between partners upon agreement anywhere around the world.66

than death under which a unique personal identifier may be retired, for example, if an identity is hacked and used for fraudulent purposes. For that reason, the law should include provisions for the retirement of a unique personal identifier and the assignment of a new unique personal identifier for individuals who have experienced a breach in security.

87. Identity management may involve not only sharing data within a country, but also across countries. Sharing data across jurisdictions is crucial to ensuring that civil register and identity records are updated to reflect the correct civil status of each individual. This is particularly important for deaths and name changes occurring overseas. Cross-border information-sharing arrangements are generally set out in bilateral or multilateral agreements, rather than a country's domestic laws.

G. Interoperability

88. Most civil registration, vital statistics and identity management systems have numerous stakeholders, with information collected in, stored across and transferred between multiple registries maintained by different agencies. The efficient functioning of such systems depends on the cooperation of these stakeholder agencies to ensure that these registries are "interoperable", in the sense that they can communicate with one another and exchange information. This will facilitate the timely transfer of information and production of statistics, and help to avoid duplication of records and of errors and omissions.

89. To ensure coordination and cooperation and achieve interoperability, a stakeholder coordination mechanism should be established. This coordination mechanism can take the form of an inter-agency civil registration, vital statistics and identity management committee, with representatives from each of the stakeholder agencies, or a single government agency empowered to coordinate the activities of civil registration, vital statistics and identity management stakeholders and oblige stakeholders to ⁵ Alan Gelb and Anna Diofasi, "Preliminary discussion paper on the future of identification and development", Center for Global Development, 31 October 2015, p. 37.

Box 10

Pacific islands and the need for cross-border information-sharing

Residents of the Pacific islands frequently travel overseas for treatment when their local hospital does not provide the facilities or treatment necessary for their condition. As a result, many countries are therefore unable to get accurate counts of births and deaths, and distributions of cause of death. This has a serious impact on the vital statistics produced by these countries and adds further challenges to their health and development planning. Identity fraud risks are also created by identity records remaining open for deceased people. The reporting of vital events occurring overseas to the resident population is critical for these countries. For this reason countries are increasingly recognizing the need to share information between registrars on vital events that happen across borders. New Zealand is in the process of establishing a framework for vital event information-sharing with the Cook Islands, Niue and Tokelau.

collaborate with the coordinating entity (see chap. III, sect. I, on inter-agency cooperation, for a more detailed discussion of coordination mechanisms.) Whichever coordination mechanism is chosen – an inter-agency committee or single agency – this entity will be responsible for ensuring the interoperability of the systems of the stakeholder agencies. It should therefore be authorized to promulgate rules on interoperability, which is best achieved through administrative procedures, as administrative procedures provide more flexibility to respond to changing needs.

90. There are three aspects of interoperability: organizational interoperability, semantic interoperability and technical interoperability.⁶⁷ The legislation should authorize the coordinating entity to set interoperability standards for each aspect of interoperability.

91. **Organizational interoperability:** This is concerned with defining business goals, modelling business processes and bringing about the collaboration of administrations that wish to exchange information and may have different internal structures and processes. Achieving organizational interoperability can pose a particular challenge in decentralized systems of government, where civil registration or identity management authorities employ different processes in each state or province. The residency registration system in Germany provides an example of such a decentralized system

Box 11

German residence registration system

In Germany, individuals are required to register where they live. If they move, they have to deregister in their old community and re-register in their new community. There are about 5,400 citizen registers and, previously, moving involved a double burden of filling out two forms, one in the old location and one in the new location. These systems could not be centralized because the registration process falls under the jurisdiction of the 17 Länder, or federal states, under the coordination of the Federal Government and there were strong privacy concerns. The Federal Government therefore decided to use a coordinating authority to establish a standard for data exchange between the local communities and standard procedures for services such as address verification and change of address. As a result, an individual who moves now need only complete the process once and the information will be exchanged between the old and new location.⁶⁸

⁷ World Bank, Technical Standards for Digital Identification, pp. 26–27.

⁶⁸ Herbert Kubicek and Ralf Cimander, "Three dimensions of organizational interoperability: insights from recent studies for improving interoperability frame-works", *European Journal of ePractice*, No. 6, January 2009, pp. 2–3. and how organizational interoperability can be achieved. The system is outlined in box 11.

92. France provides another example of a decentralized system, where civil registration is managed and operated at the local level. Achieving interoperability between local databases makes it possible to query the system that was previously not feasible or at least rendered difficult by the paper-based systems. France has undertaken a process of linking local civil registration authorities through a dedicated network for data exchange called Communication électronique des données de l'état civil (Electronic Data Exchange of Civil Status Data – COMEDEC). Further details of the process are set out in box 12.

93. Semantic interoperability: This is concerned with ensuring that the precise meaning of exchanged information is understandable by any other application that was not initially developed for this purpose. In the civil registration, vital statistics and identity management context, this means that the definitions of vital events, data elements in forms and the way in which data elements are coded must be standardized across the civil registration, vital statistics and identity management authorities. For example, if the vital statistics authority uses the United Nations definitions of live birth, fetal death and death, and the civil registration authority is (incorrectly) calling a "fetal death" a "live birth" and "death" and registering the fetal death in the birth and death register, the vital statistics authority will have flawed data on births, deaths and fetal deaths. If the identity management authority requests "surname, name, middle initial" on a form and transmits this information to the civil registrar, which has data fields for "name,

Box 12

France: Electronic Data Exchange of Civil Status Data (COMEDEC)

In France, local civil registration databases are gradually being linked to a dedicated network for data exchange called COMEDEC, which is implemented jointly by the National Agency for Secure Documents and the Ministry of Justice. The system enables the electronic exchange of civil status data between the recipients of civil status data (passportissuing authorities and notaries) and the local civil registration authorities. Implementation of the COMEDEC network began in June 2012 with the connection of the first 16 pilot municipalities. The widespread deployment of the network started on 1 January 2014, and, by mid-2017, approximately 50 per cent of all local civil registration databases had become part of the network. A law on the modernization of justice in the twenty-first century, enacted on 18 November 2016, requires municipalities to connect their civil registration databases to the COMEDEC network by no later than 1 November 2018.

middle name, surname", it will be difficult to match the information. Thus, the information exchanged between agencies must be defined and requested in a format that is standardized so that the information is understood in the same way across agencies.

94. Technical interoperability: This covers the technical issues of linking computer systems and services. Technical interoperability can be achieved across agencies by using the same software platform or compatible software. The present Guidelines are not intended to provide advice on technology standards.⁶⁹ Policymakers should, however, ensure that procurement guidelines facilitate competition and innovation and prevent possible technology and vendor "lock-in", which can increase costs and reduce flexibility to accommodate changes over time.⁷⁰

95. **Interoperability and privacy:** As discussed above, in paragraphs 44–46 and 52–54 on confidentiality, data protection and privacy must be core principles of civil

- ⁶⁹ For guidance on technology standards, see World Bank, "Technology standards for digital identity: draft for discussion" (Washington, D.C., 2017).
- ⁷⁰ Principles on Identification for Sustainable Development: Toward the Digital Age, World Bank and Center for Global Development, p. 13.

registration, vital statistics and identity management systems. Data are particularly vulnerable during transmission, and, therefore, when considering interoperability and how data will be shared, policymakers must also consider the potential for breaches of security and privacy.

96. The most common way of sharing information across databases is through a unique personal identifier, as discussed above. While this facilitates data-sharing, it also poses a risk to privacy if individual records are merged across a wide range of registers, leading to the potential to consolidate a complete record of engagements and track transactions.⁷¹ An exchange of information between databases does not necessarily mean, however, that all information is stored on one database. Information can be centralized (stored on one database) or decentralized (stored across several databases), or stored in functional databases. Estonia operates an identity management system with information stored across functional databases, which allows individuals to control their own data and provides high security. Another approach is to restrict functional databases from storing the unique personal identifier. Some countries use a separate matching register to link the identity number assigned in a functional system with the unique personal identifier. Storing the unique personal identifier separate from, but alongside, other functional databases still allows for deliberate data matching and linkage for approved purposes, but adds a layer of security if there is a data breach. Taking a different approach, the system employed by Austria uses sector-specific PINs generated from a unique personal identifier in such a way that records cannot be matched across databases. Further details on the Estonian and Austrian systems are set out in box 13.

97. It is important to note that not all countries use a unique personal identifier and in some countries the use of a unique personal identifier to link information across databases is prohibited for privacy reasons. In Portugal the use of a unique personal

Box 13

Estonia: separate functional databases

While the Estonian electronic identity (e-ID) system is anchored in the national population register, each government agency and service provider stores only the data necessary for their own purposes. The databases of each department and service provider are held separately and are connected through the country's X-Road data exchange layer that manages the exchange of information as needed by each programme. Individuals have control over their data and if one entity wishes to see data in another entity's database, the individual must consent to this (unless the sharing of data is provided for by law). This allows residents maximum access and control over their data, including checking who has had access to data and when. Abuse by public officials is punishable by imprisonment.⁷³

Austria: use of cryptography

In Austria, cryptography enables users to access multiple government services using a single e-ID card while ensuring that transaction records cannot be matched across different databases using a common number. Each e-ID card includes a unique personal identifier – the source PIN – which is stored only on the card and cannot be held by any government body or private entity. When a cardholder wants to access a service using the card, a unique sector-specific identifier, called the sector-specific PIN (SS-PIN), is generated from the source PIN using a one-way cryptographic function. The SS-PIN is different for each service. It is not possible to derive one SS-PIN from another and the SS-PIN cannot be used to calculate the source PIN. This enables cardholders to use the same credential to authenticate themselves for all purposes, but prevents their records from being consolidated across different databases using a common number.⁷⁴

^{'1} Alan Gelb and Anna Diofasi, "Preliminary discussion paper on the future of identification and development", p. 29.

⁷³ Alan Gelb and Anna Diofasi Metz, *Identification Revolution: Can Digital ID be Harnessed for Development?* (Center for Global Development, Washington, D.C., 2018), p. 139. identifier is forbidden under article 35 of the Constitution and, in 1983, the German Federal Constitutional Court ruled that the introduction of a universal personal identifier is forbidden by German constitutional law.⁷² In Austria, there was significant resistance to the use of a unique personal identifier across all databases, due to concerns that this could result in a consolidation of records across databases and a loss of protection of privacy. As a result, Austria instituted the system described above.

98. To ensure that privacy is protected, the legislation or regulations should expressly specify which data may be exchanged between registries and require that the data exchanged should be purpose-specific, proportional and minimal, and that the use of such data should be expressly provided for under law or by consent. Although the legislation should not specify the technology to be used, the legislation should require technology that ensures data privacy during transmission.

H. Accountability and governance

99. Decisions by civil registrars and identity management officials affect people's daily lives. The decision to allow a person to register a vital event with certain information, or amend a vital event record or identity document, has implications for that individual's ability to access services and exercise their human rights. For this reason, it is essential that information in the civil registration and identity management systems be accurate, that these systems be accountable and transparent, and there be recourse under law to challenge official actions, including arbitrary decisions, abuses of discretion and violations of privacy. This requires that systems be put in place for monitoring and inspection of civil registration and identity management offices and systems and procedures for appeal be established. These concepts are discussed in the present section.

1. Monitoring and inspection

100. Given the legal and statistical functions of the civil registration system, it is essential that the information in the system be accurate. One of the principal functions of a civil registration system is to issue certificates, which serve as official evidence of the information on individual vital events contained in the register. It is therefore essential that the civil register accurately reflect reality. To achieve this, the national civil registrar must be broadly accountable for ensuring and verifying that the events registered are consistent with real life. To this end, legislation on civil registration, vital statistics and identity management should require the civil registration authority to put in place appropriate protocols for validating and cross-checking data, as well as monitoring and inspecting the procedures and files of local registration offices and other sources of vital events information.

101. Similarly, given the legal function of the identity management system, local identity registration offices and systems should be monitored and inspected to ensure efficiency and transparency, to prevent exclusion and to ensure that all stakeholders appropriately use identification systems to fulfil their intended purposes. Protocols should be put in place to respond to potential data breaches and receive individual complaints or concerns regarding the processing of personal data.

102. Legislation on civil registration, vital statistics and identity management should require a system of monitoring and inspection to ensure that civil and identity registration services provided are accurate and effective and should authorize the civil registration and identity management authorities to implement such a system. The method and system of monitoring and inspection should not be specified in the legislation, but rather in the form of procedures, to allow for adjustments as needed. ² Bundesverfassungsgericht, 15 December 1983, 65 Entscheidungen des Bundesverfassungsgerichts 1. The case is discussed in, among others, Gerrit Hornung and Christoph Schnabel, "Data protection in Germany I: the population census decision and the right to informational self- determination", 25 (1) *Computer Law and Security Report*, vol. 25, No. 1, (2009), p. 84. The civil registration and identity management authorities should formulate general instructions on the method and system of monitoring and inspection to verify that the civil registration and identity management services are performing efficiently, effectively and in compliance with legislation.

103. For civil registration and vital statistics, a monitoring system should track the total number of registrations of each type of vital event on a monthly basis and at every geographical or administrative level. Similarly, the total number of certificates issued and the flow of data for each type of vital event should be tracked periodically and at every geographical and administrative level. With these simple indicators, a national or local manager will be able to detect unexpected drops or spikes in the registration flow. Comparison with the expected or historical number of vital events, in particular at the local level, will shed light on the extent and completeness of registration. Where health facilities are the primary informant or notifier, these institutions should similarly be monitored to ensure completeness of registration. The national registrar should also monitor the number of registrations undertaken per registrar, as this can be used to identify areas for improvement, make adjustments to workloads or identify other administrative arrangements to improve service to the public. In addition, reports on time spent using registration software in each registration centre may be employed to monitor the actual time that offices are open to the public. For an in-depth discussion on monitoring, see paragraphs 204-208 of the Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1.

104. The legislation should require and authorize both ordinary inspections, performed on a routine basis, and ad hoc special inspections, carried out when there has been a report that an official has acted improperly. Ordinary inspections should focus on the following:

- (a) Compliance by the registration personnel with the rules for entries in the register and transmittal to the central register;
- (b) Verification that the data required for registration and statistical purposes are being recorded, and that the corresponding statistical reports are being transmitted to the competent agency within the established time periods;
- (c) Storing and archiving of the registration documents, whether physically or electronically, in the registration office;
- (d) Compliance with procedures for disclosing registration data through the proper issuance of certificates, and with procedures for transmission of data, while safeguarding individual privacy;
- (e) Verification that the registrar concerned is properly performing the assigned duties.

105. Inspectors who have knowledge of any violations must be obliged to check on the irregularities and try to remedy them. A good monitoring and inspection programme can inform training needs and help to improve training programmes. Inspectors should report deliberate violations to the national registrar. Where inspection discloses conduct classified as a criminal offence, the national registrar must be notified and must then report the fact to the competent legal authority for a review of any criminal offences that may have been committed. An error committed by a registrar or any civil

registration personnel, depending on its gravity, may be subject to the imposition of a fine and also to disciplinary sanctions.

106. Similarly, procedures should be developed for monitoring and inspecting identity registration offices and systems.

2. Recourse and remedy

107. Because decisions made by local civil registrars and identity registration officials affect how individuals function in society, procedures must be put in place to address complaints and disputes among users of the systems. The civil registration and identity management system should prevent fraud and corruption and ensure that civil registration and identity records are not used for unlawful or unethical purposes. No person should be subject to legal jeopardy, persecution or other harm as a result of using the civil registration or identity management system, or be prevented from using these systems by the threat or fear of such harm. Accordingly, actions taken by civil registration and identity management officials should be subject to review and appeal. Provisions regarding review and appeal may be set out in administrative codes or other laws and are not necessarily included in legislation specific to civil registration, vital statistics and identity management systems. Regardless of where the legislation or laws sit in a country's legal code, an individual should be permitted to appeal to a higher-level registrar or the national registrar within a prescribed time period against any decision made by a civil or identity registrar. The law should set out detailed instructions for processing the appeal. In all cases, if satisfactory relief has not been granted, an individual should be permitted to appeal to the courts after appealing through the administrative agency. The law should provide remedies where actions of civil registration, vital statistics and identity management agencies or registrars are determined to be faulty, negligent or an abuse of discretion or authority. Registrars should be subject to disciplinary, civil and criminal sanctions, as appropriate, for improper performance of the registration duties set forth in the law.

108. There should also be a mechanism for reporting corruption, abuses, or flaws in the system by individual users of the system, officials within the system, or by journalists investigating the system, without the threat of retaliation (see chap. IV, sect. H for a more detailed discussion on recourse and remedies).

Chapter II Human rights and civil registration, vital statistics and identity management systems

A. Rights-based approach to legal frameworks for civil registration, vital statistics and identity management

109. States must consider human rights obligations in the design and implementation of legal frameworks for civil registration, vital statistics and identity management systems. The absence of a legal identity and proof of identity can serve as a barrier to the enjoyment of the fundamental rights guaranteed by the Universal Declaration of Human Rights and other conventions. In practice, the rights to vote, own property, work, migrate, receive an education, receive social security and maintain an adequate standard of living, among others, require individuals to establish and prove their legal identity. Where identity must be established through a burdensome and discriminatory civil registration or identity management system, certain segments of the population will be unable to fully exercise their rights. Conversely, systems that are continuous and universal can help to protect the rights of people who would otherwise be left behind. Furthermore, the vital statistics generated from this system can be used to inform evidence-based policy decisions based on inclusive population data. A rights-based approach, as described in the present chapter, will support effective management and operation while ensuring that the rights of the population are protected throughout the civil registration, vital statistics and identity management system.

110. The human rights discussed in the present chapter are supported by the following international instruments:

- (a) Universal Declaration of Human Rights, adopted by the General Assembly in 1948;
- (b) Convention relating to the Status of Refugees, adopted by the General Assembly in 1951, and its 1967 Protocol;
- (c) Convention relating to the Status of Stateless Persons, adopted by the General Assembly in 1954;
- (d) Declaration on the Rights of the Child, proclaimed by the General Assembly in 1959;
- (e) Convention on the Reduction of Statelessness, proclaimed by the General Assembly in 1961;
- (f) Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages, adopted by the General Assembly in 1962;
- (g) Vienna Convention on Consular Relations, proclaimed by the General Assembly in 1965;
- (h) International Convention on the Elimination of All Forms of Racial Discrimination, adopted by the General Assembly in 1965;

- (i) International Covenant on Civil and Political Rights, adopted by the General Assembly in 1966;
- (j) International Covenant on Economic, Social and Cultural Rights, adopted by the General Assembly in 1966;
- (k) Convention on the Elimination of All Forms of Discrimination against Women, adopted by the General Assembly in 1967;
- (l) Protocol Additional to the Geneva Conventions of 1949 relating to the Protection of Victims of International Armed Conflicts, adopted by the General Assembly in 1977;
- (m) Declaration on the Human Rights of Individuals Who are not Nationals of the Country in which They Live, adopted by the General Assembly in 1985;
- (n) Declaration on Social and Legal Principles relating to the Protection and Welfare of Children, with Special Reference to Foster Placement and Adoption Nationally and Internationally, adopted by the General Assembly in 1986;
- (o) Indigenous and Tribal Peoples Convention (No. 169), adopted by the International Labour Organization in 1989;
- (p) Convention on the Rights of the Child, adopted by the General Assembly in 1989;
- (q) International Convention on the Protection of the Rights of all Migrant Workers and Members of Their Families, adopted by the General Assembly in 1990;
- Guiding Principles on Internal Displacement, adopted by the Inter-Agency Standing Committee in 1998;
- (s) Convention on the Rights of Persons with Disabilities, adopted by the General Assembly in 2006;
- (t) Global Compact for Migrants, adopted by the General Assembly in 2018;
- (u) Global Compact for Refugees, adopted by the General Assembly in 2018.

111. The present chapter catalogues many of the human rights that are affected directly or indirectly by civil registration, vital statistics and identity management systems, but it is not intended to provide an exhaustive list of all relevant human rights. Other rights that are enshrined in international, regional and national laws may not be included here. At the same time, each State may not be a party to all the international human rights treaties cited throughout the chapter. The obligations and principles of rights-based civil registration, vital statistics and identity management systems rest on overlapping and complementary norms that are difficult to disentangle. When evaluating and developing civil registration, vital statistics and identity management systems, legal experts should carefully evaluate the international recommendations and obligations by which the State must abide in the legal framework.

112. The fundamental connection between human rights and the civil registration of vital events was sealed when the International Covenant on Civil and Political Rights (effective since 1966) proclaimed that "every child shall be registered immediately after birth and shall have a name", a proclamation echoed by the Convention on the Rights of the Child (effective since 1990); and when the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages (effective since 1964) proclaimed that "all marriages shall be registered in an appropriate official register by the competent authority".⁷⁵

113. To protect the human rights afforded to individuals through civil registration, States must ensure that the civil registration, vital statistics and identity management

⁷⁵ United Nations Children's Fund, A Passport to Protection: A Guide to Birth Registration Programming (New York, 2013).

Box 14 Terminology in international human rights

Convention: a "convention" is a formal agreement between States and is legally binding. The generic term "convention" is thus synonymous with the generic term "treaty". Conventions are normally open to participation by the international community as a whole, or by a large number of States. Usually the instruments negotiated under the auspices of an international organization are entitled "conventions" (for example, the Convention on the Rights of the Child, adopted by the General Assembly in 1989).

Declaration: the term "declaration" is used for various international instruments. International human rights declarations are not legally binding; the term is often deliberately chosen to indicate that the parties do not intend to create binding obligations but merely want to declare certain aspirations. The 1948 Universal Declaration of Human Rights, for example, was not originally intended to have binding force, but its provisions have since gained binding character as customary law.

Treaty: a "treaty" is a formally concluded and ratified agreement between States. The term is used generically to refer to instruments binding in international law, concluded between international entities (States or organizations). Under the Vienna Conventions on the Law of Treaties, a treaty must be, first, a binding instrument, which means that the contracting parties intended to create legal rights and duties; second, concluded by States or international organizations with treaty-making power; third, governed by international law and, fourth, in writing.

systems are free of discrimination in terms of the legislation and implementation of the legislation covering civil registration, vital statistics and identity management. Discrimination is any distinction, exclusion, restriction or preference which has the purpose or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of human rights and fundamental freedoms in the political, economic, social, cultural or any other field of public life. Forms of discrimination include, but are not limited to, discrimination based on race, ethnicity, sex, gender expression, birth out of wedlock, religious or political affiliation, language, nationality, citizenship, refugee or other status, physical or mental disability, and other characteristics.

114. The meaningful protection of human rights depends on both incorporation in national legislation and effective implementation of that legislation. Civil registration illustrates this point. Many countries have enacted civil registration laws that require continuous and universal registration of all vital events in the country yet, in practice, registration of vital events falls short of universal civil registration. States that are parties to the international instruments listed in paragraph 110 above are required to ensure that their civil registration, vital statistics and identity management legislation upholds the human rights principles outlined in these conventions. Where any policy has the effect of creating or perpetuating discrimination, it must be amended, rescinded or nullified by the State.⁷⁶

115. There are two classes of human rights related to civil registration, vital statistics and identity management:

- (a) Rights that require States to ensure that all vital events are registered, that is, that civil registration is universal and continuous in its functioning;
- (b) Rights that may depend on the vital events having been registered (e.g., the right to vote requires a birth certificate to ascertain the age of the person).

⁶ International Convention on the Elimination of All Forms of Racial Discrimination, art. 2 (1) (c).

- ⁷⁷ International Covenant on Civil and Political Rights, art. 24 (2); Convention on the Rights of the Child, art. 7 (1); Convention on the Rights of Persons with Disabilities, art. 18 (2); and International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, art. 29.
- ⁷⁸ Universal Declaration of Human Rights, art. 15 (1); and International Covenant on Civil and Political Rights, art. 24 (3).
- ⁷⁹ Universal Declaration of Human Rights, art. 2.
- ⁸⁰ Birth registration provides the official record of each child's existence and identity, including the child's given and family names, and parents' information. Whether the country establishes nationality by place of birth or by nationality of parents, this information is often determined through the birth registration process.
- Eliminating civil registration fees helps to ensure that the service is available regardless of socioeconomic status. Governments should also consider reducing indirect costs that may serve as a barrier to registration, such as long travel distances to registration offices, unnecessarily long waiting times and complicated procedures, or repeated appointments that take family members away from their homes and work. In addition to removing such barriers, Governments should consider additional policies to relieve the burden of registration, such as mobile registration units that support registration in remote regions, hiring multilingual staff and translating key materials to serve native and foreign-language-speaking populations, and providing accomodation, such as wheelchair ramps and Braille documents, to persons with disabilities.
- ⁸² Universal Declaration of Human Rights; and International Covenant on Economic, Cultural and Social Rights, art. 12.

B. Right to register vital events

116. **Right to register a birth**: All people everywhere are born with inherent rights; these include the right to be registered immediately after birth, to have a name and, to the fullest extent possible, to know and be cared for by their parents.⁷⁷ The right to acquire a nationality also extends to all persons from birth.⁷⁸ Everyone is explicitly entitled to these rights without distinction of any kind, including race, ethnicity, sex, language, religion, citizenship, geography or other status, based on the principles of non-discrimination.⁷⁹ All States have an affirmative duty to ensure universal birth registration without exception. At a minimum, the legal framework must guarantee everyone equal access to birth registration.⁸⁰ In keeping with the *Principles and* Recommendations for a Vital Statistics System, Revision 3, civil registration should be inclusive and compulsory, and should capture all vital events occurring in every geographical area and in every population group in the country. Moreover, national legislation must regulate the procedures for delayed birth registration based on the protection of article 2 of the Universal Declaration of Human Rights that guarantees equal opportunities before the law. States should undertake appropriate measures to eliminate direct and indirect barriers to registration.⁸¹

117. As birth registration establishes legal identity and proof of legal age, a number of rights stem from the registration of the birth, including the right to enrol in primary school, the right to work, the right to serve or be exempted from serving in the armed forces, the right to vote and the right to marry. Moreover, as birth registration establishes familial ties, other rights may also depend on birth registration, including the right to inheritance and proof of nationality where established through parentage.

118. Right to register a death: Neither the Universal Declaration of Human Rights nor the other international instruments explicitly reference the right to death registration. This right is implicit, however, in article 12 (2) (a) of the International Covenant on Economic, Social and Cultural Rights, which stipulates that States parties must adopt measures to reduce stillbirths and infant mortality, the monitoring of which is linked to death registration. Moreover, as described in paragraph 116 above, civil registration should be inclusive and compulsory, capturing all vital events occurring in every geographical area and population group in the country. States' legislation should establish that registration of death is compulsory for all deaths occurring in the territory, regardless of race, religion, ethnicity, residency, citizenship, geography or other characteristics based on the principles of non-discrimination. In addition, there should be provisions for the registration of death in the case of missing bodies or missing persons presumed dead. Death registration is a means of recording whether a State has fulfilled its obligation to protect an individual's right to life and health.⁸² The human rights of surviving spouses and children may depend on death registration, such as the right to inherit property or the right to remarry. Ideally, all deaths should have the cause of death medically certified by a physician or other qualified health professional using the WHO International Form of Medical Certificate of Cause of Death. At the population level, the vital statistics generated from death registration and medical certification of causes of death inform public policies that affect the health and well-being of every person in the territory. Lack of information on cause of death should not, however, prevent registration of fact of death, as proof of death registration is often needed to uphold the rights of the surviving family.

119. **Right to report a stillbirth**: All fetal deaths should be reported to the health system for health planning purposes. The duty to record stillbirths – fetal deaths with a birth weight greater than 1000 g, gestation of more than 28 completed weeks of gestation and, if weight is not known, body length greater than 35 cm – is recognized by

the International Covenant on Economic, Social and Cultural Rights, which explicitly requires States to reduce the stillbirth rate (art. 12 (2) (a)). This reduction requires assessment of the initial and the monitoring of subsequent levels of stillbirths to ensure that interventions have the necessary impact. Only a complete register of stillbirths, along with a register of live births, can provide the data needed to accurately compute stillbirth rates.

120. **Right to register a marriage**: Under international law, States must take effective actions, including enacting legislation, to ensure that all marriages are registered in an appropriate register by a competent authority.⁸³ This registration helps to ensure that both parties are recognized as spouses under the law and are able to enjoy all the rights and responsibilities that stem from the marriage. The rights to marry and found a family extend to all men and women of marriageable age, without any limitation due to race, nationality, religion or other characteristics, based on the principles of non-discrimination.⁸⁴ States must take all appropriate measures to eliminate discrimination against women in all matters relating to marriage, including ensuring that they have the same right to enter into marriage.⁸⁵ The rights that may depend on the marriage having been registered include the legitimacy of children, rights to inheritance, application for family benefits, marriage allowances, collection of pension and insurance, and the right of a spouse to acquire a nationality.

121. **Right to register a divorce:** Whether through divorce, annulment, judicial separation, or other mechanism for dissolution of a marriage under national law, both men and women must be treated equally before the law. General Assembly resolution 843 (IX) of 1954 urged Governments to establish a register of divorces. In its resolution 1068 F of 1965, the Economic and Social Council recommended that "A divorce or judicial separation shall be granted only by a competent judicial authority and shall be legally recorded." Furthermore, article 16 of the Convention on the Elimination of All Forms of Discrimination against Women provides for the elimination of discrimination against women at the inception of marriage, during marriage and at its dissolution by divorce or death. Generally, divorce proceedings take place in a court of justice and divorces are granted by a court ruling. The rights stemming from divorce registration include the right to remarry, rights to division of assets and to establish custody of minor children subject to parental authority.

122. **Right to register other vital events:** The rights to register the priority vital events listed in the preceding paragraphs are guaranteed either explicitly or implicitly under international law. Registering other key vital events may be classified as an amendment or modification of a previously registered record of a vital event. For example, judicial separation and annulment provide updated information on the status of a marriage registration record. Similarly, adoption, legitimation and recognition modify birth records. Both individuals and States have an interest in and the right to ensure that vital records are accurate and, to the extent allowed by law, modifiable, based on changes in civil or other status.

C. Human rights that may depend on the registration of vital events

123. **Right to one's own identity**: Article 24 (2) of the International Covenant on Civil and Political Rights guarantees the right to identity: "every child shall be registered immediately after birth", and articles 7 and 8 of the Convention on the Rights of the Child further guarantees the right to a name from birth, the right to a nationality and the right to preservation of identity. Proof of identity, as established by birth registration and the subsequent issuance of a birth certificate, is often required to gain access

- ⁸³ Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages, art. 3; Convention on the Elimination of All Forms of Discrimination against Women, art. 6 (3).
- ⁸⁴ Universal Declaration of Human Rights, art. 16 (1) and (2); International Covenant on Civil and Political Rights, art. 23 (2); International Covenant on Economic, Social and Cultural Rights, art. 10 (1); and Declaration on the Human Rights of Individuals Who are not Nationals of the Country in which They Live, art. 5 (1).
- ³⁵ Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (1) (a).

to government and commercial services, including alternative forms of identification such as passports or national identity cards. Thus, civil registration serves as the entryway to a host of other rights. Proof of marriage and proof of death through civil registration are often required to exercise property, inheritance and other rights. States may require official identity documents, such as birth certificates or identification cards, to gain access to these services. On the one hand, such requirements increase demand for registration by creating an incentive for civil registration and identity management systems. On the other hand, when civil registration and identity management systems are not universal and inclusive, such requirements can create a barrier for unregistered persons to gain access to other crucial services. Until universal registration can be guaranteed, countries should consider allowing alternative forms of proof of identity for access to key services in the absence of official identity documents.

124. **Right of children to know their parents:** Article 7 of the Convention on the Rights of the Child establishes the right of children to know and be cared for by their parents, to the extent possible. This right will depend on States' legislation regarding the determination of filiation, and the means of recording filiation in the civil register. Children have the right to not be separated from their parents against their will, unless in accordance with applicable law and procedure in the best interest of the child (art. 9 (1)). Even when a child is separated from one or both parents, the child retains the right to maintain personal relations and direct contact with both parents on a regular basis, unless this is contrary to the child's best interest (art. 9 (3)). In certain cases, when a child is separated from one parent, the State has an obligation to provide essential information on the whereabouts of the absent parent (art. 9 (4)). States must support family reunification in a positive, humane and expeditious manner (art. 10 (1)). The duty to support reunification extends to refugee children who may have parents in another country (art. 22 (2)). Civil registration documents that establish a child's legal identity, age and parentage will help to facilitate the fulfilment of these rights.

125. **Right to non-discrimination by reason of birth**: This right is expressly recognized in article 2 of the Convention on the Rights of the Child, and in article 2 of the Universal Declaration of Human Rights, which states: "Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status." This right is further protected under articles 2 (1) and 24 (1) of the International Covenant on Civil and Political Rights, and article 14 of the Convention for the Protection of Human Rights and Fundamental Freedoms. It is important that the registration model protects the right to non-discrimination by reason of birth. For example, compulsory data fields on the forms required for birth registration and information contained in the birth certificate, such as birth in or out of wedlock, nationality or ethnicity, could be grounds for discrimination. The civil registration law should allow these fields to be left blank if requested, to avoid discrimination.

126. **Right of a child to a name:** The right to a name was first proclaimed internationally in principle 3 of the Declaration of the Rights of the Child and subsequently recognized as a right in article 24 (2) of the International Covenant on Civil and Political Rights. Articles 7 and 8 of the Convention on the Rights of the Child recognize the right of every child to a name and the obligation of the State to ensure implementation of that right through birth registration. As stated in article 8, children have a right to preserve their identity, including nationality, name and family relations without unlawful interference. When a child is illegally deprived of aspects of identity, the State must provide rapid and appropriate assistance and protection to re-establish the child's identity. 127. Right to a nationality: Every person has the right to a nationality. This includes the right to acquire, change and retain a nationality. Every child has the right to acquire a nationality at birth; the protection and exercise of this fundamental right is effected through registration at the time of birth. Nationality is granted at birth, by operation of law, or upon an application being lodged with the appropriate authority. Neither the celebration nor dissolution of a marriage between a national of a State and a foreigner nor a change in the nationality of a spouse during the marriage shall automatically affect the nationality of the other spouse. The 1961 Convention on the Reduction of Statelessness establishes an international framework to ensure the right of every person to a nationality. It requires that States establish safeguards in their nationality laws to prevent statelessness at birth and later in life. An important provision of the convention establishes that children are to acquire the nationality of the country in which they are born if they would otherwise be stateless. A country's constitution or founding charter typically governs who its nationals are and how nationality can be acquired or lost. Regardless of the means of acquisition of nationality in the State, birth registration must be provided for all births occurring within the territory, free of discrimination. The right to nationality is recognized in four international instruments:

- (a) Universal Declaration of Human Rights, article 15;
- (b) Declaration of the Rights of the Child of 1959, principle 3;
- (c) Convention on the Rights of the Child of 1990, article 1;
- (d) Convention on the Reduction of Statelessness, article 1, which establishes the commitment of all States parties to grant their nationality to any person born in their territory who would otherwise be stateless.

128. Right to health: All people have the right to a standard of living adequate for the health and well-being of themselves and their family, including medical care and essential social services, as stipulated by the Universal Declaration of Human Rights (art. 16).86 The right to the enjoyment of the highest attainable standard of physical and mental health extends to all people,⁸⁷ regardless of sex⁸⁸ or race,⁸⁹ and includes children,⁹⁰ persons with disabilities,⁹¹ tribal and indigenous persons,⁹² and migrant workers.93 Prenatal care must be provided to pregnant women to ensure their right to a healthy pregnancy and delivery and to prevent maternal death. Postnatal care must be provided to mothers and their newborns to fulfil their right to live and grow in good health. To the extent that medical facilities, health-care services, or insurance providers require proof of identity as a precondition for medical care, the civil registration and identity management systems must ensure that all people are registered and have the means of proving their identities. To protect the right to health, it is essential that deaths are registered and causes of death are captured to generate important vital statistics for informed health policies to prevent, treat and control morbidity and mortality in the population.

129. **Right of the family to protection**: The Universal Declaration of Human Rights (art. 16 (3)), the International Covenant on Civil and Political Rights, (art. 23 (1)), and the International Covenant on Economic, Social and Cultural Rights, (art. 10), recognize that the family is entitled to protection by society and the State as the natural and fundamental group unit of society. Families should be accorded the widest possible protection and assistance particularly for their establishment and while they are responsible for the care and education of dependent children.⁹⁴ The civil registration system facilitates how States legally recognize certain familial relationships such as parentage and marriage. States must ensure that flaws in the civil registration system do not interfere with this fundamental structure of society.

- See also the International Covenant on Civil and Political Rights, art. 23 (1); and the International Covenant on Economic, Social and Cultural Rights, art. 10 (1).
- ⁸⁷ International Covenant on Economic, Social and Cultural Rights, art. 12 (1).
- ⁸⁸ Convention on the Elimination of All Forms of Discrimination against Women, art. 12.
- ⁸⁹ International Convention on the Elimination of All Forms of Racial Discrimination, art. 5 (e).
- ⁹⁰ Convention on the Rights of the Child, art. 24.
- ⁹¹ Convention on the Rights of Persons with Disabilities, art. 25.
- ⁹² United Nations Declaration on the Rights of Indigenous Peoples, art. 25.
- ⁹³ International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, art. 28.
- ²⁴ International Covenant on Economic, Social and Cultural Rights, art. 10 (1).

- ⁹⁵ Convention on the Rights of the Child, art. 1.
- ⁹⁶ International Covenant on Economic, Social and Cultural Rights, art. 10 (3); and International Covenant on Civil and Political Rights, art. 24 (1).
- ⁹⁷ International Covenant on Economic, Social and Cultural Rights, art. 10 (3); and Universal Declaration of Human Rights, art. 25 (2).
- 98 Convention on the Rights of the Child, art. 7.
- ⁹⁹ Many privileges of adulthood also require valid proof of age, e.g., driving permits, and the purchase of certain products, such as alcohol or tobacco.
- ¹⁰⁰ United Nations Children's Fund, A Passport to Protection: A Guide to Birth Registration Programming (New York, 2013), p. 18.
- ¹⁰¹ Convention on the Rights of the Child, art. 40 (3) (a).
- ¹⁰² Ibid., art. 40.
- ¹⁰³ Ibid., art. 37 (d).
- ¹⁰⁴ International Covenant on Civil and Political Rights, art. 14 (4); and Convention on the Rights of the Child, art. 37 (b).
- ¹⁰⁵ Convention on the Rights of the Child, art. 40 (3) (b).
- ¹⁰⁶ Ibid., art. 37 (b).
- ¹⁰⁷ Ibid., art. 37; and International Covenant on Economic, Social and Cultural Rights, art. 10 (2) (b) and (3).

130. **Rights of children:** Children below the age of 18 years⁹⁵ are guaranteed special protections by their family, society and the State.⁹⁶ These protections are guaranteed to all children, whether born in or out of wedlock, and regardless of parentage or other conditions.⁹⁷ Children must be registered immediately after birth.⁹⁸ Birth registration by itself does not guarantee these additional rights of children. Inclusive and effective systems of child protection, health, education, social welfare and social and economic development are required. These protections also depend on an accurate and universal mechanism for establishing age.⁹⁹ Without a reliable birth certificate or other identity document to establish the identity and age of each child, a child and his or her family will continue to be vulnerable to specific forms of abuse, neglect and deprivation of social, economic and civil rights.¹⁰⁰

131. Rights of juveniles in criminal proceedings: The age of a child has tremendous consequences for how the criminal justice system must treat that child. States are obligated to establish a minimum age below which children are presumed to lack capacity to infringe penal laws.¹⁰¹ Children who are accused of infringing penal law have certain rights.¹⁰² Incarcerated children have the right to prompt access to legal and other appropriate assistance, the right to appeal their imprisonment and the right to a prompt judgment.¹⁰³ Punishments should take into consideration the child's age, inherent dignity and the desirability of promoting rehabilitation.¹⁰⁴ Whenever appropriate and desirable, alternative mechanisms should be used to deal with such children, such as care, guidance, supervision orders, counselling, probation and foster care.¹⁰⁵ Imprisonment must be used only as a measure of last resort and for the shortest appropriate period of time.¹⁰⁶ Any child that is incarcerated or otherwise deprived of liberty - including arrest, detention and imprisonment - must be separated from adult prisoners unless it is considered in the child's best interest not to do so.¹⁰⁷ Neither capital punishment nor life imprisonment without possibility of release may be imposed on any person below 18 years of age.¹⁰⁸ Children might be owed additional privacy measures in the criminal justice system.¹⁰⁹

132. **Right to education**: Everyone has the right to education.¹¹⁰ Primary education must be compulsory and available free to all regardless of sex, race, language or other characteristics. Similarly, secondary education must be made generally available and accessible to all, and higher education must be made equally accessible, based on capacity, to all without discrimination.¹¹¹ States must repeal any statutory provision or administrative practices that involve discrimination and must ensure, by legislation where necessary, that there is no discrimination in admission to education.¹¹² This right to elementary education must be protected for all children, including girls,¹¹³

- ¹⁰⁹ "Any judgment rendered in a criminal case or a suit at law shall be made public except where the interest of juvenile persons otherwise requires, or the proceedings concern matrimonial disputes or the guardianship of children", International Covenant on Civil and Political Rights, art. 14 (1).
- ¹¹⁰ Universal Declaration of Human Rights, art. 26 (1); International Covenant on Economic, Social and Cultural Rights, art. 13 (1); International Convention on the Elimination of All Forms of Racial Discrimination, art. 5 (e) (v); and Convention on the Elimination of All Forms of Discrimination against Women, art. 10.
- ¹¹¹ International Covenant on Civil and Political Rights, art. 13 (2); and Convention on the Rights of the Child art. 28.
- ¹¹² UNESCO, Convention against Discrimination in Education, 14 December 1960, art. 3.
- ¹¹³ Convention on the Elimination of All Forms of Discrimination against Women, art. 10.

¹⁰⁸ Convention on the Rights of the Child, art. 37; and International Covenant on Civil and Political Rights, art. 6 (5).

refugees,¹¹⁴ children of migrants,¹¹⁵ indigenous and tribal persons,¹¹⁶ and persons with disabilities.¹¹⁷ States should require that birth certificates be produced for enrolment in school, as this incentivizes birth registration. Nevertheless, if birth certificates or other identification are required to attend school, then the civil registration system must ensure that no person is denied education owing to a failure to register their birth. To protect against this, States should establish programmes that coordinate school enrolment with late birth registration.

133. **Right to maintenance and protection**: States must take all appropriate measures to protect children from any form of exploitation that is prejudicial to the child's welfare,¹¹⁸ including all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, maltreatment or exploitation, including sexual abuse.¹¹⁹ Every child has the right to special protection to ensure his or her development, and the right, without discrimination, to protective measures by his or her family, society and the State. Both parents have equal responsibilities to provide protection and maintenance to their minor children. Every child has the right to rest and leisure. All have the right to be protected from economic exploitation and from performing any work that is likely to be hazardous, harmful to health or development, or that interferes with the child's education.¹²⁰ States must establish a minimum age for employment and provide appropriate regulations on working hours and conditions for minor children.¹²¹ States must take additional steps to prohibit the worst forms of child labour, including slavery and practices similar to slavery, the use of a child for prostitution or pornography, the use of a child for illicit activities, and other work that is likely to harm the child.¹²²

134. Right to marry and dissolve marriage: The rights to marry and found a family extend to all men and women of marriageable age, without any limitation due to race, nationality, religion or other characteristics.¹²³ Moreover, spouses must have equal rights and responsibilities during marriage and at its dissolution.¹²⁴ These rights include the right to choose a family name, a profession and an occupation;¹²⁵ the ownership, acquisition, management, administration, enjoyment and disposition of property, whether free of charge or for a monetary consideration;¹²⁶ the same rights and responsibilities as parents¹²⁷ (discussed below); and other individual rights as recognized by the international instruments. Spouses must also have the same rights and responsibilities at the dissolution of a marriage.¹²⁸ Whether through divorce, annulment, judicial separation, or other mechanism for dissolution of a marriage under national law, both men and women must be treated equally before the law. Civil registration procedures should not discriminate in the dissolution of marriages. During such dissolution, provision must be made for the necessary protection of any children.¹²⁹ Civil registration and the family records may help to facilitate the protection of children and spouses in the case of such dissolution.

135. **Right of minors to protection from marriage**: Children below a statutory age can never freely consent to marriage. The right to "free and full" consent to marriage is recognized in the Universal Declaration of Human Rights, which states that consent cannot be "free and full" when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. Although marriage is not mentioned directly in the Convention on the Rights of the Child, child marriage is linked to other rights – such as the right to freedom of expression, the right to protection from all forms of abuse and the right to be protected from harmful traditions. States are required to enact legislation specifying a minimum age for marriage.¹³⁰ Marriages must be prohibited for any person under this age.¹³¹ The betrothal and the marriage

- ¹¹⁴ Convention relating to the Status of Refugees, art. 21.
- ¹¹⁵ International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, art. 30.
- ¹¹⁶ International Labour Organization, Indigenous and Tribal Peoples Convention, 1989 (No. 169).
- ¹¹⁷ Convention on the Rights of Persons with Disabilities, art. 24.
- ¹¹⁸ International Covenant on Economic, Social and Cultural Rights, art. 10 (3).
- ¹¹⁹ Convention on the Rights of the Child, art. 19 (1).
- ¹²⁰ Ibid., art. 32 (1).
- ¹²¹ Ibid., art. 32 (2); International Covenant on Economic, Social and Cultural Rights, art. 10 (3); and International Labour Organization, Minimum Age Convention, 1973 (No. 138).
- ¹²² International Labour Organization, Worst Forms of Child Labour Convention, 1999 (No. 182), art. 3.
- ¹²³ Universal Declaration of Human Rights, art. 16 (1) and (2); International Covenant on Civil and Political Rights, art. 23 (2); International Covenant on Economic, Social and Cultural Rights, art. 10 (1); and Declaration on the Human Rights of Individuals Who are not Nationals of the Country in which They Live, art. 5 (1).
- ¹²⁴ Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (1) (c).
- ¹²⁵ Ibid., art. 16 (1) (g).
- 126 Ibid., art. 16 (1) (h).
- ¹²⁷ Ibid., art. 16 (1) (d).
- 128 Ibid., art. 16 (1) (c).
- ¹²⁹ International Covenant on Civil and Political Rights, art. 23 (4).
- ¹³⁰ Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages, art. 2.

¹³¹ Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (2); and Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages, art. 2, except where a competent authority had granted a dispensation as to age, for serious reasons, in the interested of the intending spouses.

