

Expert Group on Refugee and Internally Displaced Persons Statistics

INTERNATIONAL RECOMMENDATIONS
ON REFUGEE STATISTICS

March 2018



United Nations

MANUALS
AND GUIDELINES

eurostat 

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Printed by Imprimerie Centrale in Luxembourg

Manuscript completed in March 2018

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Theme: Population and social conditions

Collection: Manuals and guidelines

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Print	ISBN 978-92-79-80778-7	ISSN2 2363-197X	doi:10.2785/517815	KS-GQ-18-004-EN-C
PDF	ISBN 978-92-79-80777-0	ISSN2 2315-0815	doi:10.2785/52866	KS-GQ-18-004-EN-N

Acknowledgements

The **International Recommendations on Refugee Statistics (IRRS)** are developed by the **Expert Group on Refugee and Internally Displaced Persons Statistics (EGRIS)**. The recommendations are developed in close cooperation between experts from national governments and regional and international organizations, ensuring the representation of a wide array of perspectives.

From **country level** the following have provided valuable contributions to the finalization of the IRRS: Stephan Marik-Lebeck (Statistics Austria); Bikash Kishore Das (Bangladesh Bureau of Statistics); Nicolas Perrin (Immigration Office (DVZOE), Belgium); Sok Kosal (National Institute of Statistics, Cambodia); Christophe Tatsinkou (Institut National de la Statistique Republique du Cameroun); Ima Okonny (Citizenship and Immigration, Canada); Estefania Encalada (National Institute of Statistics and Census, Ecuador); Abdelfattah Mohamed Ali Khallaf (Central Agency for Public Mobilization and Statistics, Egypt); Mesfin Tefera Habe (Central Statistical Agency of Ethiopia); Gunter Bruckner and Jan Eberle (Federal Statistical Office of Germany); Konstantinos Voulgaris (Hellenic Statistical Authority, Greece); Ferenc Urban (Hungarian Central Statistical Office); Emn Bany Mfarej (Jordan Department of Statistics); Stanley Wambua (Kenya National Bureau of Statistics); Lara Badre (Central Administration of Statistics, Lebanon); Mohd Sofi Ali (Department of Statistics, Malaysia); Bouchra Bouziani (High Commission for Planning, Morocco); Vebjørn Aalandslid, Helge Brunborg, Minja Tea Dzamarija, Olav Ljones, Christine Meyer and Lars Østby (Statistics Norway); Peter Akre (Norwegian Directorate of Immigration); Hana Al Bukhari and Mohammed Draid (Palestine Central Bureau of Statistics); Tshwaro Gae and Ramadimetja Matji (Statistics South Africa); Pattama Amornsirisomboon (Thai National Statistical Office, Thailand); Alper Acar, Şebnem Beşe Canpolat, Neriman Can Ergan, Enver Taştı and Serife Dilek Yilmaz (Turkstat, Turkey); Eric Jensen (United States Census Bureau); Funda Ustek-Spilda (Arithmus project) and Mary Strode (Independent senior consultant).

From **regional and international organizations**, the following have taken part in the work: Jadwiga Maczynska and Joanna Napierala (European Asylum Support Office); Luca Pappalardo and Filip Tanay (European Commission); Piotr Juchno and David Thorogood (Eurostat); Samir Farid (MED-HIMS); Denis Kierans (International Organization for Migration); Natalia Krynsky Baal, Dag Roll-Hansen and Laura Kivelä (Joint IDP Profiling Service); Giambattista Cantisani (MEDSTAT IV Project); Cecile Thoreau and Yves Brem (Organization for Economic Co-operation and Development); Jan Beise and Danzhen You (United Nations Children Fund); Marwan Khawaja (United Nations Economic and Social Commission for Western Asia); Sabrina Juran, Mengjia Liang and Romesh Silva (United Nations Population Fund); Ahmed Abukhashaba, Tarek Chabake, George Ghikas, Preeti Law, Gita Swamy Meier-Ewert, Petra Nahmias, Grainne O'Hara, Andrew Painter, Ariel Riva, Kimberly Roberson, Aina Saetre, Volker Turk, and Hussain Watfa (United Nations High Commissioner for Refugees); Haoyi Chen and Keiko Osaki Tomita (United Nations Statistical Division); Rami Ibrahim (United Nations works agency for Palestine refugees in the near east); Calogero Carletto, Xavier Devictor, Talip Kilic, Harriet Mugeru, Zara Inga Sarzin, Caroline Sergeant, Emi Suzuki and Paolo Verme (World Bank) and Susanna Sandstrøm (World Food Program).

The above mentioned offices and organizations have made substantial contributions through their staff; both members of the EGRIS, as well as non-members closely associated with the EGRIS work. Financial and non-financial contributions have been made available by UNHCR, Eurostat, EFTA, OECD and Statistics Norway.

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ACRONYMS

ABS	Australian Bureau of Statistics
AHM	Ad Hoc Module
ALMP	Active Labour Market Programme
ASEAN	Association of Southeast Asian Nations
CCSA	Committee for the Coordination of Statistical Activities
CEAS	Common European Asylum System
CRRF	Comprehensive Refugee Response Framework
DHS	Demographic Household Survey
DQAF	Data Quality Assessment Framework
EASO	European Asylum Support Office
ECA	United Nations Economic Commission for Africa
ECLAC	Economic Commission for Latin America
ECOSOC	United Nations Economic and Social Council
EFTA	European Free Trade Association
EGRIS	Expert Group on Refugee and Internally Displaced Persons Statistics
ELIPA	Enquête Longitudinale sur l'Intégration des Primo-Arrivants
EPS	Early warning and Preparedness System
ESCWA	United Nations Economic and Social Commission for West Asia
ESS	European Statistical System
EU	European Union
EU-LFS	European Union Labour Force Survey
EU-SILC	European Union Statistics on Income and Living Conditions
GIS	Geographic Information System
GPS	Global Positioning System
GPS	Group for the Provision of Statistics
IBR	Individual Basic Registration
ICR	Individual Comprehensive Registration
IDMC	Internal Displacement Monitoring Centre
IDP	Internally Displaced Person
IEHR	Individual Enhanced Registration
IER	Individual Emergency Registration
IOM	International Organisation for Migration
ILO	International Labour Organisation
IMF	International Monetary Fund
IRRS	International Recommendations on Refugee Statistics
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
JIPS	Joint IDP Profiling Service
LAMP	Latin American Migration Project
LFS	Labour Force Survey
LSIC	Longitudinal Survey of Immigrants to Canada

LSMS	Living Standards Measurement Surveys
MED-HIMS	Mediterranean Household International Migration Survey Programme
MEDSTAT	Mediterranean Statistical Cooperation Program
MICS	Multiple Indicators Cluster Surveys
NEET	Not in Employment, Education or Training
NGO	Non-Governmental Organisation
NQAF	National Quality Assessment Framework
NSDS	National Strategy for the Development of Statistics
NSO	National Statistical Office
NSI	National Statistical Institute
OAU	Organisation of African Unity
OECD	Organisation for Economic Co-operation and Development
PIAAC	Programme for International Assessment of Adult Competencies
PIN	Personal Identification Number
PPP	Purchasing Power Parity
QAF	Quality Assurance Framework
RDS	Respondent Driven Sampling
RSD	Refugee Status Determination
SDG	Sustainable Development Goal
TAG	Technical Advisory Group
TurkStat	Turkish Statistical Institute
UAE	United Arab Emirates
UDI	Norwegian Directorate of Immigration
UK	United Kingdom
UN IGME	United Nations' Inter-Agency Group for Child Mortality Estimation
UNECA	United Nations Economic Commission for Africa
UNECE	United Nations Economic Commission for Europe
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNESCWA	United Nations Economic and Social Commission for Western Asia
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNRWA	United Nations Relief and Works Agency for Palestine Refugees in the Near East
UNSD	United Nations Statistics Division
WFP	World Food Programme
WHO	World Health Organization