- ¹³² Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (2).
- ¹³³ Universal Declaration of Human Rights, art. 16 (1) and (2); International Covenant on Civil and Political Rights, art. 23 (2); and Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (1) (a).
- ¹³⁴ According to the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages, art. 1 (2), even if one party is absent, the competent authority may register the marriage if satisfied that the circumstances are exceptions and that an absent party has, before a competent authority in a legally valid manner, expressed and not withdrawn consent to marry.
- ¹³⁵ International Covenant on Economic, Social and Cultural Rights, art. 11 (1); and Universal Declaration of Human Rights, art. 25 (1).
- ¹³⁶ International Covenant on Economic, Social and Cultural Rights, art. 10 (2).
- ¹³⁷ Convention on the Elimination of All Forms of Discrimination against Women, art. 12 (2).
- ¹³⁸ International Covenant on Economic, Social and Cultural Rights, art. 12; and Convention on the Rights of the Child, art. 24 (2).
- 139 Ibid.
- ¹⁴⁰ Universal Declaration of Human Rights, art. 23 (1); and International Covenant on Economic, Social and Cultural Rights, art. 6 (1).
- ¹⁴¹ Convention on the Elimination of All Forms of Discrimination against Women, art. 11 (a).
- ¹⁴² Convention on the Rights of the Child, art. 32; and Convention relating to the Status of Refugees, art. 17.

of underage children cannot have any legal effect.¹³² The civil registration system can reduce the number of underage marriages by providing continuous and universal birth registration, which provides children with proof of legal age, and by requiring that both spouses provide proof of identity, age and consent as necessary conditions for marriage registration.

136. **Right of protection from forced marriage**: Marriage is only permitted when entered into with the free and full consent of both intending spouses.¹³³ The law must require that both spouses, after due publicity, express consent in person and in the presence of witness and the authority competent to solemnize the marriage.¹³⁴ Compulsory registration of marriages provides a crucial opportunity to prevent forced and underage marriages, by verifying the free and full consent of both parties to any marriage. The consent of only one party is not sufficient. The Universal Declaration of Human Rights, the International Covenant on Economic, Social and Political Rights, and the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages are explicit and categorical on this point.

137. **Right to adequate standard of living**: Everyone has the right to an adequate standard of living, including the rights to adequate food, clothing and housing.¹³⁵ Special protections, including ensuring precise and accurate statistics, must be established in the period before and after childbirth.¹³⁶ States must ensure that pregnant women receive appropriate health-care services and adequate nutrition during pregnancy, confinement and postnatal.¹³⁷ States have a specific duty to reduce stillbirth and infant mortality rates, and to ensure appropriate prenatal and postnatal health care for mothers.¹³⁸ States must also take, throughout the entire population, measures to protect the health of children, such as combating disease and malnutrition through the provision of adequate nutritious foods and clean drinking water, while recognizing the dangers of environmental pollution.¹³⁹ In addition, States must ensure that all segments of society have access to basic education and guidance on child health, nutrition and related issues.

138. **Right to work (employment):** Everyone has the right to work and to a job that is chosen freely on equitable terms and rates of pay.¹⁴⁰ The right to work is an inalienable right of all human beings, and everyone has the right, without discrimination, to equal pay for equal work.¹⁴¹ In addition, everyone also has the right to rest, to the enjoyment of free time, to the reasonable limitation of working hours and to periodic holidays with pay. To the extent that employers require proof of identity to work, to file and pay taxes or to receive related benefits, the civil registration system must ensure that all people are registered. Where there are restrictions on eligibility to work based on age, residency or nationality,¹⁴² employers are likely to rely on information contained on birth certificates and other identity documents to determine such eligibility. States have a duty to ensure that certificates and identity documents are available, and that all information is accurate.

139. **Rights to property and inheritance**: Everyone has the right to own property alone as well as in association with others.¹⁴³ States must also grant all people equality before the law to enjoy the civil right to inherit.¹⁴⁴ Spouses must have the same rights in respect of the ownership, acquisition, management, administration, enjoyment and disposition of property.¹⁴⁵ A functioning and universal civil registration, vital statistics and identity management system supports the protection of property rights. Proof

¹⁴³ Universal Declaration of Human Rights, art. 17; and International Covenant on Economic, Social and Cultural Rights, art. 25.

¹⁴⁴ International Convention on the Elimination of All Forms of Racial Discrimination, art. 5 (d) (vi).

¹⁴⁵ Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (1) (h).

of identity may be required for purchasing, possessing, or selling certain property, including real estate, automobiles or intellectual property, such as patents. Death registration can trigger the inheritance processes for property disbursement, and official state records of family relations contained in birth, marriage and other vital event records can serve as evidence for the proper distribution of that property. Finding alternative means of proving identity and family relationship may be expensive and time-consuming, especially after the breadwinner of a family has died. To the extent that certain persons are denied access to civil registration documents, their rights to property and inheritance are infringed.

140. **Right to migrate**: Everyone has the right to leave any country, including their own, and to return to their country.¹⁴⁶ If a birth certificate or other identifying document is required to acquire a passport or other travel documents, then the civil registration system must ensure that no person is denied their right of migration because of a failure to register. Travel and identity documents, such as passports and birth certificates, must be available and aligned with international standards to allow migration, without undue burden.

141. Right to social security: In the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond the person's control, everyone has the right to social security, including social insurance.147 Mothers should receive special protections during a reasonable period before and after childbirth,¹⁴⁸ which includes appropriate prenatal and postnatal health care.¹⁴⁹ During these periods, working mothers should be given paid leave or leave with adequate social security benefits.¹⁵⁰ To the extent that a birth certificate serves as proof of parentage and establishes the time of birth for benefit purposes, every mother must have the ability to register the birth of her child in an efficient and timely manner. These protections must be granted without discrimination to men and women,¹⁵¹ children,¹⁵² indigenous and tribal persons,¹⁵³ and persons with disabilities.¹⁵⁴ Refugees have the right to the same public relief and assistance as that accorded to nationals.¹⁵⁵ States often require that persons establish their identity prior to receiving social services to ensure fair distribution of public relief and reduce embezzlement and fraud; access to identity documents thus becomes a precondition for government support. Lack of proof of identity, however, must not mean that individuals or vulnerable populations are excluded from accessing these key services.

142. **Right of spouses to custody of children**: In matters relating to their children, men and women have equal rights and responsibilities as parents, irrespective of marital status.¹⁵⁶ Parents also have equal rights in deciding on the number and spacing of their children.¹⁵⁷ With regard to concepts such as guardianship, wardship, trusteeship and adoption of children in national legislation, men and women must have equal rights and responsibilities.¹⁵⁸ Whether the parents are married, unmarried, divorced or otherwise, the best interests of the child are paramount.¹⁵⁹ Birth registration, with the recognition of the biological or adoptive parents in the birth record, is crucial to enjoyment of this right.

143. **Right to elect (vote) and be elected**: Everyone has the right to take part in the government of his or her country, directly or through freely chosen representatives.¹⁶⁰ Every citizen has the right and opportunity to vote and to run for elected office, regard-

- ¹⁴⁶ Universal Declaration of Human Rights, art. 13 (2); International Covenant on Civil and Political Rights, art. 12 (2); and Convention on the Rights of the Child, art. 10 (2).
- ¹⁴⁷ Universal Declaration of Human Rights, art. 25 (1); and International Covenant on Economic, Social and Cultural Rights, art. 9.
- ¹⁴⁸ International Covenant on Economic, Social and Cultural Rights, art. 10 (2).
- ¹⁴⁹ Convention on the Rights of the Child, art. 24 (2) (d).
- ¹⁵⁰ International Covenant on Economic, Social and Cultural Rights, art. 10 (2).
- ¹⁵¹ Convention on the Elimination of All Forms of Discrimination against Women, art. 11 (e).
- ¹⁵² Convention on the Rights of the Child, arts. 26 and 27.
- ¹⁵³ International Labour Organization, Indigenous and Tribal Peoples Convention, 1989 (No. 169), art. 24.
- ¹⁵⁴ Convention on the Rights of Persons with Disabilities, art. 28.
- ¹⁵⁵ Convention relating to the Status of Refugees, art. 23. Regarding housing, refugees should have as favourable treatment as possible, and not less favourable than that accorded to aliens generally in the same circumstances (art. 21) and, where rationing exists, which applies to the population at large, refugees must be accorded the same treatment as nationals (art. 20).
- ¹⁵⁶ Convention on the Elimination of All Forms of Discrimination against Women, art. 16 (1) (d).
- 157 Ibid., art. 16 (1) (e).

¹⁵⁸ Ibid., art. 16 (f).

¹⁵⁹ Ibid., art. 16; and Universal Declaration of Human Rights, art. 25 (2).

¹⁶⁰ Universal Declaration of Human Rights, art. 21 (1).

- ¹⁶¹ International Covenant on Civil and Political Rights, art. 25.
- ¹⁶² Universal Declaration of Human Rights, art. 21 (3).
- ¹⁶³ See, for example, European Court of Human Rights, McCann and others v. United Kingdom, Judgment (Grand Chamber), 27 September 1995, para. 161; Inter-American Court of Human Rights, Montero-Aranguren and others (Detention Center of Catia) v. Venezuela, Judgment, 5 July 2006, para. 66; African Commission on Human and Peoples' Rights, general comment No. 3 on the right to life, paras. 2 and 15; and Human Rights Committee, general comment No. 31 (2004) on the nature of the general legal obligation imposed on States parties to the Covenant, paras. 15 and 18.
- ¹⁶⁴ Commission on Human Rights, updated set of principles for the protection and promotion of human rights through action to combat impunity (E/ CN.4/2005/102/Add.1), 8 February 2005, Principle 1.
- ¹⁶⁵ International Convention on the Elimination of All Forms of Racial Discrimination, art. 1 (1).

¹⁶⁶ Ibid., art. 1 (2) and (3).

¹⁶⁷ Ibid., art. 2 (1) (c).

¹⁶⁸ Ibid., art. 5.

less of sex, race, religion, ethnicity, geographical area or other characteristics, based on the principles of non-discrimination.¹⁶¹ The promise of universal and equal suffrage¹⁶² may be fulfilled through several measures, including a complete and accurate accounting of the identity of persons and their eligibility to vote and serve in office, which are often determined by the age and nationality information provided in civil registration documents. A functional civil registration system can help to ensure that everyone has the right to participate in government, either by becoming part of the voter register or by assisting voter registration officials to identify voters and determine eligibility.

144. **Right to have suspicious and unnatural deaths investigated:** The right not to be arbitrarily deprived of life is a foundational and universally recognized right, applicable at all times and in all circumstances, recognized in, among other instruments, the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights, the African, Inter-American and European human rights conventions, and the Arab Charter on Human Rights. To fulfil the right to life, States must not deprive any persons of their life arbitrarily, including by exercising due diligence to prevent the arbitrary deprivation of life by private agents. The duty to investigate suspicious and unnatural deaths is an essential part of upholding the right to life, and promotes accountability and remedy where the substantive right may have been violated. Where an investigation reveals evidence that a death was caused unlawfully, the State must ensure that identified perpetrators are prosecuted and, where appropriate, punished through a judicial process.¹⁶⁴

D. Protection of vulnerable populations

145. In order to comply with the international instruments recognizing and guaranteeing fundamental human rights, legislation on civil registration, vital statistics and identity management must explicitly include the protection of vulnerable populations and ensure equal access to civil registration, vital statistics and identity management services and the services afforded through establishing and proving legal identity.

146. Racial discrimination: The Convention on the Elimination of All Forms of Racial Discrimination governs discrimination based on race, colour, descent, or national or ethnic origin.¹⁶⁵ Distinctions based on nationality, citizenship or naturalization are outside the scope of the Convention, so long as such provisions do not discriminate against any specific nationality.¹⁶⁶ States must amend, rescind or nullify any laws and regulations that have the effect of creating or perpetuating racial discrimination wherever it exists.¹⁶⁷ These rights extend to political and civil rights (e.g., voting and public service, migration, nationality, marriage and choice of spouse, property ownership and inheritance) and economic, social and cultural rights (e.g., employment, housing, public health, education and cultural activities).¹⁶⁸ As discussed previously, civil registration, vital statistics and identity management systems must include everyone regardless of race or other distinction, and special care should be taken to ensure that information collected through such systems in no way perpetuates any form of racial discrimination. Civil registration systems often collect and record information on classifications such as race or ethnicity. While this information might be useful from the perspective of statistics, it is at the same time vulnerable to misuse. Therefore, if such information is collected, efforts must be made to ensure confidentiality.

147. Gender discrimination: The Convention on the Elimination of All Forms of Discrimination against Women requires States to take all appropriate measures to abolish existing laws, regulations, customs and practices that constitute discrimination against women.¹⁶⁹ Women and men should have equal rights, regardless of whether they are married or not. This equality must extend to all aspects of life, including family benefits, employment, social security, health care, social life, bank loans, treatment before the law, contracting and movement.¹⁷⁰ Women must have equal rights to acquire, change or retain nationality; neither marriage to an alien nor change of nationality by the husband during marriage should automatically change the nationality of the wife.¹⁷¹ Men and women should also have equal rights as to the nationality of their children.¹⁷² Laws regarding the registration of vital events depend on the laws relating to the vital events themselves. Laws on civil registration, vital statistics and identity management are likely to be affected by existing discriminatory laws and practices regarding marriage, paternity, pregnancy and other issues relating to gender. Nevertheless, when developing and implementing laws on civil registration, vital statistics and identity management, every effort must be made to eliminate such sex or gender discrimination wherever possible.

148. Children born out of wedlock: Children have the right to registration regardless of the marital status of their parents. In some countries, children born out of wedlock are vulnerable to non-registration as a consequence of registration policies that create evidentiary or process barriers to registration. For example, processes that require an additional witness for an unmarried mother to register a child, require both the mother and the father to provide information about themselves as part of the registration process, and strict rules about whether the father or mother's family name may be registered on the basis of family relations may create a barrier to registering the birth of a child born out of wedlock. Similarly, children being raised by extended family may face challenges in registration if policies allow only the mother or the father to register a child's birth. These types of barriers should be removed.

149. Religious discrimination: Discrimination based on religion is prohibited.¹⁷³ Everyone has the right to freedom of thought, conscience and religion. This right includes the freedom to have, adopt and change one's chosen religion, or to have no religion at all.¹⁷⁴ In its resolution 2005/40, the Commission on Human Rights urged States "to review, whenever relevant, existing registration practices in order to ensure the right of all persons to manifest their religion or belief, alone or in community with others and in public or in private" (para. 4 (c)).¹⁷⁵ Civil registration, vital statistics and identity management systems can avoid perpetuating religious discrimination by understanding and being responsive to the customs and traditions of the religions within the territory. For example, if marriages can be solemnized or certified by a leader of one religion, care should be taken to ensure that people from other religions have equal access to marriage registration. Religions may have requirements about the timing and customs for burial of the dead, and the process for issuing death certificates must respond to those needs. For example, Muslims need to bury their dead within 24 hours, so there must be some mechanism for providing immediate burial permits at any time, even after regular business hours. Lastly, while information on a person's religion, or the religion of the parents, might be collected for statistical purposes, this information should not have any legal implications, nor should it be recorded on a birth certificate or identification document.

150. **Same-sex relationships:** In some States, a person can legally marry a person of the same sex, and divorce that person. Same-sex couples may have children of their own with the assistance of a sperm donor, an egg donor or a surrogate. Adoption is another route to parenthood. To the extent that such relationships are recognized by the law, the civil registration system should facilitate the registration of such vital events without discrimination, as the right to found a family is guaranteed under the Universal Declaration of Human Rights.

- ¹⁶⁹ Convention on the Elimination of All Forms of Discrimination against Women, art. 2 (f).
- ¹⁷⁰ Ibid., arts. 11–13 and 15.
- ¹⁷¹ Ibid., art. 9 (1).
 ¹⁷² Ibid., art. 9 (2).

- ¹⁷³ International Covenant on Civil and Political Rights, art. 2 (1); International Convention on the Elimination of All Forms of Racial Discrimination, art. 5; International Covenant on Economic, Social and Cultural Rights, art. 2 (2); and Convention on the Rights of the Child, art. 30.
- ¹⁷⁴ Universal Declaration of Human Rights; and International Covenant on Civil and Political Rights, art. 18 (1).
- ¹⁷⁵ See also Human Rights Council resolution 6/37, para. 9 (f).

151. Intersex and transgender individuals: Typically birth certificates or identity cards include a field on biological sex; that information may not, however, correspond to the person's actual sex in cases of individuals who are intersex or may not conform with the person's gender identity. Sometimes this disparity is due to simple clerical error and should be amended easily under the authority of the registrar. In other cases, the disparity is because the person is either a transgender or intersex person. Transgender and intersex people have the same fundamental rights as all other people, including the right to life, privacy, self-determination, physical integrity and bodily autonomy. They should have the right to register vital events without intrusive medical examinations or mandatory surgical procedures. During birth registration, a medical practitioner should assign each child as either male or female (or leave blank or opt-in to a third option when permitted by law), but the civil registration and identity management systems should allow the person to be able to amend official documents at a later stage, in accordance with the law (see chap. IV, sect. C.6, for more information on amendments and corrections). With improvements in biometrics, it may not be necessary to include sex or gender information on identification documents at all. Such information could be recorded for statistical purposes, but not appear on publicly visible identification cards.

152. Discrimination against persons with disabilities: The Convention on the Rights of Persons with Disabilities requires States parties to eliminate discrimination against persons with disabilities in all matters relating to marriage, family, parenthood and relationships (art. 23 (1)). Equal rights and responsibilities include those relating to guardianship, wardship, trusteeship, and adoption of children or similar institutions (art. 23 (2)). Children with disabilities have the same rights as all children, to be registered immediately after birth, to have a name and nationality, and as far as possible to know and be cared for by their parents (art. 18 (2)). Persons with disabilities also have the right to acquire and change nationality and not to be arbitrarily deprived of their nationality on the basis of disability (art. 18). States must not deprive people, on the basis of disability, of their right to obtain, possess and use documentation concerning their nationality or other documentation of identity (ibid.) As discussed throughout, States should enact and implement affirmative measures within their civil registration, vital statistics and identity management laws and regulations to ensure that the process of registration and the documentation that it produces are accessible to persons with disabilities.

153. Indigenous and tribal persons: Indigenous persons have the right to determine their own identity or membership in accordance with their customs and traditions. This includes the right of indigenous individuals to obtain citizenship of the States in which they live. States have the responsibility for developing, with the participation of the populations concerned, the rights of these peoples and to guarantee respect for their integrity. Such action shall include measures for ensuring that they have the same standing and human rights that is guaranteed by national legislation to other members of the population. As these populations traditionally have difficulty accessing services provided by civil registration, vital statistics and identity management systems, special procedures should be developed, such as mobile registration units, to ensure that vital events in indigenous and tribal populations are registered.¹⁷⁶

154. Eliminating statelessness: Everyone has the right to a nationality.¹⁷⁷ In order to ensure that this right is protected, the Convention on the Reduction of Statelessness forbids States parties from depriving any person or group of nationality on racial, ethnic, religious or political grounds.¹⁷⁸ Certain vital events (such as marriage, dissolution of marriage, legitimation, recognition or adoption) can affect a person's civil status and nationality. If the act of registering a vital event has the effect of terminating a

- ¹⁷⁶ United Nations Declaration on the Rights of Indigenous Peoples (arts. 13 (1) and 33 (1).
- ¹⁷⁷ Universal Declaration of Human Rights, art. 15.
- ¹⁷⁸ Convention on the Reduction of Statelessness, art. 9.

person's nationality, then the registering State must ensure that the affected person is still recognized as a national of another State.¹⁷⁹ This is particularly important in the context of marriage.¹⁸⁰ Children are especially vulnerable to non-registration if their parents are not citizens or nationals of the country where the child is born. Whether their parents are citizens, permanent residents, refugees, asylum-seekers, tourists, migrant workers, undocumented residents or otherwise stateless, all children have the right to be registered in the country where they are born - irrespective of nationality laws. States are required to ensure that every person enjoys the right to a nationality, particularly those at risk of statelessness. States that are party to the Convention on the Reduction of Statelessness are required, with few exceptions, to grant nationality to persons born in their territory who would otherwise be stateless.¹⁸¹ Abandoned infants or foundlings who are discovered in the territory should be considered to have parents possessing nationality of that State, unless there is proof to the contrary.¹⁸² Under the Convention on the Status of Stateless Persons, the State where the stateless person is residing should provide administrative assistance to the stateless, including issuing and delivering any document or certificate that would normally be delivered to aliens by their national authorities, and giving credence to them in the absence of proof to the contrary. States must issue identity papers to any stateless persons on their territory who do not possess a valid travel document.¹⁸³ Lastly, the civil registration system should prioritize the accurate capturing of information on vital events rather than enforcement of immigration laws, so registrars should ensure that informants are encouraged to provide accurate information to the registrar without fear of repercussions on their own residency status (see para. 41 for a discussion on the intersection between civil registration, vital statistics and identity management laws and those relating to nationality and citizenship).

155. **Refugees:** Vital events concerning refugees residing within the territory should be registered without discrimination, in accordance with international law, including the 1951 Convention relating to the Status of Refugees.¹⁸⁴ In particular, the State where the refugee is residing should provide administrative assistance to the refugee, including issuing and delivering any document or certificate that would normally be delivered to aliens by their national authorities, and giving credence to them in absence of proof to the contrary.¹⁸⁵ This can be undertaken by the State or an international organization such as UNHCR. In addition, States must issue identity documents to any asylum-seekers or refugees on their territory who do not possess valid travel documents,¹⁸⁶ and should give sympathetic consideration to the issue of refugees in their territory who are unable to obtain a travel document from the country of their lawful residence.¹⁸⁷ Refugees should also be allowed to enjoy other rights that may derive from civil registration, including: the right to have personal status, including mar-

- ¹⁷⁹ Ibid., art. 5 (1): "If the law of a Contracting State entails loss of nationality as a consequence of any change in personal status of a person such as marriage, termination of marriage, legitimation, recognition or adoption, such loss shall be conditional upon possession or acquisition of another nationality."
- ¹⁸⁰ Convention on the Elimination of All Forms of Discrimination against Women, art. 9.
- 181 Convention on the Reduction of Statelessness, art. 1 (1). "A Contracting State shall grant its nationality to a person born in its territory who would otherwise be stateless. Such nationality shall be granted: (a) at birth, by operation of law, or (b) upon an application being lodged with the appropriate authority, by or on behalf of the person concerned, in the manner prescribed by the national law. Subject to the provisions of paragraph 2 of this Article, no such application may be rejected. A Contracting State which provides for the grant of its nationality in accordance with sub-paragraph (b) of this paragraph may also provide for the grant of its nationality by operation of law at such age and subject to such conditions as may be prescribed by the national law." Permitted exceptions in article 1 (3) include: "a child born in wedlock in the territory of a Contracting State, whose mother has the nationality of that State, shall acquire at birth that nationality if it otherwise would be stateless."
- ¹⁸² Ibid., art. 2.
- ¹⁸³ Convention relating to the Status of Stateless Persons.

¹⁸⁴ Convention relating to the Status of Refugees, art. 1 (A) (2): a refugee is any person who: "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence ... is unable or, owing to such fear, is unwilling to return to it".

¹⁸⁵ Ibid., arts. 25 (2) and (3), and 28.

¹⁸⁶ Ibid., art. 27.

¹⁸⁷ Ibid., art. 28, Governments may charge fees to refugees for the issuance of administrative documents, including identity papers; and art. 29 (2).

¹⁸⁸ Ibid., art. 12.
¹⁸⁹ Ibid., art. 16.
¹⁹⁰ Ibid., arts. 17–19 and 24.
¹⁹¹ Ibid., art. 21.
¹⁹² Ibid., art. 22.
¹⁹³ Ibid., arts. 20 and 23.
¹⁹⁴ Ibid., art. 26.
¹⁹⁵ Ibid., art. 2.

riages, recognized;¹⁸⁸ free access to courts,¹⁸⁹ employment and labour;¹⁹⁰ housing;¹⁹¹ education;¹⁹² public relief and rationing;¹⁹³ and freedom of movement.¹⁹⁴ Access to many of these rights depends, in practice, on the refugee having a legally valid identification. Concurrently, under the provisions of the 1951 Convention, all refugees also have a duty to conform to the laws and regulations of the country where they reside.¹⁹⁵ This applies to all the rules relating to civil registration, vital statistics and identity management and the mandatory registration of vital events, which should be formulated in a manner consistent with the 1951 Convention.

156. Internally displaced persons: In accordance with the United Nations Guiding Principles on Internal Displacement, every human being has the right to recognition everywhere as a person before the law. To give effect to this right to internally displaced persons, the concerned authorities shall issue to them all documents necessary for the enjoyment and exercise of their legal rights, such as passports, personal identification documents, birth certificates and marriage certificates. In particular, the authorities shall facilitate the issuance of new documents or the replacement of documents lost in the course of displacement, without imposing unreasonable conditions, such as requiring persons' return to their area of habitual residence in order to obtain these or other required documents. Women and men shall be equally entitled to obtain such necessary documents and shall have the right to have such documentation issued in their own names.¹⁹⁶

¹⁹⁶ United Nations Guiding Principles on Internal Displacement, Principle 20.

Chapter III Institutional arrangements for civil registration, vital statistics and identity management systems

157. There is significant diversity in how countries organize and structure their civil registration, vital statistics and identity management systems. In some countries, there is one lead agency responsible for such systems. In other countries, the functions of civil registration, vital statistics and identity management are performed by multiple agencies. In addition to variation in the number of agencies responsible for carrying out civil registration, vital statistics and identity management functions, countries also have differing levels of centralization or decentralization of civil registration, vital statistics and identity management systems. In centralized systems, there is a lead agency or agencies at the central government level, with local offices also in place or agencies within political subdivisions. In decentralized systems, there will be a lead agency or agencies at the level of each major political subdivision, and possibly even in smaller political subdivisions. In addition to the agencies directly responsible for the civil registration, vital statistics and identity management functions, other agencies - such as the health sector; law enforcement, coroners and other medical-legal officers, and emergency services; funeral, burial and cremation facilities; and the courts - have important roles to play in civil registration, vital statistics and identity management systems.

158. Countries can have efficient and effective civil registration, vital statistics and identity management systems with a wide variety of institutional arrangements – with one or multiple lead agencies, with a centralized or decentralized structure, and with a wide range of other institutional stakeholders. There is no "one size fits all" or "best practice" for institutional arrangements. Nevertheless it is crucial, given the wide range of entities involved in civil registration, vital statistics and identity management, that there be a strong coordination mechanism among all stakeholders. It is also important that the agencies and other stakeholders involved in civil registration, vital statistics authority and financial resources to carry out their duties. These topics – centralized versus decentralized systems, the structure of lead agencies, rule-making authority, the role of other stakeholders in civil registration, vital statistics and identity management systems, interagency coordination mechanisms and financial resources – are discussed below, with the aim of helping policymakers to focus on the decisions to be made before drafting legislation and regulations.

A. Centralized versus decentralized systems

159. A country's system of government – centralized or decentralized – will have an impact on the structure of its civil registration, vital statistics and identity management systems. A centralized system of government is one in which a central political executive exerts direct legal authority and control over major political subdivisions,

such as states or provinces. A decentralized government, on the other hand, is a system of government where primary authority is dispersed across major, and possibly minor, political subdivisions.

160. Depending on these political and administrative structures, and also on the country's customs and traditions, civil registration, vital statistics and identity management systems may be either centralized or decentralized.¹⁹⁷ In centralized systems, there will be a lead agency or agencies at the central level, with local offices at the level of major and minor political subdivisions. These local offices are directly responsible to the central agency or agencies. In a decentralized system, by contrast, there will be a lead agency or agencies at the level of each major political subdivision, and possibly at the level of smaller political subdivisions, answerable to the local rather than the central government. For example, in the United States, the responsibility for the registration of vital events rests with each of the individual 50 states, the District of Columbia and individual territories such as Guam, Puerto Rico and the United States Virgin Islands. For historical reasons, the City of New York is responsible for registering vital events within the city and maintains its own civil registration and vital statistics system. Even in a decentralized system, however, there must be an agency at the national level to enforce minimum standards or to work cooperatively with decentralized offices to ensure generally uniform practices and procedures.

161. The level of centralization of civil registration, vital statistics and identity management systems varies across countries. Indeed, even within a single country, one aspect of the system may be more centralized than others. For example, civil registration systems are decentralized in many countries, often because these systems were developed when processes were manual and it was easier to oversee civil registration at the local level. Identity management systems, on the other hand, are a more recent development in many countries and are often more centralized. Vital statistics is also often a centralized function. Accordingly, even within a specific country there may be varying degrees of centralization across the civil registration, vital statistics and identity management functions. Regardless of the chosen arrangement, it is important that legislation accurately reflect the level of centralization or decentralization of civil registration, vital statistics and identity management agencies, including clearly delineating the powers conferred to central level authorities, and also to provincial, state, district and village-level authorities, for each of the civil registration, vital statistics and identity management functions.

B. Single versus multiple lead agencies

162. Independent of whether a country's system of government is centralized or decentralized, the functions of civil registration, vital statistics and identity management may be performed by one or more government entities. In other words, one entity might be responsible for all three functions (civil registration, vital statistics and identity management) or the functions might be the responsibility of separate entities.¹⁹⁸

163. Housing the civil registration, vital statistics and identity management functions in one single agency is the least common institutional arrangement, as most countries choose to assign the vital statistics function to a national statistics authority.¹⁹⁹ Housing the civil registration and identity management functions in one entity, with the vital statistics function carried out by a separate entity, is the most common institutional arrangement. A 2017 survey of institutional arrangements of 169 governments found that in more than half of the countries the civil registration function and the identity management function were located within the same ministry, usually internal affairs (77 countries) or justice (12 countries). The table below depicts the institutional arrangements found in these 169 countries.²⁰⁰

¹⁹⁷ See Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 307–311, for a discussion on centralized and decentralized civil registration systems.

- ¹⁹⁸ In a decentralized system, each division of local government with devolved power – i.e., the province, state, district or municipality – would determine whether one or more entities carries out each of the functions.
- ¹⁹⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 43.
- ²⁰⁰ Alan Gelb and Anna Diofasi Metz, Identification Revolution: Can Digital ID be Harnessed for Development?, p. 110.

	Primary NID entity						
Primary civil registration entity	Ministry of Justice	Ministry of Interior/ Home Affairs	Electoral body	Subnational body	Indepen- dent NID organization	Other	Total
Ministry of Justice	12	11	4	0	0	3	30
Ministry of Interior/ Home Affairs	0	77	2	0	1	5	85
Ministry of Health	0	6	1	0	2	3	12
Electoral body	0	1	5	0	0	0	6
Subnational body	0	7	2	2	0	2	13
Independent NID org	0	0	0	0	5	0	5
Other	2	3	1	1	2	9	18
Total	14	105	15	3	10	22	169

Institutional Arrangements for National ID (NID) and Civil Registration^a

Source: World Bank ID4D dataset, 2017 edition, categories revised.

^a Categories and assignments have been revised from the original IDHD classification, in particular to separate out the category of subnational providers.

164. Housing the civil registration and identity management functions within the same ministry can be more convenient for the public (if civil and identity registration are co-located), can save funding by sharing resources and should facilitate coordination between civil registration and identity management. Locating the civil registration and identity management functions in the same ministry may not, however, guarantee coordination. There are many examples of countries in which, while the civil registration and identity management functions are situated in different departments of the same ministry, each department has distinct mandates, separate business processes, and separate data systems.²⁰¹ What matters most is that the functions, whether housed under one entity or multiple entities, be established and maintained as components of a coordinated and coherent system for registering vital events, managing identity, and producing vital statistics (see box 15 for details on the integration of civil registration and identity management in Peru).

165. As stated above, most countries assign responsibility for the vital statistics system to a separate agency, usually the national statistics office.²⁰² One advantage of this arrangement is that the national statistics office has the expertise and resources to compile, analyse, evaluate and disseminate vital statistics. This arrangement does, however, require continuous and effective coordination between the national statistics office and the civil registration agency. Another option is to place the vital statistics administration within the civil registration agency.²⁰³ In countries that do this, it may be easier to coordinate between the civil registration and vital statistics systems. For example, it may be easier to operate with a single form that combines data for legal and statistical purposes for data collection. A disadvantage of this model, however, is that it may lead to a lack of adequate representation and access for other government stakeholders (such as the health sector) that provide input into, and use information from, the vital statistics system.²⁰⁴ Here again, effective and efficient systems can be developed with either arrangement. What is most important is that, whatever arrangement is chosen, there is a high degree of coordination between the civil registration, vital statistics and identity management functions and other stakeholders in the civil registration, vital statistics and identity management systems (see sect. I below for a discussion on inter-agency cooperation).

²⁰¹ Ibid., p. 109.

- 202 Principles and Recommendations for a Vital Statistics System, Revision 3, para. 43; and Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 19.
- ²⁰³ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 43.
- ²⁰⁴ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 39.

Box 15

Peru: integration of civil registration and identity management

The Registro Nacional de Identificación y Estado Civil (National Registry of Identification and Civil Status - RENIEC) of Peru provides an excellent example of a high degree of integration between the civil registration and identity functions. In Peru, as in many countries, civil registration was traditionally the responsibility of municipal governments. RENIEC was established in 1993 and assumed its current responsibilities for national identification and civil registration in 1995. Both RENIEC and municipal registration offices can register births and issue certificates. For institutional births, the RENIEC in-house auxiliary registration offices register a newborn's birth and issue the birth certificate at the hospital. The issuance process for a child's first identity credential, the Documento Nacional de Identidad (National Identity Document – DNI), is also facilitated at the same time. Births occurring outside health institutions are often registered at municipal offices. The municipal records are integrated with the RENIEC database through municipal reporting at regular intervals. The timely transfer of local registry data to RENIEC is part of the Government's performance-based payment plan for municipalities – municipalities only get paid if the civil registry entries are received centrally. Civil registration therefore provides a continuous flow of data to the population register. Children whose births are registered at municipalities will have their identities registered and identity credentials issued at a later date, through regularly deployed RENIEC mobile units.²⁰⁵

C. Ministry versus autonomous agency

166. While many countries assign responsibility for civil registration, vital statistics and identity management functions to established ministries such as the ministry of justice or ministry of the interior, or entities within established ministries such as a department of identification within the ministry of the interior, other countries have chosen to establish a separate autonomous entity with responsibility for civil registration, vital statistics and identity management functions. The benefit of establishing and maintaining these functions within existing ministries is that this allows the systems to take advantage of the existing infrastructure, resources, and expertise within those ministries. On the other hand, establishing and maintaining any or all of these functions within an autonomous body can build trust in the system, thanks to the depoliticized nature of an independent body. Whatever the structure, it is important that the functions of civil registration, vital statistics and identity management be free from political influence (see box 16 for an example of the autonomous identification and civil registration agency in Peru).

Box 16

Establishment by Peru of an autonomous entity: RENIEC

RENIEC is an autonomous agency with constitutionally guaranteed independence from government ministries and other political bodies. As such, RENIEC does not directly depend on or report to any individual ministry, but carries out its work in coordination with Congress, the Electoral Committee, the Ministry of Health, the Ministry of Economic Affairs, and other government entities as needed. The head of RENIEC is appointed by the National Council of the Judiciary for a four-year term, following a competitive selection process. Persons holding or having recently held political leadership positions cannot be considered for the post.²⁰⁶

²⁰⁵ Alan Gelb and Anna Diofasi Metz, Identification Revolution: Can Digital ID be Harnessed for Development?, p. 120. 167. In some countries, such as Ghana and India, the autonomous agency reports directly to the cabinet or executive.²⁰⁷ In others, such as Nigeria and Rwanda, the autonomous agency is overseen by a board representing stakeholders. A representative board can have the added benefit of facilitating coordination and ensuring that the needs of stakeholders and users are taken into account. In Nigeria, the National Identity Management Commission is governed by a board of 18 individuals representing different government agencies and stakeholders.²⁰⁸ The National Identification Authority in Rwanda has a governing board that includes members from the private and public sector, at least 30 per cent of whom must be women.

168. In sum, whether creating new civil registration, vital statistics and identity management systems or reforming existing systems, policymakers have decisions to make regarding institutional arrangements, including whether to house the civil registration, vital statistics and identity management functions in single or multiple entities, whether these functions are best undertaken by ministries or autonomous agencies, and whether any autonomous entity will have stakeholder boards or report directly to the executive. There is no "best practice" in regard to these structures. Policymakers should choose the institutional arrangements that work best with their country's system of government, traditions and needs. What is most important is that legislation on civil registration, vital statistics and identity management accurately reflects the chosen institutional arrangements.

D. Power to issue regulations and to delegate authority

169. The heads of civil registration, vital statistics and identity management agencies must have the power to oversee the management and operations of their respective agencies and any local offices of those agencies. To enable this, heads of agencies should be authorized to undertake, at a minimum, the following management responsibilities (within each of their respective systems): management and inspection of civil registration and identity registration services; participation in drafting of regulations, rules and instructions; assessing the degree of coverage and completeness; conducting ongoing quality assurance monitoring and addressing areas of concern; establishing boundaries for local offices; hiring, management and training of personnel; management of physical resources and technology; resolution of incidents and appeals; promoting the registration requirements to the public; exchanging information with other agencies; and safekeeping records and archives.

170. Among the many management responsibilities that fall to the heads of civil registration, vital statistics and identity management agencies, a key responsibility is the drafting of regulations, rules and instructions. The authority to promulgate regulations, rules and instructions enables the central authority to ensure that local officials are conducting duties in a uniform and consistent manner across the country. For example, the national civil registrar may issue a rule regarding the manner and frequency in which local civil registrars transmit vital event registration data to the central register. While the national agency has direct supervisory powers over local offices in centralized systems, even in a decentralized system there will be a role for a national agency. The national agency in a decentralized system should be authorized to enforce minimum standards or to work cooperatively with decentralized offices to ensure generally uniform practices and procedures.²⁰⁹ For example, in the United States, the National Center for Health Statistics (within the Centers for Disease Control and Prevention, under the Department of Health and Human Services) plays this role for the civil registration and vital statistics systems. The National Center for Health Statistics has developed the Model State Vital Statistics Act and Model State Vital Statistics ²⁰⁷ World Bank, Identity for Development: Strategic Framework (Washington, D.C., 2016), p. 9.

²⁰⁸ Ibid., p. 31.

²⁰⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 311. Regulations to help to standardize laws in the different states and harmonize reporting requirements, definitions and procedures for registering vital events. For more details, see box 17 on the United States Model Law and Regulations.

Box 17

United States Model State Vital Statistics Act and Model State Vital Statistics Regulations

The Department of Health and Human Services provides the following description of the United States Model Act and Regulations:

"The Model State Vital Statistics Act and Regulations were developed to serve as models for States in preparing their own laws and regulations. The Model Law has been designed to improve the quality and uniformity of State data by establishing standard reporting requirements, definitions, and procedures for registering vital events. The Model Law has an impact on how vital statistics data are reported and tabulated at the State level, which in turn impacts on national vital statistics.

"The U.S. vital registration and statistics system exemplifies cooperation between the Federal and State Governments at its best. Although the legal responsibility for the registration of vital events rests with the individual States, the States and the National Center for Health Statistics (the Federal partner) work together to build and maintain a cooperative system that produces records that satisfy the legal requirements of individuals and their families while protecting the security of the records and preventing fraudulent uses. In addition, the information is used for administrative and public health purpose and meets statistical and research needs at the local, State, and national levels. These cooperative efforts include the development and promotion of standards for electronic systems, certificates of live birth, death, and report of fetal death, training and quality control programs, and model legislation." ²¹⁰

171. Sometimes the goal of uniform and consistent practice may require not just standardization within one agency, but coordination between two or more agencies. For example, if the statistics agency wishes to change or expand the information collected at birth registration, this will impact the work of local civil registrars and the work of health institutions (where many births occur). In a case such as this, coordination is needed between the three entities - the statistics agency, the civil registration agency and the ministry of health. This may be accomplished through an inter-agency committee or a working group on civil registration, vital statistics and identity management (see sect. I below on inter-agency cooperation). Even where there is strong cooperation, however, a question may arise as to which agency has the power to issue a regulation that impacts other agencies. For example, in some systems, the civil registration authority may be empowered to issue a regulation that obliges not only local civil registrars but also heads of health facilities to collect the required information. In other systems, however, this may require a regulation issued jointly by the two entities, or a regulation issued by the government or cabinet, or an executive decree. The choice of which entity has the power to issue such a regulation is a function of the system of government, the powers authorized in the legislation on civil registration, vital statistics and identity management, and a country's legal traditions. Consequently, to the fullest extent possible, the relevant legislation should be explicit as to the scope of the rule-making powers granted to each agency involved in the civil registration, vital statistics and identity management systems.

²¹⁰ United States, Department of Health and Human Services, Centers for Disease Control and Prevention, Model State Vital Statistics Act and Model State Vital Statistics Regulations, 2011 Revision, p. 4. 172. The volume of work in most countries may require heads of the civil registration, vital statistics and identity management agencies to delegate powers to others, such as a deputy national registrar or local registrars, to act on their behalf. For example, in many countries the legislation on civil registration, vital statistics and identity management authorizes the national registrar to establish boundaries for local offices. Yet registrars at the provincial level may have a clearer understanding of where local offices are most needed within each district and village in their provinces. The national registrar could determine office boundaries by seeking the input of each provincial registrar. Alternatively, if the legislation permitted, the national registrar could delegate the power to draw local office boundaries to each of the provincial level registrars. Authorizing heads of agencies to delegate powers can facilitate the smooth functioning of an agency. The choice of specific powers that are up for delegation, however, is a decision for policymakers, which must be clearly reflected in the legislation.

173. Legislation on civil registration, vital statistics and identity management should also indicate to whom the head of an agency may delegate a duty. This may include individuals occupying specific positions within, or outside of, their own agency. For example, the head of an agency might be authorized to delegate duties to the deputy head of the agency or to local registrars. The head of an agency may, however, choose to delegate some powers to an official outside that particular agency. For example, to capture births and deaths within a health facility, the national registrar may confer some of the powers attached to a local registrar to the head of a health institution, rather than placing civil registration agency staff in the health institution. This would only be possible if allowed under applicable legislation. Consequently, legislation on civil registration, vital statistics and identity management should clearly delineate to whom powers may be delegated. In addition, legislation should ensure that those who delegate duties retain supervisory power over those persons to whom duties are delegated.

174. In sum, legislation on civil registration, vital statistics and identity management should be explicit as to the scope of rule-making powers granted to the head of each agency responsible for civil registration, vital statistics and identity management functions. Legislation should expressly state whether a lead agency has the power to issue regulations that bind other government agencies. In addition, legislation should clearly define who may delegate authority, which duties may be delegated, and to whom powers may be delegated. Finally, legislation should ensure that all delegated duties are properly supervised.

E. Role of the health sector

175. The health sector is a major source and beneficiary of the vital statistics generated by the civil registration and vital statistics systems. This sector also plays a critical, and dual, role in the collection of registration information. First, health professionals inform the civil registrar of the occurrence of births, fetal deaths and deaths. Second, physicians and health professionals are responsible for certifying cause of death. A high degree of coordination between the health sector and the civil registration authorities is needed to enable the health sector to fulfil these roles. Agreement must be reached not only on procedures for notification of vital events and medical certification of cause of death, which are discussed in detail in chapter IV; agreement must also be reached between the health sector and the civil registration agency regarding supervisory authority, monitoring responsibilities and dedication of resources. These issues, and decision points for policymakers, are illustrated below.

1. Informant function

176. In many countries, a large number of births, deaths and fetal deaths occur in health institutions or involve some kind of services from the health system. This places health-care professionals in hospitals, clinics and other health-care settings in a unique position in respect of compiling relevant information regarding vital events.

177. When a vital event occurs within a health facility, the most effective way of ensuring that civil registration is completed as soon as possible is to designate the health facility as being primarily responsible for notifying the civil registrar of the vital event.²¹¹ Cooperation between the civil registration authorities and the health sector is crucial to ensure that these vital events are reported seamlessly. In practice, some countries have established a civil registrar's office in each hospital and clinic in order to facilitate registration. This is a very good approach in terms of efficiency of process and accuracy of information,²¹² although it may require a large commitment of resources on the part of the civil registration agency. Other countries have found it effective to deputize staff in the health facilities to perform some of the functions of civil registrars, including gathering all the information on the event (e.g., birth, death, fetal death)²¹³ and the people involved (e.g., newborn, parents of newborn or stillborn infants, or the deceased). In other countries, the health sector and civil registration agency work together to develop procedures enabling the staff of the health facility to provide the necessary information to the local civil registrar or directly to the central agency. These latter two options raise questions as to who pays for health facility staff time and workspace – the civil registration authority or the health facility. These options also raise questions regarding the chain of authority, reporting and monitoring, as the civil registration authority may not have direct supervisory control over health sector staff. If the health facilities are private institutions, rather than government-run facilities, the civil registration agency may have even less ability to mandate procedures and monitor processes. Policymakers must consider what arrangements will work best in their own country, given the pros and cons of the various arrangements. Legislation should reflect the chosen institutional arrangements and clearly delineate the duties and responsibilities of each of the stakeholders, including financial, supervisory and monitoring responsibilities.

178. The health sector also plays an important role in notifying vital events that occur outside health facilities. In many countries, midwives, traditional birth attendants, or community health workers act as informants for births that occur at home or in the community. Some countries have deputized midwives to act as registrars for births. Similarly, community health workers may act as informants for deaths and stillbirths that occur at home or in the community. As with institutional events, placing responsibility on health professionals to act as registrars or informants for vital events that occur at home raises questions regarding the chain of authority, supervision and monitoring. For example: does the health sector have the duty and responsibility to ensure that health professionals comply with requirements or does that belong to the civil registration agency? While there is no definitive answer to this question, it is one that policymakers must determine, and legislation should clearly reflect the decision.

2. Certification of cause of death

179. Policymakers need accurate and timely cause and manner of death information to support programme planning and budget allocation. Cause of death is "all those diseases, morbid conditions or injuries which either resulted in or contributed to death

- ²¹¹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 350.
- ²¹² Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 102.
- ²¹³ WHO recommends reporting late fetal deaths (or thirdtrimester stillbirths) at ≥ 1000 g birth weight, ≥ 28 completed weeks of gestation and \geq 35 cm body length. While birth weight and gestational age are closely linked, they cannot be used interchangeably, since there is a range of "normal" birth weights for a given gestational age and sex, with substantial regional variations. A gestational age threshold has therefore been recommended as a single parameter, because it is a better predictor of viability than birth weight, and information about gestational age is more likely to be available than birth weight for stillbirths. See World Health Organization, Making Every Baby Count: Audit and Review of Stillbirths and Neonatal Death, p. 18.

and the circumstances of the accident or violence which produced such injuries".²¹⁴ By contrast, "manner of death" explains the circumstances in which a death arose. In the tenth revision of the WHO International Classification of Diseases , manner of death is classified as disease, accident, intentional self-harm, assault, legal intervention, war, pending investigation, unknown or manner undetermined. When a death is due to disease, the manner of death is often referred to as "natural causes". When a death results from another manner of death – such as accident, intentional self-harm, or assault – the manner of death is often referred to as "unnatural". These terms are used hereafter. Countries should strive to have an accurate, detailed and legally valid cause and manner of death attached to every registered death, although lack of cause of death information should not present a barrier to registering fact of death; in cases where the cause of death is "unknown", it may be written as such.

180. For natural deaths that occur in health facilities, the head of the health facility should be responsible for ensuring that there is an official determination and medical certification of the cause of death. Ideally, the certifier of the cause of death should be the physician or surgeon who attended the decedent during their terminal illness, although in countries that lack a sufficient number of medical doctors to staff health facilities, a nurse or other health professional may be trained to certify cause of death.²¹⁵ In addition, deaths due to unnatural or suspicious causes, whether occurring in or out of a health facility, should be referred to the medical-legal authority for medical certification of cause of death.

181. The WHO international form of medical certificate of cause of death should be used to record information regarding cause of death for certification. The form is designed to facilitate the determination of the underlying cause of death, which is defined as "(a) the disease or injury which initiated the train of morbid events leading directly to death, or (b) the circumstances of the accident or violence which produced the fatal injury".²¹⁶ Countries may include the form of medical certificate of cause of death within their death notification form, which includes other key information needed for legal and statistical purposes.

182. The medical certificate of cause of death should not be confused with the death certificate issued by the civil registrar, which reflects the information certified by an official to be contained within the civil register. The medical certificate of cause of death contains key information needed for legal and statistical purposes. In many countries, the civil registrar requires a medical certificate of cause of death as a precondition for registering a death. There are countries, however, whose health professionals are not adequately trained in completing a medical certificate of cause of death form, and this can result in low death registration rates. Accordingly, policymakers should carefully consider whether a medical certificate of cause of death is required to register a death, or if evidence alone of the fact of death can be submitted to the registrar. Alternatively, some countries that require a medical certificate of cause of death to register a death, accept "unknown" as a cause of death if the cause cannot be determined.

183. Completed medical certificates of cause of death should be coded in accordance with the rules of the International Classification of Diseases, the foundation for the identification of health trends and statistics globally. The International Classification of Diseases defines the universe of diseases, disorder, injuries and other related health conditions. These are organized systematically to allow for comparing health information across facilities, regions and time.²¹⁷ Fetal deaths should be coded, using the WHO application of the International Classification of Diseases to deaths during the perinatal period, known as the International Classification of Diseases-perinatal mortality (ICD-PM). ICD-PM aims to link stillbirths and neonatal deaths to the maternal

²¹⁴ World Health Organization, International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Instruction Manual, vol. 2 (Geneva, 2010). See also the WHO website, available at: www.who.int/bulletin/ volumes/84/3/mortality_glossary/en/.

²¹⁵ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 195.

²¹⁶ World Health Organization, International Statistical Classification of Diseases and Related Health Problems, 10th Revision, vol. 2; see also World Health Organization website, available at http://www.who. int/topics/mortality/en/.

²¹⁷ World Health Organization, International Statistical Classification of Diseases and Related Health Problems, 10th Revision, vol. 2, chap. 2.1, p. 3; see also United Nations, Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 494–497. ²¹⁸ World Health Organization, Making Every Baby Count: Audit and Review of Stillbirths and Neonatal Deaths, pp. 17 and 21.

²¹⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 499–501. conditions that contribute to them, where applicable, in a way that is consistent across all settings, and this helps to standardize and increase information on causes of death around the critical time of childbirth.²¹⁸

184. While a medically certified cause of death is the most reliable source of cause of death data, in countries where many natural deaths occur at home or in the community, particularly in remote locations, it may not be possible to obtain a medically certified cause of death. In those cases, it may be appropriate to use a verbal autopsy. A verbal autopsy is an interview carried out with family members and caregivers of the deceased, using a structured questionnaire to elicit signs and symptoms and other pertinent information that can later be used to assign a probable underlying cause of death.²¹⁹ The results of the verbal autopsy interview may be analysed using a computer algorithm (automated verbal autopsy), which generates a probable cause of death based on the interviewee responses. Alternatively, a verbal autopsy may be used as a decision-support tool for physicians where there is inadequate information on the deceased's medical history or the chain of events that led to death. In the case of a physician-certified verbal autopsy, the physician reviews the verbal autopsy interview results and certifies the cause of death through completion of the medical certificate of cause of death. In countries requiring physician certification of cause of death, the cause of death as provided in the physician-certified verbal autopsy is considered valid certification. Regardless of whether the cause of death from the verbal autopsy is considered valid certification, the verbal autopsy is an essential public-health tool for obtaining a reasonable direct estimation of the cause structure of mortality at community or population level if designed and implemented as such (see paras. 339-341 for more on verbal autopsy).

185. To obtain good-quality cause of death information, coordination between the health sector and the civil registration agency is crucial. The ministry of health must coordinate the training of physicians and other health-care professionals in cause of death certification and International Classification of Diseases coding. If a verbal autopsy is used, the authorities must determine who will conduct it – local health workers, civil registrars, local leaders or others – and which entity will be responsible for training, supervising and monitoring the interviewers in the verbal autopsy. Legislation should clearly delineate the jurisdictional authority of each agency and assign clear responsibilities to each entity to ensure that goals are met. Even with clearly defined roles, inter-agency cooperation is crucial and there will be a need for an inter-agency coordination committee (see sect. I below on interagency cooperation).

F. Role of the police, medical and legal officers and emergency services

186. With regard to unnatural and suspicious deaths, the medical-legal authorities play an important role. Police and other first responders may be the first on the scene of an accident, assault or medical emergency at home. As such, they play an important role in determining whether a case should be referred to the health authorities or to an officer in the medical-legal system (e.g., medical examiners, forensic pathologists, coroners and other medical-legal officers). All unnatural and suspicious deaths should be referred to the medical-legal authorities for them to investigate and ascertain facts such as the identity of the deceased, cause of death, time of death and manner of death. This helps law enforcement agencies to determine if a crime has been committed that requires adjudication.

Box 18 Medical-legal death investigation system

The medical-legal death investigation system (hereinafter referred to simply as the "medical-legal system") is responsible for conducting death investigations and certifying the cause and manner of unnatural, unexplained, or suspicious deaths. Medical-legal systems vary by jurisdiction; some jurisdictions use a coroner system, while others use a medical examiner system. Depending on the jurisdiction, a coroner may be an elected or appointed official, and may be a legal or medical professional. By contrast, a medical examiner is usually an appointed official whose duties are similar to those of a coroner, but who is generally required to have specific medical training (such as forensic pathology) and is qualified to conduct medical examinations and autopsies. For those that use a coroner system, the coroner is responsible for overseeing the inquiry by a medical examiner, forensic pathologist, or other trained professionals.

187. Emergencies and disasters are a subset of unnatural deaths that may involve a different process for registration and cause of death determination than other unnatural deaths. Emergencies and disasters present a challenge for death registration because there may be a large number of deaths occurring over a short period of time and bodies and human remains may be missing. These deaths may be referred to the medicallegal authorities, as described above. These authorities, however, may not be equipped to deal with a large number of deaths at once, so an emergency response agency may be designated as the appropriate entity to investigate, determine cause and manner of death, and notify the registrar of the deaths of the victims of the emergency or disaster.

188. Coordination among medical and legal authorities is crucial for the consistent management of unnatural and suspicious deaths and their timely registration in the civil registration system. Law enforcement, medical-legal authorities and emergency services must work closely and collaboratively to ensure that unnatural and suspicious deaths are promptly registered and that cause and manner of death are certified and reported to the registrar or national statistics agency. In addition, these agencies should be empowered to share resources and information. Legislation and regulations should clearly specify the roles of the many agents in the medical-legal system and ensure their proper coordination (see chap. IV, sect. C.3 (f)) for details of the registration process for unnatural and suspicious deaths).

G. Role of custodians of funeral, burial and cremation facilities

189. Separate laws or local ordinances often require that a permit be obtained to transport, bury, cremate or otherwise dispose of a body.²²⁰ Countries should require that a death be reported to the registrar before a permit can be obtained to dispose of a body. This permit requirement serves as an incentive for registering deaths and helps to ensure that bodies are not disposed of before investigation, in the case of suspicious deaths. In some countries, the civil registrar is the agency responsible for issuing permits to dispose of a body. If another entity is responsible for issuing these permits, that authority should be required to share their records with the civil registrar. This assists in the monitoring of compliance with the requirement to notify deaths prior to the issuing of a permit and can help to alert the registrar to deaths that were not registered.

190. Countries should also require custodians of funeral facilities, cemeteries and crematoria to request to see the disposal permit for all funerals, burials and cremations that they oversee. Custodians of these facilities should collect information regarding

²²⁰ Ibid., para. 362.

the identity of the deceased, including name, unique identification number, identity card (if applicable), birth certificate or other identifying information, and provide this information to the registrar. This constitutes an alternative entry point for ensuring that deaths are registered and for verifying the identity of the deceased.

H. Role of the courts

191. The judiciary plays an important role in civil registration and identity management when it comes to amending or correcting civil registration and identity records and appealing against decisions taken by civil registration and identity management officials.

1. Amendments and corrections to civil registration and identity records

192. The authority to correct or amend civil registration records may rest with the civil registration authority or the courts, depending on the type of change sought. Generally, there are two reasons why it may be necessary to change a vital event record: first, the original record contains simple errors or omissions that require correction; and, second, circumstances regarding the vital event or the registrant have changed, a situation which generally has legal implications for the registrant or others.

193. Authority for the first type of change should rest with the civil registration authority. Examples of these types of changes include the correction of spelling and typographical errors and the addition of uncontested, omitted information, such as the name of a newborn shortly after birth. The registrar may also add the name of the father of a newborn child, if omitted on the original birth record, or if the father freely claims paternity of the child and the mother agrees. If the paternity is, however, contested, jurisdiction should rest with the courts. Authorizing the civil registration agency to correct obvious errors and add uncontested information makes the process of corrections and amendments simpler, quicker and less costly than resorting to the courts. This facilitates accuracy in the compiling of civil registration records.

194. For amendments to civil registration records that involve changed circumstances, a registrant or their legal representative must usually apply directly to the courts. These types of amendments tend to include adoption, contested paternity, divorce, annulment and judicial separation. In some jurisdictions, changing a name or sex on civil registration and identity records may require a court order.²²¹ All of these types of amendments, other than changes to the name and sex marker, involve the rights of others (e.g., the rights of a child or a spouse), so assigning jurisdiction to the courts helps to protect these rights. While change of name or sex on civil registration and identity documents does not invoke these same concerns, some countries have traditionally involved the courts in these types of amendments. In many jurisdictions, the process of changing sex on civil registration and identity documents has involved providing proof of having undergone sex reassignment surgery and obtaining a court order. These procedures are burdensome and may create a barrier to the amendment of civil registration and identity documents. Consequently, some jurisdictions have instituted reforms to simplify the process for changing name and sex on civil registration and identity documents. For example, seven Latin American countries - Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica and Uruguay - no longer require proof of surgery or court order before allowing a change of sex on birth records and identity documents (see chap. IV, sect. C.6, for further discussion on corrections and amendments).

²²¹ Ibid., para. 411.

2. Appeals

195. Decisions made by officials within civil registration, vital statistics and identity management systems can have legal consequences that may have a fundamental impact on a person's life. Reasonable minds may disagree about how to resolve certain difficult situations, therefore civil registration, vital statistics and identity management systems should include an administrative and judicial appeal process. This appeal process will ensure that individuals receive due process in addressing problems with their civil registration and identity documents, and that such decisions are made consistently across the country. Legislation on civil registration, vital statistics and identity management should permit an individual to appeal against any decision made by a local civil or identity registration official to a higher-level registration official, and up to the central authority, within prescribed time periods. For example, if a registrar at the district level denies a person the right to register a vital event, that person should be entitled to appeal against this decision to the provincial level authority. If satisfactory relief is not obtained at the provincial level, the person should be entitled to take the appeal to the central level authority. This provides an opportunity for the central office, which has a particular interest in the accuracy and authenticity of registration records, to supervise and monitor the work of the local registrars.²²² It also creates a record of the appeal and the subsequent decision, ensuring that the national registrar has complete information upon which to make a determination.

196. Courts, however, should retain the ultimate authority to adjudicate an appeal. Persons who believe that they have not obtained satisfactory resolution of their issue through an appeal to the civil registration or identity management authorities should at all times be able to appeal to an appropriate court. Where it is not set out in administrative procedure law, the appeal procedure should be described in legislation on civil registration, vital statistics and identity management.

I. Inter-agency cooperation

197. As shown above, the institutional arrangements of civil registration, vital statistics and identity management systems inevitably involve more than one government body. In addition to the functions performed by the stakeholders described above, other entities may also play a role. For example, the education ministry may be involved in conducting birth registration outreach campaigns or setting medical school curriculum requirements on certifying cause of death. The ministry in charge of women's affairs may also play an instrumental role in civil registration outreach campaigns and the protection of women's rights. Religious officials may play a role in marriage registration (see chap. IV, sect. C.4, paras. 380–381). The ministries of justice or the interior may be involved in the medical-legal death system. On the identity management side, passport authorities, immigration and electoral commissions may use identity information for their specific purposes. Accordingly, to ensure the efficient and effective functioning of civil registration, vital statistics and identity management systems, inter-agency coordination is essential.

198. Close coordination and collaboration across government agencies aids the production of timely and accurate statistics, avoids duplication, errors or omissions and ensures that concepts, definitions and classifications are consistent nationally.²²³ Coordination also ensures that all stakeholder needs and concerns are taken into account. Coordination could take the form of an inter-agency committee on civil registration, vital statistics and identity management, comprising staff members of the agencies involved, meeting at least annually (but preferably more frequently) to discuss matters affecting the agencies.²²⁴ It may also be productive to invite non-government entities, ²²² Ibid., para. 412.

²²³ Ibid., paras. 41, 48.

²²⁴ Ibid., para. 52 and 319–22.

²²⁵ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects (United Nations publication, Sales No. E.91.XVII.5), para. 270. such as representatives from the private health sector and the religious community (for purposes of marriage registration), to take part in the meetings of this coordination committee. Any coordinating committee should be established on a permanent basis, meet regularly and have legal status as mandated by law²²⁵ (see box 19 for examples and particulars of coordination committees in the Philippines and Chile).

199. Alternatively, a coordination mechanism could take the form of a single government agency empowered to coordinate the activities of civil registration, vital statistics and identity management stakeholders and oblige stakeholders to collaborate with the coordinating entity. If a single agency takes the lead, however, it is still important that all stakeholders have a mechanism through which to make their opinions and concerns known.

200. There may also be coordination on specific topics. For example, a national mortality working group could play a key role in improving the completeness and quality of mortality data, which is critical to public health decision-making. Such a group could be effective in facilitating efforts to introduce and roll out the use of the international form of medical certificate of cause of death, training health professionals in the medical certification of cause of death, in International Classification of Diseases coding and in introducing automated International Classification of Diseases coding. A verbal autopsy committee could play a key role in the introduction of verbal autopsy, including coordinated training of community leaders, health officials and others who may be involved in verbal autopsies.

Box 19

Inter-agency coordination mechanisms for civil registration and vital statistics in the Philippines and Chile

In the Philippines, there is an Inter-Agency Committee on Civil Registration and Vital Statistics. Members are permanent representatives from the Department of Health, the Department of Education, the Department of Justice, the Department of Foreign Affairs, the Department of the Interior and Local Government, the National Commission on Muslim Filipinos, the National Commission on Indigenous People, and the Philippine Statistics Authority. The Philippine Statistics Authority serves as the technical secretariat of the Inter-Agency Committee on Civil Registration and Vital Statistics, which will tackle the implementation of the work plans for the Asia and Pacific Civil Registration and Vital Statistics Decade, 2015– 2024 (proclaimed at the 2014 Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific). It will also be entrusted with generating the Sustainable Development Goals indicators, including those concerning civil registration and vital statistics.

In Chile, an inter-institutional agreement on the elaboration of vital statistics was signed in 1982 by the Ministry of Health, the Civil Registration and Identification Service, and the National Statistics Institute. Under the agreement, a tripartite committee was created to oversee the vital statistics system. The Civil Registration and Identification Service is responsible for collecting statistical data when registering vital events, using the layouts and forms agreed on by the tripartite committee. Thus, all the information that is required (health-related, legal and statistical) is contained in a single form for each type of event and is collected from the registrant at the time of the occurrence of the event (if the event occurred in a medical facility) or at the time of registration. The Civil Registration and Identification Service enables both the National Statistics Institute and the Ministry of Health to have secure electronic access to its database, so that vital and health statistics can be compiled. All official statistics are published solely by the National Statistics Institute. This agreement has proved to be a dynamic model that allows successful inter-agency cooperation and has led to improved vital statistics coverage and timeliness.

201. To sum up, at the very minimum, legislation should require a civil registration, vital statistics and identity management coordination mechanism. Regulations may establish a civil registration, vital statistics and identity management coordination committee, with representatives from a broad array of stakeholder government agencies, that is mandated to meet at least annually, or may also decide to appoint a lead agency. The legislation should permit government agencies to invite non-governmental stakeholders, as appropriate. Legislation should also permit the civil registration, vital statistics and identity management agencies and the coordination committee to establish working groups, on a permanent or temporary basis, to address particular issues or roll out new initiatives.

J. Financial resources

202. The continuous and efficient functioning of civil registration, vital statistics and identity management systems requires access to adequate financial resources. The legal framework should include provisions to enable sustainable funding of the system and its key stakeholders. While this might take the form of mandating an annual budget appropriation, legislation can also ensure funding in other ways. For example, funding can be tied to incentives. RENIEC in Peru receives an annual performance-related payment from the central Government to support services for the poor. Municipalities are also provided with performance-related payments, which are tied, in part, to the timely submission of civil registration information to RENIEC.²²⁶

203. It is best practice that legislation stipulate that the revenue generated from civil registration and identity management services be retained to fund the system, rather than going to the central treasury. Even though birth and death registration, and identity registration if mandatory, should be provided free of charge, these systems can still generate substantial revenue. The National Identification Authority in Rwanda reports that it covers its full operating costs from fees charged for the issuance of identity documents. The basic national identity card is provided for an affordable fee - approximately \$0.72 - and those who are unable to pay can receive it for free. Other identity documents, however, such as driver's licences and passports, and expedited services can cost as much as 100 times more.²²⁷ In Peru, RENIEC raises substantial revenue from verification fees collected from private sector entities, such as banks, and from other selected government agencies.²²⁸ Australia and New Zealand generate revenue from the sale of commemorative birth certificates, which are issued for decorative purposes and usually not acceptable as proof of identity.²²⁹ Legislation should permit civil registration, vital statistics and identity management systems to generate income from authentication and other services provided to the public, government agencies and the private sector, and serious consideration should be given to ensuring that any revenue generated by the system is reinvested back into the system.

204. In addition, policymakers should consider giving a wide scope of power to civil registration, vital statistics and identity management agencies to generate revenue from entrepreneurial or contractual services. For example, in Pakistan, the National Database and Registration Authority funds its operations through charges for fast-track services and premium products for individuals, such as smart identity cards, and fees from banks and other business entities that need to authenticate their clients. It also receives fees for projects undertaken for other sections of the Government and competes successfully for external contracts to provide identification services on a commercial basis. Apart from projects performed for other sections of the Government of Pakistan, the National Database and Registration Authority has won contracts to provide services in Bangladesh, Kenya, Sri Lanka and the Sudan.²³⁰

- ²²⁶ Alan Gelb and Anna Diofasi Metz, Identification Revolution: Can Digital ID be Harnessed for Development?, p. 116.
- ²²⁷ Ibid., p. 117.
- ²²⁸ Ibid., p. 116.
- 229 See the website of the New South Wales Registry of Births, Deaths and Marriages for an example of these certificates. Available at https://www.bdm. nsw.gov.au/Pages/births/commemorative-birth-certificate. aspx.

²³⁰ Alan Gelb and Anna Diofasi Metz, *Identification Revolution: Can Digital ID be Harnessed for Development?*, p. 117. 205. To sum up, legislation should ensure that adequate resource channels are available to civil registration, vital statistics and identity management systems. Ideally, legislation would mandate a budget appropriation but at the very minimum, legislation should ensure that revenue generated from the system is used to fund the system. In addition, legislation could permit civil registration, vital statistics and identity management agencies to generate revenue from entrepreneurial or contractual services.

Chaper IV Legislative framework

A. Introduction

206. The present chapter provides guidance on topics to be included in legislation and regulations on civil registration, vital statistics and identity management. While the chapter is presented in a format that may be followed when drafting comprehensive legislation, it is not necessary to follow this specific format, nor is it necessary that all topics be covered in one distinct piece of legislation. Many countries have a legal framework for civil registration, vital statistics and identity management systems that is contained in more than one piece of legislation and regulations. In addition, separate legislation may cover other relevant topics more generally, such as the qualifications needed by civil servants; public administration; civil and criminal offences and penalties; data protection and technology. Countries that wish to enhance their civil registration, vital statistics and identity management systems through the amendment of various existing laws that address the separate functions of civil registration, vital statistics and identity management, or other topics that have an impact on these functions, can also follow the guidance in the present chapter. The content of the law is more important than the format. What is most important is that the best practices and policy options discussed below are addressed somewhere in the overall legal framework for civil registration, vital statistics and identity management systems, regardless of whether they are contained in one law or across many laws.

207. Throughout the present chapter, the term "law" is used to mean any legally binding measure, including constitutional provisions, legislation, regulations, rules, decrees, ministerial orders, official instructions to government agencies, employee manuals and standard operating procedures for government officials, judicial orders, international treaties and any other document that has the force of law. When referring solely to those acts approved by the legislature, the term "legislation" is used. The term "regulation" is used to mean all legally binding measures that implement legislation. "Instructions" is used to cover guidelines, procedures and instructions such as employee manuals and standard operating procedures. See box 20 for a general explanation of the hierarchy of laws within countries.

208. In drafting a legal framework for civil registration, vital statistics and identity management, lawmakers must first consider the country's constitutional framework and its system of government, to ensure that the legal framework for civil registration, vital statistics and identity management is compatible with the existing system and structures of government (see chap. I for a discussion on the institutional arrangements for civil registration, vital statistics and identity management systems). Lawmakers should specifically consider whether a country's system of government is centralized or decentralized. A centralized system of government is one in which a central political executive exerts direct legal authority and control over major political subdivisions, such as states or provinces. A decentralized government, on the other hand, is a system of government where primary authority is dispersed across major, and possibly

Box 20 Hierarchy of laws

All countries have a legal foundation, generally consisting of a founding document, such as a constitution, and the laws passed by the national legislature and other levels of lawmaking authority. These laws function in a hierarchy, which determines how they rank in authority. The hierarchical structure varies from country to country and depends on the form of government. However, in general, the fundamental levels of hierarchy consist of: a constitution or founding document; statutes or legislation; regulations; and guidelines. The constitution states the grounding legal and democratic principles of the country, including individual rights, citizenship, branches of the government, and powers of government. This is the supreme law to which all other laws must adhere. Next in the hierarchy is legislation, which is passed by parliament or a legislature and cannot conflict with the constitution. While more detailed than the constitution, legislation is still generally broad in its provisions. Legislation often explicitly authorizes the executive branch or a specific ministry to implement the provisions of the legislation through the issuance of regulations, which rank next in the hierarchy. Regulations are generally more detailed than laws and may not conflict with the law that they implement. More detailed still are internal guidelines, which rank last in the hierarchy and are generally not legally binding.

minor, political subdivisions. In centralized civil registration, vital statistics and identity management systems, there will be a lead agency or agencies at the central level, which has local offices at the level of major and minor political subdivisions. These local offices are directly answerable to the central agency or agencies. In a decentralized system, there will be a lead agency or agencies at the level of each major political subdivision, and possibly at the level of smaller political subdivisions, answerable to the local government rather than the central Government.²³¹ There is still, however, a role for a central level agency to ensure adherence to minimum standards. Lawmakers should consider the possibility that some functions (such as civil registration) may be more decentralized than other functions (such as identity management and vital statistics).

209. These Guidelines often refer to the "national registrar" or "central authority". In a decentralized system, the lead agency at the local level will have many or all of the powers of the national registrar or central authority in a centralized system. The guidance set forth here can therefore be followed by local lead agencies in a decentralized system.

210. In addition, while there may be a single agency or multiple agencies carrying out civil registration, vital statistics and identity management functions, these Guidelines usually refer to the "agencies", in the plural. For countries in which all functions are carried out by a single agency, they should apply the concepts discussed to the single agency.

211. Throughout these Guidelines, recommendations are provided regarding which provisions should be included in legislation versus regulations. Lawmakers should carefully consider the issue of which legal tool to use, on the basis of what works best in their system of government, and also consider how broad a scope of regulatory authority should be delegated to a ministry or agency. Because legislation must be adopted by the parliament or legislature, it can take years to negotiate and pass. Regulations that implement provisions of the legislation in accordance with delegated regulatory authority are often more quickly adopted. For that reason, provisions that may require amendment over time, for example, detailed provisions on administrative processes

²³¹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 307–311. are better addressed in regulations as opposed to legislation. Lawmakers should confer a sufficiently broad scope of regulatory authority to allow the system to respond to changing needs over time.

212. To accommodate emerging technology, legislation should not specify the technology and media used in recording, storing, updating and transmitting the information in the civil registration, vital statistics and identity management systems, or the technological format of the instruments to be produced from the information recorded. While implementing regulations may specify procedures, the specific technology to be used should be determined internally by the agency or authority, to allow for changing technology over time.

213. The present chapter is divided into nine sections: A: introduction; B: general provisions and administrative infrastructure; C: civil registration; D: identity management; E: population register; F: vital statistics; G: data protection, privacy and security; H: compliance, enforcement, rights and remedies; and I: transitional provisions. The individual sections on civil registration, identity management, vital statistics and population register may be used to guide the drafting of a single, comprehensive law or to draft or amend separate laws on each of these topics. If these Guidelines are used to draft or amend separate laws, reference should also be made to the sections on general provisions and administrative structures; data protection, privacy and security; compliance, enforcement, rights and remedies; and transitional provisions. The concepts in these sections are overarching and apply to civil registration, identity management and vital statistics systems and population registers generally and should therefore be addressed within the legal framework on civil registration, vital statistics and identity management systems. After each subsection, there is a checklist that contains a summary of the topics discussed in that subsection. This checklist is provided to help drafters to ensure that all suggested topics are addressed in the legislation.

B. General provisions and administrative infrastructure

1. General provisions

(a) Purpose of civil registration, vital statistics and identity management legislation

214. While not containing substantive provisions itself, a section setting out the purpose and intent of the legislation can assist in interpretation of the substantive provisions of the legislation. Legislative drafters should highlight the importance of providing civil registration and identity management services to all persons within the territory of the country, without discrimination. This reaffirms that all persons can exercise their human rights and benefit from government and private sector services. Legislative drafters should address the purpose of civil registration legislation, which is to provide for the recording of vital events and furnish legal instruments to individuals that prove the facts underlying those vital events, as well as their existence, identity, and personal and family situation.²³² They should also address the purpose and function of identity management system legislation, which is to provide for a unique and secure means of proving legal identity. Drafters should stress the importance of civil registration as the foundation of the identity management system, as well as the importance of deriving vital statistics from civil registration. Lastly, drafters should address the purpose of vital statistics, which is to provide reliable and timely information to other government agencies and facilitate the administration and planning of government services.

(b) Definitions of vital events

215. The inclusion of definitions lends clarity to the law and ensures that users of civil registration, vital statistics and identity management systems – government officials and residents of the country alike – have a common understanding of the law's requirements. All vital events that are required to be registered should be defined in accordance with United Nations definitions (see chap. I, sect. E). While the United Nations recommends registering and defining the vital events listed below, some countries' substantive laws may not recognize all these vital events. For example, the concept of "judicial separation" may not exist under a country's family law. Therefore, while in general, legislation will contain definitions of the following vital events, legislative drafters should modify this list as appropriate:

- (a) Live birth;
- (b) Death;
- (c) Fetal death;
- (d) Marriage;
- (e) Divorce;
- (f) Annulment;
- (g) Judicial separation;
- (h) Adoption;
- (i) Legitimation;
- (j) Recognition.

216. Drafters of the law may include additional definitions for terms used in the legislation, in order to improve the clarity of legal provisions (see the glossary, for a full list of definitions). For example, drafters may wish to consider including a definition for the following terms:

- (a) **Certificate:** The document, paper or electronic format, issued by the registrar and containing all or part of the exact information contained on the original vital record, and which, when issued by the registrar, has the full force and effect of the original vital record;²³³
- (b) Certifier (of cause of death): The person authorized by law to issue a medical certificate of cause of death, in a prescribed format, stating the underlying and contributory causes of death, and other facts related to the event, for submission to the local registrar or other appropriate authority. The certifier is usually the physician who attended the deceased in his or her last illness; or, in the case of deaths of persons who were not attended during their last illness by a physician or who may have died owing to violence or injury, the medical-legal officer (e.g., the coroner or the medical examiner);²³⁴
- (c) Informant: The individual or institution whose responsibility, designated by law, is to report to the local registrar the fact of the occurrence of a vital event and to provide all the information on and all the characteristics of the event. On the basis of such a report, the event may be legally registered by the local registrar;²³⁵
- (d) Medical certificate of cause of death: The internationally recommended form for recording information regarding cause of death for certification. Developed by WHO, the form is designed to elicit the underlying cause of death;

²³³ Department of Health and Human Services Centers for Disease Control and Prevention, Model State Vital Statistics Act and Model State Vital Statistics Regulations, 2011 Revision, sect. 2 (c).

²³⁴ Principles and Recommendations for a Vital Statistics System, Revision 3, p. 202.

²³⁵ Ibid., p. 204.

(e) Notifier: The individual appointed by the local registrar to act as intermediary between the local registrar and the informant in providing all the information on and all the characteristics of an event that is to be legally registered by the local registrar.²³⁶

217. If drafting comprehensive legislation on civil registration, vital statistics and identity management that involves the use of a population register, the following definition may also be helpful:

Population register: An individualized data system for the continuous recording, or the coordinated linkage, of selected information pertaining to each member of the resident population of a country in such a way as to provide the possibility of deriving current and up-to-date information concerning the size and characteristics of that population.²³⁷ A population register may also include information pertaining to the non-resident population (e.g., citizens temporarily residing abroad and those who have emigrated).

(c) Compulsory and universal registration

218. In keeping with the *Principles and Recommendations for a Vital Statistics System, Revision 3*, civil registration must be compulsory and universal. Civil registration is compulsory in that all vital events that occur in a country must be registered. The duty to register vital events applies to government officials responsible for civil registration and also to individuals. It is the affirmative duty of the civil registration agency to ensure that vital events are registered. As such, civil registrars should takes steps to overcome barriers to registration faced by individuals, such as physical and mental disabilities, as well as barriers faced by certain population groups due to remoteness, language, literacy, nationality status, or other characteristic.

219. Civil registration is universal in that it should capture all vital events occurring in every geographical area and in every population group in the country without discrimination or distinction based on racial, ethnic or religious group; status as a member of a nomadic, native, indigenous or aboriginal population; status as a displaced person, refugee, or asylum-seeker within the country; or status as a foreign national born in the country, including temporary workers; or any other characteristic.²³⁸

220. Unlike civil registration, identity registration need not be compulsory, as some countries do not maintain a national identity management system and do not require individuals to register for national identity credentials. Nevertheless, identity credential provision should be universal, in that countries should ensure that some form of legally valid proof of identity is available to all persons within the territory of the country.

221. Accordingly, legislation should uphold the principle that civil registration is compulsory and must be provided universally, and that some form of identity credential must be provided to all universally.

222. The legislation should also address the issue of whether processes for civil registration and identity credential provision apply to citizens of the country residing abroad. Generally, citizens residing abroad are not subject to any such requirement, but there should be a process by which they can report vital events and obtain identity credentials.

(d) Continuous and permanent registration

223. Civil registration, vital statistics and identity management systems must be both continuous and permanent, in that registration and updating of the systems should be continuous, without time limits, and records permanently maintained. The continuity

²³⁶ Ibid., p. 205.

²³⁷ Ibid., para. 454.

²³⁸ Ibid., para. 34.

and permanence of the system require the existence of an agency with administrative stability, whose operation is not limited to a certain period of time. Thus, responsibility for civil registration, vital statistics and identity management systems must be vested in an administratively stable entity. Legislation should make it clear that, regardless of which entity is responsible for civil registration, vital statistics and identity management systems, these systems are established permanently, without time bounds, and must be continuously updated and maintained. This is not to suggest that an administrative agency may not be reorganized, as may be necessary from time to time, but the systems should not be disrupted or limited in time.

(e) Legally valid proof of a vital event and legal identity

224. The civil register serves as the legal factual record of vital events. A key responsibility of the civil registrar is to issue certificates, which are an excerpt of the register and serve as official evidence of the information on vital events contained in the register. The legislation should specify that a certificate, as an official document backed by the government, is legally valid proof of a vital event. In other words, it ensures the veracity of the facts stated therein and enjoys the presumption of accuracy and truthfulness. In the case of a conflict between the civil register and the certificate, the information in the civil register should be presumed correct unless challenged and corrected through the appropriate process. Similarly, legislation should specify that an identity credential issued by the government is a legally valid proof of identity. In the case of a discrepancy between an identity credential and the information in the identity register, the identity management system record should prevail unless challenged and corrected through the appropriate process (see sect. C.6 below, on corrections and amendments to the record, and sect. H.2, on administrative and judicial review).

(f) Privacy and confidentiality

225. Information contained in the civil register and identity management system is private and confidential, unless otherwise provided for by law or consent. Data collected should only be used for the purpose for which it was intended and data used, stored and transmitted should consist solely of that information necessary for the specific use of the system. In addition, access to data should be strictly limited to the necessary officials. Many countries have a separate data protection law that governs the collection, storage and use of data, which is recommended by many experts. Regardless of whether a country has a separate data protection law, however, its legislation on civil registration, vital statistics and identity management should state that the principles of data privacy and protection apply specifically to civil registration, vital statistics and identity management systems (see sect. G below for more detailed provisions on data protection, privacy and security).

(g) Accountability and transparency

226. Civil registration and identity management agencies have an obligation to keep accurate records, ensure transparency of the system (while protecting individual privacy), and must be accountable for ensuring that the register is complete, accurate and used in accordance with law. Accordingly, legislation should provide that the civil registration and identity management agencies have a duty and responsibility to ensure that these systems are accurate and processes are transparent, and that these agencies may be held accountable. To that end, there must be a clear process for the persons to correct or amend personal information through an administrative or judicial process (see sect. C.6 below, Corrections and amendments to the record, and sect. H.2, Administrative and judicial review).

2. Civil registration, vital statistics and identity management infrastructure

(a) Ministry or agency in charge of civil registration, vital statistics and identity management

227. Efficient and effective civil registration, vital statistics and identity management systems involve three key functions – the civil registration function, the vital statistics function and the identity management function. As discussed in chapter III, these three functions may be conducted by one or more entities. Legislation on civil registration, vital statistics and identity management should clearly state which ministry, agency or other entity is authorized and responsible for carrying out the functions of the civil registration, vital statistics and identity management system. If more than one entity is involved, this section should clearly state which entity is responsible for each function.

(b) Powers, duties and authority of the civil registration, vital statistics and identity management authority

228. Legislation on civil registration, vital statistics and identity management should assign the functions of establishing, operating and maintaining civil registration, vital statistics and identity management systems to the government agencies identified above and provide a clear designation of duties and responsibilities for the key steps of a functioning system, including:

- (a) The powers and functions of the civil registration system, which include: recording vital events; storing, safe-keeping and retrieval of vital records; protecting confidentiality; issuing of certificates and other customer services; recording and reporting information on vital events for statistical purposes; and providing reliable and timely information and data to other government agencies and research institutions;²³⁹
- (b) The powers and functions of the vital statistics system, which include: collecting, compiling, analysing, evaluating, presenting and disseminating vital statistics derived from civil registration data;²⁴⁰
- (c) The powers and functions of the identity management system, which include: enrolling and validating individuals in the identity system; issuing identity credentials; establishing processes for authentication of identity; and, if authorized, maintaining a continuously updated population register;
- (d) The duty to ensure the confidentiality and security of civil registration and identity records, which is the responsibility of all designated ministries and agencies.

229. In addition, legislation on civil registration, vital statistics and identity management should set out the powers of the civil registration, vital statistics and identity management agencies to issue regulations to set standards, supervise and monitor the systems. The regulatory powers of those agencies should include issuing regulations and instructions to ensure that the procedures for registration and for issuing certificates and identity cards are uniform throughout the national territory. This should include the regulatory authority: to reorganize civil registration and identity registration offices; to prepare and approve official models of civil registration notification and registration documents and certificates, and identity registration and credential documents; to issue directives and standard operating procedures to improve the operation and efficiency of local registrars; and any other matters. ²³⁹ Ibid., para. 285.

²⁴⁰ Ibid., para. 40.

230. The powers vested in the civil registration, vital statistics and identity management agencies should permit the introduction of new technologies into civil registration, vital statistics and identity management systems to enhance the performance of services. In newly established or resource-constrained systems, the registration activity may initially or partially be performed manually, with the gradual introduction of electronic or digital methods. The power vested in the head of agencies should authorize: management of the physical and personnel resources needed to introduce new technologies into the registration process; issuance of instructions to establish uniform criteria in applying the new technologies; and development and implementation of training programmes for the relevant registration personnel. While laws should empower agencies to adopt new technology, drafters of civil registration, vital statistics and identity management laws should be careful not to require the use of advanced technology in such a way as to present a barrier to registration for those segments of the population that do not have access to, or are not proficient in, the use of technology.

(c) Structure of the civil registration and identity management authority, and qualifications, powers and duties of registrars

(i) Structure of civil registration, identity management and statistics authorities

231. In order to ensure that registration services are accessible to the public, the civil registration and identity management authorities should maintain primary registration offices in locations that correspond to the minor civil divisions of the country, adjusting boundaries, if necessary, on the basis of population, resources, accessibility, literacy and simplicity of registration. Each primary registration area should be the jurisdictional territory of, and be managed by, one local registrar.²⁴¹ The civil registration and identity management authorities may also maintain offices that correspond to major civil divisions of the country. For example, in addition to village or district offices, the national authorities may also have offices at the province level. These higher-level offices generally have supervisory authority over the lower level offices in their jurisdiction. This does not mean that the civil registration and identity management authorities must have separate premises; these offices may be co-located with each other or within other existing government facilities in order to share resources. With the digitization of government services, some countries have decreased or done away with physical civil registration offices. Nonetheless, most countries still maintain physical locations, as physical offices are particularly important for those in the population that lack access to the Internet or are not comfortable with the use of technology. Policymakers should carefully consider the location of primary registration offices and only consider removing physical locations if 100 per cent of the population has the access and skills necessary to use the Internet.

232. The legislation should address the structure of the civil registration and identity management authorities, including organizational structure and lines of authority. Regulations should clearly establish the locations of primary registration areas as well as the locations of any higher-level offices. Addressing the location of offices in regulations, instead of legislation, allows for changes to be made to the structure of offices in the future. The legislation and regulations should allow flexibility, permitting sub-units to be established as needed at selected locations with high levels of vital events, such as hospitals, without the need to amend legislation, as this is a key factor in affecting completeness of registration.²⁴² Even if a country's level of digitalization allows for the reduction of physical offices, legislation should still address organizational structure and lines of authority.

²⁴¹ Ibid., paras. 340–346.

²⁴² Ibid., para. 347.

233. Country practices vary with regard to administering vital statistics programmes. One option is to vest responsibility for vital statistics in the national statistical authority. In this case, the vital statistics programme becomes a part of the general statistics programme. Generally, the national statistics authority is a centralized agency and vital statistics are compiled at the central level. If, however, the statistics agency does have local offices, the structure of the agency should be set out in legislation or regulations.²⁴³ Another option is to place the vital statistics administration within the civil registration administration. A third option is to designate specific government agencies to carry out different vital statistics functions related to their respective areas of work. For example, the health service agency might collect and process data on births, deaths and fetal deaths, while the general statistical service or the court system might compile marriage and divorce statistics. While other arrangements are possible, it is essential in all cases that the vital statistics programme be clearly defined and have strong, permanent governmental support.

(ii) Qualifications and conduct of civil registrars and identity registrars

234. Registrars hold significant power in registering events, and registering and retiring legal identity. Registrars may also collect fees directly from individuals, which makes them vulnerable to corruption claims. Therefore, clear requirements governing fitness to act as a registrar must be outlined, including the qualifications necessary to fill the positions of local, regional and national registrar. If these officials are appointed, the appointment process should be prescribed. The proper conduct and ethical responsibilities of the national, regional and local registrars should also be established. Furthermore, national, regional and local registrars should be full-time officials, enjoy civil service status, and the terms of employment and salary level should be such as to prevent corruption. These requirements may be set out in legislation and regulations on civil registration, vital statistics and identity management. In many countries, however, these requirements are detailed in legislation, regulations and procedures regarding the hiring, retention, and promotion of civil servants. In addition, many countries have a code of conduct or ethics for civil servants. Regardless of where these requirements sit in a country's legal code, they must be clearly set forth.

235. In some countries, local elected officials hold the position of local registrar in their official capacity. Consequently, legislation cannot require or guarantee the qualifications of the local registrar. In these instances, there is usually a civil servant employed to act as the assistant registrar who handles the registration functions. Where this is the case, legislative drafters should set forth the requirements and qualifications necessary to fill the position of assistant registrar.

(iii) Powers of the national registrar

236. The heads of the civil registration and identity management agencies (often referred to as "national registrar" or "registrar general") should be responsible for and empowered to oversee operation of the civil registration and identity management systems and authorized to issue regulations and instructions to do so. The national registrar should be responsible for, at the minimum, management and inspection of registration service; participation in drafting of regulations and instructions; assessing the degree of coverage and establishing boundaries for local offices; hiring, management and training of personnel; management of physical resources and technology; resolution of incidents and appeals; promoting the registration requirements to the public; exchanging information with other agencies; and safekeeping archives. The national registrar is the steward of the system and therefore the heads of the civil registration.

²⁴³ Ibid., para. 43.

tration and identity management authorities should be responsible for ensuring interagency cooperation among themselves and other stakeholders in the system.

237. The volume of work in most countries will require the national registrars to delegate powers to others to act on their behalf. Drafters of legislation should carefully consider what duties are delegable by the national registrar to regional and local registrars. The goal should be to allow the delegation of sufficient powers to local registrars to increase the efficiency of the system. This, however, must be balanced against the need to have uniform procedures and quality control. As capacity and skills at regional and local levels improve, additional authority can be delegated. The legislation should require supervision over the exercise of any delegated duties.

(iv) Powers of local and regional registrars

238. Legislation should clearly state the duties and powers of local and regional registrars. The duties and powers of local civil registrars usually include conduct and oversight over the following civil registration functions:

- (a) Recording specific information regarding vital events according to established methods and procedures;
- (b) Ensuring compliance with registration law;
- (c) Ensuring the accuracy and completeness of each record;
- (d) Adopting such measures as are required to enable the public to be informed of the necessity, procedures and requirements of registration, and the value of vital statistics;
- (e) Conducting outreach to certain population groups, such as those that are remote or hard to reach, or have physical challenges in gaining access to the system, in order to increase registration coverage;
- (f) Taking custody of records;
- (g) Issuing certificates or copies of the vital records upon request;
- (h) Providing customer services;²⁴⁴
- (i) Ensuring the timely transmission of records to the national registrar.

239. The duties and powers of local identity management registrars usually include conduct and oversight over the following identity registration functions:

- (a) Capturing and recording key identity attributes;
- (b) Validating the identity of the individual against existing data;
- (c) Issuing credentials;
- (d) Taking custody of records and ensuring their security and confidentiality;
- (e) Conducting outreach to certain population groups, such as those that are remote or hard to reach, or have physical challenges in accessing the system, in order to increase registration coverage.

240. Where civil registration and identity management responsibilities are assigned to a single entity, all the above functions would be the responsibility of a single local registrar.

241. Regional registrars (in both the civil registration and identity management systems) should be responsible for oversight of all local registration offices in their area. Regional registration offices may also serve as a primary registration location and therefore regional registrars may, in addition to the powers below, have the same duties and powers as a local registrar. The duties and powers of regional registrars may include conduct and oversight over the following functions:

244 Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, para. 328.

- (a) Verifying and ensuring the accuracy of registration information collected at registration offices within their jurisdiction;
- (b) Training registrars within their jurisdiction to ensure uniformity of procedures;
- (c) Supervising, monitoring and inspecting registration offices within their jurisdiction;
- (d) Hearing appeals of decisions of registrars within their jurisdiction.

242. Registrars, at the regional or local level, should have the power to deploy resources as needed to reach remote or underserved areas. Mobile units should be allowed to conduct registration.²⁴⁵ Where distance and terrain are factors, local registrars should be authorized to travel through their district in regular rounds to capture unregistered vital events.²⁴⁶

(v) Qualifications and powers of national statisticians

243. The production of statistics must be free from political influence, in accordance with the Fundamental Principles of Official Statistics.²⁴⁷ To help to achieve this, the national statistician²⁴⁸ should be a full-time civil servant with terms of employment and salary sufficient to prevent corruption. The qualifications for the national statistician should be clearly established. In addition, the national statistician should be subject to applicable codes of conduct. These requirements may be set out in legislation or regulations on civil registration, vital statistics and identity management. In many countries, however, civil service legislation, regulations or procedures would govern these positions. The national statistician should be responsible for the compilation, analysis, evaluation, presentation and dissemination of vital statistics data. The national statistician may also have authority to develop regulations or procedures for data-sharing between the relevant agencies for statistical purposes; procedures for use of vital events data by researchers; and rules regarding access to microdata by officials of the statistical agency producing vital statistics and other officials for proper and authorized purposes (such as quality assurance, data linkage and supporting research).

(d) Coordination among stakeholders

244. In the light of the multiple stakeholders involved in civil registration, vital statistics and identity management systems, it is important to have a coordinating mechanism for their activities. Close coordination and collaboration across government agencies improves the timely and efficient flow of information; aids production of timely and accurate statistics; avoids duplication, errors or omissions; and ensures that concepts, definitions and classifications are consistent nationally.²⁴⁹ Coordination often takes the form of an inter-agency committee, comprising representatives of all the agencies involved, which meet frequently to discuss matters affecting the agencies.²⁵⁰ Other coordination methods may, however, be considered; for example, empowering a single government agency to coordinate the activities of civil registration, vital statistics and identity management stakeholders and obliging stakeholders to collaborate with the coordinating entity. Any coordinating mechanism should be established on a permanent basis, meet regularly and have legal status as mandated by law.²⁵¹

245. There may also be coordination on specific topics. For example, a national mortality working group can play a key role in improving the completeness and quality of mortality data, which is critical to public health decision-making. Such a group could coordinate efforts to introduce and roll out the use of the WHO international form of medical certificate of cause of death and training on the International Classification of Diseases; integration of verbal autopsy into the civil registration and vital statistics ²⁴⁵ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 348.
 ²⁴⁶ Ibid., para. 329.

- ²⁴⁷ See General Assembly resolution 68/261.
- ²⁴⁸ In some countries, responsibility for vital statistics is assigned to specific agencies. In this case the national statistician would include all the officials responsible from within the civil registration authority, health authority, courts, or other agencies as applicable. The principles of this section should apply to each of the agency-specific statisticians individually and collectively.

- ²⁴⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 41 and 48.
- ²⁵⁰ Ibid., paras. 52 and 319–322.
- ²⁵¹ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, para. 270.

system; and coordinate training in the medical certification of cause of death. Similarly, a verbal autopsy committee can play a key role in improving the completeness and quality of mortality data. A working group or groups may be established through the legislation or regulations on civil registration, vital statistics and identity management, or through another mechanism. A working group may be permanent or timelimited, depending on the nature of the issue it is meant to address.