1

Introduction

A. Need for recommendations on refugee statistics

1. Numbers of refugees, asylum seekers and internally displaced persons (IDPs) have increased rapidly in recent years.¹ Moreover, almost every country in the world is affected by forced displacement either as a source, point of transit, or host of refugees, asylum seekers or IDPs, making forced displacement a global phenomenon. There is also an increasing number of countries affected by large movements of people, often involving mixed flows of forcibly displaced people and migrants, who move for different reasons but use similar routes (United Nations, 2016). However, developing countries are disproportionately affected by forced displacement, and there is a growing consensus that greater international cooperation is required to assist host countries and affected host communities.
2. Forced displacement has gained prominence on the international agenda. The *New York Declaration for Refugees and Migrants*,² adopted by the United Nations General Assembly on 19 September 2016, recognizes the unprecedented level of human mobility and acknowledges the shared responsibility to manage large movements of refugees and migrants through international cooperation (United Nations, 2016). It also reaffirms the intention of Member States to realize the full potential of the *2030 Agenda for Sustainable Development* for refugees and migrants. Specifically, under the Sustainable Development Goal 10 to reduce inequality within and between countries, a key target is “to facilitate the orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.” The *New York Declaration for Refugees and Migrants* explicitly recognizes the needs of refugees, IDPs and migrants in the pursuit of this target.
3. With the growing prominence of forced displacement internationally, there is increasing interest at national and international levels in statistics on refugees, asylum seekers, IDPs and refugee related populations, including complete, accurate, timely and internationally comparable estimates of the numbers of people displaced. Estimates of these populations are increasingly relevant for official statistics, which need to take account of forcibly displaced populations in a consistent manner. Incomplete or inadequate statistics on displaced populations undermine the estimation of population stocks, which in turn affects other statistics, particularly those measured in per capita terms.
4. Robust statistics on refugees, asylum seekers, IDPs and refugee related populations are also critical for informed decision-making, which ultimately impacts on the lives of vulnerable populations (United Nations, 2014). There is a range of potential users of these statistics including local authorities, national authorities and international organizations. Data are necessary to better understand the phenomenon of forced displacement, to analyse its impacts, and to measure changes over time. Quality statistics on forcibly displaced populations also provide the requisite evidence to support: (a) better policy formulation and sound decision-making, (b) more effective monitoring, evaluation and accountability of policies and programs; and (c) enhanced public debate and advocacy.
5. However, existing principles and recommendations on vital statistics, population and housing censuses, and international migration statistics only address forced displacement peripherally.³ The need to enhance

the comparability of international migration statistics (including statistics on asylum seekers, refugees and related populations) was first addressed in 1953, when the United Nations published *International Migration Statistics*. In 1976, the United Nations Statistical Commission adopted *Recommendations on Statistics of International Migration* to encourage countries to collect, tabulate and disseminate statistics on international migrants and to enhance international comparability. In 1998 the recommendations were revised and expanded to include special guidelines for the compilation of statistical information on asylum seekers. However, the recommendations do not address large movements of refugees and related populations or internal displacement (United Nations, 2014).

6. It is therefore necessary to develop a set of specific recommendations that countries and international organizations can use to improve the collection, collation, disaggregation, reporting, and overall quality of statistics on forcibly displaced populations.⁴ The objective of these recommendations is “to improve statistics on an important aspect of international migration and to improve common information about a situation with a significant impact on global welfare” (United Nations, 2015). The recommendations are intended to help improve national statistics on the stocks and flows of refugee and refugee related populations in their countries, and to help make such statistics comparable internationally.
7. The *New York Declaration for Refugees and Migrants* recognizes the importance of improved data collection, particularly by national authorities. It calls for enhanced international cooperation to improve data collection on refugees and migrants, including through capacity building for national authorities. It notes that such data should be disaggregated by sex and age and include information on regular and irregular flows, the economic impacts of migration and refugee movements, human trafficking, the needs of refugees and related groups, migrants and host communities and other issues, and that data collection should be consistent with national legislation on data protection and international obligations related to privacy. Additionally, it states that specific recommendations on refugee and IDP statistics can serve as a critical instrument to enhance the statistical capacity of national authorities, thereby strengthening the evidence base for decision-making on the protection and assistance of refugees and asylum seekers (United Nations, 2016).

B. Process of developing the recommendations

8. At the forty-sixth session of the Statistical Commission in March 2015, Statistics Norway and the United Nations High Commissioner for Refugees (UNHCR) presented a joint report on statistics on refugees and IDPs (E/CN.3/2015/9). The report highlights several challenges associated with the collection, compilation and dissemination of statistics on refugees, asylum seekers and IDPs, including the lack of consistent terminology, the need for additional data sources, and difficulties in comparing international statistics on refugees and IDPs (United Nations, 2014). The authors proposed: (a) the organization of a conference on refugees and IDP statistics, which would bring together international organizations, experts from national statistical offices (NSOs), and the research community; and (b) the drafting of international recommendations on statistics on refugees and IDPs, similar to the *Recommendations on Statistics of International Migration, Revision 1* (United Nations, 2014).
9. In its decision 46/104 following its forty-sixth session, the Statistical Commission acknowledged the growing concern about the lack of harmonization in definitions, classifications and methods of data collection on refugees, asylum seekers and IDPs. The Commission supported the proposal to organize an international conference on refugee statistics, which would explore how best to incorporate the compilation of statistics into national statistical systems and to develop a set of recommendations for improving these statistics. The Commission also noted the need for a *Compilers’ Manual* on statistics on refugees and IDPs, which would serve as a practical guide for the collection, analysis and dissemination of that information, taking into consideration existing methods and initiatives (United Nations, 2015).
10. The Turkish Statistical Institute (TurkStat), Statistics Norway, UNHCR, Eurostat, and the Statistical Office of the European Free Trade Association (EFTA) organized an international conference on refugee statistics held in Antalya, Turkey from 7 to 9 October 2015. Participants included representatives of NSOs, offices dealing with the admission of foreigners and refugees, research institutions, United Nations agencies, the World Bank, and the European Asylum Support Office (EASO) (UNHCR, 2015). While recognizing the importance of improving statistics on IDPs, participants at the conference focused their discussions on refugees and asylum seekers.

Participants endorsed the proposed production of a handbook on statistics on refugees, to be called the *International Recommendations on Refugee Statistics* (IRRS), which would serve to consolidate international agreement on definitions and principles and provide guidance for national statistical work. Participants proposed that the IRRS be supplemented by a Refugee Statistics Compilers Manual, which would provide clear operational instructions on how to collect and disseminate statistics on refugee and refugee related populations.