(e) General provisions and administrative infrastructure summary

246. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation and regulations on civil registration, vital statistics and identity management, or in other parts of a country's legal code. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes". A similar checklist will be included at the end of every section, and in some cases subsections, throughout these Guidelines.

General provisions and administrative infrastructure	Yes/No
 Is each of the following terms defined in accordance with United Nations definitions: (a) Live birth; (b) Death; (c) Fetal death; (d) Marriage; (e) Divorce? 	
Is registration of the following vital events compulsory and universal; for example, is registra- tion required and provided without discrimination or distinction based on racial, ethnic or religious group; status as a member of a nomadic, native, indigenous or aboriginal population; status as a displaced person, refugee, or asylum-seeker within the country; or status as a foreign national born in the country, including temporary workers; or any other characteristic: (a) Live birth; (b) Death; (c) Fetal death (in accordance with WHO recommended practices, see sect. C.2); (d) Marriage; (e) Divorce?	
ls a continuous and permanent system of civil registration established?	
Is a continuous and permanent system of identity registration established?	
Do the principles of privacy and confidentiality apply to civil registration, vital statistics and identity management systems?	
Do the principles of accountability and transparency apply to civil registration, vital statistics and identity management systems?	
Are certificates issued by the civil registration authority established as legally valid proof of vital events?	
Are identity documents issued by the identity management authority established as legally valid proof of identity?	
 Are the functions of establishing, operating and maintaining the following systems expressly assigned to a government agency or agencies: (a) The national civil registration system; (b) The national vital statistics system; (c) The national identity management system? 	
 Does a central agency have authority to issue regulations in order to oversee operation of: (a) The national civil registration system; (b) The national vital statistics system; 	
(c) The national identity management system?	

Is the national civil registrar authorized to delegate authority to regional and local civil registrars? Is the national identity registrar authorized to delegate authority to regional and local identity registrars? Are the organizational structure and lines of authority clearly established for: (a) The civil registration authority; (b) The identity management authority? Does the organizational structure, including the physical location of registration offices and online access, ensure access to and coverage of the entire population? Do the national, regional or local registrars have the power to establish secondary registration
registrars? Are the organizational structure and lines of authority clearly established for: (a) The civil registration authority; (b) The identity management authority? Does the organizational structure, including the physical location of registration offices and online access, ensure access to and coverage of the entire population?
 (a) The civil registration authority; (b) The identity management authority? Does the organizational structure, including the physical location of registration offices and online access, ensure access to and coverage of the entire population?
online access, ensure access to and coverage of the entire population?
Do the notional regional or local registrary have the neuron to actablish secondary registration
offices, authorize mobile registration units, and conduct other types of outreach?
Are there clear requirements and standards governing the qualifications and conduct of the following: (a) National civil registrar; (b) National identity registrar; (c) National statistician (or chief statistician of agencies); (d) Regional civil registrars; (e) Regional identity registrars; (f) Local civil registrars; (g) Local identity registrars? Are the following full-time civil servants:
 (a) Civil registers; (b) Identity registrars; (c) Statisticians?
Are the terms of employment and salary level of registrars and statisticians sufficient to prevent corruption?
Are the powers and duties of civil and identity registrars at the national, regional and local level clearly defined?
Are the powers and duties of the national statistician (or chief statisticians of agencies) clearly defined?

Has a coordinating mechanism or body consisting of representatives of all stakeholders in the civil registration, vital statistics and identity management systems been established?

C. Civil registration

1. Registration of birth

247. Birth registration establishes the existence of a person under law and lays the foundation for safeguarding civil, political, economic, social and cultural rights. As such, it is a fundamental means of protecting the human rights of the individual.²⁵² Birth registration is the formal act of recording the facts of a birth in the civil register. The person who notifies the registrar of the event is referred to as the "informant". The process by which the informant reports the event to the civil registrar is sometimes referred to as "notification". When a birth is notified, the registrar verifies the information provided, including any required documentation, and then records details of the birth, the newborn and the parents in the official civil register. These details constitute the birth registration record (see annex A for recommended information to be recorded on the "notification of birth" registration form).

248. Legislation on birth registration should address all aspects of the process by which a birth is registered. This includes the following topics: informants; processes for births that occur in a health facility and births that occur outside a health facility;

²⁵² Resolution 28/13 of the Human Rights Council on birth registration and the right of everyone to recognition everywhere as a person before the law. place of birth registration; proof required for birth registration; assigning of a unique personal identifier; registration deadlines; late and delayed notification; certified copies of birth registration; information to be collected at registration for legal and statistical purposes; and special procedures for certain birth circumstances. These topics are discussed in detail below.

(a) Informants

249. Registration records should be completed as soon as possible after the event. The simplest and most efficient method to achieve this is to require an informant to provide the needed information directly to the civil registrar soon after the event has occurred.²⁵³ The informant is the person who reports to the local registrar the occurrence of a vital event within the prescribed time limit.²⁵⁴ The importance of the informant is that the registrar can only register a vital event on the basis of the informant's declaration, either verbally, in writing or through electronic submission.²⁵⁵ The designation of an informant for each type of vital event should be established clearly and unequivocally in the legislation to ensure that there will be one and only one person primarily responsible for providing the information needed for the registration. This notwithstanding, the law may designate alternative informants and establish the order in which each of them must assume his or her responsibilities. The appropriate informant for a live birth, in priority order of preference, is (see box 21):

- For a birth that occurred in a health facility, the head of the health facility, or, for a birth that occurred outside a health facility with a birth attendant, the birth attendant; OR
- 2. The mother;
- 3. The father;
- 4. The nearest relative of the mother;
- 5. Any other adult person having knowledge of the facts.²⁵⁶

Box 21

Informants for birth registration

The *Principles and Recommendations for a Vital Statistics System, Revision 3*, in paragraph 355, list the informants for a live birth, in priority order of preference as:

- 1. The head of the institution (or designee) if the birth occurred in an institution **OR**
 - _.
- 2. The mother
- 3. The father
- 4. The attendant at the delivery
- 5. The nearest relative of the mother
- 6. Any other adult person having knowledge of the facts

The present Guidelines differ slightly from the *Principles and Recommendations* in that they recommend that, for births that occur outside a facility with the assistance of a health professional (for example, doctor, nurse, midwife or other health professional), the health professional that attended the birth should be primarily responsible for notifying the registrar of the birth. Many countries now vest primary responsibility for birth registration in the health professional that attended the birth, as this may facilitate increased birth registration for home births.

- ²⁵³ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 281.
 ²⁵⁴ Ibid., para. 356.
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²⁵⁵ Ibid., para. 351.

²⁵⁶ See, ibid., paras. 352–355.

(b) Process of registering births occurring in health facilities

250. When a live birth occurs in a health facility, the head of the health facility should be the primary informant. This will help in achieving the goal of registering the birth as soon as possible after the event. Unlike the family, who will be busy with a newborn, the health facility should be able to notify the registrar almost immediately after the birth. The legislation should explicitly state what type of facility is considered a "health facility" for purposes of being an informant. Some countries define "health facility" by the number of beds contained in the facility; for example, any facility with over 10 beds might be considered a health facility for purposes of being an informant. Other countries define "health facility" by the number and type of medical professionals on staff; for example, any facility in which a medical professional is present might be considered a "health facility". In many countries a birthing facility run by midwives is considered a "health facility" for purposes of birth registration. While the head of the health facility is ultimately responsible for ensuring the notification of the birth, they should be able to delegate this responsibility to staff.

251. The legislation should require the health facility to provide the local registrar with all the legal and statistical information necessary to register the birth. This information is usually contained in a "notification of birth" form and is collected from and confirmed with the parents (see sect. (j) below, on information collected at registration). The information may be provided by physical or electronic means. The process by which the information is provided should be set out in regulations or instructions, as this will allow flexibility to change the process as the system and technology develop.

252. After receiving notification of a birth, the registrar should verify the information for accuracy and completeness, officially register the birth and issue a birth certificate to the family.²⁵⁷ Some countries issue the birth certificate by mail; others require the family to come in person to pick up the birth certificate. In fully digitized systems it may be possible to issue a certified electronic birth certificate. Because the certificate issuance process may change over time, the process should be set out in instructions in order to allow maximum flexibility (see sect. (l) below, on certified copies of birth registration, for details on certificate format and issuance).

253. Some countries follow a two-step process. In this process, the health facility submits a notification of birth (by physical or electronic means) to the local registrar and provides a copy to the parent or parents of the newborn. To complete the registration process, the parent must provide a copy of the notification of birth, and any other required information and documentary evidence, to the registrar. The registrar should verify the information for accuracy and completeness, officially register the birth and issue a birth certificate to the parent. This two-step process may result in lower registration rates, as parents may not complete registration. Having been notified of the birth by the facility, however, the registrar will be aware of unregistered births.

254. With either process, the legislation should broadly describe the process but leave the details of the process to be described in regulations or instructions. For countries transitioning from a paper to a computerized system, both manual and electronic procedures may exist in parallel for several years. For that reason, the legislation should avoid language that requires the submission or transmission of documents to be either in a paper or a digital format. In addition, leaving this level of detail to the regulations or instructions will allow flexibility in amending the process as technology advances.²⁵⁸

255. The notification of birth form should not be contained in or appended to the legislation. Rather, the form should either be appended to the regulations or included

²⁵⁷ Ibid., paras. 93–97.

²⁵⁸ For an in-depth discussion of the registration process for births in a health facility, see Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 93–97. in instructions from the national registrar. This will allow for ease of amendment. Data elements recommended for inclusion in a notification of birth form are set out in annex A.

(c) Process of registering births occurring outside health facilities

256. Births that occur outside health facilities may be grouped into two categories: those that take place with the assistance of a birth attendant and those that take place without a birth attendant. Many countries have increased the rate of registration of births that occur outside health facilities by vesting responsibility in birth attendants to notify the registrar of births that they attend. This allows for quicker notification of the birth by relieving the family of the burden of travelling to the registration office soon after the birth of a child. For births without an attendant, the parents remain the primary informant. These two processes are described below.

257. For live births occurring outside a health facility with a birth attendant, such as a doctor, nurse, midwife or traditional birth attendant, legislation should place the responsibility on the attendant to be the primary informant or to notify the registrar of the birth. If the birth attendant is the primary informant, the legislation should require the attendant to provide all the information requested in the notification of birth form, and any other required evidence, which is collected from and confirmed with the parent or parents. The registrar should verify the information for accuracy and completeness, officially register the birth and issue a birth certificate to the family.

258. As with in-facility births, some countries have a two-step process for births that occur outside a health facility with a birth attendant. In a two-step process, the attendant submits a notification of birth to the registrar and gives a copy to the parents. The parents then complete the registration process by providing the copy of the notification of birth to the registrar and any other required information and documentary evidence. The registrar verifies the information for accuracy and completeness, officially registers the birth and issues a birth certificate to the family. As with the equivalent two-step process for facilities, this process may reduce registration rates, as it relies on the parents to complete the registration process.

259. The regulations should provide a process for registration if there is no birth attendant or if a birth attendant is unable to complete the notification of birth form because of illiteracy or other reasons. In this instance, one of the parents or a close relative should report the event to the local registrar and provide the information requested on the notification of birth form, together with any other required documentation. The registrar verifies the information, prepares the official birth record in the register and issues a birth certificate to the family.

260. Vesting primary responsibility in parents to report births can result in low registration rates. Many countries have seen birth registration rates rise by deputizing health workers – including vaccination workers, nurses, doctors and other health professionals who see newborns for paediatric visits – as informants. If these health workers see an infant who has not been registered – whether during a vaccination appointment, paediatric visit or for another reason – they can use the opportunity to register the child. Legislation or regulations should allow for or require health workers to act as informants in these circumstances, in a process which is sometimes called "opportunistic birth registration".

261. As with in-facility births, the legislation should broadly describe the process for registration of out of facility births, leaving the details of the process to be described in regulations or instructions.

(d) Place of birth registration

262. Legislation should state where registration of a birth must take place. Traditionally, legislation has limited registration of vital events to a primary registration area in a certain location. The registration of a vital event can be made by the place of occurrence or by the place of usual residence. Most countries have adopted the place of occurrence as a norm for the registration of births, deaths and fetal deaths, as this facilitates and accelerates the registration process by putting civil registration within reach of the population.²⁵⁹ As civil registration, vital statistics and identity management systems become more networked within countries, however, it may be possible to register a vital event at any place where the informant can access the system, as the information would go directly to a central database.²⁶⁰

263. Legislation should generally provide that an informant should notify a birth at the registration office in the location where the birth occurred. However, drafters of the legislation may wish to allow for flexibility regarding place of birth registration and permit, through regulation, notification at any location where the registration system may be accessed.

(e) Proof required for birth registration

264. Registrars should require proof as to the veracity of the information to be registered. The proof or evidence required for registration must be sufficiently stringent to provide assurance of the accuracy of the information without being so burdensome as to discourage or prevent registration. Verification of the occurrence of a vital event can be achieved through documentary or oral evidence. Documentary evidence is always preferred. For birth registration, the most common form of documentary evidence is the notification of birth. If, however, this is not available, testimony or affidavits of witnesses may be substituted.²⁶¹

265. If a health facility or birth attendant is the primary informant and notifies the registrar directly of a birth, with no action needed by the parents, the provision of the information in the notification of birth form is sufficient for the registrar to record the birth in the register. If, however, the mother or father of a child is the primary informant, the health sector should be obliged to issue a notification of birth to the parents, free of charge, for all medically attended births. This includes births attended by a midwife or traditional birth attendant. A notification of birth constitutes critical documentary evidence of the occurrence of a birth, which can be used to satisfy civil registration verification requirements. Consequently, it is important that it be issued free of charge and in a uniform format throughout the country.

266. The legislation or regulations should specify whether any proof is required in addition to the notification of birth, such as an identity card or birth certificate of the mother, father or both. It is important that documentary evidence requirements not prevent the registration of a birth. Accordingly, if additional evidence is required, the regulations should allow for alternative evidence if the mother or father does not possess such documentation. The registrar should be authorized to use discretion to complete the registration process with the information available, in accordance with the guidelines issued by the national registrar.

(f) Assigning of a unique personal identifier

267. An individual may enter into the identity management system at birth with the assignment of a unique personal identifier. Within a single country, a unique personal identifier is assigned to only one person, and a person should have only one unique

- ²⁵⁹ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, paras. 177–179.
- ²⁶⁰ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 92.

²⁶¹ Ibid., paras.189–192, 365–366, 368.

personal identifier. This code is assigned to an individual for life and generally cannot be changed, except under specified circumstances, such as identity theft. The assignment of a unique personal identifier at birth facilitates the linkage of records in the civil registration and identity systems.

268. A unique personal identifier may be generated by the civil registration agency, the identity management agency, or the agency responsible for the population register. If the civil registration agency generates and assigns a unique personal identifier to a newborn, the registrar should send the unique personal identifier along with birth information (such as name, date and place of birth, and name of the parent or parents) to the identity management agency and the population register. If the identity management agency or agency responsible for population register generates the unique personal identifier, the registrar should send a request to the responsible agency, which then issues a unique personal identifier and sends it to the registrar. The registrar then enters this information into the birth record.²⁶² Regardless of which entity generates the unique personal identifier, legislation should require the registrar to ensure that a unique personal identifier is assigned and entered into the birth record for every child born within the territory of the country, regardless of citizenship, ethnicity, nationality, or residency status.

269. Lawmakers should determine how the unique personal identifier will be provided to the parents. For example, it may be included on the birth certificate or provided on a separate document. The process by which the unique personal identifier is provided to parents is best contained in regulations or procedures to allow for changes to the process over time.

Box 22 Unique personal identifier

Depending on the country, a unique personal identifier may be referred to as a unique identity number (UIN), a personal identification number (PIN), or similar term. In the Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, the term "PIN" is used for the identifier assigned to each person by the government. In the present Guidelines, the term "unique personal identifier" is used to refer to the identifier assigned by the government to individuals. Some countries use letters and other characters in addition to numbers in the identifier, so this document uses the inclusive term "code" rather than "number". In addition to a unique personal identifier, some systems use an additional character sequence to authenticate the identity of the individual. This closely guarded code is often known as a PIN. For example, in Estonia, all persons are assigned a unique personal identifier at birth, and later in life select two PINs that are attached to their identity credential for purposes of authentication. To distinguish between these two types of character sequences, "unique personal identifier" is used herein to refer to the character sequence assigned for life to all persons in the population and "PIN" to refer to a personal identification number used for authentication or other purposes.

(g) Registration deadlines

270. The legislation should specify a time period in which a birth must be notified. Uniform processes and time periods for the notification of vital events should be applied throughout the country. The maximum time period allowed for notification should be as short as possible so as to facilitate current and accurate registration. Deadlines for notification are often between 14 and 30 days, but vary from country to country.²⁶³

²⁶² For more information on operational procedures for linking the birth registration record and the unique personal identifier, see World Bank, "Integrating unique identification numbers in civil registration" (Washington, D.C., 2018), pp. 15–19.

²⁶³ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, paras. 180–184.

Box 23 Malawi: issuance of a unique personal identifier, integrated birth registration and identity systems

In Malawi, the civil registration and identity management systems are considered to be one system, the National Registration and Identification System, under the National Registration Act of 2010, although functionally they are managed across two distinct electronic platforms. A decision was made to link the two platforms, so that a nationally recognized unique national identity number is generated upon birth registration, which will remain valid for the life of the individual. Upon birth registration, information is transferred from the electronic civil registration system to the electronic national identification system where a unique national identity number is assigned. This unique national identity number is then transferred back to the civil registration system and printed on a child's birth certificate. The birth record within the national identification system is flagged as being generated from the birth registration system. Upon reaching the age of 16, children that obtained a national identity number at birth will be prompted to verify registration details and provide biometric data, in order to validate registration data prior to receiving an adult national identity card. This ensures rigorous verification standards for all adultissued national identity cards, while enabling the assignment of a national identity number at birth.

271. As a practical matter, hospitals and health facilities should be able to notify births almost immediately if the system is computerized and linked to the registrar, while notification of out-of-facility births often take longer. To this end, the legislation should provide a maximum time frame within which a birth must be notified and the regulations may set a shorter time frame for specific circumstances, such as births in facilities with computerized systems.

(h) Late and delayed notification

272. The more time that passes between the occurrence of a vital event and its notification, the less likely that the information provided about the event will be accurate and trustworthy. For that reason, every effort should be made to ensure that notification occurs as early as possible, although, despite all best efforts, late and delayed notifications may still occur.

273. A late notification occurs after the legally specified time period, but within a grace period, which is usually considered to be one year after the vital event. Delayed notification is that which occurs after the grace period. The legislation should make provisions for the handling of late and delayed birth notification. While late and delayed notification should be discouraged, so that vital events are registered in a timely manner, the procedures should not be so restrictive as to prevent late and delayed notification of events. For example, laws that require a court order for late or delayed registration present a significant barrier to registration. Lawmakers should take account of the difficulties encountered in finding or verifying evidence of past events, while striving to maintain the integrity of the records. These provisions should indicate the required documentary evidence that may be acceptable, based on the length of time of the delay.²⁶⁴

274. If a birth is notified within one year of the date of the birth, and the birth occurred in a health facility or with an attendant, the legislation should allow for registration with a notification of birth from the health facility or attendant, together with any other required information. If the birth took place at home without an

²⁶⁴ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 369–374. ²⁶⁵ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 103.

²⁶⁶ Ibid., para. 161.

- ²⁶⁷ Department of Health and Human Services Centers for Disease Control and Prevention, Model State Vital Statistics Act and Model State Vital Statistics Regulations, 2011 Revision, section 2 (c).
- ²⁶⁸ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 416.

²⁶⁹ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 169. attendant, the legislation should allow for registration with provision of the information requested in the notice of birth form, and may require additional evidence, such as a witness statement.²⁶⁵

275. After a year has passed, legislation may require additional proof of the facts of the birth. This proof may include an affidavit of those present at the birth, a medical record of the pregnancy or a record of a subsequent paediatric visit, and some form of proof of residency at the time of birth, such as a rent agreement or statement from a village leader.²⁶⁶ In some countries, for delays longer than one year, the legislation may require judicial procedures and decisions. This could, however, create a barrier to registering a birth after a year, in particular in areas where the nearest courthouse may be a great distance away. For opportunistic birth registration, such as birth registration during immunization campaigns (see sect. (c) above, para. 260), evidentiary requirements may be lessened, if appropriate. This will help to facilitate such registrations. While evidence requirements should be stringent for late and delayed notification, proof of birth should not be so onerous as to disincentivize birth registration. Lawmakers must balance these concerns when drafting regulations or instructions for late and delayed registration.

(i) Certified copies of birth registration

276. A key responsibility of the registrar is to issue birth and death certificates, which serve as official evidence of the information on individual vital events contained in the register. A certificate is a document, in paper or electronic format, issued by the registrar and containing all or part of the exact information contained on the original vital record, and which, when issued by the registrar, has the full force and effect of the original vital record.²⁶⁷ These certificates can come in several forms, including a digital certificate, a computer printout, a photocopy or reproduction of the original record, or a separate form with handwritten or typed information. Legislation should require that security measures be put in place for certificate issuance (both hard copies and electronic) to minimize fraud. The specific types of security measures should be addressed in regulations or instructions to maintain flexibility. To deter counterfeiting of paper certificates, safety paper (paper that has been specially prepared to readily disclose erasures) should be used and closely controlled.²⁶⁸ Certificates retrieved or received electronically should contain other types of security features, such as a digital seal, chain or code²⁶⁹ (see box 24 for an example of effective security features found in the electronic retrieval system implemented by the Civil Registration and Identification Service of Chile).

277. Depending on the information required, the certificate may contain all the information from the register (full or long-form) or limited information (partial or short-form). The short-form might, routinely, be the form of choice for providing copies, except in circumstances where the entire form is required for a particular legal or administrative use. The form of the birth certificate – long- and short-form – should be included in regulations or instructions rather than the legislation, to permit changes to the form over time if necessary.

278. A partial or short-form certificate may contain only information that is in the public domain, such as full name, name of the parent or parents, sex, and place and date of birth. Other information contained in the long-form, however, such as information regarding the marital status of the parents, may be sensitive, and disclosure to the wrong person could violate the right to privacy. Only the immediate family, spouses, heirs, or their legal representatives, and third parties with a legitimate interest should have access to such sensitive information. Government agencies may also

Box 24 Chile: security features in the production of certified copies by the Civil Registration and Identification Service

The Civil Registration and Identification Service performs registration and certification of vital events by means of a centralized database. When the unique personal identifier of the registrant is introduced, the system automatically fills in the fields that can be retrieved from family members' records. These fields are hard-coded, so that only authorized registrars can modify them. In order to obtain certified copies, users can access a public database online, where documents can easily be retrieved. Downloaded documents contain a digital verification code that can be read and validated by other service providers, including health, insurance and education institutions. Thus, the security features of the paper are given diminished attention in comparison with the digital seal, chain or code, which not only allows verification of the validity of the information contained in the document, but also makes possible electronic transmission of the data. This system also enables the obtaining of certified copies, recognized by the Convention Abolishing the Requirement of Legalisation for Foreign Public Documents (the Apostille Convention), from overseas.

require such information for legitimate purposes. The local registrar should have the authority to determine the legitimacy of requests for certificates containing information not in the public domain, in accordance with guidelines issued by the national registrar.

279. Legislation should require the registrar, upon completion of registration, to issue an original birth certificate to the parents of the child free of charge. Ideally, the local registrar has the power to issue a birth certificate, as this will shorten the time frame for certificate issuance. In some countries, however, the local registrar lacks the resources or capacity to issue the certificate. For example, the local registrar may not have a sufficient supply of security paper or the certificate form or the means to print these forms. In these instances, the central authority issues the birth certificate, which is then sent to the local registrar to be collected by the parents. This of course can cause substantial delays in certificate issuance. As the certificate can be an incentive to register, delay in certificate issuance can depress rates of registration. Procedures should therefore be put in place to facilitate the issuance of certificates at the local level.

280. Original birth certificates may get lost or destroyed over time, and it is therefore important to have a process for the issuance of a duplicate birth certificate. Information necessary for certification might only be contained in the local register where the birth was registered, if communication between the local and central register is infrequent. Information may also be contained in the central register if there is effective communication between the local and national level. If information is contained in the central register, it is possible that it could be accessed from any local registration location, which makes the process of requesting a duplicate certificate easier for those who no longer reside at the place of registration. Steps should therefore be taken to speed up processing and information-sharing between the local and national level, in both manual and electronic systems. This will allow the swift processing of duplicate certificate requests from any registration district, not just the district where the vital event was registered. Regulations or instructions should set out the specific process for obtaining a duplicate birth certificate, and should specify the district office from which a duplicate certificate may be requested.

281. The traditional method for requesting a certificate involved walking into the local registration office and requesting a copy at the counter. Many countries, however,

have developed additional procedures to accommodate the public, such as requests by mail, telephone or online. Some countries offer digital certificates for sharing with government agencies (see box 24 for an example of digital certificates in Chile). When developing alternative forms of requesting and providing certificates, policymakers should ensure the privacy and confidentiality of the process, as well as establishing a means to verify the identity of the requester.²⁷⁰ These procedures are best handled in instructions in order to retain maximum flexibility.

(j) Information collected at registration

282. Information provided by the informant during notification is entered into the register and constitutes the birth registration record. In a traditional manual registration process, a local registrar prepares two documents – a vital event registration record and the corresponding statistical report. The registration record, in view of its legal function, is permanently filed and stored. The statistical report is forwarded to the agency responsible for compiling vital statistics. As civil registration becomes more computerized, however, these two components are merging into one computerized input in the system. Where the registration document and the statistical report are combined in a single form (or a single input in the system), a clear distinction should be made between the legal and statistical components. This is important because certificates are subsequently prepared from the combined form. Certificates should contain only the legal portion of the records; items that are relevant only for statistical purposes should not be reproduced on certificates.²⁷¹

283. The *Principles and Recommendations for a Vital Statistics System, Revision 3,* provide recommendations on data elements that should be recorded for statistical purposes, including high-priority topics along with topics that represent a less urgent goal.²⁷² These topics are set out in annex A and should be included in the notification of birth form. The information for the legal component is minimal, and usually consists of: given name; surname; date of birth; birthplace; sex; and names of the parents.

284. While the registrar should strive for complete legal and statistical information, an informant's inability to provide information for any one data field should not prevent registration. For example, while it is preferable that information on both parents is provided (in accordance with the Convention on the Rights of the Child), birth registration should not be denied if the mother cannot or will not name the father, or if the father refuses to acknowledge the child. Similarly, if an informant is unable to provide information on other data elements in the notification of birth form – for example, the weight of a child born at home – this should not prevent registration. Accordingly, registrars should be authorized to complete registration with the available information, in order to fulfil their duty to strive for universal registration coverage. The national registrar should issue guidelines on completion of registration with missing information, such as a missing name in cases of delayed naming (see sect. (k) below), questions of nationality and citizenship, and missing paternity information.

285. In addition to the information regarding the characteristics of the birth and the parents, data elements should include: information regarding registration area (territorial district) and local office; number of record; date and place of registration; identity of registrant; and identity of the registering officer.²⁷³

286. Legislation should not prescribe the precise form of the register – in contrast to data elements to be captured – as this may be overly prescriptive and prevent changes in the form of the register as a result of advances in technology.

²⁷¹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 374–377.

²⁷² Ibid., para. 66, table III.1.

273 Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, p. 23.

²⁷⁰ Ibid., paras. 172–174.

(k) Birth circumstances requiring special procedures

(i) Delayed naming and permissible name of the child

287. A child has the right to a name from birth. In many communities across different countries, however, children are named only after a certain period of time following their birth, ranging from a few days to several weeks, based on varying religious practices and customary or social norms. Registration laws that require registration with a name can hinder birth registration in those communities that delay naming of their children. To overcome this, legislation may allow the registration of a birth without a name (i.e., "Baby Girl" or "Baby Boy") or with a temporary name, providing a separate cut-off date for insertion of a name following a specified process set out in the regulations or instructions.²⁷⁴ Delayed naming traditions may be a reason for a country to adopt a two-step birth registration process, as it allows the parents to complete registration after a name has been chosen. Policymakers should, however, weigh this against the risk of births going unregistered if parents fail to complete the process.

288. Countries may have a law on permissible names for a child, which may govern the given name and family name. Registrars should be aware of these substantive laws. Any requirement, however, that a baby must use the surname of the father may hinder or prevent registration. If the mother is unable or unwilling to name the father, she should be permitted to use her family name or a chosen family name, and registration should not be denied. The national registrar should issue instructions on potential issues that can arise with the naming of a child.

(ii) Registering a foundling

289. All births should be registered, including those of a foundling. A foundling is a child who has been abandoned and whose parents are unknown. Generally, the person or the head of the institution that assumes custody of the infant should be responsible for notifying the registrar of the birth. The person reporting the birth should provide information regarding, first, the date and place of the finding; second, the sex and approximate birth date of the child (to the extent this can be determined); third, the name and address of the person or institution reporting the finding; fourth, the name given to the child by the custodian of the child; and, fifth, any other information requested by the registrar. The registrar should record the facts in the birth register as a live birth. Generally, the registrar records the place where the child was found as the place of birth and the approximate date of birth as the date of live birth. The entry in the birth register should be clearly marked as "foundling" and information about parentage left blank. If the child is later identified and a previous live birth registration is found or obtained, the foundling birth registration record should be voided and placed under seal. To avoid statelessness, foundlings who are discovered in the territory should be considered to have parents possessing nationality of that State, unless there is proof to the contrary. ²⁷⁵

290. Legislation should clearly identify the entity or person that are primarily responsible for reporting the finding and the birth to the registrar. Regulations may set forth the information to be collected, the process for registering the birth, and the process for voiding a foundling record (if a live birth record is later found) to maintain flexibility.

(iii) Registering the birth of an intersex child

291. Intersex is a collective term used for many natural variations in sex characteristics and bodily characteristics that do not match strict medical definitions of male or female. These characteristics may be chromosomal, hormonal or anatomical and may ²⁷⁴ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 155–156.

275 Convention on the Reduction of Statelessness, art. 2. ²⁷⁶ European Union Agency for Fundamental Rights, "The fundamental rights situation of intersex people", FRA Focus, 2015, p. 2. Available at http:// fra.europa.eu/en/publicalater stages in line not a medical construction of a medi

tion/2015/fundamental-rights-

situation-intersex-people.

²⁷⁷ Ibid., p. 5.

be present to differing degrees. Many variants of sex characteristics are immediately detected at birth, or even before. Sometimes these variants become evident only at later stages in life, often during puberty. These are natural variations, and intersex is not a medical condition.²⁷⁶

292. Issuing a birth certificate with an assigned sex at birth can have an impact on the fundamental rights of intersex people. When basic aspects of a person's civil status (e.g., birth or death registration), social status (e.g., access to services) or health conditions are defined by the sex binary classification of being either "male" or "female", intersex people are often the subject of discrimination. This is because their sex characteristics cause them to fall outside this classification. It can also lead to grave violations of their rights to physical and psychological integrity and other fundamental human rights. The requirement to classify a child as either male or female at birth has caused intersex people to be subjected to cosmetic and other surgery that is not medically necessary in infancy, resulting in irreversible sex assignment and often sterility, without the informed consent of either the person in question or their parents or guardians.²⁷⁷

293. In November 2017, Germany's highest court ruled that requiring birth registration as either male or female or leaving the sex-marker blank violated the right to personality, which includes gender identity. The court ruled the country must provide a third gender option beside male or female in the nation's birth register or dispense entirely with information on gender in civil status. Advocacy concerning intersex registration is evolving and there are differing views. While some advocate for a third gender option, other feel that such an option is stigmatizing and propose that sexmarkers be removed from birth certificates and identity documents entirely.

Box 25

Intersex birth registration

At least five European Union member States allow a sex-neutral identification to be registered in birth certificates.

In the United Kingdom of Great Britain and Northern Ireland, "unknown sex" may be registered.

In Latvia, sex is not included on the birth certificate of an intersex child; instead "unclear sex" is allowed in medical certificates issued by medical staff.

In the Netherlands, if the sex of a child is unclear, the birth certificate can state that the sex could not be determined. Within three months of the date of birth, a new birth certificate should be drawn up and the first one destroyed. In the new birth certificate, the sex of the child should be given, based on a medical statement. If no medical statement is submitted or if the sex cannot yet be determined, the new birth certificate should indicate that it is not possible to determine the sex of the child. Once intersex persons have decided on their sex identity, they can change the registration in accordance with the Civil Code, but no time limit is set.

In Portugal, the person reporting the birth of an intersex child at the civil registration office is advised to choose a first name that is easily adapted to either sex. It is expected that the birth certificate will be amended accordingly, once a sex can be attributed with some precision.²⁷⁸

In November 2017, Germany's highest court ruled that the country must provide a third gender option beside male or female in the nation's birth register or dispense entirely with information on gender in civil status. The court ruling press release is available in English at www.bundesverfassungsgericht.de/SharedDocs/Pressemitteilungen/ EN/2017/bvg17-095.html

278 Ibid.

294. Intersex people will remain vulnerable to discrimination as long as birth and other registries do not record sex appropriately. For that reason, lawmakers should consider allowing a sex-neutral option at birth registration, such as "unclear", "unknown" or "other". Lawmakers should also consider alternatives to sex markers in birth certificates and other identity documents – including the possibility of removing sex markers or including a gender-neutral sex marker – to protect intersex people.

(iv) Registering births that occur in custody

295. It is not uncommon for female prisons to include pregnant prisoners. It is estimated that there are over 700,000 women and girls incarcerated globally.²⁷⁹ Approximately, 24,000 to 60,000 of these women are pregnant while incarcerated.²⁸⁰ The head of a detention facility, or the person in charge of health care within the detention facility, should be required to notify the local registrar of all vital events that occur in custody. This requirement is particularly important for birth, because women who give birth in custody have no opportunity to register the birth of their child while incarcerated or detained. Accordingly, legislation should assign responsibility to a specified person, such as the head of a detention facility or the head of health services within the detention facility, to notify the registrar of births that occur in custody. As with health facilities, the particulars of the process of notifying the registrar should be spelled out in regulations or instructions.

(v) Registering a birth for nationals giving birth abroad

296. Vital events occurring to citizens who are abroad temporarily should be reported to the home country.²⁸¹ When a child is born to parents who are residing outside their country of citizenship, the country in which the birth occurred has an obligation to register the birth and issue a birth certificate. While the home country of the parents will not issue a new birth certificate, there should be a process by which the parents report the birth to the parents' home country. This is important for purposes of establishing citizenship and receiving a passport for the child. The legislation should provide a process for citizens temporarily residing abroad to report the birth of a child to the registrar (or the passport agency). This is usually facilitated by a country's embassies and consulates. The legislation should address the type of documentary evidence required, such as a birth certificate or medical record of birth from the country where the birth occurred, or an affidavit given by a birth attendant. Regulations should also address the process to be followed by the embassy, including how the information is submitted from the embassy to the central registrar. While children of refugees born in a host country should be registered in the host country, special procedures may be needed for reporting these births upon return to the home country if the child was not properly registered and provided with a birth certificate in the host country. Procedures should be flexible regarding the documentation required to ensure that these births may be reported to the home country.

297. A birth certificate from the country of residence may not be in the official or national language of the country of citizenship. A country's laws may require a certified translation of the birth certificate and any other required documents, along with proof that the documents are valid. If a country is a party to the Convention Abolishing the Requirement of Legalisation for Foreign Public Documents (the Apostille Convention), validity may be established under the procedures of the Convention. The registrar should be aware of any laws requiring translation and certification of validity.

- 279 Roy Walmsley, "World female imprisonment list" (third edition)", Institute for Criminal Policy Research, Birkbeck, University of London, 2015. Available at: www.prisonstudies.org/ news/more-700000-womenand-girls-are-prison-aroundworld-new-report-shows.
- ²⁸⁰ Mollt Skerker and others, "Improving antenatal care in prisons", *Bulletin of the World Health Organization*, vol. 93, No. 10, 2015, pp. 739–740.
- ²⁸¹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 296.

(vi) Registering a birth that takes place in a vehicle in transit

298. If a birth occurs in a moving vehicle, such as a ship, aircraft, train or car, a question arises as to "place of occurrence" of the birth for registration purposes. If the birth occurs in a moving vehicle within the territory of the country, many countries consider the place of occurrence to be the place where the newborn exits the vehicle. Births that occur in international airspace or waters present a tougher question. Some countries require that if a birth occurs on a foreign ship or aircraft, the birth must be registered in the country in which the ship or aircraft is registered. The legislation should address these questions and state the presumption for "place of birth" for births that occur in or on moving vehicles, both domestically and internationally. In accordance with international law, these provisions must not result in rendering a child stateless. For ships and airplanes, the captain or pilot is usually the informant.

 Registering birth for refugees, undocumented migrants, internally displaced persons, stateless persons, persons of undetermined nationality and nomadic populations

299. All births that occur in the country - including births to refugees, undocumented migrants, internally displaced persons, stateless persons, persons of undetermined nationality and members of nomadic peoples - must be registered in the civil registration system, just as other births are. Where necessary, legislation should include specific provisions to guarantee the registration of these populations regardless of whether the person has legal residency status. For a birth to a mother or father who lacks legal proof of identity (birth certificate, identity card) because of statelessness, internal displacement, refugee status or for other reasons, the legislation should allow for alternative forms of documentary evidence and witness statements to permit registration.²⁸² The legislation or regulations should also allow for registration to be made through mobile units in refugee camps and remote locations to facilitate registration of marginalized populations. Where appropriate, legislation or regulations should allow for international organizations, such as UNHCR, to play a role in ensuring that the births of refugee children are registered in the civil register. For births in nomadic populations that cross borders, an agreement between the neighbouring countries to share civil registration information may facilitate accurate and up-to-date information in the countries' registers.

(I) Birth registration summary

300. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

²⁸² For a fuller discussion on special registration issues and these populations, see Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 180–183.

Birth registration	Yes/No
Are the heads of health facilities responsible for notifying the registrar of births that occur in facilities?	
Is "health facility" defined for purposes of determining whether a facility has a responsibility as an informant?	
For a birth that occurred outside a health facility and with the assistance of a birth attendant, is the birth attendant responsible for notifying the registrar of births?	
For a birth that occurred outside a health facility without the assistance of a birth attendant, does the legislation clearly specify the person responsible for notifying the registrar of the birth?	
Does the legislation permit births to be registered at the place of occurrence (or wherever the system may be accessed)?	
Does the legislation address whether documentary evidence is required to register a birth?	
If a country allows for or requires a unique personal identifier, is it assigned at birth?	
Is there a specified time period within which a birth must be notified, ideally within 14–30 days?	
Is there a process for late birth notification? If so, does this process specify any documentary evidence required to register the birth?	
Is there a process for delayed birth notification? If so, does this process specify any documentary evidence required to register the birth?	
Are only persons with a legitimate interest able to receive a certified copy of a birth registration record?	
Does the law require security measures for the issuance of a certified copy of a birth registration record to minimize the risk of fraud?	
Do local registrars have the authority and capacity to issue a certified copy of a birth registra- tion record?	
Is the United Nations-recommended statistical information collected during birth registration?	
Is a clear distinction made between legal and statistical information?	
Do registrars have discretion, subject to guidelines, to complete the registration process if some requested information is missing?	
Does the birth registration record capture information regarding registration area (territorial district) and local office, number of the record, date and place of registration, and identity of the registering officer?	
Is there a process permitting delayed naming of a child?	
Is there a process for registering the birth of a foundling?	
Is there a process for registering a child as intersex at birth?	
Does the legislation clearly designate an entity and person responsible for notifying the regis- trar of a birth that occurs in detention?	
Is there a process for reporting to the registrar the birth of a child of nationals temporarily resid- ing abroad?	
Is there a process for registering a birth occurring in a moving vehicle?	
Are there specific provisions and procedures for registering, in the civil register, births to: (a) Refugees?	
(b) Undocumented migrants?	
(c) Internally displaced persons?(d) Stateless persons?	
(e) Persons of undetermined nationality?	
(f) Nomadic populations?	

2. Reporting of fetal death

301. Tracking stillbirths and other fetal deaths is important for statistical and public health purposes. These events should not be registered in birth or death registries, as they do not establish a legal identity or affect civil status. Nevertheless it is important that stillbirths and other fetal deaths are reported for statistical purposes, including tracking information on causes of fetal deaths. Official recognition that the fetal death occurred can have significance for families and can help to facilitate cremation and burial if the family desires.

302. For the purposes of international comparability, WHO recommends reporting of late fetal deaths – also called third-trimester stillbirths – at \geq 1,000 g birth weight, \geq 28 completed weeks of gestation and \geq 35 cm body length. While birth weight and gestational age are closely linked, they cannot be used interchangeably, since there is a range of "normal" birth weights for a given gestational age and gender, with substantial regional variations. A gestational age threshold has therefore been recommended as a single parameter, because it is a better predictor of viability than birth weight, and information about gestational age is more likely to be available than birth weight for stillbirths.²⁸³

303. Stillbirths should be medically certified in the same way as other deaths. WHO recommends the medical certification of stillbirths using the standard medical certificate of cause of death form.²⁸⁴ Countries requiring a separate medical certificate of cause of death form for stillbirths should consult the International Classification of Diseases for the recommended reporting information for stillbirths.²⁸⁵ The information that the United Nations recommends collecting through fetal death reporting is set out in annex A.

304. In priority order of preference, the informant for a fetal death is the same as for a live birth: first, the head of the health facility (for a fetal death that occurred in a health facility) or the birth attendant (for a fetal death that occurred outside a health facility with a birth attendant); second, the mother; third, the father; fourth the nearest relative of the mother; and fifth, any other adult person having knowledge of the facts.²⁸⁶

305. In many countries, the process for reporting a fetal death that occurs in a facility or out of any facility is similar to the processes for an in-facility and out-of-facility birth. In other countries, however, fetal death reporting is limited to the health sector, since the emphasis is placed on the reporting of the medical certification of cause of fetal death. The drafters of the legislation may choose to provide flexibility in reporting fetal deaths to health institutions or the civil registration authority. If fetal deaths are reported through the civil registration system, the health facility, birth attendant or other informant should report a fetal death to the registration office in the location where the fetal death occurred, or at any location where access is available to the registration system, if the system is sufficiently networked. If reporting is limited to the health sector, the health facility, birth attendant, or other informant should report fetal deaths to the central health ministry. The health ministry should provide fetal death incidence information to the statistics agency on a regular, periodic basis. The time frame for reporting a fetal death is usually the same as that for a death. There should, however, be a procedure for late and delayed reporting pending a medical-legal decision if the fetal death status is unclear or disputed.

306. Fetal deaths should be classified using ICD-PM, which aims to link stillbirths and neonatal deaths to contributing maternal conditions, where applicable, in a way that is consistent across all settings. This will help to standardize and increase information on causes of death around the critical time of childbirth.²⁸⁷

- ²⁸³ "World Health Organization, Making Every Baby Count: Audit and Review of Stillbirths and Neonatal Deaths", p. 18. Note that in para. 2, footnote 3, the Principles and Recommendations for a Vital Statistics System, Revision 3, reference an earlier WHO recommendation on recording of fetal deaths. The paragraph above contains the most recent recommendation.
- ²⁸⁴ World Health Organization, International Statistical Classification of Diseases and Related Health Problems, 10th Revision (Geneva, 1992), vol. 2, p. 140.

²⁸⁵ Ibid., p. 141.

²⁸⁶ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 352–355.

²⁸⁷ World Health Organization, Making Every Baby Count: Audit and Review of Stillbirths and Neonatal Deaths, pp. 17 and 21. 307. Regulations or procedures should set out the process for issuance of a fetal death certificate by the registrar, as a certificate may be required for burial or cremation of the fetus (see sect. C.3 (l) below on certified copies of death registration for information regarding certificate issuance). If reporting takes place through the health sector only, the health facility should provide a medical record of the fetal death to the parents, if needed for burial or cremation of the fetus. Fetal death certificates and medical records of fetal death should contain security features to prevent fraud (see sect. C.1 (i) on certified copies of birth registration).

308. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

3. Registration of death

309. Death registration is the formal act of recording the facts of a death in the civil register. The person who notifies the registrar of the event is referred to as the "informant". The process by which the informant reports the event to the civil registrar is sometimes referred to as "notification". When a death is notified, the registrar verifies the information provided, including any required documentation, and then records details of the death and the decedent into the official civil register. These details constitute the death registration record. Legislation on death registration should address

Fetal death registration	Yes/No
Does the law require reporting of a fetal death that meets the weight, weeks and body length criteria (late-term stillbirths) that occur in a health facility?	
Does the law require the use of the international form of medical certificate of cause of death for a fetal death?	
Is the United Nations recommended statistical information for fetal death collected through fetal death reporting?	
If fetal deaths are reported through the civil registration system,(a) Are the heads of health facilities responsible for notifying the registrar of fetal deaths that occur in facilities?	
(b) Are birth attendants responsible for notifying the registrar of fetal deaths that they attend?	
 If fetal deaths are reported through the health system only, (a) Are heads of health facilities responsible for notifying the central health ministry? (b) Are birth attendants responsible for notifying the central health ministry? (c) Is the health ministry required to share fetal death information with the statistics authority on a regular and timely basis? 	
Is there a process for late and delayed reporting of fetal death, pending any medical-legal inquiry?	
Are fetal deaths classified using ICD-PM?	
If fetal deaths are reported through the civil registration system, do local registrars have the authority and capacity to issue a fetal death certificate?	
If fetal deaths are reported through the health system, do health facilities have the authority and capacity to issue a medical record of fetal death?	
Does the law require security measures for the issuance of fetal death certificates and/or medical records of fetal death to minimize the risk of fraud?	
Is the family issued an official document recognizing the fetal death that can be used to acquire a cremation or burial permit?	

all aspects of the process by which a death is registered. This includes the following topics: informants; place of registration; determination and certification of cause of death; the process for registering the death (including natural and unsuspicious deaths that occur inside a health facility, natural and unsuspicious deaths that occur outside a health facility, unnatural and suspicious deaths, deaths in emergencies and disasters, and missing bodies); time allowed for notification; late or delayed registration notification; information to be collected at registration for legal and statistical purposes; certified copies of death registration; permit for disposal of a body; and special procedures for certain death circumstances.

Box 26

Informants for death registration

The recommended priority order of preference for informants for death registration provided in the present Guidelines differs slightly from that in the *Principles and Recommendations for a Vital Statistics System, Revision 3*, paragraph 355. The present Guidelines provide additional information on the preferred informant, based on the manner and circumstances of the death. Specifically, the Guidelines provide information on the recommended informant for natural deaths that occur outside a health facility under medical supervision and for unnatural or suspicious deaths; information not fully elucidated in the informant list in paragraph 355 of the *Principles and Recommendations*.

(a) Informants

310. The designation of an informant for each type of vital event should be established clearly and unequivocally in legislation or regulations to ensure that there will be one and only one person primarily responsible for providing the information needed for the registration. Notwithstanding, the law may designate alternative informants and establish the order in which each of them must assume his or her responsibilities. The appropriate informant for a death, in priority order of preference (see box 26), is:

- For natural deaths that occur in a health facility the head of the facility; for natural deaths that occur outside a health facility with medical supervision – the medical professional; for unnatural or suspicious deaths (with or without medical supervision) – a specified officer of the medical legal system;²⁸⁸
- 2. The nearest relative (for example, the surviving spouse or partner; or a sibling or parent of the decedent);
- 3. Any other adult person having knowledge of the facts.²⁸⁹

If it is unclear whether a death is due to natural or unnatural or suspicious causes, there is a presumption of suspicious death. If a person has been ill, however, there is a presumption of death due to natural causes.

(b) Place of registration

311. The legislation should state the location where death registration is to occur. Legislation should generally provide that an informant should notify a death to the registration office in the location where the death occurred. Drafters of the legislation may, however, wish to provide flexibility by allowing registration at any location where the registration system may be accessed, assuming the system is sufficiently well networked to allow for this.

²⁸⁸ A coroner is responsible for the investigation of unnatural or suspicious deaths occurring within a specific jurisdiction. Depending on the jurisdiction, a coroner may be an elected or appointed official, and may be a legal or a medical professional. By contrast, a medical examiner is usually an appointed official whose duties are similar to a coroner but who is generally required to have specific medical training (such as forensic pathology) and is qualified to conduct medical examinations and autopsies. Some jurisdictions use a coroner system, while others use a medical examiner system. For those that use a coroner system, the coroner is responsible for overseeing the inquiry by a medical examiner, forensic pathologist, and/or other trained professionals. The term "coroner" is used in these Guidelines to refer to the various systems of inquiry in place across jurisdictions.

²⁸⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 352–355.

(c) Determination and medical certification of cause of death

312. Understanding the manner and cause of death for all deaths is critical to ensuring that usable mortality data are available in a country. "Manner of death" explains the circumstances in which a death arose. In the tenth revision of the International Classification of Diseases, manner of death is classified as: disease; accident; intentional self-harm; assault; legal intervention; war; pending investigation; unknown; or "manner undetermined". By contrast, the record of cause of death provides a diagnosis and assigns a specific cause. Cause of death is "all those diseases, morbid conditions or injuries which either resulted in or contributed to death and the circumstances of the accident or violence which produced such injuries".²⁹⁰ Statistics on cause of death facilitate informed policymaking. For example, information on unnatural deaths (for example homicides, poisonings, suicides, road traffic accidents and other externally caused deaths) can inform policies related to violence, drug use and road safety, and other public policy.

313. Countries should strive to have an accurate, detailed and legally valid cause of death and manner of death attached to every registered death. Ideally, all deaths should have a medically certified cause of death. Deaths that occur in health facilities under the supervision of a physician and deaths referred to the medical-legal authorities tend to be the most likely to have a medically certified cause of death. By contrast, natural deaths that occur in the home or community are especially unlikely to have a medically certified cause of death. Because timely and accurate information on cause of death for all deaths is important for policymaking, legislation should support processes that facilitate medical certification of cause of death for all deaths. Recognizing the difficulty this may present in some countries, however, legislation should not block registration of a death if medical certification of cause of death is not possible.

314. Legislation should address the following points: first, whether a medical certificate of cause of death is required in order to register a death; second, what entity and which person is responsible for determining and certifying cause of death; third, the form used for cause of death certification; and, fourth, how cause of death information is transmitted to the registrar or statistics agency. These topics are introduced here and are further elaborated upon in the sections on processes for registering deaths.

(i) Requirement for medical certification of cause of death

315. It is international best practice to have an accurate, detailed and legally valid cause of death and manner of death reported with every registered death. While it is best practice to require a cause of death to register a death, countries will need to consider this requirement given local conditions. In some circumstances – for example, when a death occurs at home or where health institutions are scarce or lack medical staff trained to determine cause of death – it may not be possible to obtain a medical certification of cause of death.²⁹¹ In countries or circumstances where it is not practical or possible to have a medically certified cause of death for all deaths, failure to ascertain cause of death should not prevent death registration. In those circumstances, evidence of fact of death, not cause of death, may be the best option.

(ii) Person and entity responsible for medical certification of cause of death

316. A certifier of cause of death is the person authorized by law to certify the fact of death, the manner of the death and the specific disease, injury or other causes of death. Legislation should state what entity and person is responsible for certifying cause of death based on the circumstances of the death. As discussed in sect. (d) below, for a death that occurred in an appropriately staffed health facility, the legisla-

²⁹⁰ Glossary of Statistical Terms, Organization for Economic Cooperation and Development, available at https:// stats.oecd.org/glossary/detail. asp?ID=296

²⁹¹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 499. tive framework should place responsibility on the head of the facility to ensure that the cause of death is medically certified. The individuals who must conduct the cause of death certification should also be clearly identified. For example, the physician or surgeon who attended the decedent during her or his terminal illness is responsible for certifying the cause of death. If a body is brought in dead to a health facility, a medical examiner or a coroner may be responsible for certifying cause of death. For deaths due to unnatural causes, the coroner may be responsible for certifying cause of death. For a home-based death due to natural causes, a certifier may include a doctor, nurse, or other trained health professional who attended the deceased during that person's illness. It is important that the legislation or regulations address each type of situation: in-facility death due to unnatural causes or suspicious manner (e.g., violence, accident, suicide or dead on arrival); and emergencies and disasters. The process for registering a death in each of these type of circumstances is addressed in sections (d)–(g) below.

(iii) Form of cause of death determination and certification

317. The WHO international form of medical certificate of cause of death is the recommended form for recording information regarding cause of death for certification of all deaths, including stillbirths and unnatural or suspicious deaths.²⁹² The form is designed to facilitate the determination of the underlying cause of death, which is defined as "the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury".²⁹³ These diseases and injuries should be coded in accordance with the rules of the International Classification of Diseases, which were developed by WHO and are the foundation for the identification of health trends and statistics globally. The International Classification of Diseases defines the universe of diseases, disorder, injuries and other related health conditions. These are organized systematically to allow for sharing and comparing health information collected in different facilities and regions and at different times.²⁹⁴ Coding takes place as the last step in the process and is a separate activity from cause of death certification. Coding staff, often situated in the central health or statistical agencies, use the International Classification of Diseases to assign and code the underlying cause of death.

318. Some countries embed the medical certificate of cause of death in a notification of death form. Other countries use a separate medical certificate of cause of death form and notification of death form. The information to be collected in the notification of death form is discussed in section (k) below and set out in annex A.

(iv) Transmission of cause of death information to the civil registrar and statistics agency

319. The medical certificate of cause of death should be transmitted to the civil registrar or the statistics agencies to be used for legal and statistical purposes. In some countries, all the information in the medical certificate of cause of death is submitted to the registrar directly, who in turn submits the statistical information from the medical certificate of cause of death to the statistics agency. Other countries use a bifurcated form, containing a section for legal information and a section for statistical information. With this type of form, the legal information is submitted to the registrar and the statistical information is submitted directly to the statistics agency.

- ²⁹² Certifiers may have supplemental information that may be recorded at the same time that the medical certificate of cause of death is completed, depending on the circumstances. For example, a medical-legal officer may include an autopsy report with detailed forensic information on the cause and manner of death. This additional information should be recorded in addition to the medical certificate of cause of death, not as a substitute for it.
- ²⁹³ See World Health Organization, "The top 10 causes of death", Health Topics, 9 December 2020. Available at http://www. who.int/topics/mortality/en/.

²⁹⁴ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 494. 320. The direct link from certifier to civil registrar, or from certifier to civil registrar and statistics agency, achieves two simultaneous benefits. First, the efficient transmission of information provides the necessary information, including cause of death, to the civil registrar and statistics agency without placing an additional burden on an intermediary, often a mourning family, to convey the medical certificate of cause of death to the registrar. Second, certifiers of cause of death are less likely to modify sensitive cause of death information. For example, a physician may not feel comfortable listing HIV as the underlying cause of death on a medical certificate of cause of death that will be handed to the family. It should be noted, however, that the *Principles and Recommendations for a Vital Statistics System, Revision 3*, state that cause of death information may be disclosed to close relatives.²⁹⁵ Nonetheless, some countries may restrict even the family's access to cause of death information.

(d) Process of registering a natural and unsuspicious death occurring in a health facility

321. When a natural and unsuspicious death occurs in a health facility, the most effective means of ensuring that civil registration is completed as soon as possible is to designate the head of the health facility as the person primarily responsible for notifying the civil registrar of the death.²⁹⁶ As with birth registration, the legislation should explicitly state what type of facility is considered a "health facility" for purposes of being an informant. Some countries define "health facility" by the number of beds contained in the facility; for example, any facility with over 10 beds might be considered a health facility for purposes of being an informant. Other countries define "health facility" by the number and type of medical professionals on staff; for example, any facility in which a medical doctor is present might be considered a "health facility" for these purposes. While the head of the health facility is ultimately responsible for ensuring the notification of the death, they should be able to delegate this responsibility to staff.

322. The head of the facility notifies the death by submitting information requested on the notification of death form and the medical certificate of cause of death to the registrar. A physician or other authorized member of staff is responsible for filling out the medical certificate of cause of death, whereas other health facility staff may be responsible for obtaining from the family the details required on the notification of death form. In some countries, where a bifurcated medical certificate of cause of death form is used, the portion of the form containing legal information is submitted to the registrar and the portion with statistical information (cause of death) is submitted directly to the statistics authority. In either instance, the notification of death form and the medical certificate of cause of death may be submitted by physical or electronic means. The process by which the notification of death form and the medical certificate of cause of death are submitted should be set out in regulations or instructions, as this will allow flexibility to change the process as the system and technology develop.

323. After receiving the medical certificate of cause of death and notification of death form, the registrar should verify the information contained in the notification of death form for accuracy and completeness, and officially register the death. Regulations or instructions should set out procedures to be used in cases where some information is missing. For example, a health facility may be unable to obtain all of the information requested on the notification of death form from the family, or a health facility may be unable to certify cause of death if a trained physician is not available. Instructions should be provided for use in these situations; missing information should not, however, prevent death registration.

²⁹⁵ Ibid., para. 498.

²⁹⁶ Ibid., para. 350.

324. After registering the death, the registrar should issue a death certificate to the family. Some countries issue the death certificate by mail; others require the family to come and pick up the death certificate. In fully digitized systems it may be possible to issue a certified electronic death certificate. Because the certificate issuance process may change over time, the process should be set out in instructions in order to allow maximum flexibility (see sect. (l) below, on certified copies of death registration, for details on certificate format and issuance). In this one-step process, the registrar completes registration without additional steps being taken by the family of the deceased.

325. Some countries follow a two-step process. In this process, the health facility submits a medical certificate of cause of death to the local registrar and provides a copy of it to the family. Some countries may restrict the family's access to cause of death information by using a bifurcated medical certificate of cause of death form. In this instance, the portion of the form containing legal information is submitted to the registrar with a copy of this information issued to the family, and the statistical information, including cause of death, is submitted directly to the statistics agency. To complete the registration process, the family must provide the information requested on the notification of death form to the registrar, together with the copy of the medical certificate of cause of death and any other documentary evidence required. The registrar must then match the record from the health facility (the original medical certificate of cause of death) with the copy of the certificate provided by the family.²⁹⁷ The registrar should verify all information for accuracy and completeness, officially register the death and issue a death certificate to the family. This two-step process may result in lower registration rates, as families may not complete the registration. Having already been notified of the death by the facility, however, the registrar will be aware of unregistered deaths.

326. With either a one-step or two-step process, the legislation should broadly describe the process, but leave the details of the process to be described in regulations or instructions. For countries transitioning from a paper to a computerized system, both manual and electronic procedures may happen in parallel for several years. For that reason, the legislation should avoid wording that requires the submission or transmission of documents or sharing of data in any particular format or media. In addition, leaving this level of detail to the regulations or instructions will allow flexibility in amending the process as technology advances.

327. The notification of death form should not be appended to the legislation. Rather, the form should be appended either to the regulations or to the procedures. This will allow for ease of amendment if needed. The data elements recommended for inclusion in a notification of death form are set out in annex A.

(e) Process of registering a natural and unsuspicious death occurring outside a health facility

328. When a natural and unsuspicious death occurs outside a health facility, but under the care of a medical professional, the most effective means of ensuring that civil registration is completed as soon as possible is to designate the medical professional charged with care of the deceased as the person primarily responsible for notifying the civil registrar of the death. The process is similar to the process for when a natural death occurs in a health facility. In a one-step process, the medical professional notifies the registrar of the death by submitting a medical certificate of cause of death, as well as information requested in the notification of death form, which the medical professional obtains from the family. In countries where a bifurcated medical certificate of cause of death form is used, the portion of the form containing legal information is submitted to the registrar and the portion with statistical information (cause of death) is submitted directly to the statistics authority.

297 Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 122–123. 329. In a two-step process, the medical professional submits the medical certificate of cause of death to the registrar and provides a copy of it to the family. If a bifurcated form is used, the relevant portions are submitted to the registrar and statistics agency and the family is provided with a copy of the legal portion of the form. The family is then responsible for completing the process with the registrar by providing any additional information required on the notification of death form. In either a one-step or two-step process, information may be submitted by either physical or electronic means.

330. If the deceased was not under the care of a medical professional, the next of kin (or law enforcement or first responders, if first on the scene) should report the death to a local health worker to determine whether the manner of death is suspicious. If there is no reason to believe that the manner of death was suspicious (e.g., assault or self-inflicted harm), responsibility should be assigned to the local health worker to notify the civil registrar of the death.²⁹⁸ A local health worker does this by submitting the information requested in the notification of death form, which the health worker obtains from the family, and a medical certificate of cause of death, if cause of death information is available. In a two-step process, the local health worker submits the medical certificate of cause of death to the registrar and provides a copy of it (or the legal portion in the case of a bifurcated form) to the family, who follow up with the registrar to provide any additional information required. In some countries, there may be remote locations where the health system is not readily accessible. In such instances, responsibility may be assigned to a local leader to notify the registrar of the fact of death (but not cause of death), and the family may be required to provide additional information requested in the notification of death form to the registrar.

331. After a death is notified, the registrar verifies the information provided in the notification of death form for accuracy and completeness, records the information needed for the official registration of the death and issues a death certificate. In instances where there is no medical certificate of cause of death because, for example, the health system is not accessible or local health workers are not trained in completing such a certificate, the death should be registered without cause of death information. The death may, however, be referred for verbal autopsy (see sect. (h) below on verbal autopsy).

332. In any instance, the process by which the medical certificate of cause of death and notification of death form information is submitted to the registrar should be set out in regulations or instructions, not legislation, to allow flexibility to change the process. In addition, the civil registration authority should have an active outreach method to engage with medical professionals, local health workers and local leaders at regular intervals to collect information on natural and unsuspicious deaths that occur outside health facilities. The registrar general should issue instructions for procedures to be followed where there is missing personal information, such as outreach to family. Missing information, however, including missing cause of death information, should not prevent death registration.

Process of registering an unnatural or suspicious death referred to a medical-legal officer

333. When an unnatural or suspicious death occurs, the death must be reported to the medical-legal authorities. For unnatural or suspicious deaths in health facilities, including persons brought in dead, the law should assign responsibility to the head of the health facility to notify the appropriate officer in the medical-legal system, such as a police officer, coroner or medical examiner. For unnatural or suspicious deaths occurring outside health facilities, that responsibility may fall to the next of kin, first ²⁹⁸ If the death appears suspicious, then the case should be forwarded to the medical-legal system and should follow the process described in the next section. responders, or others, depending on the circumstances. Whoever is first on the scene of the death should notify the appropriate officer in the medical-legal system. The appropriate medical-legal officer may differ, depending on the legal framework and entities in the country's medical-legal system. Legislation should avoid phrasing that details the types of cases to be referred to the medical-legal system. Leaving this level of detail to the regulations or instructions will allow flexibility in amending the types of cases referred to the medical-legal system.

334. Medical-legal systems vary between countries owing to the variations in laws upholding the system. Despite such variations, the legislation or regulations must assign responsibility to a specified medical-legal officer to ensure that these deaths are registered and their causes of death reported in a timely fashion. Often the medicallegal officer who notifies the death and cause of death to the civil registrar is a coroner or medical examiner, who performs this function by submitting a medical certificate of cause of death and any other information required. The family may also be required to provide additional information requested in the notice of death form to the registrar. In some instances, the informant that gives notification of the fact of death may be someone other than the certifier of cause of death. For example, the police may notify the registrar of fact of death when a case is referred to the coroner for inquiry, and the coroner will later provide the medical certificate of cause of death after completion of the inquiry. In some instances, cause of death and manner of death may be certified by different entities. For example, a doctor in a health facility may certify the cause of death, but the coroner or police would certify the manner of death (as assault, for example). Legislation should allow for the amendment of a medical certificate of cause of death, which may be necessary in medical-legal cases in which a lengthy inquiry is required and conclusive cause of death is delayed. The medical certificate of cause of death may be provided by physical or electronic means.

335. The remainder of the registration process for an unnatural or suspicious death follows the same steps as for natural or unsuspicious deaths. After receiving the medical certificate of cause of death and notification of death form, the registrar should verify the information in the form for completeness, officially register the death and issue a death certificate to the family.

336. To ensure that unnatural and suspicious deaths are registered, legislation should clearly specify who is responsible for notifying the registrar of the fact of death. The fact of death should be notified within the required time frame, even if a coroner or medical examiner's inquiry into cause of death is still under way. As with other deaths, the legislation should broadly describe the process, leaving the details of the process to be described in regulations or instructions. Procedures should set out steps for the registrar to take if there is missing information; missing information, however, including cause of death, should not prevent death registration of the fact of death.

(g) Process of registering deaths in emergencies, disasters or where there are no human remains

337. Emergencies and disasters present a challenge for death registration because there may be a large number of deaths that occur in a short period of time. Because these are deaths that occur outside a health facility, they may be referred to the medical-legal authority, according to the process described above for deaths due to unnatural causes. These authorities may not however, be equipped to deal with a large number of deaths at once, so emergency rescue authorities may be designated as the appropriate entities to investigate and notify the registrar of a death.

Box 27 Civil registration and disaster preparedness

Disasters (both human-caused and natural) are a threat to every country in the world. The Sendai Framework for Disaster Risk Reduction 2015–2030 and the 2030 Agenda for Sustainable Development underline the need to reinforce national capacities on all aspects of disaster risk management, including disaster preparedness, mitigation, adaption and response management. Such capacity-building should also recognize the important role of civil registries in disaster management efforts.

Civil registration and vital statistics systems have a critical role to play in disaster planning, disaster mitigation and management. Birth and death records maintained by registration offices are of crucial importance in enabling governments to identify and to reach out and locate individuals and families that may be in need of specialized care during and after a disaster. This includes care for children that are born just before, during or shortly after times of disaster, who are at higher risk of death. Civil registration information is also very important in supporting the reunification of families in cases of separation. In this regard, civil registration systems must be able to replace damaged or lost vital documents, which are necessary to reduce vulnerability and the risk of exploitation. Registration of death and collation of mortality and causes of death data are critical for public health planning in times of disasters, particularly in managing and mitigating the spread of infectious diseases. The table below provides a snapshot of potential uses of civil registration records and documents in supporting disaster management efforts.

Type of record/ document	Potential use	Examples of type of use
Individual records and documents	Proof of identity to facilitate access to important services during or after a disaster	 Proof of identity to access crop, property or individual insurance for health, life cover, etc. Proof of identity to access government support programmes such as building loans and support payments Re-unification of separated families, particularly children Providing official records of death that have occurred as a result of the disaster Identification of missing persons
Vital statistics	ldentification of the population at risk or population affected by the disaster and its characteristics	 Monitoring the morbidity and mortality impact of a disaster Population data to facilitate planning for provision of important support programmes and services. Such data are crucial for: Calculation of number of vaccine doses needed by the affected population Estimation of emergency housing, food and sanitary needs Budget planning for social welfare payments

While civil registration and vital statistics systems are crucial in supporting disaster management and mitigation efforts, they are equally at serious risk themselves of being compromised by and from the effects of disasters. Civil registration infrastructure may be partially or completely destroyed; electricity and Internet connectivity may be lost for long periods of time; civil registration records may be lost or damaged; members of the public may have documents lost or damaged; registration operations may be disrupted, creating a backlog. It is crucial that civil registration and vital statistics systems are disaster-resilient. The following table provides a summary of key considerations to make in the development of disaster-resilient systems.

Activity		Purpose
(a)	Establish a disaster-responsive civil registration legislative and policy framework	-The legislation and policies should provide adequate guidance on the management of registration processes in the context of disasters.
(b)	Development of a robust disas- ter management plan with an adequate budgetary allocation	 The plan should outline the activities and procedures to be undertaken before, during and after a disaster and should correspond to the national disaster management plan. It is necessary that the plan be adequately resourced with both human and financial resources. It should be noted that in certain circumstances, it might be necessary to erect temporary registration offices or mobilize mobile registration services; these would need to be adequately budgeted for.
(c)	Make infrastructural investments that are disaster-sensitive	 Ensure that the physical location of registration offices, including the storage facilities, are not disaster-prone. Ensure that back-up facilities for electricity, Internet and record storage are in place, including contingency plans for database access. In countries that are highly prone to disasters, the issuance of waterproof certificates may be considered.
(d)	Establish the relevant organi- zational, management and coordination frameworks with other important government departments.	-Establish correspondence and coordination with the na- tional disaster management department, to ensure timely notification for oncoming disasters and facilitation of the necessary coordination support in times of a disaster. -Establish working arrangements with other government departments such as the departments of education and health as these could play a critical role in supporting registration functions in times of disaster and recovery of records in case of loss.
(e)	Build knowledge and aware- ness among members of the public	 Raise awareness by the public on how to keep important records safe and accessible. Raise awareness by the public on how and where to access registration services during or after a disaster, as well as the requirements for registration.
(f)	Build knowledge and aware- ness among civil registration functionaries	 -Ensure that staff are knowledgeable in how to manage registration functions in times of disasters. -Plan for back-up arrangements among staff in case some staff may not be available. -Develop operational guidelines to support staff in undertaking registration functions in the context of a disaster.
(g)	Optimize civil registration records and data to support disaster-planning efforts	–Plan on procedures and requirements for making available existing records and data to support disaster management efforts in line with the legislative and policy framework.

338. The legislation should specify what entity and person is responsible for notifying the registrar of the fact of death in an emergency or disaster (e.g., law enforcement, coroner's office, emergency rescue agency or next of kin) and what entity and person is responsible for certifying cause of death. The specific process for notifying the registrar of the death should be contained in regulations or instructions.

339. Missing persons should be reported to police, who should investigate whether the person matches with any person in a police database of unknown persons brought in dead, so that the death of that person might be registered. Many countries have a process by which a court may declare a person dead after they have been missing for a prescribed period of time. In such cases, the court should be required to notify the registrar of the declaration of death. 340. Where a body is missing or where, owing to a natural disaster or emergency, there are no human remains, laws should allow for a finding of fact of death without the waiting period required for other missing persons, but with appropriate documentation. For example, such documentation might include an affidavit that the individual was last seen at the site of the disaster, or that the person was on the passenger manifest of an aircraft that has crashed. If this process involves the court, the legislation should require the court to transmit the declaration of death to the registrar.

(h) Verbal autopsy

341. Ideally, the medical certificate of cause of death is used for all deaths, including stillbirths and unnatural or suspicious deaths, because it contains key information needed for legal and statistical purposes. Legislation should require that this form be used for all deaths, regardless of manner of death or place of occurrence. Some health facilities and coroner services may not, however, have staff trained in certifying cause of death. In addition, in some countries, a significant number of deaths occur outside health facilities or jurisdictions with coroner services. Where use of the medical certificate of cause of death is not possible, legislation should allow for the use of alternative methods of determining cause of death, such as verbal autopsy.²⁹⁹

342. Verbal autopsy is an interview carried out with family members or caregivers of the deceased, using a structured questionnaire to elicit signs and symptoms and other pertinent information that can later be used to assign a probable underlying cause of death.³⁰⁰ The results of the verbal autopsy interview may be analysed using a computer algorithm (automated verbal autopsy), which generates a probable cause of death based on the interviewee responses. Automated verbal autopsy is a practical means for improving mortality statistics and, when built upon a death registration system, particularly one with high coverage nationally or within a specified area, verbal autopsy applied to a sample, or whole population, of notified deaths, can serve as a significant supplement to the existing civil registration system in order to better ascertain cause of death. While the probable cause of death from automated verbal autopsy is a valuable statistical product, it should not be considered legally valid at the individual level.

343. Alternatively, in countries, such as Brazil, where all deaths must be medically certified by a physician, verbal autopsy is used as a decision-support tool for physicians where there is inadequate information on the deceased's medical history or the chain of events that led to death. For physician-certified verbal autopsy, the physician reviews the verbal autopsy interview results and certifies the cause of death through completion of the medical certificate of cause of death. In countries requiring physician certification of cause of death, cause of death from a physician-certified verbal autopsy is considered valid certification, verbal autopsy is an essential public-health tool for obtaining a reasonable direct estimation of the cause structure of mortality at a community or population level, if designed and implemented as such.

344. If policymakers determine that a verbal autopsy may be used when a medical certificate of cause of death is not possible, legislation should be written so as to permit its use. Regulations may provide more detail on the specific circumstances in which a verbal autopsy may be used and the procedures for its use. There is currently no consensus among international experts regarding the reporting of verbal autopsy-generated cause of death information to the civil registrar. Determinations of cause of death by verbal autopsy are not considered to be accurate at the individual level, although the results provide useful data on the population. Information

²⁹⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 499.

300 lbid., paras. 499-501.

on cause of death at the population level is important for public health decisionmaking, and cause of death data generated through verbal autopsies can make a significant contribution to public health data. For this reason, some experts recommend that cause of death information from verbal autopsies should be delivered or transmitted directly to the statistics agency (not the registrar), as it is used for statistical purposes only, not legal purposes.

(i) **Registration deadlines**

345. The legislation should specify the time period within which a death must be notified. Uniform processes and time periods for registering vital events should be applied throughout the country. The maximum time period allowed for notification should be as short as possible so as to facilitate current and accurate registration. Dead-lines for death notification are around three days, but vary from country to country.³⁰¹ Registration notified by health facilities, rather than next of kin, may allow for shorter deadlines. The legislation should therefore provide a maximum time period for registration, and regulations may provide for a shorter time period for specific situations, such as in-facility death.

(j) Late and delayed notification

346. A late notification occurs after the legally specified time period, but within a grace period, usually considered one year after the vital event. Delayed notification occurs after the grace period. Legislation should allow for late and delayed death notification, with the specific process set out in the regulations or instructions. These provisions should indicate the required documentary evidence that may be acceptable, based on the length of time of the delay.³⁰² While late and delayed notification should be discouraged so that vital events are registered in a timely manner, the procedures should not be so restrictive as to prevent late and delayed notification of events.

347. The length of the period of delay may affect the evidence required. Late notification should be permitted with a valid medical certificate of cause of death. If there is no such certificate, the regulations or instructions should state what alternative evidence of fact of death may be accepted, such as an affidavit from a witness, or a record of burial or cremation. Notification delayed by more than one year may require recourse to judicial procedures and decisions.³⁰³ If, however, a country is striving to increase its rate of death registration, consideration should be given to creating a non-judicial procedure for delayed death notification, with the provision of adequate documentation proving the fact of death.

(k) Information collected during death registration

348. Information collected during registration is used to create both a vital event registration record and a corresponding statistical report. The registration record, in view of its legal function, is permanently filed and stored. The statistical report is forwarded to the agency responsible for compiling vital statistics. As civil registration becomes computerized, however, these two components are merging into a single computerized input in the system. A clear distinction should therefore be made between the legal and statistical components. Items that are relevant only for statistical purposes must not be reproduced on certified copies of records.³⁰⁴

349. The *Principles and Recommendations for a Vital Statistics System, Revision 3,* provides recommendations on data elements that should be recorded for statistical purposes, including high-priority topics as well as topics that constitute a less urgent goal.³⁰⁵ These topics are set out in annex A. The information required for legal pur-

³⁰¹ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, paras. 180–184.

³⁰² Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 369–374.

³⁰³ See Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 162.

³⁰⁴ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 374–377.

³⁰⁵ Ibid., para. 66, table III.1.

poses for the death register is more minimal. The information may consist of: name of the deceased; place and date of birth; place and date of death; sex; and unique personal identifier.

350. While the registrar should strive for complete legal and statistical information, an informant's inability to provide information for any one data field should not prevent registration. The information required for legal purposes as opposed to the additional information desirable for statistical purposes should be made explicitly clear to prevent refusal of registration if the informant is unable or unwilling to supply the statistical information. For example, although cause of death information is essential for public health purposes, it should not rigidly be required to register a death, as this might deter or prevent registration of deaths that occur at home or in the community.

351. In addition to information regarding the death itself, data elements should include: information regarding the registration area (territorial district) and local office; number of record; date and place of registration; identity of registrant; and identity of the registering officer.³⁰⁶ Legislation should not prescribe the precise form of the register – in contrast to data elements to be captured – as this may be overly prescriptive and prevent changes in the form of the register as technology advances.

(I) Certified copies of death registration

352. As discussed above, a key responsibility of the registrar is to issue certificates, which serve as official evidence of the information on individual vital events contained in the register. A certificate is a document, in paper or electronic format, issued by the registrar and containing all or part of the exact information contained on the original vital record, and which, when issued by the registrar, has the full force and effect of the original vital record. These certificates can come in several forms, including a digital certificate, a computer printout, a photocopy or reproduction of the original record, or a separate form with handwritten or typed information. Regardless of the format, paper or electronic, security measures should be put in place for certificate issuance in order to minimize fraud (see sect. C.1 (i) above on certified copies of birth registration). As with a birth certificate, a death certificate may contain all the information from the register (full or long-form) or limited information (partial or short-form). The short-form might, routinely, be the form of choice for providing copies, except in circumstances where the entire form is required for a particular legal or administrative use.

353. Country practices vary with regard to the inclusion of cause of death in the death certificate issued by the civil registrar. Information on cause of death can be important to close family members of the decedent for insurance and other matters. United Nations guidance provides that close family members should have the right to request that cause of death information be included in a death certificate. Cause of death information, however, contains sensitive and often confidential medical information, and the right to have this information included on a death certificate might cause a certifier to modify a potentially sensitive cause of death. As a consequence, some countries do not include cause of death information on death certificates issued by the civil registrar, while others do. Some countries include cause of death information on a long-form death certificate; while the short-form contains only basic information that may be in the public domain, such as name, sex, and date and place of death.

354. In view of the sensitivity of cause of death information, legislative drafters should consider whether to include cause of death information in the death certificate, or consider having long-form and short-form death certificates. The format of the death certificate should be included in the regulations or instructions, rather than the legislation, to allow for changes to the form over time.

³⁰⁶ Handbook of Vital Statistics Systems and Methods. Vol. I: Legal, Organizational and Technical Aspects, p. 23. 355. The legislation should require that, upon completion of registration, the registrar issue a death certificate to the decedent's next of kin free of charge. For the reasons discussed above (see also para. 279), the local registrar should have the power to issue a death certificate. As with the issuance of a birth certificate, the legislation should require security measures to be put in place for certificate issuance (both hard copies and electronic) to minimize fraud. The specific type of security measures should be addressed in regulations or instructions to maintain flexibility (see sect. C.1 (i) above for details).

356. Original death certificates may get lost or destroyed over time and it is therefore important to have a process for the issuance of a duplicate death certificate. Legislation should provide for the issuance of a duplicate death certificate. Regulations or instructions should set out the specific process for obtaining a duplicate death certificate and should specify the district office from which a duplicate certificate may be requested. As discussed above, with computerization and timely information-sharing between local and central registers, a duplicate certificate may be requested from any local registration office. The regulations or instructions should also address the process by which a certificate may be requested, for example, in person, by mail, by telephone or online, and how the identity of the requester is to be verified (see also sect. C.1 (i) above). Only interested parties or their legal representatives should be able to request certificates that contain cause of death information. Government agencies may also require such information for legitimate purposes. The local registrar should have authority to determine the legitimacy of such requests, in accordance with guidelines issued by the national registrar.

(m) Permit for disposal of a body

357. The laws applicable should require a permit to transport and dispose of a body. This requirement is often included in municipal laws or regulations, but could also be included in the civil registration law. Legislation should require that a death be notified to the registrar before a permit to dispose of the body is issued, as this incentivizes death registration.³⁰⁷ To enforce this requirement, custodians of funeral and burial facilities and crematoriums should be required to request proof of notification of death before proceeding with services.

358. While, ideally, all deaths should be registered as a precondition for issuance of a permit for disposal of a body, this may not be practical in some countries, particularly in rural settings where the registration office is far from the occurrence of death. Where death registration is not possible before disposal of a body, some countries require village leaders or custodians of funeral facilities, burial facilities and crematoriums to provide a record of all funerals, burials and cremations. This will alert the registrar to the fact of a death that has not been notified. Even if registration is required before issuance of a disposal permit, some countries require custodians to verify the identity of the deceased (through unique personal identifier, identity card, birth certificate or other means) and provide other particulars to the registrar. This can be an alternative means to notify death, or a means to verify the identity of the deceased.

359. Legislation should address whether registration is required to obtain a permit to dispose of a body. It should also address any obligations on the part of custodians of funeral facilities, burial facilities and crematoriums to provide records to the registrar of disposal of a body. If the provision of records is required, regulations should provide time frames and processes for custodians to notify the registrar.

³⁰⁷ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 138–140.

(n) Death circumstances requiring special procedures

(i) Registering the death of an unknown person

360. Cases where the decedent's identity is unknown should be referred to the police. These deaths should, however, be registered while the investigation is pending, as investigation might take a substantial amount of time. The law should assign responsibility to the head of the local police department to notify the registrar of the death of an unknown person within their jurisdiction within a specified time frame following referral of the case to the police. Legislation should authorize the national registrar to issue regulations or instructions on how to register a death when the name (or any other information) is unknown. Generally, procedures permit the registration of the death under "Unknown", with an investigation number.

(ii) Registering a death in custody

361. All deaths in custody should be referred to the medical-legal authorities for investigation, as required by the Minnesota Protocol on the Investigation of Potentially Unlawful Death³⁰⁸ (see box 28). "Deaths in custody" refers to those deaths in which the circumstances of the death place the decedent in either direct or indirect contact with law enforcement in such settings as incarceration, apprehension and pursuit. Deaths in custody include, but are not limited to, police shootings, arrest-related deaths, apprehension deaths, legal intervention deaths and in-custody deaths.³⁰⁹ All deaths in custody should be viewed as potentially unlawful or suspicious deaths and should therefore be referred to the medical-legal authorities.

362. For deaths that occur in a detention facility, the head of the detention facility or the head of health services within the detention facility should initiate the process of notifying the medical-legal authorities. For deaths that occur during pursuit or apprehension, the police chief should refer the death to the medical-legal authorities. The remainder of the registration process follows the same steps as with other deaths

Box 28

Minnesota Protocol on the Investigation of Potentially Unlawful Death

The Minnesota Protocol on the Investigation of Potentially Unlawful Death requires the investigation of all potentially unlawful deaths at the hands of the State. This includes not only killings by state officials and deaths in custody, but also covers deaths linked to a possible State failure "to exercise due diligence to protect an individual or individuals from foreseeable external threats or violence by non-State actors". All deaths in custody should be viewed as potentially unlawful and suspicious, and therefore potentially a violation of the right to life. A prompt, impartial and effective investigation is key to ensuring accountability.

The Minnesota Protocol was originally drafted to supplement the United Nations Principles on the Effective Prevention and Investigation of Extra-legal, Arbitrary and Summary Executions. The United Nations Principles, which set out international legal standards for the prevention of unlawful death and the investigation of potentially unlawful death, were endorsed by the General Assembly in 1989. The Minnesota Protocol was adopted by the Crime Prevention and Criminal Justice Branch of the United Nations Centre for Social Development and Humanitarian Affairs in 1991. In 2014, the United Nations Special Rapporteur on extrajudicial, summary or arbitrary executions, in collaboration with the Office of the United Nations High Commissioner for Human Rights, initiated a process to revise and update the Protocol. A revised version of the Protocol was adopted in 2016.

- ³⁰⁸ Office of the United Nations High Commissioner for Human Rights, The Minnesota Protocol on the Investigation of Potentially Unlawful Death (New York and Geneva, 2017).
- ³⁰⁹ Roger Mitchell and others, "National Association of Medical Examiners position paper: recommendations for the definition, investigation, postmortem examination, and reporting of deaths in custody", *Academic Forensic Pathology Journal*, vol. 7, No. 4, 2017, p. 606.

referred to the medical-legal authorities (see sect. (f) above). The fact of death may be notified to the registrar by either a representative of law enforcement or the coroner or medical examiner. The medical certificate of cause of death should be transmitted to the registrar (or statistics authority) by the coroner or medical examiner.

363. Legislation should require that all deaths in custody be referred to the medical-legal system. Legislation should clearly state who is responsible for notifying the medical-legal authorities of deaths that occur in detention facilities, during pursuit, or other forms of direct or indirect contact with law enforcement. Legislation should also clearly state who has primary responsibility to notify the registrar of the fact of death and who has responsibility for completing and submitting the medical certificate of cause of death. Notification of fact of death should be required, even while an investigation is pending, in order to ensure timely death registration.

(iii) Registering deaths of non-citizens occurring in the country

364. All vital events occurring within a country's territory should be registered. Accordingly, the death of a non-citizen within a country should be registered. If the individual is a permanent resident registered in the identity management system, the notification, cause of death certification and registration process should be the same as for citizens. If the individual is temporarily within the country – such as a tourist or temporary worker – the regulations should address the process for the provision of a medical certificate of cause of death and a death certificate to the next of kin for use in the deceased's home country. Bilateral or multilateral agreements can help to facilitate information-sharing between the national registrars of the country where the death occurred and the home country of the foreign national.

(iv) Reporting the death of a national occurring abroad

365. Vital events occurring to nationals who are abroad should be reported in their home country.³¹⁰ When a person dies abroad, the next of kin or other person with knowledge of the death should register the death with the local authorities where the death occurred. The death should also be reported in the person's home country. It is particularly important to capture deaths of nationals temporarily or permanently abroad, so that their identity credential and unique personal identifier may be deactivated and archived. Otherwise, such documents and numbers could be used for fraudulent purposes.

366. The death of a national who is abroad should be notified and registered in the country where the death occurred. The death should also be reported to the embassy or consulate of the home country of the deceased. The embassy or consulate will confirm the death, the identity and the citizenship of the deceased and attempt to locate or notify the next of kin. Ideally, the embassy or consulate would submit this information to the national registrar. Many countries, however, place this responsibility on the next of kin.

367. If the next of kin wish to bring the body or remains back to the person's home country, the next of kin generally must provide the death certificate from the country where the death occurred (which may require translation) and permission to transport the body or remains from the country where the death occurred. Once the body is back in the home country, the next of kin should take the death certificate (from the country where death occurred) to the registration office where the funeral, burial or cremation is to occur. The registrar will not issue a new death certificate, as the death certificate from the country where the death occurred is the official document. The registrar should, however, issue a document noting the

³¹⁰ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 296. reporting of the death. This allows the funeral, burial or cremation to proceed in the home country. If the death was due to external causes, the next of kin may also need to notify the coroner's office, and a certificate from that agency may also be needed to proceed with disposal of the body.

368. A death certificate and other documents from the country of residence may not be in the official or national language of the country of citizenship. A country's laws may require a certified translation of the death certificate and any other required documents, as well as proof that the documents are valid. If a country is a party to the Apostille Convention, validity may be established under the procedures of the Convention. The registrar should be aware of any laws requiring translation and certification of validity. Agreements regarding information-sharing between countries' national registrars can help to facilitate the reporting of deaths overseas. These types of agreements are generally contained in bilateral or multilateral treaties, rather than a country's domestic laws.

369. As is the case with other nationals abroad, the death of a refugee should be registered in the civil register of the country where the death occurred and the death should be reported by next of kin upon return to their home country to the civil registration authorities. Special procedures may be needed, however, if the next of kin lack a death certificate due to the failure of the host country to register the death, or due to loss of documents.

(v) Registering death occurring in a vehicle in transit

370. If a death occurs in a moving vehicle, such as a ship, aircraft, train or car, a question arises as to "place of occurrence" of the death for registration purposes. If the death occurs in a moving vehicle within the territory of a country, many countries consider the place of occurrence to be the place where the body is removed from the vehicle. Deaths that occur in international airspace or waters present a tougher question. Some countries require that, if a person dies on a foreign ship or aircraft, the death must be registered in the country in which the ship or aircraft is registered. The legislation should address these questions and state the presumption for "place of death" for deaths that occur in or on moving vehicles, both domestically and internationally.

(vi) Registering the death of refugees, undocumented migrants, internally displaced, stateless persons, persons of undetermined nationality and nomadic populations

371. All deaths that occur in a country – including deaths of refugees, undocumented migrants, internally displaced persons, stateless persons, persons of undetermined nationality and members of nomadic peoples – should be registered. The legislation should provide for specific processes for registering the deaths of these persons, such as through mobile units, regardless of whether the person has legal residency status.³¹¹ These deaths should be registered in a country's civil register even if also recorded in a functional register for refugees. Where appropriate, legislation or regulations should allow for international organizations such as UNHCR, to play a role to ensure that the deaths of refugees are registered in the civil register. For deaths in nomadic populations that cross borders, an agreement between the neighbouring countries to share civil registration information, may facilitate accurate and up-to-date information in the countries' registers.

¹¹¹ For a fuller discussion on special registration issues and these populations, see *Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1*, paras. 180–183.

Regist	tration of death	Yes/No	
the he Do	aths due to natural and unsuspicious causes that occur in a health facility, is the head of alth facility responsible for ensuring notification of the death to the registrar? es legislation assign responsibility to the head of the health facility for ensuring certifica- n of cause of death?		
medic respor	aths due to natural and unsuspicious causes that occur outside a health facility but under al supervision, is the medical professional who attended the deceased during their illness isible for notifying the registrar of the death? he medical professional responsible for certifying cause of death?		
withou registr Do	aths due to unnatural and unsuspicious causes that occur outside a health facility ut medical supervision, does legislation clearly state who is responsible for notifying the ar of the death? wes legislation clearly state which person is responsible for certifying cause of death (if s information is available)?		
For de (a) (b) (c)	aths due to unnatural or suspicious causes (including bodies brought in dead), Does the law specify who must notify the medical legal authority? Does the law specify who must notify the registrar of fact of death? Does the law specify what entity or person is responsible for certifying cause of death?		
respor Do	aths resulting from emergencies and disasters, does the legislation clearly state who is isible for notifying the registrar of the death? ies legislation clearly state which entity or person is responsible for certifying cause of ath?		
	egislation require the use of the international form of the medical certificate of cause of for medically certified deaths?		
Does t certifie	he law permit death registration if cause of death cannot be determined or medically ed?		
	use of the medical certificate of cause of death is not possible, does legislation address er use of an alternative method of determining cause of death, such as verbal autopsy, is ted?		
(a)	Is there a clear process for transmitting cause of death information to the registrar or the statistics agency for:		
(b) (c)	Natural and unsuspicious deaths that occur in a health facility? Natural and unsuspicious deaths that occur outside a health facility under medical supervision?		
(d)	Natural and unsuspicious deaths that occur outside a health facility without medical supervision (if cause of death information is available)?		
(e) (f)	Deaths due to unnatural or suspicious causes? Deaths due to emergencies and disasters?		
	he legislation permit deaths to be registered at the place of occurrence (or wherever the n may be accessed)?		
•	e a specified time period within which a death must be notified?		
ls ther	e a process for late and delayed notification? The sthis process specify the evidence required for late and delayed notification?		
Are only persons with a legitimate interest able to receive a copy of a person's death certificate?			
	he law require security measures for the issuance of death certificates to minimize the fraud?		
Do loc	al registrars have the authority and capacity to issue death certificates?		
s the United Nations-recommended statistical information collected during death registration?			
s there a clear distinction made between legal and statistical information?			
Does the law address whether cause of death information is included on the death certificate?			
ls deat	s death registration required in order to receive a permit to dispose of a body?		
	re custodians of funeral and burial facilities and crematoriums required to provide the regis- rar with a report of bodies received for disposal?		

Registration of death	
 Are deaths in custody required to be reported to the medical-legal authority? (a) Is it specified in legislation or regulations who must notify the medical legal authority (b) Is it specified in legislation or regulations who must notify the registrar of fact or death (c) Is it specified in legislation or regulations who is responsible for certification of cause of death? 	n?
 Are there specific provisions and procedures for registering the death of: (a) An unknown person? (b) A national temporarily residing abroad? (c) A foreigner residing in the country? (d) A person who died in a vehicle in transit? (e) Refugees, undocumented migrants, internally displaced, stateless persons, persons of undetermined nationality and nomadic populations? 	

(o) Registration of death summary

372. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

4. Registration of marriage

373. Marriage is the act, ceremony or process by which the legal relationship of spouses is constituted. The legality of the union may be established by civil, religious or other means as recognized by the laws of each country. Some countries recognize other forms of legally recognized partnerships, such as civil unions. The term "registered partnership" usually refers to a legal construct, registered with the public authorities according to the laws of each country, that leads to legal conjugal obligations between two persons.³¹² For simplicity, all of these types of partnership are referred to below as "marriage". All marriages that occur in a country should be registered, without discrimination or distinction based on racial, ethnic or religious group; status as a member of a nomadic, native or indigenous population; status as a displaced person, refugee or asylum-seeker; or status as a foreign national born in the country, or other characteristic.

374. Because marriages are conducted in a manner that is dependent on particular social conventions, there is no standard registration process across countries.³¹³ There are, however, common elements that are often addressed in legislation or regulations concerning marriage registration, including: place of registration; application for marriage, including proof of age; late and delayed registration; information collected; issuance of the marriage certificate; name change procedures; and the process for registering marriages that occurred abroad. Lawmakers should consider and address these topics in legislation or regulations governing marriage registration. If a different registration process exists for marriage and other civil unions, the legislation or regulations should specifically address these differences.

(a) Place of registration

375. Countries may require marriage registration in the location where the marriage ceremony took place or the place where one or the other spouse resides. Some countries may permit marriage registration at any registry location within the country, particularly if the system is centrally networked. Flexibility regarding the location of marriage registration may help to increase marriage registration rates in some countries. Conversely, rigidly limiting marriage registration to a specific location – for example, the

- ³¹² Principles and Recommendations for a Vital Statistics System, Revision 3, para. 2.
- ³¹³ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 142–143.

registration office in the area of residence of one of the spouses – may create barriers to registration if the marriage ceremony occurs outside that area. Lawmakers should consider the options for place of registration of marriage and specifically address in the legislation the location where a marriage should be registered.

(b) Application process: proof required, waiting period and duration of validity of application

376. A country's family law will generally address substantive requirements for marriage, including, for example, the age at which a person can consent to marriage and restrictions on remarriage, polygamous unions and marriage between persons who are related. There must be a process to ensure that these requirements are met. Generally this occurs through an application process, sometimes referred to as an application for a marriage licence or a notice of marriage.

377. This application, when signed by both persons in the presence of the registrar, may act as proof of consent to marry. Along with the application, both spouses must usually present proof of identity and proof of legal age to marry. If either spouse has been married previously, they must also present proof of dissolution of the previous marriage or proof of the death of the spouse. There may also be a statement demonstrating that the persons who are to marry are not close relatives.