11. At the forty-seventh session of the Statistical Commission in March 2016, Statistics Norway, TurkStat, Eurostat and UNHCR presented a report on the progress of the work on statistics on refugees and IDPs (E/CN.3/2016/14). The report underlines the often limited connection between national statistics on refugees and national figures on migration and population, the need to improve coordination between national refugee data producers, as well as the lack of comparability between national and international refugee figures (United Nations, 2015). Building on the conclusions of the conference in Antalya, the report highlights the need to improve the understanding of flows and stocks of refugee and related populations by building efficient information systems that serve both administrative and official statistics needs, noting that “such common systems follow in the tradition of official statistics by using administrative data as a source”. In addition, the report emphasizes the extreme sensitivity of refugee data and the importance of confidentiality and data protection in refugee statistics. In conclusion, the report proposes the preparation of the IRRS and the formation of a committee of experts, which would serve as a professional meeting place for refugee-focused statisticians to lead and follow the development of the recommendations.
12. In its decision 47/111 following its forty-seventh session, the Statistical Commission acknowledged the urgent need to build more efficient information systems against the backdrop of a rapidly growing volume of forcibly displaced persons due to new humanitarian crises. The Statistical Commission endorsed the establishment of an expert group on refugee statistics, but suggested that the group includes IDPs in its scope of work, and builds on existing technical work, such as the *Recommendations on Statistics of International Migration, Revision 1* (ST/ESA/STAT/SER.M/58/Rev.1) and the *Conference of European Statisticians Recommendations for the 2020 Censuses of Population and Housing* (ECE/CES/41). The Statistical Commission formally requested that the expert group develops recommendations on refugee statistics as a reference guide for national and international work concerning asylum and refugee statistics, and a Refugee Statistics Compilers Manual as operational instructions on how to collect refugee statistics, in consultation with a wide range of stakeholders including migration authorities and offices in charge of registration of displaced persons. Additionally, the Commission requested that the expert group: (a) organizes a technical meeting on refugee statistics in late 2016, as a follow up to the first international conference on refugee statistics, to review the progress of the work conducted by the group; and (b) conducts a global consultation on the draft recommendations on refugee statistics early on in its existence to solicit comments widely and submit recommendations to the Commission for adoption at its forty-ninth session in 2018.
13. In June 2016, a Steering Committee was established comprising Statistics Norway, UNHCR, and Eurostat. In July 2016, Terms of Reference for the Expert Group on Refugee and Internally Displaced Persons Statistics (EGRIS) were approved by the Bureau of the Statistical Commission. The overall objective of EGRIS is to improve international refugee statistics through the development of international recommendations on how to collect, compile and disseminate statistics on refugees, asylum seekers and related populations. Specifically, EGRIS is mandated to develop: (a) International Recommendations on Refugee Statistics, to serve as a reference guide for national and international work concerning statistics on refugees, asylum seekers and related populations [to be submitted in March 2018 at the 49th session of the Statistical Commission]; (b) Refugee Statistics Compilers Manual, with operational instructions on how to collect statistics and disseminate on refugees, asylum seekers and related populations [to be submitted in March 2019 at the 50th session of the Statistical Commission]; (c) a Technical Report outlining a way forward for the development of comparable international standards for statistics on IDPs [to be submitted in March 2018 at the 49th session of the Statistical Commission]. EGRIS is composed of around over 30 national statistical and immigration authorities, the Steering Committee and almost 20 regional/international organizations.
14. The first meeting of EGRIS was held in Copenhagen in November 2016. Meeting participants reviewed the proposed structure of the IRRS and IDP Technical Report and established working groups to draft the various chapters. A second meeting of EGRIS was held in Oslo in April 2017, with the objective of further developing the structure and substance of the IRRS chapters, focusing in particular on the scope and nature of the likely recommendations. Participants included representatives of the European Union (EU),⁵ Joint IDP Profiling Service (JIPS), Internal Displacement Monitoring Centre (IDMC), International Organization for Migration (IOM), Mediterranean Statistical Cooperation Program (MEDSTAT), Organisation for Economic

Co-operation and Development (OECD), United Nations Economic and Social Commission for West Asia (ESCWA), United Nations Population Fund (UNFPA), UNHCR, United Nations Children's Fund (UNICEF), United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA), United Nations Statistical Division (UNSD), World Food Programme (WFP), World Bank, the statistical offices of Austria, Azerbaijan, Bangladesh, Bosnia and Herzegovina, Cambodia, Cameroon, Colombia, Cote d'Ivoire, Ecuador, Egypt, Ethiopia, Germany, Greece, Hungary, Jordan, Kenya, Kosovo, Kurdistan, Lebanon, Malaysia, Morocco, Norway, Palestine, Philippines, Somalia, South Africa, Thailand, Turkey, Uganda, Ukraine, and the United States and the immigration authorities of Belgium, Canada, Norway and the United Kingdom.

15. This report presents recommendations on refugees, asylum seekers and related populations only. A separate Technical Report addresses the way forward for the development of comparable international standards for statistics on IDPs.
16. A global consultation on the International Recommendations on Refugee Statistics, and Technical Report on Statistics of Internally Displaced Persons (IDPs) was launched in November 2017 by the United Nations Statistics Division/DESA. The documents were made available for comment to all national statistics offices worldwide between the 10th November and 10th December 2017. The aim of this consultation was to receive feedback and input from national immigration and statistical offices in order to ensure that different views and contexts were reflected in the document. All relevant authorities/offices of UN member states were also invited to provide comments. Comments were received from 11 countries, from 3 international organisations during the global consultation. Prior to the formal consultation process, the document had been through an extensive period of review by the large number of countries and other stakeholders involved in the drafting of the document as part of the EGRIS group.

C. Current state of statistics on refugees and asylum seekers

17. Some national authorities, as well as international organizations such as UNHCR and Eurostat, publish annual statistics on refugees and asylum seekers. In many countries, the collection and publication of the statistics is undertaken by UNHCR on behalf of the country, until such time that the country has the capacity to produce its own statistics. However, in addition to the capacity building needs of many countries there are several challenges associated with the collection, compilation and presentation of data on refugees and asylum seekers, which affects the quality of published statistics. These challenges include:
 - a) Lack of comparability between statistics on refugees and asylum seekers produced by different countries, and across displacement situations within countries. This arises due to the lack of consistency⁶ of terminology, concepts, definitions and classifications, as well as variation in the methods of data collection, compilation and presentation at national and international levels. Data on refugees and asylum seekers are typically collected for administrative not statistical purposes, and the definitions employed reflect country-specific legislation, policies and practices;
 - b) Necessity to improve the understanding of concepts of flows and stocks of refugees and asylum seekers, to classify and define the different types of refugee and related populations, and to build efficient information systems that can serve both administrative and official statistics needs;
 - c) Measurement of forced population movements in humanitarian crises presents unique technical, operational and political challenges, which affect the accuracy and reliability of data sources. For example, refugees and asylum seekers are highly mobile, especially in ongoing humanitarian crises, and population distributions can change rapidly, which in turn affects sampling frames for surveys;
 - d) Gaps in official statistics, including a lack of socio-economic data on refugees and asylum seekers that would permit analysis of their basic and ongoing needs and their degree of integration, and permit comparisons with general migrants and the wider population;
 - e) Necessity to maximize the use of available data sources (e.g. by integrating questions on migration and refugee status into existing survey instruments) while at the same time developing new data sources (e.g. spatial data and big data);

- f) Limited connection between national statistics on refugees and asylum seekers, often managed within immigration departments, and national statistics on migration and population;
- g) Extreme sensitivity of refugee and asylum seeker data and the importance of confidentiality and data protection in refugee statistics, which may limit the access of statisticians to information in administrative systems; and
- h) Significant variation across countries in terms of the size of forcibly displaced populations, the capacities of the national statistical and administrative systems, and national policy priorities. In particular, capacity constraints in developing countries limit the scope and effectiveness of data collection and dissemination activities.

D. Organization of these recommendations

18. The International Recommendations on Refugee Statistics are set out in six chapters, which are described below:
- a) **Chapter 1** contains the present introduction, which highlights the imperatives for recommendations on refugee and IDP statistics, summarizes the process of developing the recommendations, and briefly describes the current state of statistics on refugees, asylum seekers and related populations;
 - b) **Chapter 2** describes the international legal framework for refugees and asylum seekers, sets out the legal definitions relating to persons in need of international protection, and explains the procedures for determining refugee status and the conditions under which refugee status ends or is terminated;
 - c) **Chapter 3** utilises the legal framework to create a statistical framework which standardises the relevant terminology, concepts, definitions and classifications, as well as the proposed techniques for basic data tabulation and compilation;
 - d) **Chapter 4** focuses on the collection and measurement of refugee stocks and flows based on national and international data sources including the UNRWA and UNHCR record systems; with specific reference to population and housing censuses, household surveys, and administrative records. The chapter also discusses integrated data sources and their relevance for statistics on refugees and asylum seekers;
 - e) **Chapter 5** discusses the measurement of the socio-economic characteristics of refugee populations, and identifies the socio-economic indicators of integration and the extent to which their basic and ongoing needs have been met; and
 - f) **Chapter 6** examines coordination issues at the international, regional and national levels. It also tackles data quality, the legal framework for statistics, and the needs for capacity building.