Box 29

Child marriage

The right to "free and full" consent to marriage is recognized in the Universal Declaration of Human Rights, which says that consent cannot be "free and full" when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. Child marriage, defined as a formal marriage or informal union before the age of 18, is a reality for both boys and girls, although girls are disproportionately more affected. Child marriage is widespread and can lead to a lifetime of disadvantage and deprivation.

Worldwide, more than 650 million women alive today were married as children. An estimated 12 million girls under 18 are married each year. Girls who marry before they turn 18 are less likely to remain in school and more likely to experience domestic violence. Young teenage girls are more likely to die due to complications in pregnancy and childbirth than women in their 20s; their infants are more likely to be stillborn or die in the first month of life.³¹⁴

The Convention on the Elimination of All Forms of Discrimination against Women covers the right to protection from child marriage in its article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage." Although marriage is not mentioned directly in the Convention on the Rights of the Child, child marriage is linked to other rights – such as the right to freedom of expression, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices – and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage include the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages; the African Charter on the Rights and Welfare of the Child; and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa.³¹⁵

Civil registration can help to uphold the rights of children and prevent child marriage through laws that set the age of consent for marriage at 18 and require proof of age for marriage registration. Universal birth registration and identification offer the best mechanism for establishing proof of age.

³¹⁴ United Nations Children's Fund, "Child protection from violence exploitation and abuse: a statistical snapshot", June 2011. Available at https://data.unicef. org/resources/child-protection-violence-exploitationabuse/.

³¹⁵ United Nations Children's Fund, "Child marriage", UNICEF Data, October 2021. Available at https://data.unicef.org/ topic/child-protection/childmarriage/. 378. This application must usually be filed within a specified time period before the marriage ceremony. For example, in the United Kingdom, notice of marriage must be given to the registrar at least 28 days before a marriage ceremony. This is often referred to as the waiting period, and there may be a requirement that notice of the marriage be published at the registration office or other location during this period. Legislation or regulations should address how long a waiting period is required after the filing of the application before the marriage ceremony can take place, and also state where notice of the marriage should be published, if these are requirements. These requirements may also be contained in a country's family law.

379. The application is usually valid for a specified period of time, for example, one year, during which the marriage ceremony must take place or the registration completed at the registration office. If the marriage does not take place within this time period, the application expires and the marriage is not registered.

380. Some countries require that a civil ceremony take place at the registration office after the waiting period and before the validity of the application expires. Where this is the case, the registrar issues the marriage certificate after the civil ceremony. A religious or other type of ceremony may be celebrated after the civil ceremony.

381. Other countries do not require that the marriage take place in front of the registrar and provide for an alternative process to complete the marriage registration. For example, if a religious officiant or other marriage officiant conducts the ceremony, that marriage officiant is required to submit documentation to the registrar verifying the fact of marriage. The registrar then issues the marriage certificate. In the United Kingdom, if a couple marries in the Anglican Church, they do not need to give notice at the registration office; the Anglican minister collects the required application information from the spouses and registers the marriage.

382. Some countries have low marriage registration rates, often due to a lack of understanding of the marriage registration process. For example, couples are often united in religious or customary ceremonies that are recognized in the community as marriage, but if the couple then fails to apply for or complete registration of the marriage with the registrar, the marriage is not legally recognized. If a country requires the marriage to be entered into in the presence of the registrar, education campaigns should make this known. Alternatively, countries should consider permitting and requiring religious and other officiants to complete the registration process by filing proof that the marriage occurred.

(c) Late and delayed registration

383. As discussed in the preceding paragraph, some countries have low marriage registration rates because couples are married in religious or customary ceremonies that are not legally recognized. A process for registering these marriages is important for the legitimation of children, property rights, inheritance and other legal purposes. For that reason, lawmakers may wish to consider creating a process by which a marriage can be registered retroactively by providing proof that the marriage occurred at some time in the past, such as affidavits or statements of witnesses to the wedding ceremony.

(d) Information collected through marriage registration

384. The marriage application should contain the information to be collected during marriage registration, including characteristics of the spouses and characteristics of the event.³¹⁶ The application form should not be included in the legislation, but rather appended to the regulations or contained in instructions for ease of amendment (for recommended statistical data elements for marriage registration, see annex B). As is

³¹⁶ Principles and Recommendations for a Vital Statistics System, Revision 3, annex I. the case with registration of birth and death, the regulations or instructions should clearly state which elements are required for legal purposes and which are required for purely statistical purposes.

(e) Marriage certificate

385. The legislation should provide that, upon completion of marriage registration, the registrar should issue a marriage certificate to the spouses. The form of the marriage certificate should not be contained in the legislation, but rather in regulations or instructions, to allow for flexibility. As with birth and death certificates, the local registrar should have the authority to issue a marriage certificate. In addition, the legislation should require that security measures be put in place for certificate issuance (both hard copies and electronic) to minimize fraud. The specific types of security to be taken should be addressed in regulations or instructions to maintain flexibility (see sect. C.1 (i), para. 276).

(f) Procedure for name change

386. In many countries, it is common for spouses to change their family name after marriage. Regulations frequently provide a process for name change after marriage that is simpler than the standard process, which usually involves the courts. The simplified process may entail providing proof of marriage (marriage certificate) to the identity management authority or some other process of verifying the fact of marriage. The identity management authority then authorizes the name change on the identity document issued by that authority. The name change on that identity document can then be used to change the name on other documents.

(g) Process for registering marriages that occurred abroad

387. In general, unless a marriage abroad breaks the laws of the country of a person's origin, marriages that are legally valid in the jurisdiction in which they were performed are also legally valid in the country of the person's origin. Accordingly, substantive family law generally recognizes a marriage that occurs abroad as legally valid and recognizes a marriage certificate from a marriage abroad as providing legally valid proof of the marriage.

388. Country practices vary on registration of a marriage that occurred abroad. For example, in the United Kingdom, citizens and residents of the United Kingdom are not required to register a marriage performed abroad.³¹⁷ They may, however, apply for an Overseas Marriage Certificate, if they wish, which provides legally valid proof that the marriage occurred.³¹⁸ If registration of the marriage that occurred abroad is required or permitted, the legislation should address what type of documentary evidence is necessary for registration (for example, a marriage certificate from the foreign country). Regulations may require the foreign marriage certificate to be validated by the country in which the marriage was performed.³¹⁹ Regulations may also require a certified translation of a marriage certificate in a foreign language.

(h) Marriage of foreign nationals

389. Marriage to a foreign national is generally subject to immigration requirements. These laws may require special fiancé or spouse visas and may have different waiting period requirements. Registrars should be cognizant of the immigration laws in order to ensure compliance.

- ³¹⁷ See information on the United Kingdom Government website at https://www.gov.uk/marriage-abroad.
- ³¹⁸ See information at https:// www.gov.uk/government/ publications/overseas-marriage-certificate.
- ³¹⁹ This may be subject to the requirements of the Apostille Convention if both countries are parties to the Convention.

(i) Registration of marriage summary

390. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Registration of marriage	Yes/No
Is place of marriage registration specified?	
Is proof of age and consent required to register a marriage?	
Does the law address whether there is a marriage application process?	
If there is an application process, does the law specify if the marriage must occur within a speci- fied time period after an application is filed?	
If there is an application process, does the law specify if there is a waiting period and publica- tion of the pending marriage after application for marriage?	
Does the law address whether marriage must be entered into before the registrar?	
Does the law address whether religious or other officiants are permitted to lawfully marry a couple?	
Is there a process for late and delayed registration of marriage? If so, does this process specify the evidence required for late and delayed registration?	
Is the United Nations-recommended statistical information collected during marriage registration?	
Is there a clear distinction made between legal and statistical information?	
Do local registrars have the authority and capacity to issue a marriage certificate?	
Does the law require security measures for the issuance of marriage certificates to minimize the risk of fraud?	
Is there a simplified process for changing one's name after marriage?	
Does the law address whether there is a process for registering a marriage that occurred abroad?	

5. Registration of dissolution of marriage or civil union

391. There are various legal means to dissolve a marriage or civil union, each of which has different legal implications. A divorce is the final legal dissolution of a marriage; that separation of spouses which confers on the parties the right to remarriage under civil, religious or other provisions, according to the laws of each country. In countries that recognize registered partnerships, a legal dissolution of a registered partnership refers to the legal, final dissolution of such a partnership, according to national laws, conferring on the parties the right to re-enter into another partnership or marriage.³²⁰ Annulment is the invalidation or voiding of a marriage by a competent authority, according to the laws of each country, which confers on the parties the status of never having been married to each other.³²¹ Judicial separation is the disunion of married persons, according to the laws of each country, without conferring on the parties the right to remarry.³²² A country's family law governs which types of dissolution of marriage or partnership are legally recognized.

(a) Process for registering dissolution of union

392. The dissolution of a marriage or civil union – whether by divorce, dissolution of registered partnership, judicial separation or annulment – falls under the jurisdiction of the courts. Because the process for registering each type of dissolution is similar, for simplicity the phrase "dissolution of union" is used for all processes.

³²⁰ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 2.

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322 Ibid.
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³²¹ Ibid.

393. When a court grants a request for dissolution of union, this information must be submitted to the registrar in order for the dissolution to be matched against the marriage record and recorded. Courts should therefore be required to collect specific information about the spouses and the marriage. After the dissolution decree is issued, the decree and the required information should be submitted to the local registration office in the area (e.g., the province or district) where the dissolution decree was issued. Legislation should require the courts to submit this information to the local registration office within a specified time period.

394. Some countries do not place this requirement on the courts, but instead assign responsibility to the parties to submit the information to the local registrar. This process, however, is likely to result in a lower rate of dissolution of union registration than a process in which the court reports on dissolutions. To encourage registration of dissolution of union where the recipient of the dissolution is the informant, the civil registration law should require proof of registration of dissolution before remarriage.

(b) Information collected through dissolution of marriage registration

395. The information collected by the court (or, alternatively, provided by the parties to the dissolution) should contain characteristics of the parties to the dissolution and characteristics of the event.³²³ As with registration of birth and death, regulations or instructions should clearly state which elements are required for legal purposes and which are required for purely statistical purposes. Information collected for legal purposes is minimal and may include the name of the spouses, date and place of the dissolution, and the judicial authority granting the dissolution (for recommended statistical data elements, see annex B). The record should include the date and place of the union dissolved. This identifying information will help the registrar to match the dissolution of union record to the corresponding marriage or civil union record.

(c) Divorce or dissolution certificate

396. The legislation should provide that upon dissolution of the union, the parties to the dissolution should each be given a certificate of dissolution of the union. In some jurisdictions the court issues the certificate, in other jurisdictions the registrar issues it. The form of the certificate should not be contained in the legislation, but rather in regulations or procedures, to allow for flexibility. The certificate need only contain legal information and should not contain any sensitive statistical information.

(d) Name change after divorce or dissolution of marriage or civil union

397. The regulations should provide for a simplified process for spouses to change their name back to the name that they used prior to marriage. Often this may be done at the same time and through the same court that grants the dissolution of a union.

(e) Process of registering a divorce or dissolution that occurred abroad

398. A country's family law will generally address when and to what extent a foreign dissolution decree is recognized as legally valid. Foreign dissolution decrees are usually recognized as valid if certain procedural requirements have been met (such as the provision of proper notice to the parties). The civil registration law should provide a process for registering a dissolution that occurred abroad. The regulations should address the issue of who may register the dissolution (namely, either party to the dissolution) and what, if any, documentary evidence in addition to the foreign dissolution decree, is required.

323 Ibid., annex I.

Registration of dissolution of marriage	Yes/No
Does the legislation address whether courts are required to notify the registrar of dissolution decrees granted?	
Is the United Nations-recommended statistical information regarding divorce collected (by either the courts or the registrar)?	
Is there a process for issuing a certificate of dissolution of the union (by either the registrar or the court)?	
Is there a simplified process to change one's name back to one's name prior to marriage?	
Is there a process for registering a dissolution that occurred abroad?	

399. Regulations may require the foreign dissolution decree to be validated by the country in which the dissolution was granted. This may be subject to the requirements of the Apostille Convention, if both countries are parties to the Convention. Regulations may also require a certified translation of a dissolution decree in a foreign language.

(f) Registration of dissolution of union summary

400. To aid in drafting, the above checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

6. Corrections and amendments to the record

401. Because vital event records serve a legal purpose, it is essential that they accurately reflect the characteristics of the event and the persons related to the event. There are two reasons why it may be necessary to change a vital event record in order to maintain accuracy: first, the original record contained errors or omissions that require correction; and, second, circumstances regarding the event have changed and require amendment to the record. Examples of the first type of change, which generally fall within the authority of the civil registration agency, include obvious spelling, date and typographical errors and the addition of uncontested omitted information, such as the late naming of a baby, or uncontested paternity. Examples of the second type of change, which usually fall within the authority of the courts, include adoption, contested paternity, divorce, annulment, judicial separation, name change and change to the sex marker. Generally, only the registrant or the registrant's legal representative, have the authority to request or apply for both of these types of corrections or amendments. There may also be a need to correct a death registration record based on the completion of a medical-legal inquiry. All of these types of change are discussed below.

(a) Corrections and amendments within the authority of the civil registrar

402. The authority to correct or amend the record may rest with the civil registration authority or the courts, depending on the type of change sought. The civil registration agency should have authority to correct errors such as obvious spelling, date or typographical errors. The registrar may require documentary evidence for certain types of changes. For example, if a father's name is misspelled on a birth certificate, the registrar may request a copy of a legally valid identification from the father to verify the error and ensure the accuracy of the correction.

403. Adding omitted information should also be within the power of the civil registration authority. For example, if a parent names a child after a permitted number of days or weeks, it should be within the power of the registrar to add the name to the birth registration record. A request to add a father's name on a birth registration record may require administrative action only or may require judicial action. For example, if the father freely acknowledges paternity and the mother consents, the laws of the country may allow the registrar to fill in the missing paternity information on the birth record without application to the courts. In cases where paternity is disputed, however, amendment to the record requires a judicial decision (see sect. (b) below).³²⁴ Providing the registrar with authority to make these types of corrections and amendments relieves the applicant of having to spend time and money applying to the courts, and relieves the courts of additional workload.

404. Individuals should be able to appeal to the courts if they feel they have not been able to obtain a satisfactory resolution of their issue through an application to the registrar. It is the case in many countries, however, that, before appealing to the courts, an individual must appeal against a local registrar's decision to a higher administrative level, up to the national level. This is referred to as "exhaustion of remedies" and serves two purposes. First, it allows the registration authorities the opportunity to correct the mistake without burdening the courts. Second, it creates a record of the administrative decision for the court to review.

405. In cases where a medical-legal inquiry is pending when a death is registered, there may be need to amend the death registration record after the conclusion of the inquiry. For example, if a person's identity is confirmed during a medical-legal investigation or other investigation, the death registration record should be amended to include the identity. In other cases, the manner and cause of death information may be listed as "unknown" pending an inquiry, or may have been attributed incorrectly prior to the inquiry. Adjudication in the courts may also result in a change of manner of death. For example, a criminal case may find that a death, previously considered a suicide, was in fact a homicide. Determinations and changes to the cause of death and manner of death should be reported to the registrar, whether by the coroner, medical examiner, or representative of the legal system. In those instances, the civil registrar should have authority to add or correct this information with the submission of a medical certificate of cause of death from the appropriate medical-legal authority or a court order.

(b) Amendments requiring a court order

406. For corrections or amendments that involve changed circumstances or involve the rights of others (e.g., a spouse or a child), a registrant or their legal representative must usually apply directly to the courts. These types of amendments generally include adoption, surrogacy, paternity, divorce, annulment, judicial separation, name change and change to the sex marker.

407. Adoptions must be approved through a judicial process. Country laws vary regarding the legal requirements and arrangements for adoption. Many jurisdictions require that adoptions be kept confidential. This is accomplished by preparing a new birth record, reflecting the new parents' birth facts and obscuring from public view the pre-adoption facts of birth. The place and date of birth of the child remain unchanged in the record, along with any unique personal identifier, if one is assigned.³²⁵ If a child is adopted from a foreign country, most countries have a process by which the adoptive parents may apply for a domestic birth certificate. This generally involves providing to a court a certified copy of the final adoption decree from the foreign country and a written request for a new birth certificate.

³²⁴ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 151–152.

³²⁵ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 157. 408. Surrogacy is an arrangement whereby a woman agrees to carry a pregnancy for another person or persons who will become the newborn's parents after birth. National laws regulating surrogacy vary substantially, from a total ban on the practice to allowing it and specifying certain conditions to be included in the agreement between the parties. Regardless of how surrogacy is regulated, civil registration in surrogacy is handled in a similar manner to that for adoption. The original birth record contains the information of the biological mother. After the birth, the parents initiate the process of legal adoption and the procedures described above for adoption are followed.

409. If paternity is disputed, amending the record requires a judicial decision.³²⁶ After adjudication, the judicial decree should be transmitted to the registrar so that the registrar may make a notation on the birth record regarding paternity.

410. As discussed in section 5 above on registration of divorce, upon receipt of the judicial decree or information regarding the divorce from the court, the registrar should match the divorce record to the original marriage record and annotate the record accordingly. When the divorce occurs in a place other than that where the marriage was registered, the registrar who receives the divorce notification should notify the registrar in the location where the marriage took place, so that a notation can be made on the original marriage record. If the registration system is linked to a central database, this step is not necessary.

411. In many jurisdictions, change of sex on a birth record and identity documents requires a court order and may also require proof of sex reassignment surgery, although this is changing in some countries. Seven Latin American countries – Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica and Uruguay – no longer require a court order or proof of surgery before allowing a change of sex on birth records and identity documents. Similarly, in the United States, about half of the states no longer require proof of surgery or court orders before allowing a change of sex on birth records and identity documents.³²⁷ Removing these barriers reduces the cost of the process and the time that it takes and helps to protect the privacy of the applicant. If a court order is required, courts should be required to transmit this information to the registrar, who should then record the amendment in the record.

(c) Preservation of the original record

412. Additions or changes to the record (other than corrections of minor errors) should be made in such a way as not to alter the original entry.³²⁸ The process for changing the record will differ for paper-based and computerized systems. For example, in paper-based systems, the layout of the registration record should have ample space for entering those notations and additions. Furthermore, the changes should be made in duplicate so that copies can be forwarded to the central storage place and other archives. For all amendments and corrections, every copy, either active or archival, should be amended to reflect the changes, and also the reason for the change.³²⁹ While the principles are the same as for paper records, the methods used for making amendments and corrections in computerized records differ. Annotations in computer files can be made in a section of the record designed for annotations. When uploaded to a central system, all records in the system should reflect the change, the date and the place where it was made.

413. Legislation and regulations should contain clear provisions for amending records, including correcting errors, making name changes, and dealing with disputed entries, adoptions and other changed circumstances. The legislation should specify who may request or apply for a correction or amendment to a record. The

³²⁶ Ibid., paras. 151–152.

- ³²⁷ National Center for Transgender Equality, "Issues: identity documents and privacy". Available at https://transequality.org/issues/identitydocuments-privacy.
- ³²⁸ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 409.
- ³²⁹ Ibid., para. 414.

Corrections and amendments to the record	
Is there a clear distinction between types of corrections within the jurisdiction of the civil regis- tration authority and amendments within the jurisdiction of the courts?	
Is there a process to amend the death registration record in the event of a medical legal process?	
Is there a process for appealing against the decision of a local registrar to regional and national level registration officials, before appealing to the courts?	
Is there a process to issue a new birth certificate after a child is adopted?	
Is there a process to amend name and sex on a birth certificate?	
Are amendments to the record made in such a way as to not alter the original entry?	
Are amendments and corrections to the record made in such a way as to ensure that every copy, either active or archival, reflects the changes and the reasons for the change?	

legislation should also specify what entity – the civil registrar or the courts – has the authority to amend the registration record and under what circumstances. Because processes for paper-based and computerized systems will differ, the specific process for making amendments and corrections should be set out in instructions, which can be easily amended if needed.

(d) Corrections and amendments summary

414. To aid in drafting, the above checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

7. Submission of local registrar records to national registrar

415. The legislation should set time frames for the transfer of information from the local register to the centralized register. For non-computerized systems, this should cover the timing and frequency of delivery of records and the compilation of reports derived from registers. For computerized registers, this should cover the frequency with which electronic records are transmitted to, or shared with, the central register. This may be simultaneous with registration (where local registers are linked to central registers), daily, weekly or monthly. The timing may differ for non-computerized and computerized systems. Thus, if a country has two types of systems in use simultaneously, the legislation should provide a maximum time frame for submission of records and regulations may provide a shorter time frame for those districts that are computerized. The process should be addressed in regulations or instructions to allow for flexibility as the system technology advances.

416. Regardless of whether the system is computerized or non-computerized, a local registrar must submit records of all vital events occurring in the territory of the reporting official during the reporting period.

417. Mongolia provides an example of a country with dual processes for districts that have online access to the central database and districts that do not have such access. Districts that do not have access to the online system for civil registration carry out complete registration processes offline. The complete registration form is printed with a quick response (QR) code in machine-readable format. These forms are delivered to the provincial level office, where the QR code is scanned and information is entered into the central system.³³⁰ Box 30 below sets out further details on the transfer of records online and offline in Mongolia.

³³⁰ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, p. 183.

Box 30 Mongolia: transfer of records online and offline

Mongolia has achieved very high rates of birth and death registration in recent years. An important factor in this is their introduction of an electronic system for data capture. Digital data that have been collected from the local registration units are, where possible, transmitted through the online system to the central database. As most of the districts (or "soums", in Mongolian) still lack direct access to the online system for civil registration, an offline programme has been introduced in these offices.

The registrar at the district level enters a vital event using the offline programme. This programme includes checks and controls and ensures that the forms are entirely filled out and in line with nationally standardized questions. If an information item is missing, a warning is shown by the registration programme and no further processing is accepted. Once the registration is complete, the local civil registrar prints the official registration form, including a QR code, where information has been saved in a machine-readable format.

The registrar and the informant sign the registration form, which is sealed by the registrar. The registration form (which also contains digital information in the QR code) is then delivered to the province ("aimag") registration unit, where a superior registrar verifies the information on the registration form, together with other attached documents (such as the birth notification form issued by the health facility, copies of the identity credentials of the parents and acknowledgement of parentage). If everything is in order, the information will be scanned through the QR code and entered into the online registration system. If not, a correction procedure will be required and the registration form will be returned to the district registrar. At registration centres without access to the Internet, information about vital events is also computerized. The computers are used to print a QR code with all relevant information on a copy of the certificate, which is then forwarded to the higher-level civil registration centre, where the QR code is scanned and this information is entered online into the national database.

Before the offline system was introduced, information on vital events was often inaccurate because of unintentional mistakes. Since the offline programme has been in place, the mistakes caused by manual errors have almost disappeared. In addition, significant time is saved as data only have to be entered once and many errors are avoided thanks to automatic checks.³³¹

418. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Submission of records to national registrar	Yes/No
Is there a clear time frame within which registrars must submit records to the national registrar?	
Does legislation allow for development of both paper-based and electronic submission pro- cesses, if needed?	

8. Fees

(a) Fees for registration

419. To encourage registration, the legislation should clearly state that registration of a birth, fetal death and death within the time period prescribed by the law is free of charge. Instructions might address ways to ensure that no fees are charged, such as the

³³¹ Ibid., p. 183.

Box 31

Uganda: waiving of fees for vulnerable non-citizens

In Uganda, in 2012, in exercise of his powers under section 24 of the Births and Deaths Registration Act of 1973, the Attorney General waived the registration fees payable by refugees to register a birth or death. Previously, refugees had been required to pay \$40 (the same as for foreigners) in order to obtain a birth or death certificate.

display of signs at registration offices notifying the public of services that are free of charge and establishing a hotline for public complaints.

420. While many countries charge for marriage registration, drafters of the legislation should consider making this process free if marriage registration rates are low.

421. Some countries apply fees in cases of delayed or late registration of vital events, with rates related to the extent of the delay.³³² In countries where registration rates are low, however, and officials are attempting to increase rates of registration, late registration fees may hinder these efforts. Some countries have opted to impose a penalty for failure to register – or, more precisely, refusal to register – rather than impose a penalty for late registration, as this will provide an incentive rather than a disincentive to register. If fees are charged for delayed or late registration, policymakers should consider having a fee-waiver process for those for whom fees are a hardship.

422. If higher fees are imposed on non-citizens, the drafters should ensure that these higher fees are not imposed on refugees, stateless persons or other vulnerable populations.

(b) Fees for original and duplicate certificate issuance

423. The first (original) certificate for a birth and death should be issued free of charge. Fees may be charged for duplicate birth and death certificates, but should be kept to an appropriate level so as not to discourage application for a duplicate certificate.³³³ Appropriate fees may be charged for other types of certificates, including marriage and divorce.

(c) Fees for corrections and amendments

424. Minor corrections required as a result of clerical errors should be permitted free of charge.³³⁴ The addition of a baby name within the time frame for late naming should also be free of charge. Fees may be charged for other types of amendments, including amendments made in connection with adoption, the establishment of paternity, a name change and a change to the sex marker.

(d) Fees for use of data for research purposes

425. Researchers may sometimes request data from civil registrars for academic purposes. Legislation should specify under what circumstances data from the civil registrar may be provided to researchers, in accordance with privacy provisions (see sect. G below). If data are provided to researchers, fees may be charged. The fee structure should be set out in regulations or instructions.

(e) Fees in regulations or instructions

426. Where fees are charged, fees should be addressed in regulations or instructions to allow for adjustments over time. Fees should be minimal or priced so as not to disincentivize the registration or request, or a process for a fee waiver should be established for those for whom a fee would be a hardship.

³³² Principles and Recommendations for a Vital Statistics System, Revision 3, para. 363.

³³³ Ibid., para. 363.

334 Ibid.

(f) Fees summary

427. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Fees	Yes/No
Is registration of birth, fetal death, and death within the prescribed period free of charge?	
If late and delayed registration fees apply, are these fees reasonable?	
Is the first (original) birth and death certificate provided free of charge?	
Are corrections due to clerical errors free of charge?	
If data are available to independent researchers, is there a fee structure for these data use?	

D. Identity management

1. Identity management principles and life cycle

428. As discussed in chapter I, when a child is born, the child enters into the identity management system through birth registration and issuance of a birth certificate, which provides proof of registration. In countries that use a unique personal identifier, the unique personal identifier may be assigned at birth and is assigned for life. For those that immigrate to a country, entrance into the identity management system may begin with issuance of a unique personal identifier or registration in the population register (often through the immigration authorities). At the time of entrance into the identity management system, or at some specified later time, an individual may obtain a digital identity, or e-identity, which is a set of electronically captured and stored attributes and credentials that can uniquely identify a person.³³⁵ As with other types of physical or non-digital, identity cards or credentials, these digital identities are created and used as part of a life cycle that includes four fundamental stages: first, registration, including enrolment and validation; second, issuance of documents or credentials; third, authentication for service delivery or transactions; and, fourth, identity management, including updating, deactivation and archiving. The present section discusses the life cycle of identity management, with a focus on policy decisions that should be made by lawmakers before drafting legislation on identity management. It also addresses the principle of universality (as it applies to identity credential provision) and fees that may be charged to individuals and other users of the system.

(a) Universality

429. The ability to prove one's identity is fundamental to the enjoyment of human rights as well as government and private sector services. As, therefore, with civil registration, proof of identity should be provided without discrimination or distinction based on geography; racial, ethnic or religious group; status as a member of a nomadic, indigenous, native or aboriginal population; status as displaced, stateless, refugee, asylum-seeker, or person of undetermined nationality; or status as a foreign national born in the country or temporary worker; or any other characteristic. Regardless of the type of identity credential issued, it must be legally valid and be sufficient documentation to gain access to rights and services to which the individual is entitled. ³³⁵ World Bank, *Technical Standards for Digital Identity*, p. 2.

(b) Assignment of a unique personal identifier

430. As discussed in section C.1 (f), a unique personal identifier is a code assigned for life to an individual. In those countries that use a unique personal identifier, an individual should have only one unique personal identifier and each unique personal identifier should be assigned to only one individual. With the assignment of a unique personal identifier, an individual's record across various registers can be linked. For example, an individual's birth registration record and identity information can be linked to firmly establish that the information in both records unequivocally belongs to one individual. The unique personal identifier may be used by other government actors as well, such as health and social services, in order to link records across various agencies. The unique personal identifier, when linked with biometrics in an identity record, helps to prevent duplication of identity in the system and misuse of identity. A unique personal identifier should be retired at death. This ensures that the identity can no longer be used and helps to prevent identity theft. While there are many benefits to the use of a unique personal identifier, there are privacy and security risks when using a unique personal identifier to link data across multiple databases (see para. 96).

(i) Assignment of a unique personal identifier at birth

431. Assignment of a unique personal identifier at birth, rather than when a person has reached a certain age, facilitates linkage of the civil registration and identity management systems. A unique personal identifier may be generated by the civil registration agency, the identity management agency, or the authority in charge of the population register (see para. 268). If the civil registration agency generates and assigns a unique personal identifier to a newborn, the registrar should send the unique personal identifier along with birth information (such as name, date and place of birth, and name of the parent or parents) to the identity management agency and population register. If the identity management or population register agency generates the unique personal identifier, the registrar should send a request to the identity management or population register agency, which issues a unique personal identifier and sends it to the registrar. The registrar then enters this information into the birth record.

432. For countries that use a unique personal identifier, regardless of which entity generates it, legislation should require the registrar to ensure that a unique personal identifier is assigned at birth. Legislation should make clear that a unique personal identifier is assigned to all newborns, regardless of citizenship, nationality or residency status.

(ii) Assignment of a unique personal identifier after birth

433. If the assignment of a unique personal identifier at birth is a new requirement in a country, many people will have been born before the requirement comes into effect. In addition, there will be people that immigrate into a country. These people will not have had the opportunity to receive a unique personal identifier at birth. Legislation should therefore, require all individuals permanently residing within the territorial jurisdiction of the country, who were not previously assigned a unique personal identifier, to apply for one by a certain age. A unique personal identifier should not be denied based on citizenship, nationality or residency status, as it does not confer citizenship or any specific legal rights.

(iii) Character sequence in a unique personal identifier

434. The characters in a unique personal identifier may be alphabetic or numeric or a combination of both. The content of the alphanumeric characters in the unique per-

sonal identifier has important implications for security. In many countries, character sequences were traditionally based on personal information, such as date and place of birth. Today, random sequences (also referred to as "unintelligible sequences") are preferred, as character sequences based on personal information may be easily comprehended, allowing the information and the unique personal identifier to be used fraudulently. Such a security breach occurred in the Republic of Korea, which uses digit sequences based on date of birth (see box 32 for details on how the country addressed this situation). In addition, character sequences that contain variables for personal status, such as citizenship, residency or refugee status, may make individuals vulnerable to discrimination. In addition, citizenship may change during the course of a person's lifetime through naturalization and a variable based on this status could therefore later require recharacterization of the unique personal identifier sequence. Lastly, the use of personal information in character sequences limits the available permutations and the country may eventually run out of character sequences (see box 33 for details on how Norway addressed an impending unique personal identifier shortage).

Box 32

Republic of Korea: intelligible digit sequence

Identity numbers started to be issued in the 1960s. The first few digits are the user's date of birth, followed by a 1 for male or 2 for female. Due to the ease of determining a person's identity number, the Government estimated that an estimated 80 per cent of the country's population had their identity numbers and personal details stolen from banks and other targets. In consequence, in recent years, the Government now offers PINs to be used with identity numbers, which increases security.

435. Legislation should address the key elements of the unique personal identifier, requiring, for example, that it be unique, unintelligible and random. Other elements of the unique personal identifier (e.g., number of characters and use of checksum) should be within the authority of the agency responsible for generating it to determine, either through regulations or instructions.

(c) Identity credential registration: enrolment and validation

(i) Enrolment

436. As discussed in chapter I, registration for an identity credential entails enrolment in the credential system and validation of identity. Enrolment involves capturing and recording key identity attributes from a person who claims a certain identity, which generally includes biographical data and may include biometrics.³³⁶ Once a person has claimed an identity during enrolment, that person's identity is then validated by checking the attributes presented against existing data.³³⁷

437. Biometrics describes the measurement of unique physical characteristics that can be used to identify an individual. Biometrics may include a photo readable by facial recognition software, the capture of between 1 and 10 fingerprints, an iris scan or other evolving types of biometrics. Until recently, biometrics had been collected somewhere between the ages of 15 to 18 years, partly because it was difficult to capture biometrics reliably on the very young. As biometric technology improves, however, some countries have started capturing biometrics earlier in life. India and Mexico, for example, now begin capturing biometrics at the age of 5 and then recapture those ³³⁶ Ibid., p. 3.

³³⁷ Ibid., p. 4.

Box 33

Norway: revising the character sequence for the Norwegian personal identity number

The current Norwegian unique personal identifiers – called a personal identity number (PIN) in Norway – consists of 11 digits: the first six digits reflect the person's date of birth, the ninth digit reflects sex (even numbers for women and odd numbers for men), and the last two digits are control numbers. It is currently estimated that the system will run out of unique numbers by 2040. Norway therefore undertook a study to determine how to revise the PIN system. The study identified three absolute requirements for the new PIN: first, ensure capacity for the population at least until 2150; second, each person shall have one unique identifier; and, third, the identifier shall comply with current regulations for privacy and security. The study considered 40 alternatives, with the following options:

- · Reuse of unused and partly used number series
- Use of alphanumeric codes
- · Information free identifier and neutral digit for sex
- Various numbers of control digits
- With and without conversion
- · Various lengths, numbers of positions and digits
- Date of registration for issuance of d-number (a number issued to foreigners)

Some of the considered alternatives contained personal information while others did not. The arguments in favour of a PIN with personal information were that:

- It was user-friendly and easy to remember
- It reduced errors
- It was cost-effective
- It ensured more efficient access to vital personal information such as age and sex
- It involved minimal changes from the current system

The arguments in favour of a PIN without personal information were that:

- It increased stability and robustness for changes
- It increased capacity
- It provides no information about age and sex
- It is more protective of privacy
- It clarifies the characteristics and the area of application of the identifier, which is to identify and not authenticate.

Ultimately, Norway decided to keep an 11-digit PIN with date of birth information. The PIN will no longer contain a sex specific digit, however, and the mechanism for the control numbers will be changed. The changes will go into effect in 2032 and will ensure sufficient numbers until 2150.

biometrics at the age of 15. Peru captures a footprint at birth and other biometrics later in life. Biometrics captured at a young age, however, are still less accurate than those collected from adults and, at this point in time, there is limited information on the longevity of biometrics collected from children.

438. While the use of biometrics is on the rise, biometrics may present a risk of exclusion. Some individuals may have biometrics that are hard to capture. For example, manual labourers or the elderly may have worn fingerprints that cannot be captured clearly and iris scans may be difficult to capture on people with cataracts. People with disabilities, such as a missing limb or eye, may face exclusion depending on the prescribed biometric. In addition, the use of biometrics may exclude children from the identity system, if the identity system is not linked to the civil registration system. In this situation, lawmakers will have important policy decisions to make regarding what types of biometrics are captured and at what age. Even with the best of systems, biometric capture can fail. Policymakers should therefore determine what backup measures will be put in place for those individuals whose biometrics cannot be used in the system. In addition, because these systems may be subject to errors and security breaches, there should be a process for challenging collected data (see sect. H.2, on administrative and judicial review).

439. If policymakers have determined that biometrics will be used in the identity management system, legislation should authorize an agency to collect biometrics. Because biometric technology is changing rapidly, the type of biometrics collected should not be prescribed in the legislation. Instead, the legislation should delegate authority to the identity management agency to establish regulations on the type of biometrics collected. The legislation may specify at or by what age a person must enrol (or is permitted to enrol, if not mandatory) and have their biometric information collected, or authority may be delegated to the identity management agency to make this determination, as the age of enrolment may be related to the type of biometrics collected. Although authority to determine age and type of biometrics may be delegated to the identity management agency, the legislation should specify if there are any constraints on the type of biometrics that may be collected and how they are collected. For example, in some countries the collection of DNA or blood samples violates the right to privacy. Accordingly, the collection of fingerprints, iris scans and vein pattern-recognition might be allowed; however, collection of DNA or blood samples would be prohibited. In addition, legislation should define if the captured biometrics may be stored and, if so, for how long (see also sect. G below on data protection, privacy and security).

(ii) Validation

440. The validation process ensures that the identity exists (in other words, that the person is alive) and is claimed by only one person (namely, it is unique in the database). Biometrics offer one means of ensuring that there are no duplicate identities in the system. Validation against other databases helps to ensure that the identity exists and belongs to the persons claiming it. For the United Nations-recommended model of integrated civil registration and identity management systems, validation against information in the civil register should be required.³³⁸ This incentivizes birth registration, in essence making it a requirement in order to obtain an identity credential. If a person whose birth has not been registered applies for any identity credential, ideally, the identity management agency would assist that person in registering his or her birth while providing an identity credential service.

441. Depending on the age of identity credential enrolment, the validation process might also require checking the claimed identity against other databases or checking other forms of proof of identity. For example, if enrolment is at a very young age, connecting the child's identity to the parents through birth registration is generally sufficient. If, however, enrolment is at a later age, additional documentation might be required, such as school records or other forms of identification to ensure that the person is who they claim to be. Policymakers could consider introducing a point system, requiring a certain number of points to establish identity with highly trustworthy documents assigned more points than other documents (see box 34 on the Malawi point system).

442. Legislation may state how an identity is validated, or it may delegate authority to the identity management agency to determine the validation process, including which databases are checked and what identity information should be provided.

³³⁸ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 456–457.

Box 34 Malawi point system

In 2017, Malawi embarked upon a national identity registration project, which aimed to issue identity cards to all citizens. In a country where many people lack documentation, determining who was and who was not a citizen was a challenge. To determine who qualified as a citizen, Malawi developed a scoring model that assigned a certain number of points to different forms of identification, with 100 points as the threshold needed to qualify. For example, a passport received 40 points, a birth certificate 60 points, and a driver's licence 30 points. Other acceptable documents included (but were not limited to) registration and naturalization certificates, utility bills and pay stubs from government departments (see the table below for the full list of accepted documents and assigned points). Crucially, given the prevailing absence of formal documentation, Malawi also assigned 80 points to each traditional authority or village head who could act as a witness to verify a person's citizenship.

As no scoring system is perfect, Malawi also created an adjudication committee to investigate and make determinations for the roughly 3,400 cases whose files either raised questions or were flagged as possible duplicates during de-duplication. The adjudication committee, run by the National Registration Bureau, includes members from the police, Immigration Department and National Registration Bureau officials to make the final decision for each case.³³⁹

For proof of citizenship, score must total 100 or	more.
National identity card presented in person by biological parent, who is a Malawian (100)	Receipt presented in person by biological parent, who is a Malawian and registered previously by the same biometric registration kit (100)
Personal testimony of village head and advisor (80)	Certified and signed letter from village head with indication of parent and list of children (80)
Name in village register (80)	Citizenship or naturalized certificate (60)
Certified and signed letter from village head (40)	A certified copy of adoption court order (in the case of an adopted child when one or both of the adopt- ing parents are Malawian citizens) (40)
New birth certificate post 2015 (60)	Old birth certificate pre-2015 (30)
Malawian diplomatic or service passport (70)	Malawian passport (40)
Driver's licence (30)	Voter card (40)
Government pay slip (30)	Two community witnesses registered by the same biometric registration kit (must be present when registering) (100) Employment identity card (10)
Marriage certificate (10)	Tax certificate (5)
Any other official document (10)	Letter from the social welfare officer of the district (in the case of an abandoned child who is now aged 16 or older) (40)

Scoring pattern for registering as a Malawian citizen

(d) Credential issuance

443. After registration an identity provider issues identity credentials. Common types of electronic credentials fall into three categories: first, something the person knows (such as a password); second, something the person has (such as an identity card, a mobile telephone or a cryptographic key); or, third, something the person is (such as a fingerprint or other biometric data).³⁴⁰

³³⁹ Tariq Malik, "Malawi's journey toward transformation: lessons from its National ID Project", CGD Notes, Center for Global Development, August 2018, pp. 25–26.

³⁴⁰ World Bank, *Technical Standards for Digital Identity*, p. 4.

- (a) Smart cards: Cards offer advanced security features and record a digital cryptographic key or biometric data on an embedded computer chip. Smart cards can come in the form of a contact or contactless card, or near field communication (NFC)-enabled SIM card. Data stored on a smart card can be accessed offline for authentication purposes where there is no Internet connection or mobile network;
- (b) Two-dimensional (2D) barcode card: Cards can be personalized with an encrypted 2D barcode containing a person's personal data and biometrics, either instead of or in addition to a chip. The 2D barcode is a cost-efficient means of providing an e-identity and authenticating holders by comparing live biometrics with those on the card. It has been widely deployed in Africa, Latin America and the Middle East, including in Ghana, Lebanon and Mali;
- (c) Mobile identity: Mobile telephones and other devices can be used to provide portable e-identity and authentication for a variety of online transactions. For example, providers can issue SIM cards with digital certificates or use other mobile network assets that can enable secure and convenient identity and authentication of users for e-government services and other public or private platforms;
- (d) Identity (credential) in a central store or on the cloud: Unlike portable credentials such as smart cards and SIM cards, some systems store certificates and biometrics on a server only. In this case, a physical credential storage device may not be issued. A unique personal identifier may be issued in non-electronic form (e.g., the Aadhaar programme in India issues only a paper receipt). A tamper-resistant environment of cryptographic key generation and management to secure the identity credential in the central store against theft will increase the security and assurance level of the identity system.³⁴¹

445. Standards for identity credentials are generally governed by domestic law. Some countries, however, are now issuing national identity credentials that meet ICAO standards so that the credential may be used for international travel. For example, 13 OSCE member States have a national identity card with a contactless chip that is designed according to ICAO specifications and contains the same information as that stored in an e-passport.³⁴²

446. Lawmakers must make several policy decisions regarding credentials, including the type of credential issued, information presented on, or knowable from, the credential, and credential validity and expiration.

(e) Type of credential

447. There are advantages and disadvantages to each type of credential and policymakers should weigh these in determining the type of credential to be used. For example, smart cards with chips or 2D barcodes permit authentication of an identity offline, which is important in countries where Internet connectivity is not widely available. The production of smart cards may, however, be expensive. Credentials stored in a central store can produce enormous cost savings, as has been the experience with the Indian Aadhaar system. At the same time, storing credentials in a central store can leave the system vulnerable to security breaches. This has been the experience in India, where identity numbers and information may have been sold or inadvertently made public on multiple occasions. ³⁴¹ Ibid., p. 4.

³⁴² Organization for Security and Cooperation in Europe, Compendium of Good Practices in Identity Management in the OSCE Region, p. 41. 448. Technology is changing rapidly. It is therefore best not to specify the type of credential system in legislation. Rather, authority should be delegated to the identity management agency to determine the type of credentials to be issued and the technology system used with the credential (such as chip, bar code, or other). The identity management authority should promulgate credential standards in regulations or procedures. This will allow for changes, if needed or desired, as technology advances.

(i) Information presented on or in credential

449. Many countries have a different type of identification card for citizens and noncitizens. For example, in Thailand, non-citizens are given a pink-coloured card, while Thai citizens receive a blue card. A credential need not, however, be tied to citizenship. For example, the Indian Aadhaar system was revolutionary in providing a unique personal identifier to all residents of the country, with no information contained in that unique personal identifier regarding citizenship or residency status.

450. Information on citizenship, ethnicity or residency status may make an individual vulnerable to discrimination. Policymakers should therefore carefully consider whether it is necessary to include this information, or other information that may be the basis for discrimination, on the face of the identity card or other physical credential. It is important to note that only limited information is necessary on the face of the credential, in particular if a credential has biometrics, a chip, a PIN or any other authenticating method associated with it.

451. If a physical credential is used, the legislation may authorize the identity management agency to determine what information is presented on or in the credential. Policymakers may, however, wish to provide parameters to the agency and, for example, state that the face of credentials may not identify an individual as member of a minority or marginalized segment of the population, as this may lead to discrimination.

(ii) Credential validity and expiration

452. The period of validity of credentials varies from country to country and may be dependent on the type of credential. For example, the unique personal identifier assigned in the Indian Aadhaar system never expires. In many countries that use an identity card with a photograph, however, the identity card must be renewed with a new photo or other biometric capture periodically. The renewal of an identity card or credential does not, however, imply that the unique personal identifier should be changed. As stated previously, a unique personal identifier is assigned for life.

453. Because the period of validity is related to the type of credential and biometrics, policymakers may choose to delegate authority to the identity management agency to determine the period of validity. If authority is delegated, the identity management agency should also have authority to establish the process for renewing credentials.

(f) Authentication

454. In many countries, a national identity credential is necessary for access to benefits and services, such as health services and banking, which is one reason why identity credentials should be provided for all. In order to gain access to services, the user must be authenticated. Authentication is the process of verifying the claimed identity against the registered identity information;³⁴³ in other words, proving that persons are who they say they are. Authentication should not be confused with "authorization", which involves determining whether a person has a right to a particular service.³⁴⁴ The present section is concerned with authentication, not authorization. Authentication

World Bank, Technology Landscape for Digital Identity, p. 6.

³⁴⁴ Ibid., p. 7.

may occur using one or more factors that, like credentials, generally fall into one of three categories – something you know, something you have or something you are.³⁴⁵

455. Authentication, using these attributes, can occur through various pathways, including:

- (a) Smart cards: People with smart cards can authenticate their identity using multiple authentication factors for varying levels of assurance. For example, a simple PIN for low-risk use cases or a digital signature based on PKI technology for high-risk use cases. Fingerprints can be used to establish a non-ambiguous link with the user. Because they store data locally on a chip, smart cards can also be used for offline digital authentication or remote locations where connectivity is limited;
- (b) Mobile identity: Using smartphone applications, unstructured supplementary service data (USSD) or short message service (SMS)-based authenticators, or SIM cards, mobile identity can incorporate multiple authentication factors for varying levels of assurance. For example, a simple PIN for lowrisk use cases, multiple-factor authentication solutions (including with the use of biometrics) or a mobile signature based on PKI technology with a secure element for high-risk use cases. Authentication can be strengthened by using third and fourth factors such as the individual's location or behaviour;
- (c) Identity in a central store or on the cloud: Instead of issuing an e-identity document or mobile credential, an e-identity system can rely on biometrics for remote authentication. In this case, an identity is asserted and verified via a computer or other device with a biometric reader that connects to the cloud. A cloud-based system eliminates the need for and cost of physical credentials, but requires robust information and communications technology infrastructure for connectivity and security of the central storage.³⁴⁶

456. While the use of biometrics is on the rise, it is not necessary to use biometrics to authenticate an identity. For example, as stated above, a smart card may be used with a PIN to authenticate identity. This is the case with the Estonian identity card (see box 9 on the Estonian e-ID system). If biometrics are used for authentication, provision should be made for alternative authentication methods because biometric authentication can sometimes fail to recognize individuals, even though they are who they say they are. This could potentially result in the owner of an identity being rejected for the services that the individual is seeking. For example, in March 2018, the Unique ID Authority of India, which is the custodian of the Aadhaar database, stated that the biometric authentication failure rate for fingerprints (after three attempts) was nearly 12 per cent in government programmes, 5 per cent in banks and 3 per cent for telecommunications operators. Other reports suggest a rate of between 2 and 4 per cent after repeated attempts.³⁴⁷ This highlights the importance of having effective protocols to manage exceptions, such as mobile one-time password (OTP) or authentication by a local authority. In the state of Andhra Pradesh, the village revenue officer is allowed to authenticate a beneficiary if needed as a last resort - a human response to a shortcoming of technology.³⁴⁸ Essential services should not be withheld in the event that a biometric authentication fails. There must therefore be a procedure for alternate means of authentication and resolving the issue that does not cause harm or disadvantage.