2

Legal framework and refugee definitions

A. Introduction

1. Scope of this chapter

19. This chapter focuses on providing clear and accessible legal definitions about the main concepts related to persons in need of international protection, including but not limited to asylum seekers and refugees, as existing in relevant provisions in international and regional law treaties. This chapter will further cover aspects related to asylum procedures and determination of legal status of the different concepts explained, as well as issues related to derivative status and termination of refugee protection and other legal status presented here, as relevant.
20. Recognising that legal and statistical definitions are not always harmonised, this chapter does not seek to define relevant terms for statistical purposes, which will be covered in subsequent chapters of these recommendations.

2. The international legal framework protecting refugees and others in need of international protection

21. It is the responsibility of States to protect their citizens. When governments are unwilling or unable to do so, individuals may suffer such serious violations of their rights that they are forced to leave their homes to seek safety in another country. Since, by definition, the governments of their home country no longer protect these rights, other countries need to step in to ensure that these rights are respected.
22. Such obligations are contained in the international refugee protection regime, with the [1951 Convention Relating to the Status of Refugees](#) (hereafter “1951 Convention”)⁷ and [1967 Protocol Relating to the Status of Refugees](#) (hereafter “1967 Protocol”)⁸ at its heart, which establishes a specific rights system that protects refugees. This operates alongside general human rights law, founded on the 1948 [Universal Declaration of Human Rights](#)⁹ and subsequent international human rights law instruments, and alongside the four 1949 Geneva Conventions on international humanitarian law, and is complementary to these regimes. In addition, an array of international and regional treaties and declarations, both binding and non-binding, specifically address the needs and rights of refugees.
23. Under international law, provisions for protection of persons in need extend beyond those of asylum seekers and refugees to cover stateless persons as well others. The rights and obligations of stateless persons are contained in the [1954 Convention Relating to the Status of Stateless Persons](#)¹⁰ and in the [1961 Convention on the Reduction of Statelessness](#)¹¹ (which provides detailed and concrete safeguards to ensure a fair and appropriate response to the threat of statelessness).¹²

B. Mapping existing legal definitions in international, regional and national systems

24. The need for international protection arises when a person is outside their home country¹³ and unable to return home because they would be at risk there, and their country is unable or unwilling to protect them. Risks that give rise to a need for international protection classically include those of persecution, threats to life, freedom or physical integrity arising from armed conflict, serious public disorder, or different situations of violence. Other risks may stem from: famine linked to situations of armed conflict; natural or man-made disasters; as well as being stateless. Frequently, these elements are interlinked and are manifested in forced displacement. Refugees are, by definition, in need of international protection, being outside their country of origin because of serious threats against which the authorities of their home country cannot or will not protect them. In addition, individuals who are outside their country of origin (typically because they have been forcibly displaced across international borders) but who may not qualify as refugees under international or regional law, may in certain circumstances also require international protection, on a temporary or longer-term basis. This may include, for example, persons who are displaced across an international border in the context of disasters or the adverse effects of climate change but who are not refugees. In such situations, a need for international protection would reflect the inability of the country of origin to protect against serious harm¹⁴.

1. The right to asylum

25. The institution of asylum, including the legal framework established by the 1951 Convention and 1967 Protocol, derives directly from the right to seek and enjoy asylum affirmed in Article 14(1) of the 1948 [Universal Declaration of Human Rights](#), and is among the most basic mechanisms for the protection of refugees.¹⁵
26. The word “asylum”, although not defined in international law, has become an umbrella term for the sum total of protection provided by a country to refugees and other persons in need of international protection on its territory. The principle of *non-refoulement*¹⁶ is central to the realization of the right to asylum in international law. But the right to asylum goes beyond the prevention of *refoulement*. The process starts with admission to safe territory and concludes with the attainment of a durable solution.
27. At the regional level the right to asylum has also been reaffirmed in a growing number of refugee and human rights instruments.¹⁷

2. Definitions under international law of persons in need of international protection

a. Refugees

28. The term “**refugee**” is defined in the 1951 Convention (Article 1). The 1951 Convention was amended by the 1967 Protocol¹⁸ thereto, which removed limitations on the application of the 1951 Convention in terms of both time and place (i.e. events were no longer restricted to those occurring before 1 January 1951 or in Europe). According to the 1951 Convention and the 1967 Protocol thereto, a refugee is someone “who, owing to a 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”. Some 150 countries are parties to the 1951 Convention and/or the 1967 Protocol thereto.

29. While the 1951 Convention and 1967 Protocol were designed to assure refugees the widest possible enjoyment of their rights, States in different regions of the world have developed further standards extending or complementing the international refugee protection regime.
30. The first extended definition is contained in the 1969 [Organization of African Unity Convention Governing the Specific Aspects of Refugee Problems in Africa](#) (hereafter “OAU Convention”)¹⁹, developed as a consequence of the conflicts that accompanied the end of the colonial era in Africa which had led to a succession of large-scale refugee movements.
31. In its Article 1, the OAU Convention affirms that the 1951 Convention is “the basic and universal instrument relating to the status of refugees”. It replicates the refugee definition found in the 1951 Convention, but also includes any person compelled to leave his or her country because of “external aggression, occupation, foreign domination or events seriously disturbing public order in either part or the whole of his [or her] country of origin or nationality”.
32. This means that persons fleeing civil disturbances, widespread violence and war are entitled to claim refugee status in States that are parties to the OAU Convention, regardless of whether they have a well-founded fear of persecution for one of the reasons set out in the 1951 Convention. In many cases, people may be refugees under both Conventions as the definitions thereby contained are complementary and not mutually exclusive.
33. The second extended definition was adopted in 1984 when a colloquium of government representatives and distinguished Latin American jurists was convened in Cartagena, Colombia, to discuss the international protection of refugees in the region. Inspired by the OAU Convention, they adopted what became known as the [Cartagena Declaration](#)²⁰.
34. The Cartagena Declaration reaffirms the centrality of the right to asylum and the principle of *non-refoulement*, as well as the importance of searching actively for durable solutions. It recommends that the definition of a refugee used throughout the region should include both persons fulfilling the 1951 Convention definition and those who have fled their country “because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of human rights or other circumstances which have seriously disturbed public order”.²¹
35. It is important to highlight that all individuals recognised under the extended definitions in the OAU Convention and Cartagena Declaration fall within the category of refugee in the same manner and with the same rights and obligations as persons recognised under the 1951 Convention. This means that the legal status of refugees, in the sense of the 1951 Convention, applies to them equally and irrespective of the legal definition applicable to their status determination procedures.
36. The EU in turn laid down a complementary definition of a refugee in Article 2 (d) of the Qualification Directive,²² stating that refugee means “a third country national who, owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, political opinion or membership of a particular social group, is outside the country of nationality and is unable or, owing to such fear, is unwilling to avail himself or herself of the protection of that country, or a stateless person, who, being outside of the country of former habitual residence for the same reasons as mentioned above, is unable or, owing to such fear, unwilling to return to it, and to whom Article 12 [exclusion clauses] does not apply”. As evident from its wording this definition strongly refers to the one included in the 1951 Convention, although the reference to ‘third country national’ leaves the EU citizens (citizens of all EU Member States) out of the scope of this definition.
37. Finally, a person can be recognised as a refugee under UNHCR’s Mandate.²³ The High Commissioner’s core mandate covers refugees, that is, all persons outside their country of origin for reasons of feared persecution, conflict, generalized violence, or other circumstances that have seriously disturbed public order and who, as a result, require international protection.²⁴

b. Palestinian refugees

38. In 1950 UNRWA became operational to assist and protect Palestine refugees in the aftermath of the 1948 Arab-Israeli conflict. UNRWA supports several million Palestine Refugees who are registered with the agency in the five areas in which it operates: Lebanon, Syria, Jordan, the West Bank (including East Jerusalem)

and the Gaza Strip. UNRWA's mandate extends to Palestine refugees within UNRWA's area of operations and other persons eligible to receive assistance, including persons displaced as a result of the 1967 and subsequent hostilities present within UNRWA's area of operations.