457. The process of authentication is related to the type of biometrics and technology adopted in enrolment and credential issuance. For that reason, policymakers may choose to delegate authority to the identity management agency to determine the method of authentication, including whether single or multi-factor authentication is

³⁴⁵ Other types of information, such as location data or device identity, may be used by a verifier to evaluate the risk in a claimed identity, but they are not considered authentication factors. See Paul Grassi, Michel Garcia and James Fenton, *Digital Identity Guidelines*, NIST Special Publication 800-63-3, National Institute of Standards and Technology, Gaithersburg, MD, p. 12.

³⁴⁶ World Bank, Technical Standards for Digital Identity, pp. 4–5.

³⁴⁷ Alan Gelb and Anit Mukherjee, "The Aadhaar debate: where do we go from here?" CDG blogpost, Center for Global Development, 13 April 2018. Available at https://www. cgdev.org/blog/aadhaardebate-where-do-we-go-here.

348 Ibid.

used. No matter what type of technology and authentication process is adopted, the identity management agency should have the authority to establish alternative authentication procedures in the event of authentication failure, such as a mobile one-time password, alternative biometric or authentication by a local authority.

(g) Deactivation: closure and archiving

458. Deactivation of a unique personal identifier and identity credential upon death is important in order to prevent identity theft. An efficient and effective connection between the civil registration system and the identity management system is the best way to ensure that this deactivation occurs upon death. This should occur when the civil registrar transfers information from the death record to the identity management system. There may be other reasons for deactivation of a unique personal identifier or identity credential, such as fraudulent use of the identity.

459. After deactivation of a unique personal identifier and identity credential, identity records should be retained and permanently archived. Country practices vary on the reuse of a unique personal identifier after closure. In some countries a unique personal identifier is never reused; in others it is not reused for at least 50–100 years.

460. Legislation should require the deactivation of a unique personal identifier and associated identity credential upon death. The procedures for that deactivation, including the reuse of a unique personal identifier (if any), should be set out in regulations or instructions.

Box 35 Ecuador: deactivation of identity in the population register

In Ecuador, a person's identity is opened and deactivated in the population register, which is managed by the Statistics Institute, based on information transferred from two agencies: the Civil Registry, which transfers information on births and death; and the Social Security Institute, which transfers the register called "Affiliates", which contains identification codes for foreigners who are working in Ecuador. This information is stored in a so-called "master table", which generates a technical variable with four codes, assigned in this way: 1 for active people (living population, who reside in the country); 2 for deceased persons; 3 for persons residing outside the country; and 4 for persons with administrative problems. When information on the death or emigration of a person is received, that individual's registration is deactivated in the population register.

In addition, there are other validations made in the Statistics Institute within the administrative records related to the population register. The identification number of a baby born alive and the records from the birth register are validated through a process called "Accuracy", the objective of which is to know if the identification number corresponds to the registered person. To fulfil this objective, it is important to have a main source of data (the most reliable) with which to compare the identification number. The process makes use of similarity algorithms through the combinatory theory of identification variables such as names, date of birth, place of birth, sex and others that do not change over time.

2. Fees

(a) Fee for identity credential issuance

461. Many countries charge a fee for identity credential issuance and there is no best practice regarding fees. If obtaining an identity credential is mandatory, however, policymakers should consider providing the original identity credential free of charge

or for a minimal fee. Fees may be charged for replacing a lost identity credential. This fee structure should be addressed in regulations or instructions.

(b) Fee for private institutional users and government users

462. As discussed above, individuals may use their identity credentials to authenticate their identity in order to gain access to a variety of services, both public and private. The public and private services benefit from the authentication services provided by the civil registration, vital statistics and identity management system, so some countries charge a small fee to service providers for authentication. Country policies vary in respect of whether to charge government entities, such as the healthcare system, social services and others, a fee for authentication services. In some countries, the identity management authority charges other government entities a fee for this service. In other countries, there is a policy of providing this service to other government entities free of charge. Private institutional users, such as banks, that wish to use the identity management system for identity authentication purposes are generally charged a fee for this service. The legislation should authorize the identity management agency to set fees for authentication services. Fees should be established in regulations so that they may be more easily adjusted over time.

3. Identity management summary

463. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Identity management	Yes/No
Is proof of identity provided to all persons, without discrimination, within the territory of the country?	
 If a country uses unique personal identifiers, (a) Is everyone in the resident population issued a unique personal identifier? (b) Is a unique personal identifier assigned at birth for those born in the country? (c) Is there a process for obtaining a unique personal identifier for migrants? (d) Is there a process for obtaining a unique personal identifier for those born before the law requiring a unique personal identifier became effective (if applicable) 	
Is the character sequence of the unique personal identifier random?	
If biometrics are collected, does the law address the scope of authority of the identity manage- ment agency to collect biometrics, with specified constraints?	
If biometrics are used, does the law address the age at which of biometrics are collected?	
Is there a process for validating the identity of a person when they enrol in the identity manage- ment system? If so, does that process entail validation against information in the civil register?	
Is authority delegated to the identity management agency to determine the type of credentials issued?	
Is authority delegated to the identity management agency to determine the method of authentication?	
Does the information contained on or in the credentials protect against discrimination (for ex- ample, by not providing information on status as member of a minority or marginalized group)?	
Is there a clear process for deactivation upon death of:(a) The unique personal identifier?(b) The identity credential?	
Are identity credentials provided free of charge or for a reasonable fee?	
Is there a fee structure for private institutional users of the system?	
Does the law address fees for government users of the system?	

E. Population register

464. The population register is a data system used for continuous recording and coordinated linkage of selected information pertaining to each member of the resident population of a country, in such a way as to provide the possibility of determining up-to-date information concerning the size and characteristics of a country's population, including residential address, at any given time. The population register is the product of a continuous process, in which notifications of certain events, which may have been recorded originally in different administrative systems, are automatically linked to it on a current basis.³⁴⁹ In many countries, the population register also contains information pertaining to persons who are not usual residents of the country, such as citizens temporarily residing abroad, those who have emigrated, and those who are deceased or have disappeared.

465. Not all countries maintain a population register. For those that do, however, the population register is essentially a computerized database with a separate record for each individual residing in the country and, in many countries, for citizens residing abroad as well. The population register can be a centralized database or it can consist of regional and provincial databases that are linked, or functional databases that are linked. Agencies in charge of operating and maintaining a population register differ from one country to another. For example, the a population register may be the responsibility of the ministry of the interior or justice, or the statistics or tax authority.³⁵⁰ In some countries, the entity responsible for maintaining the population register may be the same as the entity responsible for civil registration or identity management.

466. The primary function of the population register is to provide reliable information for the administrative purposes of government, particularly for programme planning, budgeting and taxation. The registers are also useful in other administrative areas, such as voting, education, military service, social insurance and welfare, and for police and court reference. In some countries, the production of vital statistics is derived directly from the population register.³⁵¹ Information submitted through civil registration, as well as other agencies, is crucial for keeping the population register up to date.

1. Information to be submitted to the population register

467. The more information included in, or linked to, the population register, the richer the variety of possible analyses of population structures and dynamics, but, at the same time, the greater the concerns about confidentiality and the more complex the issue of management. Accordingly, during the development of a population register, countries might benefit from progressive implementation, entailing, at the beginning, inclusion of only a minimum amount of information.³⁵²

468. The content of a specific population register varies from country to country. However, it commonly contains the names of individuals and their parents, date and place of birth, residential address and unique personal identifier.³⁵³ A population register also often contains information concerning an individual's legal status (such as citizenship, legal residency status, immigration and emigration status) and civil status (namely, married, unmarried, divorced). For those born in the country, the first entry into the population register happens at birth. After birth registration, the civil registration agency submits basic facts about a child (name, parents, place and date of birth and unique personal identifier) to the population register. The first entry into the population register can also occur when a person immigrates to a country and is assigned a unique personal identifier, after which the immigration office or another agency submits that person's basic information to the population register. Submission

³⁴⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 454.

³⁵⁰ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 438.

³⁵¹ See Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 452–484.

³⁵² See ibid. para. 481.

³⁵³ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 443.

Box 36 Sweden: population register

The Tax Administration is responsible for population registration in Sweden. The agency receives information from other authorities as well as the public. Information from other authorities includes reports of births, deaths and court decisions. Information from the public includes applications for marriage licences and name changes, and address notifications. Most changes by authorities and the public alike can be effected using e-services, with immediate updates of the population register.

In Sweden, it is mandatory for the health sector to report births and deaths to the population register. If the birth or death occurs at a hospital, health professionals report it directly to the register using e-services. Births or deaths occurring elsewhere are reported by a midwife, the parents, or family of the deceased. A newborn baby is assigned a unique personal identifier when the birth is registered, and all relevant authorities are notified through the notification register. Likewise, all relevant authorities are notified when a death is recorded.

Authorities in Sweden can subscribe to changes in the population register through the notification register, where authorities can choose to receive updates on a daily or weekly basis. The updates include, among other data, the unique personal identifier, name and home address. One of the subscribing authorities is the Swedish Population and Address Register. Its task is to provide accurate information about the public to the private sector, but sharing only the name and home address. The agency Statistics Sweden can conduct a census using the information notified by different authorities. The Election Authority can issue voting cards and post them to the public at their current address.

Information about the population register and the Swedish Population and Address Register may be found at: www.statenspersonadressregister.se/master/start/englishsummary/

Box 37

Ecuador: civil register, population register and residence register

The population register in Ecuador receives information from various administrative records including: the birth and death registries, which receive information from the Ministry of Health; the register of migration; the marriages and divorces register; and the education register. It also contains information on people who are not registered in the civil register, including those residing in Ecuador for work or education.

In order to link the population register and the housing register, there was a need to create a consolidated residency register. The consolidated residency register was an initiative of the Statistics Institute, which began in 2016 with the inclusion of this activity in the Constitutional Act on Identity Management and Civil Data. The objective of the consolidated residence register is to register information about the place of residence of the population through the electric utility service, using the georeferenced unique national electricity code, abbreviated CUEN in Spanish, which is linked to the building where the person resides. The same code is related to maps and the postal code of the Postal Regulation and Control Agency. The development and implementation of the system was the responsibility of the Civil Registrar's Office.

Updating of the residency register is implemented in cooperation with other government entities. For example, in order to register a vital event, including a birth, death, fetal death, marriage or divorce, a person must present a residence certificate. The Ministry of Education requires a residence certificate at the time of a child's registration for school. Other government bodies have similar requirements. of the unique personal identifier soon after it is assigned is essential, as this enables the population register to be linked with other databases and to maintain continuously up-to-date information about the population.

469. Generally, the civil registration authority also submits information about the occurrence of other vital events – marriage, divorce, adoption, legitimation, recognition, and death – to the population register. This keeps the population register up to date with regard to a person's civil status. While legal information is generally submitted, policymakers should consider whether statistical information captured during civil registration is needed in the population register. If the statistics agency compiles vital statistics from information provided by the civil registration agency directly, rather than from the population register, then statistics information collected during civil registration need not be submitted to the population register.

470. Country practices vary with regard to the information submitted from the identity management system to the population register. In some countries, biometrics are submitted, in others they are not. Policymakers should take into account data protection and privacy concerns when determining whether this information should be submitted to the population register. Even if biometric information is not submitted, the identity management agency might play a role in keeping the population register up to date. For example, in Chile, when people renew their national identity card they are given the opportunity to update their address, and this residence information is then updated in the population register.³⁵⁴

471. Population registers often are the authoritative source for other registers, such as tax and voting registers and other functional registers. In other instances, the functional register (such as a residency register) may provide input into the population register. In either instance, policymakers should consider how information is shared between the population register and other registers.

472. Legislation should address the minimum information that the civil registration agency and identity management agency are required to share with the population register. If the agency in control of the population register has rule-making authority, this agency might require additional information to be shared with the population register through regulations. Policymakers should also determine what information from other registers is shared with the population register, and what information is available to other agencies and from the population register. Legislation or regulations may address this information-sharing between functional registers and the population register. Legislation in the population register is public information.

2. Submission procedures

473. Information from the civil registration and identity management agencies must somehow be accessible in the population register. A population register need not be either a physical or single consolidated list (either in paper or electronic format), but can be a network of registers linked in a coordinated way. In such systems, it may be that the information is not physically submitted or transmitted from the civil registration, identity management and other agencies, to the population registrar; rather, the registers may be linked, through a unique personal identifier, so that a complete record may be recreated at any time³⁵⁵ (see para. 96 and box 13 on Estonia's functional databases).

474. The process for collecting information in the population register, whether through transmission or linkage, will depend on the level of digitization and type of system. Records may be transmitted manually or electronically, or databases may

³⁵⁵ See Principles and Recommendations for a Vital Statistics System, Revision 3, para. 469.

³⁵⁴ Ibid., p. 155 (textbox).

be linked. Manual and electronic systems may be used concurrently for many years in a country as it digitizes its system. In these circumstances, it is important that the regulations cover both manual and electronic processes. Processes for transmission or linkage should therefore be specified in regulations or instructions, so as to allow for changes to the process over time.

3. Submission frequency

475. Regulations should address the frequency of submission of records from the civil registration and identity management agencies, and also other appropriate agencies, to the population register. Because the population register may be linked to numerous services (such as voter registration, education, taxation, social security and health benefits), there is good reason to update the population register as frequently as possible. The regulations should specify the frequency of updating, whether daily, weekly, or monthly, which will likely depend on the mode of transmission and the degree of digitization and interconnection across systems. To allow for flexibility, regulations may address the minimum frequency of transmission and instructions may establish greater frequency as technology develops.

4. Data protection and privacy during transmission to and storage in the population register

476. The law should mandate that individual data and information be protected during transmission to, and storage in, the population register. Personal data should be protected at all times and special consideration should be given to protection of data that, if improperly obtained, could result in discrimination, such as information on citizenship or legal residency, or status as a refugee or asylum-seeker. Data are particularly vulnerable during transmission and therefore encryption should be required (for electronic transmission of information). Technical specifications on encryption should, however, be left to instructions to allow for changing technology (see sect. G below for more on data protection, privacy and security).

5. Population register summary

477. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Population register	Yes/No		
Is information required to be submitted to the population register from the civil registration and identity management agencies? Is that information clearly defined?			
Does the law address information from other agencies required to be submitted to the population register? Is that information clearly defined?			
Does the law address what information from the population register is available to:(a) The public?(b) Other government agencies?			
Is the time frame for submission of information to the population register specified?			
Does legislation allow for development of both paper-based and electronic submission processes, if needed?			
Does legislation require that personal data and information be protected during submission to and from, and storage in, the population register?			

F. Vital statistics

1. Vital statistics to be derived from civil registration data

478. Vital statistics constitute the collection of statistics on vital events in a lifetime of a person, and also relevant characteristics of the events themselves and of the person or persons concerned.³⁵⁶ Vital statistics provide crucial information on the population of a country,³⁵⁷ which is a prerequisite for socioeconomic planning and informed decision-making. A well-functioning civil registration system is the ideal source from which to derive accurate, complete, timely and continuous information on vital events. Vital statistics should therefore be derived from civil registration data.

479. Complementary data sources, such as population censuses and in-depth household surveys, have also been used to evaluate and enrich civil registration data and to gather information on demographic and epidemiological processes that complements the information obtained through civil registration.³⁵⁸ Additional sources within a vital statistics system include specific questions on fertility and mortality added to population censuses, household sample surveys, vital records from sample registration and health records. Through the use of these sources of data, together with the application of indirect techniques of demographic estimation, some countries have been furnished with certain of the statistical indicators needed for planning purposes, mainly at the national level. There is no substitute, however, for the availability of continuous information on vital events based on the civil registration data. It is essential that countries strive to ensure that the statistics produced by their systems are accurate, timely and complete. Allowance is to be made, as appropriate, for the use of other sources of complementary or alternative data³⁵⁹ (see box 38 for methods for the use of incomplete data).

480. The *Principles and Recommendations for Vital Statistics Systems, Revision 3*, provides a list of recommended topics to be collected for statistical purposes when registering births, deaths, marriages and divorces. The list includes high-priority topics, which are an immediate goal, along with topics that are a less urgent goal.³⁶⁰ The recommended topics to be collected for births, deaths, marriages and divorces are set out in annexes A and B.

481. Legislation should require that vital statistics be derived from civil registration data and should delegate authority to the civil registration or statistics agency to issue regulations or instructions that state the information to be collected when registering births, deaths, marriages and divorces. The regulations or instructions should clearly state what information is required for legal purposes and what information is desired for statistical purposes. These data elements should be included in notification forms, as discussed in the sections above. The civil registration and statistics agencies should collaborate on all decisions on the content and format of the information to be collected.

2. Submission of statistical information to the statistics authority

482. The civil registration agency must submit statistical information collected during registration to the national statistics authority in order for the agency to compile and publish vital statistics. The law should therefore require and enable the regular and timely sharing of data needed for statistical purposes between the civil registration and statistics agencies. The privacy of individuals is sufficiently protected by law when data are shared, while not causing excessive barriers to data linkage and research

³⁵⁶ Ibid., para. 1.
 ³⁵⁷ Ibid.

³⁵⁸ Ibid., para. 28.

³⁵⁹ Ibid., para. 29.

³⁶⁰ Ibid., para. 66, table III.1.

Box 38 Incomplete data methods: indirect techniques

An increasing need for basic demographic measures, combined with the poor quality of civil registration and vital statistics systems in most developing countries, has led to the development of indirect techniques for the estimation of these measures from incomplete or deficient data. The results obtained from application of such methods can also be used to evaluate registration coverage in various ways: first, birth or death rates estimated through use of methods dealing with incomplete data may be compared with vital rates obtained from civil registration data; second, demographic relationships used in methods dealing with incomplete data may be compared with vital rates obtained from civil registration data; second, demographic relationships used in methods dealing with incomplete data may be adapted to assess the quality of civil registration and vital statistics data; and, third, incomplete data methods may be employed to directly estimate the level of underregistration of vital events. A detailed treatment of these techniques may be found in the revision by the International Union for the Scientific Study of Population of the 1983 publication *Manual X: Indirect Techniques for Demographic Estimation* of the United Nations Population Division.³⁶¹ For a discussion on quality assessment methods, see *Principles and Recommendations for a Vital Statistics System, Revision 3*, paragraphs 579–603.

activities in the public interest For example, statistical information may be submitted with identifying information removed, except for the unique personal identifier, which allows for data linkage and verification.

483. Specific procedures for the submission of statistical information from the civil registration agency to the statistics agency will vary depending on the level of integration, connectivity and digitization of a country's civil registration and vital statistics agencies. For example, if the two systems are computerized and integrated, submission may be automated and happen continuously, or daily or weekly. In paper-based systems, submission might be less frequent, such as monthly or quarterly. Accordingly, the specific process for submission, including the frequency of submission, should be addressed in regulations or instructions, rather than legislation, to allow for changes over time.

3. Compilation of vital statistics

484. The compilation of vital statistics data is the process of condensing and summarizing information on vital events by classifying and tabulating the data within categories or groups in order to produce vital statistics according to a predetermined tabulation programme. Vital statistics should be compiled for the total geographical area of the country, for each of the major or minor civil divisions, and for each principal town and city. Vital statistics should distinguish between urban and rural settings at least for the country as a whole and for each major or other civil division.³⁶²

485. National vital statistics should be compiled uniformly for the country, using common definitions, classifications, coding, querying, data entry and editing procedures throughout. To ensure uniformity, compilation of vital statistics should to be undertaken by the central agency, rather than compiled at the local level. In cases where the numbers of vital events would be overwhelmingly large if processed at the central level, a decentralized approach may be adopted whereby subnational offices are set up to carry out all or selected data-processing functions, subject to guidelines issued by the central agency.³⁶³ During compilation, the statistics agency should conduct an internal review to validate the data and ensure there are no miss-

³⁶¹ Tom Moultrie and others (eds.), *Tools for Demographic Estimation* (Paris, International Union for the Scientific Study of Population, 2013).

³⁶² Principles and Recommendations for a Vital Statistics System, Revision 3, para. 213.

³⁶³ Ibid., para. 218.

ing, duplicative, improbable or erroneous data (see box 39 on the Canadian internal review mechanism).

486. The production of vital statistics should be carried out in accordance with the Fundamental Principles of Official Statistics and internationally accepted frameworks for statistical quality assurance and documentation, such as the United Nations Statistics Quality Assurance Framework.³⁶⁴ Such frameworks typically address quality requirements within the domains of relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, and accessibility and clarity. Legisla-

Box 39

Canada: internal review mechanisms for vital statistics

Coverage: Although vital event registration data are received by Statistics Canada on a daily basis, and volumes are monitored on a weekly basis, data are processed on a yearly basis. Once all the microdata for a reference year are extracted, a reconciliation of data holdings takes place. During this step, different sources of data are gathered: the electronic National Routing System messages, digitized images of event registrations, cause of death data extracted by the automated cause of death coding software, and the highest registration number reported by the jurisdiction. These are compared in order to determine whether all records have been received. If for example, there are more records on the cause of death coded data than there are electronic death messages for a particular jurisdiction, the jurisdiction is contacted and asked to send the missing data.

The next step is the elimination of possible duplicates within a jurisdiction, among jurisdictions, and over two years of data. Most of the possible duplicates identified through this process, which is based on a set of key fields, can be resolved at the central office, which then cancels the duplicate record. For those that cannot be resolved, the jurisdictions for which there are duplicate records are contacted for resolution.

Missing, improbable, and erroneous data: The microdata are then run through a series of validation edits. Historically, vital statistics records in error have been corrected or verified by manually consulting the digitized image (or microfilm) of the registration to confirm or correct the information in the field that failed the edit. This process is lengthy and labour-intensive. Where possible, automated corrections or data conversions have been programmed for systematic errors, based on information available in other data elements. For example, if the "age of mother" field is blank but the "date of birth" field contains data, the age will be derived using the date of birth and date of event. In this way, the parity of the mother can be better verified during the editing stage. Another example is where the province of residence is missing and the postal code is available: here, the province is derived by looking at the first letter of the postal code. Certain edits correct logic errors (for example, verifying marital status as "single" for deaths of children under the age of 15).

The final piece of the evaluation will be to measure the value of the corrections on the precision of the estimates.

Cause of death editing is a separate process and a shared responsibility. The three larger jurisdictions maintain their own trained cause of death coding staff and code their own data. Statistics Canada provides cause of death coding for the remaining jurisdictions. Statistics Canada provides training for all cause of death coders and also conducts a cause of death review where invalid cause, rare codes, first-time-used codes, age and cause correlations and maternal deaths are reviewed. The review also ensures consistent application of the classification and addresses known problems with the automated mortality classification system. Validity checks such as age and cause or sex and cause are addressed during the editing process.

³⁶⁴ United Nations Statistics Quality Assurance Framework (UN-SQAF), prepared by the United Nations Conference on Trade and Development and Task Team, United Nations, 2016 (UNSYSTEM/2017/3).

Box 40 Pacific islands: tabulation of vital statistics in countries with small populations

Countries with very small populations may need to reconsider the frequency of tabulation on the basis of their specific circumstances. For example, in the Pacific region, it is recommended that vital statistics tabulations are aggregated for several years (for example, from three to five years), because small populations, and consequently the small number of births and deaths, can result in poor consistency of data over time owing purely to stochastic or random effects. Sub-yearly tabulations may also allow persons to be easily identified, contravening principles of official statistics.

tion should require the compilation and production of vital statistics by the national statistics authority on a regular periodic basis, for example, monthly, quarterly or annually. Instructions should address the process of compilation, in order to allow for flexibility. Instructions should address the following topics: control of receipt of statistical reports, editing, querying, imputation of missing or inconsistent data items, coding of data, quality assurance and tabulation. When compilation is carried out in a decentralized manner, the central agency should issue detailed guidelines to ensure uniformity. These topics are discussed in depth in *Principles and Recommendations for a Vital Statistics System, Revision 3*, paragraphs 220–256.

4. Publication and dissemination of vital statistics reports

487. Annual publication of vital statistics reports offer government agencies and other users a dependable source of vital statistics data and provide the vital statistics agency with visibility in terms of its fulfilment of national needs, its purpose and its importance to society. The law should therefore mandate that the statistics agency prepare and disseminate vital statistics reports and data on a regular basis, and at least annually.³⁶⁵

488. Regulations should address the timeliness of the data – the time frame within which the data must be reported. This is usually within 12 months. Reports on vital statistics for any calendar year should ideally be based on events that actually occurred during the calendar year and not on those merely registered during that period. Tabulations should indicate clearly whether the data are provided on a registration or occurrence basis and, when necessary, give information about delays in registration. The date of occurrence as the basis for tabulation requires the determination of a terminal date after which final tabulation can be made. Instructions issued by the statistics agency should provide a cut-off date and final tabulations should be made on the basis of statistical reports received before that cut-off date. Reports received after the cut-off date should be tabulated separately by date of occurrence to provide for the analysis of the problems of delayed registration and delayed reporting.³⁶⁶

489. Regulations or instructions may address the means of dissemination (such as paper publications, bulletins and electronic media), and also content and format.³⁶⁷

5. Vital statistics summary

490. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes". ³⁶⁵ See Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 258–273 for a discussion on the presentation of results and data dissemination.

³⁶⁶ Ibid., paras. 245–251.

367 Ibid., paras. 258–273.

Vital statistics	Yes/No
Are vital statistics derived from civil registration data?	
Is the civil registration authority required to submit data to the statistics authority on a regu- lar and timely basis?	
Are data shared with the statistics authority in a manner that sufficiently protects the privacy of individuals?	
Are vital statistics produced for the total geographical area of the country, for each of the major or minor civil divisions, and for each principal town and city?	
Are vital statistics produced on a prescribed regular, periodic basis?	
Are vital statistics prepared and disseminated at least annually?	

G. Data protection, privacy and security

491. Many countries have data protection laws that regulate the collection, storage and use of data by both government and private data collectors. Civil registration, vital statistics and identity management systems should be subject to these laws, while allowing data to be used for legitimate government purposes. It is recommended that countries develop a general data protection law. If such a law exists, lawmakers should consider including provisions in civil registration, vital statistics and identity management legislation or the general data protection law that state how the provisions of a general data protection law specifically apply to records in civil registration, vital statistics and identity management systems, including the population register. If a general data protection law does not exist, legislation on civil registration, vital statistics and identity management should contain provisions that provide for the protection of personal information contained in civil registration, vital statistics and identity records, including information transferred to the population register. Some internationally recommended principles for the protection of data are discussed below.

492. In October 2018, the United Nations adopted the Personal Data Protection and Privacy Principles, which apply to all personal data stored or processed by, or on behalf of, the United Nations system organizations in carrying out their mandated activities. In recent years, many countries and organizations have adopted their own data protection principles and rules, with concepts similar to those set forth in the United Nations Personal Data Protection and Privacy Principles. In 2013, OECD adopted the Guidelines Governing the Protection of Privacy and Transborder Flows of Personal Data (the "Privacy Guidelines"), which updated previous guidelines from 1980. These Privacy Guidelines are applicable to public and private data collectors. In April 2016, the European Union adopted the General Data Protection Regulation, which came into force in May 2018 and applies to both public and private data collectors. The World Bank and key partners developed Principles on Identification for Sustainable Development, centred around the themes of inclusion, design and governance, that frame their work on digital identification for development. Further details of the principles set out in those instruments can be found in chapter I, boxes 4, 5 and 6.

1. United Nations Personal Data Protection and Privacy Principles

493. The United Nations Personal Data Protection and Privacy Principles are as follows (see https://unsceb.org/principles-personal-data-protection-and-privacy-listing):

Fair and legitimate processing: The United Nations system organizations should process personal data in a fair manner, in accordance with their

mandates and governing instruments and on the basis of any of the following: (i) the consent of the data subject; (ii) the best interests of the data subject, consistent with the mandates of the United Nations system organization concerned; (iii) the mandates and governing instruments of the United Nations system organization concerned; or (iv) any other legal basis specifically identified by the United Nations system organization concerned.

Purpose specification: Personal data should be processed for specified purposes, which are consistent with the mandates of the United Nations system organization concerned and take into account the balancing of relevant rights, freedoms and interests. Personal data should not be processed in ways that are incompatible with such purposes.

Proportionality and necessity: The processing of personal data should be relevant, limited and adequate to what is necessary in relation to the specified purposes of personal data processing.

Retention: Personal data should only be retained for the time that is necessary for the specified purposes.

Accuracy: Personal data should be accurate and, where necessary, up to date to fulfil the specified purposes.

Confidentiality: Personal data should be processed with due regard to confidentiality.

Security: Appropriate organizational, administrative, physical and technical safeguards and procedures should be implemented to protect the security of personal data, including against or from unauthorized or accidental access, damage, loss or other risks presented by data processing.

Transparency: Processing of personal data should be carried out with transparency to the data subjects, as appropriate and whenever possible. This should include, for example, provision of information about the processing of their personal data as well as information on how to request access, verification, rectification, and/or deletion of that personal data, insofar as the specified purpose for which personal data is processed is not frustrated.

Transfers: In carrying out its mandated activities, a United Nations system organization may transfer personal data to a third party, provided that, under the circumstances, the United Nations system organization satisfies itself that the third party affords appropriate protection for the personal data.

Accountability: United Nations system organizations should have adequate policies and mechanisms in place to adhere to these Principles.

494. While the United Nations Personal Data Protection and Privacy Principles apply to data collected, stored and processed by the United Nations, the concepts set forth in these principles may be applied to civil registration, vital statistics and identity management systems. Applying these general principles ensures the protection and privacy of personal data, while still allowing such systems to function effectively and fulfil their intended purposes. How these principles might be applied to civil registration, vital statistics and identity management systems is discussed in the following subsections.

(i) Fair and legitimate processing

495. Fair and legitimate processing means that data should be processed in a fair manner, on the basis of consent or established rules. Generally, processing of data is lawful if it is by consent or pursuant to a legal obligation. To comply with the principle

of "fair and legitimate processing", legislation or regulations on civil registration, vital statistics and identity management should specify the data to be collected through civil registration and identity registration.

(ii) Purpose specification

496. The principle of "purpose specification" requires that data be processed only for their specified purpose. Legislation should clearly define the purposes – legal, statistical and administrative – for which the data will be used. This serves to notify the population of the purposes and uses of the data collected, in line with the purpose specification principle. If data are to be used for other purposes in the future, laws should be promulgated or amended to reflect these uses.

(iii) Proportionality and necessity

497. The principle of "proportionality and necessity" requires that processing of personal data be relevant, limited and adequate to what is necessary in relation to the specified purposes of personal data processing. While a wide array of information is collected during registration of vital events, this information is necessary in order to carry out the statistical and administrative functions of civil registration. The collection of this information therefore complies with the principle of proportionality and necessity. For identity registration, experts recommend that information collected for purposes of an identity credential be kept to the minimum needed to register, validate and authenticate an identity – for example, name, limited biographical information, and any biometrics (if provided for by law).

(iv) Retention

498. The principle of "retention" requires that data be retained only for the time that is necessary for the specified purposes. Civil registration, vital statistics and identity records (including population registers) are, by law, permanently maintained, even after a person's death. Accordingly, the retention principle permits the permanent retention of civil registration, vital statistics and identity records. The retention principle is closely related to the so-called "right to be forgotten", a right enshrined in the data protection laws of some countries. This concept maintains that individuals have the right to erasure of their personal data if the data are no longer needed. This right generally does not apply, however, where there is a legal obligation to retain the data, such as with civil registration, vital statistics and identity management systems. Accordingly, countries do not delete civil registration, vital statistics and identity records: they are kept and archived permanently.

(v) Accuracy

499. The principle of "accuracy" requires that data be accurate and, where necessary, up to date to fulfil the specified purposes. The continuous and permanent nature of civil registration and identity management helps to ensure that personal data are accurate, complete and kept up to date, in line with this principle.

(vi) Confidentiality

500. The principle of "confidentiality" requires that data be processed with due regard for confidentiality. This principle is closely related to the security principle below, and confidentiality may be maintained by complying with the security principle. In addition, confidentiality of civil registration data is maintained by permitting only persons with a legitimate interest to obtain vital event certificates or certified extracts of civil

registration records. Identity management officials should also ensure that identity credentials do not contain confidential information in or on the identity credential in a manner that permits persons without a legitimate interest to have access to this information. Laws should also define what information in the population register is available to the public. When information is shared with the statistics authority, procedures should provide for confidentiality while not imposing excessive barriers to data linkage and research activities in the public interest; for example, by requiring that individual records be anonymized, except for the unique personal identifier, before submission to the statistics agency.

(vii) Security

501. The principle of "security" requires that appropriate organizational, administrative, physical and technical safeguards and procedures be implemented to protect the security of personal data, including against or from unauthorized or accidental access, damage, loss or other risks presented by data processing. Different categories of government officials and individuals from non-governmental backgrounds have diverse needs for access to and use of data from civil registration, vital statistics and identity management systems. In keeping with the security principle, laws should address these diverse needs for all those who may be able to access the records, in order to prevent unauthorized or accidental access. This includes civil registration and identity management officials, vital statistics officials and independent researchers, other government officials, vendors and contractors, and non-governmental and private institutional users. These are discussed in the following paragraphs.

502. Access by civil registration and identity management officials: The law should allow access to vital event records and identity records, including the right to change or amend data, for official legal, administrative and statistical purposes only. The law should also establish that access to civil registration and identity records is limited to only the necessary officials. Regulations or instructions should establish a hierarchy for allowing different levels of access to the records, limiting this access to only that which is necessary for the specific legal, authorized administrative or statistical purpose in question.³⁶⁸

503. Access by national statistics authority officials and independent researchers: Individual records submitted from the civil registration agency to the statistics agency should be submitted with any identifying information, such as names, removed, while the unique personal identifier should be available to statisticians, so that errors and inconsistencies can be identified in the processing, editing and aggregating of records (see sect. F.2 above). This prevents unauthorized access to personal information and ensures that statistical data are used for their intended purpose. Academic and independent researchers may also wish to have access to civil registration data. Laws or regulations may provide that access to civil registration records may be made available to certain users for legitimate research purposes only. Access may include data at an aggregated level, and also individual vital statistics records. Access to individual records, however, should be subject to a user agreement on confidentiality and the use of data between the statistical agency and users. As a rule, identifying information is removed from the file to protect the privacy of individuals³⁶⁹ (see boxes 41 and 42 for details on how the dissemination of vital statistics microdata has traditionally been handled in Norway and the new online system in Norway for researcher access to microdata).

504. *Access by other government officials*: Other government agencies, such as health or social services and law enforcement, may have need access to civil registration and identity records. Regulations or instructions should establish procedures for other

³⁶⁸ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 485–488.

³⁶⁹ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 269 and 299.

Box 41

Norway: vital statistics microdata for research

Requests for access to the data of the population register in Norway are handled by the owner agency, the national Tax Administration. The Tax Administration distributes data directly and daily to a few large users, including Statistics Norway, the Norwegian Labour and Welfare Administration, the Directorate of Immigration and the Norwegian Mapping Authority. Other users (more than 2,200) receive the information through a private company according to an agreement with the Tax Administration. Users may only receive data after an application that explains the reasons for needing the data. The users only receive the data in the population register to which they are entitled, under law.

On the other hand, Statistics Norway handles requests for microdata for research projects, relating to persons, establishments and enterprises. As a part of the European Economic Area, Norway implemented the European Union General Data Protection Regulation in July 2018. According to the regulation, researchers from approved research institutions may use microdata for research purposes. They apply to Statistics Norway for the data for specified projects. In the application they include their own assessment of the privacy impact of the project in a data protection impact assessment. If the project includes health data, they also have to include an ethical assessment from one of the regional ethics committees for permission to use microdata. The costs of producing the data files are charged to the researcher.

Under the Statistics Act, the transfer of indirectly identifiable personal data outside the country's borders is not allowed. There have been some cases of misuse of data from the central population register, where conditions for receiving microdata were violated, such as the sharing of data with other researchers or the export of data to other countries. In some cases, the institution at fault has been denied access to microdata for a period of time. Before the researchers can have access to data, they are de-identified to an extent that makes them only indirectly identifiable. All variables that can be used to directly identify an individual are either removed or pseudonymized, such as name and identity numbers. Since it may be possible to use other variables, such as address, full date of birth, and other characteristics, to indirectly identify individuals, users need to sign a non-disclosure declaration. Microdata for research are always released for a specific project and must be deleted when the project is finished. Microdata for research include data from administrative registers, population censuses and sample surveys, and cover labour market, population, social security, income, wealth, educational activity and attainment, health and establishments and enterprises.

According to the National Registry Act, public authorities and enterprises are able to obtain non-confidential information from the population register through lists based on personal identification numbers. Private businesses and entities are able to obtain non-confidential information from the population register on named and identifiable individuals. The principle of confidentiality will not apply to information elements such as name, date and place of birth, gender, personal identification number, citizenship, marital status and date of death. The confidential items will include, among other attributes, address, parents, spouse, children and adoption.

agencies to request access to or copies of records or data for official government purposes and should provide that any disclosure of information that might identify a person has been specifically authorized with the national registrar, either by legislation, regulation, instruction or agreement.³⁷⁰ As with access by civil registration and identity officials, access should be permitted only to the extent necessary for the specific administrative purpose and levels of access should be established.

Box 42

Norway: instant access to microdata via the domain microdata.no

The new online service microdata.no gives researchers instant access to register microdata at a low cost without any application procedure and without violating confidentiality. This is made possible by creating a platform where the actual data are invisible for the users. They see nothing but microdata, and all output are made confidentially safe by a built-in digital disclosure control.

- 1. The service was developed in a joint venture between the Norwegian Centre for Research Data and Statistics Norway. The platform is built on four principles:
- 2. Online remote access.
- 3. Microdata are invisible, only statistical output will show.
- 4. Users should be allowed to combine data from different sources.
- 5. All statistical results should be confidentially safe.

The metadata part of the platform is open to the public. The analysis environment may be accessed by researchers and students at accredited institutions. Users log in to the system with a smartphone-based procedure built on the Norwegian national identity number.

Once logged in, users are free to create any population, connect it to any set of variables available in the service, and perform all analyses available through the built-in analysis tool. All end-user transactions (such as analytical or data transformation command) are subject to automated introspection, monitoring and disclosure control before the result of the transaction is returned.

At the launch, microdata.no included 10.2 million persons and 124 variables with the longest time series dating back to the early 1960s. Data will be updated yearly, the number of variables will be extended, and new units, such as corporations, will be added.

Data are kept in a safe environment at Statistics Norway. User scripts are created outside the firewall and processed inside it. Each processing returns identical output. The scripts may be downloaded and shared with colleagues or peers.

505. Access by vendors and contractors: Civil registration and identity management agencies may have need to contract technology firms and other vendors to carry out specific functions of the system. For example, the identity management agency may contract a vendor to provide authentication services, including point-of-service equipment and platform software; or enrolment in the programme might be subcontracted to a variety of entities, as with the Indian Aadhar system. Vendors' and contractors' access to data should be limited to only that which is essential to carry out the task required. Contracts between the government agency and vendor should contain provisions that explicitly set out what data may be accessed, how it may be accessed and used, and limit the ability of the vendor or contractor to store and retain those data to the extent that is necessary for the specified task. As with government officials, contractors should have protocols that establish a hierarchy of levels of access.

506. Access by non-governmental and private institutional users: Legislation or regulations should address access by private institutions that use the identity management system for authentication purposes. The legislation or regulations should address the level of access, including access to only those data that are necessary for authentication. The manner of access to those data should ensure that the private institution does not have the ability to collect and store the data, but only to use them for the authentication purpose at the time of request. Specific procedures for accessing data should be detailed in instructions or a user agreement. 507. To ensure that only authorized personnel have access to data, some countries have a system to monitor and track system users who have access to records. Policy-makers may wish to consider imposing a general requirement that digital systems be designed in such a manner as to automatically and continuously keep a log of personnel that have access to records. Instructions may address technical specifications and procedures for such a system.

508. In addition to requiring protection against unauthorized access, the security principle also requires protection against damage, loss or other risks presented by data processing, such as unauthorized modification or disclosure during transmission, storage and archiving.

509. Data are particularly vulnerable during transmission and therefore measures should be put in place to safeguard them during transmission. Specific processes to protect data will differ for manual and digital systems. For manual systems, records should be physically protected from tampering and improper access and use when being transferred from local registrars to the central authority. Where registration records are transmitted electronically, end-to-end encryption should be used. Measures and technology used to ensure privacy and security should be set out in instructions so that they may be more easily amended as technology advances.

510. Special consideration should be given to issues of privacy and security when record linking is used, as linking may provide opportunities for inadvertent and inappropriate disclosures.³⁷¹ If record linking is employed, regulations should address how access to information and data elements will be limited to only those officials with authorization and need to access that information.

511. The protection of data from loss and destruction during storage and archiving requires protocols for maintenance and backup systems. For digital civil registration and identity management systems (including the population register), procedures for storing and preserving records rely on current general practices for maintenance and backup. A common approach consists of having two servers simultaneously online and mirroring each other so that each interaction and input of a new record is recorded on both. Another common practice is to have daily backups from the main server maintaining the database or population register, thus ensuring the preservation of records. Frequently, as a risk mitigation strategy, the mirror or backup server is located in a different geographical area, even a different country. If this course of action is taken, data protection measures for the mirror server must be taken, in particular if the service is outsourced to a private company.³⁷²

512. Maintenance and backup systems should be required to prevent the loss and ensure the security of civil registration, vital statistics and identity data. These requirements are generally spelled out in internal agency procedures, so they may be revised in response to needs. Legislation should not address the type of technology used, the frequency of backup, or other details regarding maintenance and backup procedures, as this may lock in the specified maintenance and backup system.

(viii) Transparency

513. The transparency principle states: "Processing of personal data should be carried out with transparency to the data subjects, as appropriate and whenever possible. This should include, for example, provision of information about the processing of their personal data as well as information on how to request access, verification, rectification, and/or deletion of that personal data, insofar as the specified purpose for which personal data is processed is not frustrated."

³⁷² Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 251.

³⁷¹ Ibid., para. 425.

514. To comply with the transparency principle, legislation should provide that all persons have a right to know how their civil registration and identity data are collected, used, stored and shared. The law should also establish the right of individuals to correct and modify their own civil registration and identity records, subject to proper documentary or other evidentiary proof, and challenge improper use of data, in accordance with provisions of the law. Provisions that address amendments and corrections to vital events records and identity documents (see, sect. C.6), and also provisions on administrative and judicial review processes (see, sect. H.2), help to ensure these rights. Providing for sanctions and penalties (see, sect. H.3) ensures that data controllers are held accountable for compliance, in accordance with the accountability principle. As an extension of the privacy principle, some countries require that a controller of data communicate a personal data breach to an individual, without undue delay, if the breach is likely to result in a risk to their rights or freedoms.

(ix) Transfers

515. This principle mandates that data should transferred to a third party only if the data collector satisfies itself that the third party affords appropriate protection for the personal data. This principle has implications for cross-border datasharing, such as data-sharing between national registrars, which is helpful in keeping civil registers, identity registers and population registers up to date. Legislation should mandate that civil registration, vital statistics and identity management systems may share data with another country if that country provides for an adequate level of data protection. How "adequacy" is determined may be addressed in regulations. If a country is not deemed to have adequate data protection laws, the data should only be shared subject to appropriate safeguards, such as an enforceable confidentiality and data protection agreement. This transfer principle may also have implications for data transfers within a country if other agencies are not subject to the same data protection rules as the civil registration, vital statistics and identity management systems. This may be the case if a country does not have a general data protection law. Therefore legislation on civil registration, vital statistics and identity management should mandate data protection requirements for all agencies with which civil registration, vital statistics and identity records may be shared.

(x) Accountability

516. The accountability principle requires entities that collect data to have adequate policies and mechanisms in place to adhere to these principles. To comply with the accountability principle, civil registration, vital statistics and identity management systems should be subject to general data protection laws that reflect the above principles, or laws on civil registration, vital statistics and identity management themselves should reflect these principles.

2. Data protection, privacy and security summary

517. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Data	protection, privacy and security	Yes/No
includ	e concepts set out in the United Nations Personal Data Protection and Privacy Principles led in the country's laws (in general data protection laws or laws on civil registration, tatistics and identity management)?	
Does	the country's law require compliance with the "fair and legitimate processing" principle?	
Does	the country's law require compliance with the "purpose specification" principle?	
Does	the country's law require compliance with the "proportionality and necessity" principle?	
Does	the country's law require compliance with the "retention" principle?	
Doest	the country's law require compliance with the "accuracy" principle?	
Doest	the country's law require compliance with the "confidentiality" principle?	
Does includ (a)	the country's law require compliance with the "security" principle? ling: Is access to and use of data limited to only necessary officials?	
(b)	Has a hierarchy been established that allows different levels of access to the records?	
(c)	Is access to records by civil registration, identity management, and other govern- ment officials permitted only to the extent necessary for the specific administrative purpose?	
(d)	ls access to data by independent researchers subject to confidentiality agreements and proper procedures to protect personal data?	
(e)	Are vendors' and contractors' access to data limited to only those data which are es- sential to carry out the task required?	
(f)	Are private institutional users of authentication systems prevented from storing accessed data?	
(g)	Are digital systems designed in such a manner as to automatically and continuously keep a log of personnel that have access to records?	
(h)	Are procedures established to ensure the confidentiality of vital event and identity records during transmission, storage and archiving?	
(i)	Are backup systems maintained?	
Doest (a)	the country's law require compliance with the "transparency" principle, including: Do individuals have a right to correct and amend their data, in accordance with provi- sions of law?	
(b)	Do individuals have a right to appeal decisions made by civil registration and identity management officials?	
_	the country's law require compliance with the "accountability" principle?	

1. Monitoring and inspection

(a) Monitoring and inspection of civil registration and identity registration offices

518. A performance-monitoring programme is an integral part of civil registration and identity management systems. Routine monitoring and inspection of a registrar's work is required in order to continue to improve the efficiency, effectiveness, completeness and quality of the systems. Periodic information on the systems' performance provides information on whether the systems are being conducted effectively. For example, the *Principles and Recommendations for a Vital Statistics System, Revision 3,* recommends tracking the total number of registrations of each type of vital event, at least on a monthly basis, and at every geographical or administrative level. Similarly, the total number of certificates issued for each type of vital event should be tracked periodically and at every geographical and administrative level. With these indicators, a manager, national or local, will be able to detect unexpected drops or spikes in registration flow.³⁷³ For a complete discussion on monitoring the effectiveness of the civil registration system see *Principles and Recommendations for a Vital Statistics for a Vital Statistics*.