39. There are three general categories of refugees of Palestinian origin. They broadly include:
- a) Palestinians who fall under the mandate of UNRWA.²⁵
 - b) Palestinians who are either registered with UNRWA or otherwise eligible to receive UNRWA services, but are outside of UNRWA's area of operations and are unable to avail themselves of UNRWA's protection or assistance because of reasons beyond their volition or control. These persons fall under UNHCR's mandate. They are often referred to as Article 1D refugees.²⁶
 - c) Palestinians who do not fall under the above categories and have become refugees for the first time because they meet the definition of a refugee contained in Article 1A of the 1951 Convention.²⁷
40. Thus, the term "Palestine refugee", must be distinguished from the term "Palestinian refugee", which is used by UNHCR and refers to refugees of Palestinian origin who fall under its mandate, by virtue of either, Article 1A or Article 1D (paragraph 2) of the 1951 Convention.²⁸

c. Asylum seekers

41. In turn, it is important to understand the difference between refugees and asylum seekers, as they are entitled to overlapping but different rights. As explained in the previous paragraphs, refugees are defined and protected by international refugee law and States' responsibilities towards them are regulated under international law and national legislation.
42. However, "**Asylum seeker**" is not a legal term of art but a general term for someone who is claiming or applying for protection as a refugee and who has not yet received a final decision on his or her claim. It can also refer to someone who has not yet submitted an application for refugee status recognition (has not yet formalised the administrative requirements in national law) but may nevertheless be in need of international protection.²⁹
43. Not every asylum seeker will ultimately be recognized as a refugee, but many will. Until the claim is examined fully and fairly, the asylum seeker is entitled not to be returned to his or her country of origin, according to the principle of *non-refoulement*, and to be treated in line with international human rights standards.
44. In countries where national asylum procedures to determine refugee status are not in place or where States are unable or unwilling to assess asylum claims in a fair or efficient manner, UNHCR may conduct Refugee Status Determination (RSD) under its mandate.

3. Other forms of protection

45. As with asylum seekers and refugees, persons who are granted protection under any of the forms described in this section are also considered persons with international protection needs for the purposes of this guidance.

a. Complementary / subsidiary protection

46. Some people fleeing armed violence and conflict may not come within the 1951 Convention refugee definition.³⁰ In the same manner, other persons may flee their countries because protection by their own State is lacking, either as a matter of law or as a matter of fact, with the result that basic human rights are seriously at risk. Such a situation classically comes about in relation to persecution, threats to life and personal security, armed conflict, serious public disorder or other man-made disasters. Natural or ecological disasters or insecurity due to statelessness are additional causes. These persons might still be in need of international protection, if it is not possible for them to return them to their country of origin, on account of such protection risks as mentioned above.³¹

47. As a result, States have developed various forms of complementary or subsidiary protection, in particular in countries where the OAU Convention and Cartagena Declaration do not apply. Many States have established mechanisms to provide some type of permission to remain, whether based on domestic legislation or administrative discretion, often referred to as humanitarian protection. Some States have also made visa arrangements, specifically provided for in legislation, which extend protection to defined categories of persons, who are held to be outside the 1951 Convention; others have made discretionary and time-limited protection arrangements for particular situations; still others recognize that there may be compelling humanitarian reasons for allowing particular individuals to remain in the country.
48. The rights afforded to such persons in different countries vary widely. Some States provide little more than protection against *refoulement*; others accord all the rights normally afforded to refugees.
49. Within the asylum system of the EU, for example, the Qualification Directive defines a person eligible for subsidiary protection in Article 2(e) as a third country national or a stateless person who does not qualify as a refugee but in respect of whom substantial grounds have been shown for believing that the person concerned, if returned to his or her country of origin, or in the case of a stateless person, to his or her country of former habitual residence, would face a real risk of suffering serious harm as defined in Article 15 [defining real risk of suffering serious harm], and to whom Article 17(1) and (2) [exclusion clauses] do not apply, and is unable, or, owing to such risk, unwilling to avail himself or herself of the protection of that country.

b. Temporary protection

50. Temporary protection is usually understood as a specific provisional protection response to situations of humanitarian crisis, often in complex or mixed population movements, providing immediate emergency protection from *refoulement* that should be clearly distinguished from other forms of international protection.³²
51. Temporary protection or stay arrangements are pragmatic “tools” of international protection that reflect States’ commitment and practice of offering sanctuary to those fleeing humanitarian crises. They are complementary to the international refugee protection regime, being used at times to fill gaps in that regime as well as in national response systems and capacity, especially in non-Convention States. Temporary protection examples include the extension of residence visas or stay permits on a wide range of grounds.
52. Specifically, in EU law, the Directive on temporary protection³³ lays down a specific exceptional procedure which can be triggered by the Council in the event of a mass influx or imminent mass influx of displaced persons from non-EU countries who are unable to return to their country of origin. In those cases, immediate and temporary (meaning for a limited period of time) protection can be provided to such persons on a group basis without individual assessment of each claim, as that would not be feasible under such critical conditions. So far, this mechanism has never been used by the EU.

C. Procedural framework for status determination procedures

1. Inclusion: recognition of protection needs

53. Determination of refugee status involves the individual assessment of each claim on its own merits according to the criteria set out in the 1951 Convention and applicable regional instruments. In most situations where the numbers of people arriving and seeking asylum are not overwhelming, States have opted to approve and implement legislation setting out the criteria that need to be fulfilled for refugee status to be recognized on an individual basis.
54. Many States have developed sophisticated and increasingly complex systems to determine the refugee status and other international protection needs of asylum seekers. Some States have adopted a single procedure to examine refugee status and other international protection needs at the same time, as in all

EU Member States where refugee status and subsidiary protection are considered in the same procedure. Occasionally some States have adopted legislative provisions for refugee status to be recognized on a group basis and the conditions when such approaches are warranted, including on the basis of the numbers of arrivals and the nature of claims.

55. Where large numbers of people are fleeing armed violence and conflict or other mass violations of human rights, it may be neither practical nor necessary to examine individual claims for refugee status. In such circumstances, States and UNHCR may decide to recognize refugee status for the entire group. Recognition on this basis is appropriate where there are readily apparent, objective conditions in the country of origin that indicate that those fleeing are at risk of harm that brings them within the refugee definitions in the 1951 or OAU Conventions. Every member of the group is considered a refugee *prima facie*, that is, in the absence of evidence to the contrary suggesting that an individual should not be considered a refugee because he or she does not meet the inclusion criteria or because he or she falls within the application of one of the exclusion clauses.
56. A *prima facie* approach may also be appropriate in relation to groups of similarly situated individuals whose arrival is not on a large scale, but who share a readily apparent common risk of harm.
57. Whichever form it takes, when an asylum seeker is recognized as a refugee, he or she should be granted a secure and durable form of legal residence status automatically upon recognition. Refugees, like asylum seekers, are entitled to be issued with identity papers. Recognized refugees are in addition entitled to receive travel documents.
58. These rights are maintained until the recognised status ends. The termination of refugee status can happen only for a limited number of reasons as explained below. Being declarative in nature, renunciation of refugee status is not possible, for example.

2. Derivative status: extending protection to family members

59. The right to family³⁴ life and **family unity** is inherent in the universal recognition of the family as the fundamental group unit of society. Respect for the right to family unity requires not only that States refrain from action which would result in family separations, but also that they take measures to maintain the unity of the family and reunite family members who have been separated. In order to uphold family unity in the refugee context, States may grant nationality to the children born to refugees in the country of asylum. In such circumstances, the children are not refugees because they enjoy the protection of their State, or parents' country of asylum (see below under Cessation of Refugee Status). Despite not being refugees, it is important for statistical and analytical purposes to capture the number of children of refugees notwithstanding their status.
60. In the absence of a provision in the nationality legislation that would allow the child of a refugee to acquire the nationality of the country of asylum at birth, the principle of family unity may be upheld by granting refugee status to the spouse and dependants of a refugee so that they are able to enjoy their right to family unity. When spouses and dependants acquire refugee status on this basis, they are said to enjoy "derivative refugee status", which entitles them to the full benefits of the 1951 Convention.
61. The right to family life and family unity is widely recognized in international and regional human rights law. Notably, the Convention on the Rights of the Child stipulates that "applications by a child or his or her parents to enter or leave a State Party for the purpose of family reunification shall be dealt with by States Parties in a positive, humane and expeditious manner" (Article 10). The obligation to respect this right of refugees is thus a basic human right, which applies regardless of whether a country is a party to the 1951 Convention.
62. In this context, **family reunification** in the country of asylum is often the only way to ensure respect for a refugee's right to family unity, since he or she cannot return to the country of origin or habitual residence. It is a fundamental aspect of bringing normality back to the lives of people who have fled persecution or conflict and have lost touch with family members during forced displacement and flight.

3. Termination of refugee status: cessation, cancellation and revocation

63. Someone who has been recognized as a refugee (whether by a State under the 1951 Convention and/or by UNHCR as a mandate refugee) may lose refugee status only if certain conditions are met. Refugee status may only be withdrawn on the basis of a cancellation or revocation or if the conditions for cessation of refugee status are met.

a. Cessation of refugee status

64. Recognition of a person's refugee status is not limited in time. It only ceases when the so-called "cessation clauses" (under Article 1C of the 1951 Convention and Article 1, paragraph 4 (a) to (e) of the OAU Convention) are met. These spell out the conditions under which a refugee ceases to be a refugee and are based on the consideration that international protection should not be maintained where it is no longer necessary or justified.

65. Refugee status should thus be retained unless the refugee comes within the terms of one of the cessation clauses. This results from the need to provide refugees with the assurance that their status will not be subject to constant review in the light of temporary changes – not of a fundamental character – in the situation prevailing in their country of origin.

66. Under Article 1C (5) of the 1951 Convention, refugee status may cease either through the actions of the refugee (contained in sub-paragraphs 1 to 4) or through fundamental changes in the objective circumstances in the country of origin upon which refugee status was based (sub-paragraphs 5 and 6). Of the six cessation clauses, the first four reflect a change in the situation of the refugee that has been brought about by him- or herself, namely:

- a) Voluntary re-availment of national protection;
- b) Voluntary re-acquisition of nationality;
- c) Acquisition of a new nationality (and enjoys the protection of the such new nationality - see section on derivative status); and
- d) Voluntary re-establishment in the country where persecution was feared.

67. The last two cessation clauses, Article 1C(5) and (6), are based on the consideration that international protection is no longer justified on account of changes in the country where persecution was feared, because the reasons for a person becoming a refugee have ceased to exist. They are known as the "ceased circumstances clauses".

68. When a State wishes to apply the ceased circumstances clauses, the burden rests on the country of asylum to demonstrate that there has been a fundamental, stable and durable change in the country of origin and that invocation of Article 1C(5) or (6) is appropriate. There may be instances where certain groups should be excluded from the application of general cessation because they remain at risk of persecution.

b. Cancellation

69. "Cancellation" is a term used to refer to a decision to invalidate a refugee status recognition which should not have been granted in the first place. Cancellation affects determinations that have become final, that is, they are no longer subject to appeal or review. It has the effect of rendering refugee status null and void from the date of the initial determination (*ab initio* or *ex tunc* – from the start or from then). Cancellation of refugee status is warranted when it becomes known that the individual was recognized as a refugee even though he or she did not meet the eligibility criteria at the time. This may be because the inclusion criteria were not met or because an exclusion clause should have been applied. The decision to grant refugee status may have been made in error because the person had intentionally misrepresented or concealed material facts in order to obtain refugee status, in cases of misconduct such as bribery, or due to a mistake by the determining authority.

c. Revocation

70. "Revocation" involves withdrawal of refugee status in situations where a person engages in conduct which comes within the scope of Article 1F(a) or 1F(c) of the 1951 Convention after having been recognized as a refugee. This has effect for the future (*ex nunc* – from now).
71. Cancellation and revocation of refugee status should not be confused with expulsion under Article 32 of the 1951 Convention nor with loss of protection against *refoulement* pursuant to Article 33(2). Neither of the latter provide for the loss of refugee status of a person who, at the time of the initial determination, met the eligibility criteria of the 1951 Convention.

3

Defining refugee and refugee related populations for the purpose of statistical measurement

A. Measuring refugee and refugee related populations

72. Following the discussion in the previous chapter on the legal definition of refugees, this chapter attempts to develop a statistical framework for refugee and refugee related populations which is applicable for national statistical systems. The term “**refugee and refugee related populations**” will be used throughout this document to refer to the total population in scope of these recommendations.

1. Population in scope of these recommendations

73. At any point in time, a country has a stock of refugees and others seeking international protection, together with those with a refugee background (terms are defined below in sub-section 2). In addition, a population may exist of those who have returned to their home country after seeking protection abroad. The population of concern in these recommendations is very closely, but not exactly, aligned to the mandate UNHCR has been entrusted with by the international community. UNHCR’s responsibility includes refugees, asylum seekers, returned refugees, stateless persons, other groups in refugee-like situations, and IDPs. Stateless persons are not included in the scope of these recommendations unless they are also refugees. In addition, IDPs are excluded, as they are subject to separate recommendations from the EGRIS group, and can be found in the *Technical Report on Statistics of Internally Displaced Persons: Current Practice and Recommendations for Improvement*.

74. The population in scope of these recommendations includes refugees, asylum seekers, those admitted for subsidiary/complementary and temporary forms of protection, and others admitted for other international protection reasons. It also includes people who have returned home after seeking international protection. Also in scope are those people who are not themselves refugees, but who have a refugee background, including naturalised former refugees, children born to refugee parents who are not themselves refugees, and reunified family members from abroad (see sub-section 3 for more details).

75. It is important to note that this framework report includes only those who enter the country to flee from persecution, disturbed public order, war or violence in the country of origin, or those with a similar background. Persons migrating to a country due to economic deprivation, or climate change and other man-made disasters in their home country are excluded from the scope of these recommendations, unless they are also in need of international protection to the extent that they cannot return home. In addition, irregular migrants, who are those staying in the host country without valid authorisation to reside, are excluded from the scope of these recommendations. It may however be difficult to distinguish irregular migrants from refugees in some data sources. Excluded irregular migrants include asylum seekers who have failed to gain asylum and who have exhausted all means of appeal against the decision and who are still in the country. More information on the coverage of irregular migrants by type of data source is available in Chapter 4.