³⁷³ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, paras. 203–204.
See also Principles and Recommendations for a Vital Statistics System, Revision 3, para. 335. *System, Revision 3,* part three, chapter I, and *Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1,* chapter IV. As with the civil registration system, performance of the identity management system should also be monitored.

519. Legislation should authorize and require the national registrar and head of the identity management authority to implement a performance-monitoring programme and conduct routine and ad hoc inspections of local civil registration and identity registration offices, and also of the overall system itself. Details of the monitoring and inspection programme should be addressed in instructions, which should include the method and frequency with which routine inspections of local registrars are conducted. In addition, instructions should address procedures for conducting ad hoc inspections, as necessary, to respond to special situations, such as an office that is underperforming or is suspected of abuse of authority.

(b) Monitoring and evaluation of other institutional processes

520. Completeness of civil registration can only be achieved if the legal obligation of other stakeholders – such as the health sector, police, coroner's office and custodians of funeral, burial and cremation facilities – to report or notify vital events is monitored and enforced. A system of supportive supervision and monitoring is likely to be more effective than a system of fines and penalties, in part because the infrastructure required to adjudicate fines and penalties may not be available. For example, courts may be backlogged, appeal procedures may be lengthy, and collection of fines may be difficult.³⁷⁴ By contrast, a good system of reporting, monitoring and feedback – including regular reports from those obliged to notify vital events which can then be compared against birth and death registers – may be more feasible and effective.

521. Legislation should require the monitoring of institutions that are responsible for reporting or notifying vital events. The specific monitoring process may be set forth in regulations or instructions.

2. Administrative and judicial review

522. Decisions made by officials within the civil registration, vital statistics and identity management system can have legal consequences with a fundamental impact on a person's life. Reasonable minds may disagree about how to resolve certain difficult situations and therefore decisions made by civil registration and identity management officials should be subject to administrative and judicial appeal. These procedures are often set out in country's administrative procedure law.

523. If a country does not have applicable administrative procedure law, legislation on civil registration, vital statistics and identity management should provide for an appeal process. Policymakers should consider requiring administrative appeal before appeal to the courts. This will prevent the overloading of the courts, afford the civil registration and identity management agencies the chance to correct any errors and establish a record upon which the court can act if satisfactory relief is not granted in the administrative process. An administrative process generally provides for appeal from a decision at the local level to a higher-level (such as provincial), and up to the national level. After exhaustion of this process, an appeal may be taken to a court with appropriate jurisdiction.

524. Legislation should allow for appeal against registrar decisions, for example, a refusal to register a vital event or issue an identity credential. Legislation should permit appeal within prescribed periods of time. Regulations or instructions should con-

³⁷⁴ Principles and Recommendations for a Vital Statistics System, Revision 3, para. 294. tain detailed procedures for processing the appeal so that the national registrar will have the competent authority to rule on the filed appeal. In all cases, if satisfactory relief has not been granted through the administrative appeal process, an individual should be permitted to appeal to a court with appropriate jurisdiction.

3. Offences and penalties

(a) Disciplinary sanctions, civil and criminal penalties for failure to carry out duties and misconduct by civil registrars, statisticians and identity management officials

525. Civil registrars, statisticians and identity management officials, as public servants, are expected faithfully to carry out the law. Where civil registrars, statisticians or identity management officials fail to carry out duties or abuse their authority, legislation should explicitly provide for penalties.³⁷⁵ There should be clear disciplinary procedures and penalties for instances of deliberate misconduct by registrars, including fraudulent registrations or inappropriate disclosures,³⁷⁶ and also for abuse of powers and discretion. In criminal cases, the head of the civil registration, statistics or identity management agency should be accountable to the competent law enforcement authorities. Disciplinary procedures and penalties are often set out in other laws, including laws pertaining to civil servants and the civil and criminal code. Regardless of where in a country's legal code these provisions are addressed, the law should provide for disciplinary sanctions, and also civil and criminal penalties, for instances where a civil registrar, vital statistics or identity management official:

- (a) Refuses to register a vital event or its characteristics, where the informant has provided accurate information;
- (b) Refuses to register an individual in the identity management system, where there is a right to such registration;
- (c) Loses, damages or alters any registered records or permits such loss, damage or alteration to occur;
- (d) Loses or alters any statistics or permits such loss or alteration to occur;
- (e) Breaches a person's right to privacy and protection of that person's data;
- (f) Has been found guilty of violating the provisions of legislation or regulations on civil registration, vital statistics and identity management;
- (g) Fails to fill out and submit statistical documentation;³⁷⁷
- (h) Fails to transmit data in accordance with the provisions of civil registration, vital statistics and identity management law.

Whether a violation merits disciplinary sanctions or civil or criminal penalties should be determined by the severity of the violation, in accordance with national law.

(b) Offences and penalties for other government officials

526. Legislation should provide for disciplinary sanctions and civil penalties for other government officials that fail to comply with the law, including entities that are required to notify vital events to the civil registrar and government officials that fail to transmit information to the population register as required under the law. These provisions may be addressed in laws other than civil registration, vital statistics and identity management laws, such as laws pertaining to civil servants and the civil and criminal code.

³⁷⁵ Ibid., paras. 338–339.

³⁷⁶ Ibid., para. 326.

³⁷⁷ Ibid., para. 338.

(c) Third party penalties

527. Third party users of the system, including those using the system for authentication purposes, must be subject to civil and criminal penalties for failure to comply with the law, including data protection and privacy provisions. These penalties may be spelled out in a country's civil and criminal code.

(d) Penalties for the general public: late and delayed registration, fraudulent action

528. Care must be exercised in imposing sanctions, in particular penal sanctions, for late and delayed registration. Contrary to what might be expected, sanctions discourage registration and entail the risk of keeping important segments of the population from registering vital events or lead to false declarations of important data, notably the date of occurrence.³⁷⁸ For that reason, policymakers should avoid penalties for individuals for late or delayed registration.

529. The law should provide for criminal penalties for fraudulent acts, such as providing false documentation to civil registration or identity management authorities, or falsifying or altering certificates or identification documents. These should include criminal penalties for government officials who take part in, or aid and abet, this type of fraudulent activity. As with other penalties, these provisions may be contained in a country's civil and criminal code.

4. Revenue to fund the system

Fee collection into the system

530. In order to support the sustainability of systems, the law should provide that fees and other revenue collected through civil registration, vital statistics and identity management systems are allocated to funding those systems.

5. Compliance, enforcement, rights and remedies summary

531. To aid in drafting, the following checklist provides a summary of the topics discussed above that should be addressed in legislation on civil registration, vital statistics and identity management. The questions are structured in such a way that, if good practices are being followed, the answer should be "yes".

Compliance, enforcement, rights and remedies	Yes/No
Is there an established procedure for monitoring and inspection of the civil registration and identity management system?	
Is there an established system of monitoring institutions that are responsible for reporting or notifying vital events?	
Are decisions of civil registrars and identity management officials subject to administrative and judicial review?	
Are disciplinary sanctions, and civil and criminal penalties established for cases where a civil registrar, statistician or identity management official: (a) Refuses to carry out duties?	
(b) Violates provisions of law?	
(c) Engages in other misconduct?	

³⁷⁸ Ibid., paras. 371–373.

Compliance, enforcement, rights and remedies (continued)	Yes/No
 Are sanctions and penalties established for other government officials that fail to comply with provisions of the law including: (a) Entities that are required to notify events to the civil registrar? (b) Government officials that are required to transmit information to the population register? 	
Are third party users of the system, such as institutions that use authentication services, subject to civil and criminal penalties for failure to comply with the law, including failure to comply with data protection and privacy provisions?	
 Are criminal penalties established for fraudulent acts, such as: (a) Providing false documentation to authorities? (b) Falsifying or altering documents? (c) Aiding and abetting such acts? 	
Is revenue collected from civil registration, vital statistics and identity management systems used to fund those systems?	

I. Transitional provisions

532. Transitional provisions may be necessary to ensure that the transition from the existing law to the new law is properly implemented. If all provisions of the new law come into effect immediately, before stakeholders are ready and able to implement those provisions, stakeholders may find themselves in violation of the law. For example, if the new law requires heads of health facilities to notify the registrar of births and deaths that occur in their facility but there are no systems in place to enable the facility to record all required information and transmit it to the local registrar, the head of the health facility would be in violation of the law.

533. To avoid this situation, the law should contain transitional provisions phasing in the new requirements. Such a provision might state, for example, that section X of the law (the section that requires health facilities to notify the registrar of births and deaths) comes into force on a specified date in the future, which could be one, two or even more years in the future. During this transitional time, the civil registration agency should work with the health facilities to ensure that staff are adequately trained to collect the required information. If health facilities are to submit information online, civil registration authorities should work with health facilities to ensure that the systems are interoperable. If a paper-based system is used, health facilities must have a sufficient supply of the required forms and understand the procedures to submit the forms to the registrar on a timely basis.

534. In many countries, computerized and paper-based registration systems will be used concurrently for many years, particularly if some parts of the country lack Internet connectivity. If this is the case, regulations and instructions can be developed that set out the steps that registrars must follow when collecting, storing and transmitting information to the central registrar for both paper-based and digitized systems. If the goal is to have all registration offices computerized by a specific date, the regulations governing paper-based processes can be phased out over time. Mongolia provides an example of a country with dual processes for districts that have online access to the central database and districts that do not have online access (see box 30 above for details).

535. Transitional provisions should allow for pilot projects to be developed during the phase-in period, in order to develop processes that work best for the country. As new procedures and systems are honed, they can be rolled out over a period of years around the country. Drafters of legislation should be realistic regarding the time frames for pilot projects and roll-out. New systems can take years to develop and the transitional provisions should allow adequate time for this.

Chapter V Other laws and policies that support civil registration, vital statistics and identity management systems: incentives, medical profession training and technology

536. Much of the information in the preceding chapters of these Guidelines addresses how a country's laws on civil registration, vital statistics and identity management can create an enabling environment for civil registration, vital statistics and identity management systems, with the aim of achieving complete and universal civil registration; the timely and accurate production and dissemination of vital statistics generated from civil registration; and the provision of identity credentials to individuals for proving legal identity and exercising their human rights. Creating an enabling environment includes removing barriers to civil and identity registration – such as fees and penalties, inefficient and burdensome procedures, distance to registration offices, social and language barriers, and other exclusionary policies. Effective laws on civil registration, vital statistics and identity management may also place the onus on civil registration and identity registration officials to proactively reach out to remote or marginalized communities and require other government entities, such as health-care facilities, to take on the responsibility of acting as informants for vital events.

537. Even with these best practices in place, however, there may not be 100 per cent compliance by institutions and individuals. For example, local registrars may not sufficiently engage in outreach and some health facilities may fail to register all events that occur in their facilities. Vital events that happen outside facilities, where the individuals themselves or the family might be directly responsible for registering these events, are particularly likely to be unregistered. If individuals do not perceive any personal benefit from civil registration, these individuals may not take the time to register vital events. Similarly, individuals may not perceive any benefit from registering their identity and receiving an identity credential, regardless of whether identity registration and credentials are mandatory or not.

538. The present chapter focuses on how to create incentives for institutions and individuals to comply with civil registration, vital statistics and identity management obligations. Whereas measures to remove barriers and otherwise create an enabling environment are generally addressed in laws on civil registration, vital statistics and identity management, measures to incentivize institutional compliance and increase individual demand for civil registration and identity documents are commonly addressed in other laws and policies. Below, measures are discussed that may help countries to increase institutional compliance and individual demand for civil registration and identity documents, and suggestions are made as to how these policies might be integrated into other laws. The present chapter also addresses laws that may be adopted, other than specific laws on civil registration, vital statistics and identity management, to improve cause of death information and facilitate the use of technology in civil registration and identity management systems. 539. In addition to integrating these measures into laws, education and communication campaigns also are necessary so that people are aware of the benefits of civil registration. For further information on education and communications campaigns, see the *Handbook on Civil Registration*, *Vital Statistics and Identity Management Systems: Communication for Development*.

A. Incentives for institutional compliance

540. Civil registration and identity registration rates can vary greatly within a country. Poorer, rural, remote or mountainous areas often have lower registration rates than more urban or economically developed areas, due to greater difficulty in reaching registration offices and lower levels of knowledge regarding the benefits of registration. Obligating and empowering local civil and identity registrars to conduct public outreach campaigns and organize mobile units can help to increase registration rates in these areas. Laws requiring civil registrars to be proactive may not by themselves be sufficient, however. In addition, particularly in decentralized systems, central authorities may struggle to get registration records from local authorities in a timely manner. To incentivize compliance, proactive action and timely transmission of information by local registrars, some countries have linked funding of local registration offices to the attainment of certain criteria or targets. For example, in Peru, both the central civil registration agency (RENIEC) and municipal registration offices have the authority to register births and issue certificates. To ensure that local municipalities transfer birth registration information to RENIEC in a timely manner, the central Government has incorporated this requirement into its performance-based payment plan for municipalities; municipalities only get paid if the civil register entries are received centrally.³⁷⁹ Similarly, funding may be used to incentivize health institutions to comply with civil registration requirements: those institutions that reach target compliance levels may receive higher levels of funding. Likewise, funding incentives may be used for all types of partners and stakeholders in the civil registration, vital statistics and identity management system.

541. Tying funding to performance can be an effective way to increase institutional compliance. When doing this, however, countries must be careful not to penalize those areas of the countries that have the greatest need. For example, as noted above, remote and mountainous regions often have the lowest civil registration and identity registration rates. These areas often are poorer regions and have the greatest need of funding in order to organize mobile units and conduct outreach and education campaigns. Yet, if funding is tied solely to registration rates, these areas may be deprived of the very funding that they need to increase registration rates. Countries should be careful to ensure that funding incentives do not create a low registration rate trap, with low funding contributing to low registration rates and low registration rates leading to lower funding.

542. Policies that address the level of disbursement of funds to registration offices, civil registration, vital statistics and identity management stakeholders, and government or private facilities may be included in laws or regulations, but more often detailed funding criteria are spelled out in agency procedures. This affords the Government and the central offices of agencies greater flexibility in determining the disbursement of funds to incentivize compliance, proactive action and timely transmission of information.

B. Creating individual demand for identity credentials

543. Country practices vary as to whether registering for and obtaining a national identity card or other credential is mandatory, voluntary, or even possible. Even in countries where identity cards or credentials are mandatory, many people may still

³⁷⁹ Alan Gelb and Anna Diofasi Metz,, *Identification Revolution: Can Digital ID be Harnessed for Development?*, p. 120. not register if they perceive no benefit to having a national identity card or credential. Many countries have found that linking the national identity credential to provision of services is the best way to incentivize identity registration. For example, a national identity card is required in many countries to vote (or register to vote) and to obtain a passport.

544. The rights to vote and obtain a passport, however, are often tied to citizenship. If a country aims to have all residents register and obtain a national identity credential, presenting the national identity credential must be tied to a wide variety of benefits and services; these benefits must be available to all residents within the territory. To this end, countries may consider requiring proof of identity in the form of the national identity credential in order to receive many types of services, such as services under a national health-care system and social service benefits. The national identity credential may be required as proof of identity to open a bank account or to obtain a driver's licence. The Government of India has made access to the free school midday meal for children contingent on proof of participation in the Aadhaar identification programme, either through an Aadhaar number or by some other form of Aadhaar authentication. In Indonesia, some areas experimented with creating incentives for child participation in the identification programme, including forming partnerships with local businesses to provide discounts for school supplies and staple foods for parents of children with the national child identity card ("kartu identitas anak", or KIA).³⁸⁰

545. These types of requirements and policies are generally not included in laws on civil registration, vital statistics and identity management. Rather, they are laid down in laws that pertain to those particular services. For example, so-called "know your customer" obligations, a process by which a business identifies and verifies the identity of its clients, are often included in banking laws. The requirement to provide proof of identity in order to receive health-care benefits or other government services would ordinarily be found in regulations or agency instructions that pertain to those services. Whether the requirement is contained in legislation, regulations or instructions is a decision to be made by a country's lawmakers, bearing in mind that regulations and instructions are easier to amend than legislation.

546. Most countries have more than one type of government-issued identity document. In addition to a national identity credential (if available), countries issue passports and driver's licences. Some countries issue national health-care system cards and documents that entitle the bearer to other forms of government assistance. All of these are official documents and may, depending on the country, be accepted as proof of identity. Some countries that have a mandatory national identity credential have low registration rates for the credential because other forms of proof of identity are readily accepted for public and private services. This decreases demand for the national identity credential. If a country aims to have the entire population (or population above a certain age) obtain the national identity credential, the laws, regulations and procedures that require proof of identity for services should specify that the national identity credential is the only acceptable form of proof of identity.

547. When linking identity registration and provision of a national identity credential to provision of services, countries must ensure that they do not exclude individuals from services to which they are entitled. If access to a service or exercise of a right is tied, by law, to identity registration and provision of an identity credential, then the State has an obligation to ensure that barriers to identity registration are removed, and that all persons residing within the territory of the country have the means to obtain an identity credential. ³⁸⁰ Cyril Bennoua, "Will child ID cards really protect children's rights?" *The Jakarta Post*, 6 April 2016.

Box 43

Chile: cooperation between the Civil Registry Service and the Ministry of Education

In Chile, the Civil Registry Service (Servicio de Registro Civil) shares the data of individuals in the age range of 7–23 years with the Ministry of Education to help in defining potential beneficiaries for the preferential school subsidy. This subsidy is an initiative that provides additional resources to educational establishments for each priority student (students for whom the socioeconomic conditions of their homes can hinder their ability to succeed in school) to implement educational improvement plans focused on priority students. In 2018, the Civil Registry Service and the Ministry of Education signed an agreement to assign a unique personal identifier (known in Chile as "rol único nacional" or RUN) to migrant children with irregular migratory status enrolled in Chilean schools, so that the children would have access to all rights guaranteed by the Chilean social protection system.

C. Creating individual demand for civil registration

548. As with increasing demand for national identity credentials, an effective way to increase demand for civil registration is to link registration of vital events to access to key services. Examples of services that may be linked to birth, death, marriage and divorce registration are discussed below. As with national identity credential provision, linking civil registration to key services should not have the unintended effect of excluding people from the service that they are seeking. If civil registration is required for access to a service, the State has an obligation to ensure that barriers to civil registration are removed and those who were not registered at the time of occurrence of the vital event have the means to register later. In no event should an essential service be withheld because of lack of registration; rather, the service should be provided while the civil registration authority works to resolve the issue.

1. Birth registration

549. If there is a mandatory national identity credential that is the sole form of acceptable proof of identity, the single most effective way to encourage birth registration is to make birth registration a prerequisite for national identity registration. This requirement not only helps to validate an identity during identity registration, it also helps to incentivize birth registration. Demand for national identity cards and other credentials is often higher than the demand for birth certificates because, as discussed above, a national identity credential is often required to exercise the right to vote, to obtain a passport and to obtain health-care and social service benefits. Making birth registration a prerequisite to obtaining a national identity credential can therefore provide a strong incentive to register a birth. This requirement, however, should not prevent provision of an identity credential. Ideally, if a person whose birth is previously unregistered applies for an identity credential, identity registration officials would facilitate delayed birth registration. This is made easier if the identity registration and civil registration functions are the responsibility of one agency. Even if they are not, however, cooperation between the two agencies can facilitate delayed birth registration. Identity registration officials may be deputized as civil registrars or may act as notifiers for delayed birth registration. Because identity registration officials are tasked with collecting information to enrol and validate the identity of an individual, they may already have collected information that could be used for delayed birth registration. Consequently, coordination between identity registration and civil registration officials can aid in increasing birth registration rates.

550. The requirement to provide proof of birth registration in order to enrol in the identity management system and obtain a national identity credential is generally contained in identity legislation or regulations. This will ensure that the requirement is binding and alternative forms of proof of identity are not accepted as substitutes. The process by which the civil registration and identity management agencies cooperate to ensure that those seeking a national identity credential are able to register a previously unregistered birth may be set out in regulations or instructions, or a memorandum of understanding between the agencies.

551. Many countries do not have a national identity credential or have low rates of registration for the national identity credential. Accordingly, other incentives for birth registration may be necessary. Many countries have had success in increasing birth registration by linking birth registration to access to services, such as education, health care and social services. Requiring proof of birth registration (a birth certificate) in order to enrol in primary school can be particularly effective, as almost all countries provide free and compulsory primary education, as required by the International Covenant on Economic, Social and Cultural Rights (art. 13 (2)). Caution should be exercised, however, as no child should ever be denied the right to enrol in school if that child's birth is not registered. Instead, school officials should facilitate the child's delayed birth registration agency. In some countries, local registrars attend school enrolment drives to register the birth of those children not previously registered. In others, school officials might act as informants for the child's late birth registration.

552. The requirement to show a birth certificate to enrol in primary school may be set out in legislation, regulations, or even instructions on how to complete the enrolment application. Cooperation between the civil registration agency and the ministry responsible for education may occur in several ways. The ministry may be invited to take part in an inter-agency coordination committee on civil registration, vital statistics and identity management or the ministry and the civil registration authority may enter into a memorandum of understanding.

553. Linking birth registration to access to the national health-care services and other social service programmes, such as cash transfers and child grants, has also proved to be extremely effective. In some countries, income transfer programmes require beneficiaries to provide proof of birth registration (a birth certificate) before taking part in the programme and, if needed, they support beneficiaries through the process of delayed birth registration. Linking birth registration with these programmes provides targeted intervention, as these programmes help the poorest segment of the population, which is often less likely to register a birth.

554. A study in India and Zimbabwe examined whether birth registration rates were higher for those enrolled in a cash transfer programme conditioned upon birth registration. These studies found birth registration rates increased by 14.6 and 16.4 per cent, in India and Zimbabwe, respectively, in the group participating in the cash transfer programmes compared to control groups that did not take part in these programmes.³⁸¹ In other countries in which cash transfer and child grant programmes are conditioned on birth registration, these programmes have contributed to national birth registration rate increases of anywhere between 20 and 63 percentage points. The table below demonstrates how these programmes have contributed to birth registration rate increases in six countries.

555. As with education, requiring birth registration as a prerequisite to taking part in cash transfer or other social benefit programmes can be included in regulations or

³⁸¹ World Bank, Incentives for Improving Birth Registration Coverage: A Review of the Literature (Washington, D.C., 2018), pp. 6–7. agency instructions. As highlighted above, however, cooperation between civil registration authorities and social service programme officials is crucial to ensuring that the birth registration requirement does not prevent individuals from receiving benefits to which they are entitled. in addition, birth registration need not necessarily be a formal requirement to produce results. In Colombia, birth registration was not a formal requirement of the cash transfer programme. At the same time, the civil registration officials worked with cash transfer programme officials to encourage birth registration, resulting in higher rates of birth registration for programme participants.³⁸²

556. Birth registration may also be linked to obtaining a passport or registering to vote. Both these procedures generally require proof of citizenship. While a birth certificate may not prove citizenship, it can be essential in establishing citizenship, by proving place of birth or parents' nationality. Requiring proof of birth registration to obtain a passport or voter registration card can strongly incentivize birth registration. In some countries, a person can obtain a passport or voter registration is required to obtain that national identity card, as discussed above. If, however, birth registration is required to obtain a passport or to register to vote. This requirement, whether set out in legislation, regulations, or agency instructions, strongly incentivizes birth registration. Here again, however, a birth registration requirement should not deny individuals a right to which they are entitled as citizens. Officials should facilitate delayed birth registration for those registering to vote or applying for a passport who have not previously registered their birth.

557. Other incentives include requiring a birth certificate as a form of proof of identity in order to obtain a drivers' licence. In addition, a birth certificate may be required to prove legal age for marriage and is a way to combat child marriage.

558. Some countries provide direct cash or in-kind incentives to register the birth of newborns. Ukraine provides an incentive for timely birth registration in the form of a lump-sum childbirth grant.³⁸³ In-kind goods incentives may include newborn kits, including items such as diapers, bottles and baby clothing, or may be the provision of household goods. Some countries also provide cash stipends for health care.³⁸⁴

	Programme type	Location	Impact
equirements	 Conditional cash transfer programme Child grant programme Noncontributory pension programme 	 Brazil Bolivia Nepal Lesotho South Africa 	 Contributed to national birth reg- istration increase of 20 percentage points Contributed to national birth reg- istration increase of 13 percentage points Birth registration of ben- eficiaries 48 percent higher than nonbeneficiaries Contributed to national birth reg- istration increase of 37 percentage points Contributed to national birth reg- istration increase of 63 percentage points

2. Death registration

559. In many countries, death registration rates are significantly lower than those of birth registration. Unlike a birth certificate, which individuals may need to obtain services during their lifetime, the next of kin of the deceased often perceive little benefit from registering a death. The key to increasing death registration is to tie benefits

³⁸³ United Nations Children's Fund, Every Child's Birth Right: Inequities and Trends in Birth Registration (New York, 2013), p. 13.

³⁸⁴ Handbook on Civil Registration and Vital Statistics Systems: Management, Operation and Maintenance, Revision 1, para. 480.

Source: World Bank, Incentives for

Improving Birth Registration Cov-

erage: A Review of the Literature.

³⁸² Ibid., p. 7.

Box 44

Pacific islands: increasing civil registration through incentives and cooperation

Island countries throughout the Pacific have instituted innovative programmes to boost civil registration.

- Nauru has an essentially complete registration of births and deaths, achieved, in part, by its system of granting funeral assistance payments and a child payment at birth, which are linked to formal registration.
- In 2018 the Government of Fiji introduced a 1,000 Fiji dollars grant under the country's Parenthood Assistance Payment scheme, which is linked to birth registration and the possession of a birth certificate.
- In Niue, the Government introduced a Baby Incentive Grant system, in October 2016, which requires that a baby's birth be registered. This grant has also encouraged the re-registration of births to resident mothers that occurred overseas. As a large number of births to Niueans occur overseas, this is important to the Government for complete vital statistics reporting.
- In Vanuatu, the Department of Civil Registry and the Ministry of Education signed a
 memorandum of understanding in 2008 outlining cooperation, with the goal of reaching previously unregistered children through schools. Through this arrangement, parents of unregistered children complete the registration form at school; approved and
 authorized head teachers and principals then sign the completed registration forms;
 and the completed forms are transmitted to the provincial education office where registration is completed. A birth certificate is sent back to school for collection. This system benefits both the Civil Registry and the Ministry of Education; it encourages birth
 registration by improving access, and allows the Ministry to track student progress by
 using birth certificate numbers as unique identifiers.

receivable by the next of kin to proof of death registration. For example, a surviving spouse may be required to provide proof of death registration in order to receive the pension benefits of the deceased and inheritance, or establish other property rights. A death certificate may also be required to permit remarriage.

560. Some countries provide direct cash incentives for death registration. In Cambodia, some communes offer small cash payments as an incentive to register deaths. Brazil covers funeral expenses for the poor if the family registers the death. In Nepal, widowhood pensions are provided to women who can provide death and citizenship certificates for their deceased husbands.³⁸⁵

561. Death registration should be required in order to receive a permit to bury, cremate or otherwise dispose of a body (see chap. IV, sect. C.3 (m)). This incentivizes death registration. Many countries require custodians of funeral, burial and cremation facilities to record the identity information of deceased persons for whom they provide services and report this information to the registrar. This may provide either an alternative way to register the death or a way to verify identity of the deceased with a view to monitoring whether the death was registered.

3. Marriage and divorce registration

562. There may be a variety of incentives to register a marriage, including tax, financial, legal, health and employment benefits. In some countries, married couples are subject to lower tax rates. Upon the death of a spouse, a marriage certificate may be required to obtain financial benefits. For example, a surviving spouse may be required ³⁸⁵ James C. Knowles, "Assessment of the quality and relevance of existing data to monitor the gender dimensions of CRVS in Asia and the Pacific", report to the United Nations Foundation under the Data2X Initiative, May 2016, p. 9. to provide proof of marriage (and also proof of death registration) in order to receive the pension or life insurance benefits of the deceased. Similarly, property may be transferred tax-free to a surviving spouse. Marriage registration can also confer legal decision-making benefits. A marriage certificate may be required to prove that a person is next of kin for purposes of making medical decisions for an incapacitated spouse. In addition, there may be employment-based benefits. For example, individuals may be entitled to health insurance benefits through their spouse's employer and may be entitled to family leave benefits should their spouse fall ill.

563. Registration of divorce is usually carried out through the courts (see, sect. C.5). Where the responsibility falls to the individual, however, the ability to prove dissolution of the previous marriage in order to remarry is an incentive to register a divorce.

D. Improving cause of death information

564. Accurate cause of death information is essential for public health policy and planning. Gathering accurate information on causes of death for the entire population requires not only registration of all deaths, but also accurate and complete information on the cause of death certified by medical professionals. Practicing medical professionals must be trained and retrained in medical certification of cause of death. To improve the quality of information in medical certificates of death and mortality data, physicians must be trained in the correct completion of the WHO international form of the medical certificate of cause of death. Medical certification of cause of death should be included in curricula for all medical students. This usually requires cooperation with the ministry of education, which has the power to mandate the inclusion of this topic in curricula. In addition, training on medical certification of cause of death should be made part of mandatory and voluntary continuing medical education programmes, which may require cooperation with medical professional associations. In addition to physicians, coroners and other officials, medical professionals who may be responsible for completion of a medical certificate of cause of death should be included in these training programmes.

565. Coding the information contained in a medical certificate of cause of death in accordance with the WHO International Classification of Diseases is essential to the production of high-quality mortality data and requires specialized training. It is therefore recommended that a dedicated International Classification of Diseases-coder cadre is created, trained and funded.

E. Facilitating use of technology

566. The use of computers, tablets and other electronic devices should be permitted for the collection of data for vital events, and it should be permitted for these data to be transmitted between government agencies and officials with the use of mobile technology or the Internet.³⁸⁶ In addition, registrants, family members and representatives are increasingly seeking to transmit data and official documents by themselves through online access (for example, to transmit birth or death certificates to another government agency directly). Laws on civil registration, vital statistics and identity management should not block the use of technology by including provisions that require the registrant to be present for the collection of data or by stipulating manual processes for data transmission. At the same time, such laws should not require the use of advanced technology in such a way as to pose a barrier to registration for those segments of the population that do not have access to, or are not proficient in the use of, technology. Processes should be included in regulations or instructions on civil registration, vital

³⁸⁶ Principles and Recommendations for a Vital Statistics System, Revision 3, paras. 378 and 381–382. statistics and identity management in such a manner that they may be amended as technology advances.

567. In addition to the above, some provisions that facilitate the use of technology might be included in laws other than specific laws on civil registration, vital statistics and identity management. For example, electronic or digital signatures (or unique identifiers in lieu of signatures) should be permitted, to facilitate the electronic collection of information, registration of vital events and issuance of certificates. In many countries, these provisions are set out in laws that specifically regulate the use of technology, including electronic and digital signatures. Countries should ensure that these laws permit the use of electronic and digital signatures and technology in civil registration, vital statistics and identity management systems.

Annex A **Recommended information for birth, death and fetal death registration**

The following list of topics is an updated version of that contained in the *Principles* and *Recommendations for a Vital Statistics System*, *Revision 3*, paragraph 66. For a thorough discussion on these and related topics, see chapter III of the *Principles and Recommendations*.

Birth registration ● = High priority **O**= Lower priority (*=Legal information)

Characteristics of event

- Date, (time) and place of registration
- Date, (time) and place of occurrence *
- Attendant at birth
- O Type of place of occurrence (hospital, home, etc.)
- Type of birth (twin, triplet, etc.)

Characteristics of newborn

- Sex *
- Weight at birth

Characteristics of mother/father

- $\mathbf{\nabla}/\mathbf{\nabla}$ = Mother high/low priority
- $\Delta =$ Father high/low priority

- ▼/▲ Date of birth
- ▼/▲Marital status
- ▼/▲ Educational attainment
- ∇/Δ Literacy status
- $\boldsymbol{\nabla}/\boldsymbol{\Delta}$ Ethnic and/or national group
- **∇**/**∆**Citizenship
- ∇/Δ Economic activity status
- ∇/Δ Usual occupation
- ▼/▲ Place of usual residence
- \mathbf{V}/Δ Duration of residence in usual place
- $\boldsymbol{\nabla}/\boldsymbol{\Delta}$ Place of previous residence
- ▼/∆ Place/country of birth
- **∇** Date of last menstrual period
- **∇** Number of prenatal visits
- ∇ Month in which pregnancy prenatal care began
- ▼ Children born alive to mother during her entire lifetime

▼ Children born alive to mother during her entire lifetime and still living

- ▼ Fetal deaths to mother during her entire lifetime
- ▼ Date of last previous live birth
- ▼ Date of marriage

Additional legal information

- Name and surname of child *
- Name and surname of parents *

Fetal death registration ● = High priority O= Lower priority (*=Legal information)

Characteristics of event

- Date, (time) and place of registration
- Date, (time) and place of occurrence
- O Attendant at birth
- O Type of place of occurrence (hospital, home, etc.)
- O Type of birth (twin, triplet, etc.)
- O Cause of death
- O Certifier

Characteristics of fetus

• Sex

O Weight at birth Characteristics of mother/father

 $\nabla = M$ other high/low priority $\Delta = F$ ather high/low priority

- ∇/Δ Date of birth
- ▼/▲ Marital status
- ∇/Δ Educational attainment
- ∇/Δ Literacy status
- ∇/Δ Ethnic and/or national group

 ∇/Δ Citizenship

 ∇/Δ Economic activity status

 ∇/Δ Usual occupation

- ▼/▲ Place of usual residence
- ∇/Δ Duration of residence in usual place
- ∇/Δ Place of previous residence
- ∇/Δ Place/country of birth
- **∇** Date of last menstrual period
- ▼ Number of prenatal visits
- ∇ Month in which pregnancy prenatal care began
- ▼ Children born alive to mother during her entire lifetime
- ∇ Children born alive to mother during her entire lifetime and still living
- ▼ Fetal deaths to mother during her entire lifetime
- ▼ Date of last previous live birth
- ▼ Date of marriage

Death registration ●= High priority O= Lower priority (*=Legal information)

Characteristics of event

- Date, (time) and place of registration
- Date, (time) and place of occurrence *
- Attendant at birth (for death under 1 year of age)
- O Type of place of occurrence (hospital, home, etc.)
- Cause of death
- O Manner of death
- O Whether autopsy findings used to establish cause of death
- O Death occurring during pregnancy, childbirth, puerperium
- Certifier

Characteristics of decedent

- Date of birth *
- Sex *

Marital status

- O Educational attainment
- O Literacy status
- O Ethnic and/or national group
- O Citizenship
- O Economic activity status
- O Usual occupation
- O Whether birth was registered (for death under 1 year of age)
- O Born in wedlock (for death under 1 year of age)
- Place of usual residence
- Place of usual residence of mother (for death under 1 year of age)
- O Duration of residence in usual place
- O Place of previous residence

O Place/country of birth

Additional legal information

- Name and surname *
- Identity document and registration data relating to birth *

Annex B **Recommended information for marriage and divorce registration**

The following list of topics is an updated version of that contained in the *Principles* and *Recommendations for a Vital Statistics System*, *Revision 3*, paragraph 66. For a thorough discussion on these, and derived topics, see chapter III of the *Principles and Recommendations*.

Marriage registration ●= High priority O= Lower priority (*=Legal information)

Characteristics of event

- Date of occurrence *
- Date of registration
- Place of occurrence
- Place of registration
- O Type of marriage

Characteristics of spouses (each separately)

- Date of birth *
- O Marital status (previous)
- O Number of previous marriages
- O Educational attainment
- O Literacy status
- O Economic activity status
- O Usual occupation
- O Ethnic and/or national group
- Citizenship
- O Place of usual residence
- O Duration of residence in usual place
- O Place of previous residence
- O Place/country of birth

Additional legal information

- Name and surname (of each spouse) *
- Identity document and registration data relating to birth (of each spouse) *
- **Divorce registration** ●= High priority **O**= Lower priority (*=Legal information)

Characteristics of event

- Date of occurrence *
- Date of registration
- Place of occurrence

- Place of registration
- Characteristics of divorcees (each separately)
- Date of birth *
- O Type of marriage being dissolved
- O Number of dependent children of divorced persons
- O Number of children born alive to the marriage being dissolved
- Date of marriage
- O Mode of dissolution of previous marriage
- O Number of previous marriages
- O Educational attainment
- O Literacy status
- O Economic activity status
- O Usual occupation
- O Ethnic and/or national group
- Place of usual residence
- O Duration of residence in usual place
- O Place of previous residence
- O Place/country of birth
- O Place of occurrence of marriage being dissolved
- Additional information
- Name and surname (of each divorcee) *
- Identity document and registration data relating to birth (of each divorcee) *

Glossary³⁸⁷

Accuracy of registration: This refers to the case where data items for each vital event on the vital record have been correctly and completely filled out; that is to say, the case where there are neither response errors nor missing items. The measurement of any deviation from correctness is called "content error".

Adoption: The legal and voluntary taking in of the child of other parents and treating of that child as one's own child, as provided by the laws of the country. By means of a judicial process, the adopted child, whether related or not to the adopter, acquires the rights and status of a biological child born to the adoptive parents.

Age: The interval of time between birth and the present time, expressed in completed units of solar time. Age is usually measured in completed years for adults and children and in completed months, weeks, days, hours or minutes of life, as appropriate, for infants or very young children.

Annulment: Invalidation or voiding of a legal marriage by a competent authority, according to the laws of the country, thereby conferring on the parties the status of never having been married to each other.

Attendant at birth: The person who assisted the mother in delivering a live-born infant or a dead fetus.

Availability of data: The accessibility of data that have been collected, filed, processed and stored in the civil registration and vital statistics systems, in a user-friendly format, to users upon request.

Born in wedlock: Characterization of a live-born infant or dead fetus whose mother was legally married (through any recognized union by the laws or customs of the country) at the time of delivery. See "Wedlock status of the mother at the time of the child's birth".

Born out of wedlock: Characterization of a live-born infant or dead fetus whose mother was not legally married at the time of delivery (through any union recognized by the laws or customs of the country at the time of delivery). See "Wedlock status of the mother at the time of the child's birth".

Burial permit: The official document, usually issued only for a legally registered death, authorizing the removal of the dead body (corpse) to the cemetery or for other final disposal.

Causes of death: All diseases, morbid conditions or injuries that either resulted in or contributed to death, and the circumstances of the accident or violence that produced any such injuries. For vital statistics purposes, symptoms or modes of dying, such as heart failure and asthenia, are not considered to be causes of death. See "Underlying cause of death".

Certificate: A document, in paper or electronic format, issued by the registrar and containing all or part of the exact information contained on the original vital record, and which, when issued by the Registrar, has the full force and effect of the original vital record.

³⁸⁷ Based on the glossary in Principles and Recommendations for a Vital Statistics System, Revision 3, pp. 201–207. **Certifier (of cause of death):** The person authorized by law to issue a certificate, in a prescribed format, stating the underlying and contributory causes of death, and other facts related to the event, for submission to the local registrar or other appropriate authority. The certifier is usually the physician who attended the deceased in his or her last illness; or, in the case of deaths of persons who were not attended during the last illness by a physician or who may have died owing to violence or injury, the medical-legal officer (such as the coroner or the medical examiner).

Civil registrar: The official authorized by law with the responsibility for carrying out the civil registration of vital events in a well-defined area (an entire country, or a county, district, municipality, parish or other administrative division) and for recording and reporting information on those vital events for legal and statistical purposes.

Civil registration: The continuous, permanent, compulsory and universal recording of the occurrence and characteristics of vital events pertaining to the population, as provided through decree or regulation in accordance with the legal requirements in each country. This process establishes and provides legal documentation for such events. The civil registration records are also the best source of vital statistics.

Civil registration method: The procedure employed in gathering the basic information on the incidence of vital events that have occurred to the population of a country (or area) within a specified time period and their characteristics, based upon which vital records with legal value are prepared and vital statistics are produced.

Civil registration system: The institutional, legal and technical settings established by government within which civil registration is conducted in a technically sound, coordinated and standardized manner throughout a country, taking into account cultural and social circumstances particular to that country. See "Civil registration and vital statistics system".

Compilation of vital statistics data: The process of condensing and summarizing information on vital events by classifying and tabulating the data within categories or groups in order to produce vital statistics according to a predetermined tabulation programme.

Coroner: The officer of a county, district, municipality, parish or other administrative division, authorized by law to hold an inquest regarding deaths of persons who may have died by violence or injury or under suspicious circumstances, to determine if the death was due to non-natural causes, such as accident, suicide or homicide.

Credential: A document, object or data structure that vouches for the identity of a person through some method of trust and authentication.

Date of birth: The day, month and year of birth, including hours and minutes, if required, which information is used to determine age in completed units of time. See "Age".

Date of occurrence: The exact date when an event occurred, which should be expressed in terms of the day, month and year, and also the hour and minute, if appropriate (for live births, fetal deaths and deaths).

Death: The permanent disappearance of all evidence of life at any time after the occurrence of live birth, namely, the postnatal cessation of vital functions without capability of resuscitation. This definition excludes fetal deaths. See "Fetal death".

Delayed civil registration: The registration of a vital event after the prescribed period determined in existing laws, rules or regulations (including any grace period, if specified). Late registration is the registration of a vital event after the prescribed time period but within a specified grace period. Since the grace period is usually considered to be one year following the vital event, delayed registration is usually considered to be

the registration of a vital event one year or more after the vital event has occurred. See "Late civil registration".

Digital identity: A set of electronically captured and stored attributes and credentials that can uniquely identify a person.

Divorce: The legal final dissolution of a marriage, that is, that separation of spouses that confers on the parties the right to remarriage under civil, religious or other provisions, according to the laws of each country. In the case where a country recognizes registered partnerships, a legal dissolution of a registered partnership constitutes the legal final dissolution of such a partnership, according to national laws, which confers on the parties the right to enter into another partnership or marriage.

Enrolment: The capturing and recording in the national identity management system of key identity attributes.

Fetal death: The death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the period of gestation. Death is indicated by the fact that, after such separation, the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.

Identity management: Producing legally valid proof of identity to each individual and maintaining systems for managing information and documents associated with a person's identity, which may include individual biometrics.

Infant death: The death of a live-born child under 1 year of age.

Infant mortality rate: The vital statistics summary rate based on the number of infant deaths occurring during the same period of time, usually a calendar year, namely, the number of deaths of live-born children under 1 year of age occurring in a given geographical area during a given year, per 1,000 live births occurring among the population of that area during the same year.

Informant: The individual or institution whose responsibility, designated by law, is to report to the local registrar the fact of the occurrence of a vital event and to provide all the information on and all the characteristics of the event. On the basis of such a report, the event may be legally registered by the local registrar.

International Statistical Classification of Diseases and Related Health Problems: A classification system maintained by the World Health Organization for coding diseases, signs, symptoms and other factors causing morbidity and mortality. It is used worldwide for morbidity and mortality statistics and designed to promote international comparability in the collection, processing, classification and presentation of statistics.

Judicial (legal) separation: the disunion of married persons, according to the laws of each country, without conferring on the parties the right to remarry.

Late civil registration: The registration of a vital event after the legally specified time period but within a specified grace period. The grace period is usually considered to be one year following the vital event. See "Delayed civil registration".

Legal identity: The basic characteristics of an individual's identity, such as name, sex and place and date of birth, conferred through registration and the issuance of a certificate by an authorized civil registration authority following the occurrence of birth. In the absence of birth registration, legal identity may be conferred by a legally recognized identification authority; this system should be linked to the civil registration system to ensure a holistic approach to legal identity from birth to death. Legal identity is retired by the issuance of a death certificate by the civil registration authority upon registration of death. In the case of refugees, Member States are primarily responsible for conferring legal identity and issuing identity papers. The conferring of legal identity on refugees may also be administered by an internationally recognized and mandated authority.

Legislation: Rules and laws that have the force of authority by virtue of their promulgation by an official organ of a country or other organization.

Legitimation: The formal vesting of a person with the same status and rights as those of a person born in wedlock, according to the laws of the country.

Live birth: The result of the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such a birth is considered to be live-born.

Marriage: The act, ceremony or process by which the legal relationship of spouses is constituted. The legality of the union may be established by civil, religious or other means as recognized by the laws of each country. Countries may wish to expand the definition to cover civil unions if they are registered. In that case, registered partnership usually refers to a legal construct, entailing registration with the public authorities according to the laws of each country, that becomes the basis for legal conjugal obligations between two persons.

Maternal death: The death of a woman while pregnant or within 42 days after the termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from an accidental or an incidental cause.

Medical certification of cause of death: The completion by a medically trained person of a death certificate that includes the cause of death according to the International Classification of Diseases certification standards.

Neonatal death: The death of a live birth during the first 28 completed days of life.

Notifier: The individual appointed by the local registrar to act as intermediary between the local registrar and the informant in providing all the information on and all the characteristics of an event that is to be legally registered by the local registrar.

Perinatal period: The period that commences at 22 weeks (154 days) of gestation (the time when birth weight is normally 500 grams) and ends 7 completed days after birth.

Population census: The total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country.

Population register: An individualized data system, that is, a mechanism of continuous recording, or of coordinated linkage, of selected information pertaining to each member of the resident population of a country in such a way as to offer the possibility of deriving up-to-date information concerning the size and characteristics of that population at selected time intervals.

Primary registration area (unit): Part of the territory of a country that is entrusted to a local civil registrar for the recording of the vital events occurring therein. Each primary registration area is therefore the jurisdictional territory of one of the local civil registrars.

Quality assurance of civil registration and vital statistics systems: The process comprising the steps taken at each stage of the operation of civil registration and vital statistics systems to ensure that all vital events that occurred within the country are registered without duplication, that all related information is accurately recorded and that data on recorded vital events are compiled and processed into vital statistics in a correct and timely manner.

Recognition: The legal acknowledgment, either voluntary or compulsory, of the paternity of a child born out of wedlock.

Record linkage (or data linkage): The process, usually computer-based, whereby information from two or more data files is merged into a new, combined file containing selected information about individuals or events that was not available in the separate records.

Regulations: an authoritative rule dealing with details or procedures; a rule or order issued by an executive authority or regulatory agency of a government and having the force of law.

Underlying cause of death: The disease or injury that initiated the train of morbid events leading directly to death or the circumstances of the accident or violence that produced the fatal injury. The underlying cause of death is used as the basis for the tabulation of mortality statistics.

Validation: Checking the attributes presented against existing data.

Vital event: The occurrence of a live birth, death, fetal death, marriage, divorce, adoption, legitimation, recognition of parenthood, annulment of marriage or legal separation.

Vital event record: A legal document entered into the civil register that attests to the occurrence and characteristics of a vital event.

Vital statistics system: For the purposes of the present principles and recommendations, an integrated whole comprising a set of independent or interacting components—in this case, legal registration and statistical reporting of, and collection, compilation and dissemination of statistics pertaining to, vital events. The vital events of interest are: live births, adoptions, legitimations, recognitions, deaths and fetal deaths, and marriages, divorces, separations and annulments. See "Vital event".

Wedlock status of the mother at the time of the child's birth: A topic derived from the marital status of the mother, which describes the status of a live-born child or dead fetus in respect of its being considered the lawful issue of a couple at the time of delivery.

21-13524

ISBN 978-92-1-259215-2