76. Unaccompanied children seeking international protection are included in the scope of the report, but are not identified as a separate category. They can be distinguished from adults at the analysis stage by being under the age of eighteen, unless, under the law applicable to the child, majority is, attained earlier and also by being “separated from both parents and not being cared for by an adult who by law or custom has responsibility to do so”³⁵. Proposed basic tabulations for this and other groups are given below in section C.
77. Refugee and refugee related populations in scope of these recommendations may satisfy the statistical definition provided for international migrants if they have changed their country of residence. It is important to distinguish between the legal and statistical definitions provided in these recommendations.³⁶ Within the context of this chapter, the terms “international migrant”, “immigrant” and “emigrant” (see definition in sub-section 2 below) should be understood in accordance with their statistical meanings, which are distinct from their definitions under national and international law.
78. Similarly, not all refugee and refugee related persons in scope of these recommendations are foreign citizens, as some may take the citizenship of their host country, and these persons may or may not be regarded as refugees by the national authorities. Their legal status as refugees will depend on whether they are still in need of international protection although Palestine Refugees with protection under the UNRWA mandate (see Chapter 2, Section (3)) are treated as refugees regardless of nationality. According to legal definitions discussed in the previous chapter, some of the refugee stock may already be citizens of the host country. Children born of refugees and asylum seekers in the host country may or may not be entitled to citizenship. Nonetheless, how citizenship interplays with refugee status varies by country and country-specific. Citizenship is an important factor that determines who is subject to control on arrival in a country as well as the person’s rights to protection within the country, therefore it is important to understand the interplay between citizenship and refugee status.
79. In addition, those having returned to their home country after having sought or received international assistance abroad are also in scope of these recommendations, as they too have to be supported on their return and be integrated into their local communities. Some people who have unsuccessfully sought international protection abroad, are repatriated to their home countries. These returned asylum seekers are also in scope, even though they were never recognised as in need of international protection, as the flows of these intending asylum seekers are recorded as inflows of asylum seekers and as outflows of repatriated asylum seekers.

2. Refugee statistics and correspondence with recommendations on international migration statistics

80. The population in scope of these recommendations is primarily classified in legal terms by their claim to refugee status, or their descent from those with or seeking international protection. As noted previously, the fact that they may be classified as international migrants for statistical purposes has no bearing on their legal status. Further, it should be noted that some refugees and other persons in need of international protection may not satisfy the international migrant definition set out in this chapter, often because they are refugees *sur place* or because they were born in exile to refugee parents. Therefore, not all refugees meet the statistical definition of international migrants.
81. Some National Statistics Offices publish statistics about international flows of refugee and refugee related populations, and for this reason, the definitions of international migration from other relevant international sources are reproduced below.
82. According to the United Nations’ *Recommendations on Statistics of International Migration, Revision 1*, an international migrant is “any person who changes his or her country of usual residence” (United Nations, 1998). The recommendations make a distinction between short- and long-term international migrants based on a person’s “country of usual residence”. Specifically, a long-term migrant is defined as:

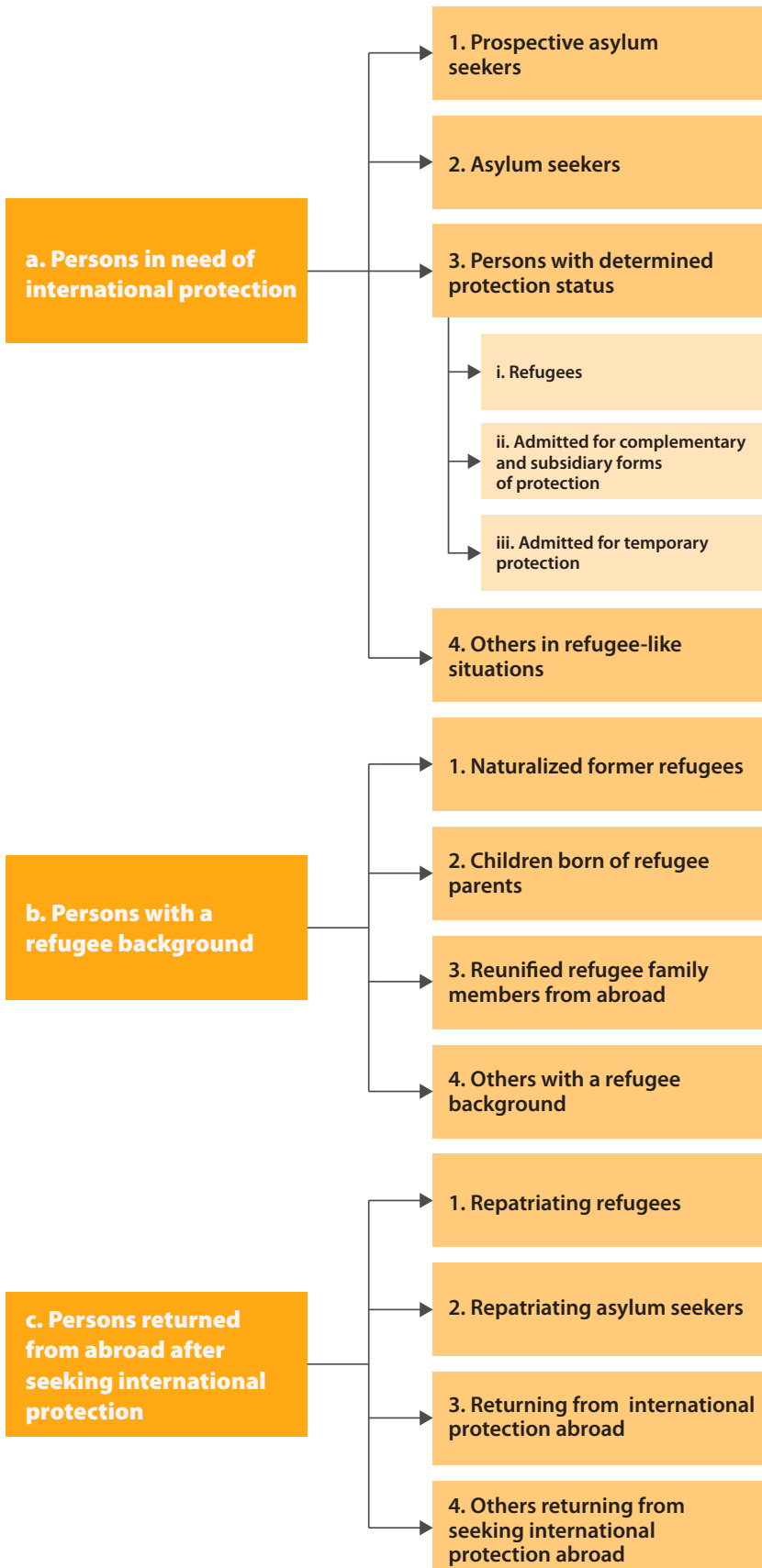
A person who moves to a country other than that of his or her usual residence for a period of at least a year (12 months), so that the country of destination effectively becomes his or her new country of usual residence. From the perspective of the country of departure the person will be a long-term emigrant and from that of the country of arrival the person will be a long-term immigrant (United Nations, 1998, p. 10).

83. To help in clarifying the United Nations' definition, the United Nations' *Handbook on Measuring International Migration through Population Censuses* provides an operational definition of an international migrant:
- A person must satisfy the following conditions to be considered as an **immigrant** of a country in the context of population flows:
- entering the country by crossing the border
 - having been a usual resident of another country before entering or not a usual resident of the country when entering
 - staying or intending to stay in the country for at least one year.
- A person must satisfy the following conditions to be considered as an **emigrant** of a country in the context of population flows:
- leaving the country by crossing the border
 - having been a usual resident of the country
 - staying or intending to stay in another country or abroad for at least one year. (United Nations, 2017, p. 7)
84. Therefore, statistically some refugees can also be part of the total migrant count by both the definitions used above. In fact, if refugee and refugee related groups, as outlined in Figure 3.1 meet the duration requirement, they will be counted in the statistics of international migrants if they moved to the country within the reference dates. If a foreign person enters the host country for international protection reasons, with the intention of staying for at least one year, this person should be considered as an immigrant. For a refugee who returns to his or her country of habitual residence after having sought protection abroad and if this person intends to stay in the home country for at least one year, then this person should be considered an immigrant into his or her home country. These people are also defined as returned migrants (United Nations, 2017, p. 18).
85. However, there may be difficulties in using the concept of usual residence for potential and actual asylum seekers, as many people fleeing their countries of origin are in an impermanent position, and their destination is often undefined. If they have the intention of staying in the country for a year then they should be included in the migrant count. Asylum seekers in transit to another country are excluded from the scope of these recommendations.

3. Major classifications of refugee and refugee related populations

86. In the drive towards international comparability of statistics, it is imperative to have a standard statistical concept of refugee and refugee related populations and to understand the concepts underlying them, so that the divergence in concepts and resulting differences in statistics can be better revealed.
87. For statistical purposes, we need a framework which can be readily applied to measure both the stocks and flows of refugee and refugee related populations. The concepts and classifications set out below require translation into core questions that will enable identification of the refugee related populations in data sources in ways that are both practical and cost effective to apply. Because of the complexity of the legal definitions of persons in need of international protection (see Chapter 2), simplification is needed to arrive at a workable classification.
88. This chapter identifies three distinct populations: (a) the population in the country needing international protection; (b) persons with a refugee background; and (c) persons who have returned to their home country after seeking international protection abroad. Figure 3.1 below shows the composition of the population in scope of these recommendations, divided into those in need of international protection, those with a refugee background and those who have returned to their home country or country of former habitual residence³⁷ after seeking international protection abroad. Population (c) also include repatriated asylum seekers who received a negative decision on their asylum claim.

Figure 3.1: Scope of the population of refugee and refugee related populations



4. Descriptions of categories in the statistical framework

89. Definitions of the categories in the statistical framework of persons in a country needing international protection.

a. Persons in need of international protection

90. This category includes individuals in a country other than their own who are seeking or who have received international protection—in both cases they would have expressed a need for international protection. While most of the individuals in this category will be foreign citizens who have immigrated to seek protection, others may have been born in the host country to refugees or asylum seekers. Children born to refugees or asylum seekers in a host country have their entitlement to citizenship determined by the law of the country of asylum, and many are not entitled to citizenship of that country. Therefore, this category includes children of refugees or asylum-seekers who may have been born in the country of asylum, but who have not themselves acquired the citizenship of their host country and are therefore in need of international protection. This category also includes Palestine Refugees recognized under UNRWA's mandate who may have been born in the host country and who may have acquired citizenship of the host country.

91. This category of persons in need of international protection is subdivided into 4 groups - prospective asylum seekers; asylum seekers; those with determined protection status which is split into 3 sub-groups: (i) admitted as refugees, (ii) admitted for complementary or subsidiary forms of protections, or (iii) admitted with temporary protection status; and others in refugee-like situations admitted for other international protection reasons. The category includes any persons who enter the country with the intention to seek international protection or who have been admitted for international protection. It excludes persons who have a refugee background and any others who no longer need international protection.

92. This category comprises four groups:

1. Prospective asylum seekers: Persons with the intention of filing an application for asylum, but who have not yet done so for reasons which include being unable to file an application because of practical or administrative obstacles including capacity constraints in the receiving country authorities. Asylum seekers in transit to another country are excluded from the scope of these recommendations.

2. Asylum seekers: Persons who have filed an application for asylum in a country other than their own and whose claims have not yet been determined. These include those filing primary applications or subsequent applications following an appeal. The date on which the application for asylum is filed marks their entry into the status of asylum seeker. They remain in the status of asylum seeker until their application is considered and adjudicated.

3. Persons with determined protection status: Persons who have had their protection status determined by their host country. To reflect the different legal basis of the determination, three sub-categories are available:

- i) **Refugees:** Persons who have current refugee status, granted either before arrival or upon arrival in the receiving country. Those with status granted before arrival in the receiving country include resettled refugees, and those who were living abroad at the time of application and whose application for permanent residence was considered concurrently with that of the protected person already living in the country³⁸. Refugee status can be granted on the basis of the 1951 Convention and the 1967 Protocol or pertinent regional instruments (see Chapter 2 for a full description). The group may also include persons who qualify as refugees under national legal systems. Refugees under the UNHCR mandate, Palestine Refugees registered with UNRWA and other persons eligible to receive UNRWA services without being registered are also covered under this category. It may be important, however, to distinguish refugees recognized under different conventions and covered by different entities for data compilation. This will depend on the needs of national statistical users.
- ii) **Admitted for complementary and subsidiary forms of protection:** Persons with one of a number of designations granted by host countries, including Subsidiary Protection in the EU. This category includes individuals who have been granted leave to stay and may be in need of international protection.

- iii) **Admitted for temporary protection:** Persons who are granted temporary legal status in the host country because their lives would be in danger if they were to return to their home countries. This status may continue for as long as the threat persists. Temporary protection is often a stepping-stone to refugee status.

4. Others in refugee-like situations: Persons who are not admitted to the host country as asylum seekers, but have nonetheless fled persecution, disturbed public order, war, violence, etc. in their country of origin or habitual residence. This group may include people who enter the country: (i) on tourist, student or work visas; (ii) pursuant to humanitarian stay programs; or (iii) in accordance with treaties guaranteeing free movements within a defined area, provided that the underlying reason for their presence in the host country is tied to their need for international protection. This category also covers any international protection admissions that cannot be accommodated in previous categories.

b. Persons with a refugee background

93. This category comprises persons who are not currently in need of international protection but who have a refugee background including: persons who previously held refugee status but have been naturalised and acquired citizen status; those born in the host country of refugee parents or grandparents with the citizenship of the family's host country; those permitted to join refugee family members and be in the country under family reunification schemes and others with a refugee background. Those who now have citizenship of the host country could be considered to no longer need international protection, and can be termed those with a refugee background. There may also be persons who would be eligible for citizenship of the host country, but who have decided not to avail themselves of it. These persons are no longer in need of international protection and are classified here. Some, but not all of these persons may be capable of being identified by their own citizenship or that of their parents.

94. Possible groups under this category of persons with a refugee background include:

1. Naturalised former refugees: These persons were once refugees in the host country, but who no longer have refugee status because they are now naturalised citizens of the host country having gone through a process of taking on citizenship of the host country.

2. Children and descendants of refugees: These persons are born of one or more refugee parents, and who are not themselves in need of international protection, usually because they have citizenship of the host country. Children born of refugee parents who have not acquired the citizenship of the host country should be included in category (a) (persons in need of international protection) in paragraph 92 above. Their exact group under this category will depend on their current legal status, which may be that of their parents, but will depend on the national law of the host country.

3. Family member reunification: Those people who have joined refugee families or former refugee families from abroad through a process of family reunification are included here. The category does not include locally born or citizen family members who have joined households by marriage or by household formation.

4. Others with a refugee background: These include any others who have a refugee background who are not currently refugees. It may include those whose protection has ceased but who remain in the country of concern.

c. Persons returned from abroad after seeking international protection (returnees)

95. These are persons who have returned to their home country after seeking international assistance abroad. The home country is defined legally as the country of *former habitual residence*, and is usually their country of citizenship, but it may be that of their parents or grandparents who fled many years ago, as many crises span several generations. For stateless persons, the previous country of residence could be considered as the home country.

96. In addition, this category includes those who have sought asylum abroad, have failed to gain refugee status, and have returned to their home country. While these persons are not in need of international

protection, they are included in flows as they were previously part of the stock of refugee and refugee related populations. These groups might be identified in international migration questions, depending on the reference date used. They may be difficult to identify in their home country, as most will hold citizenship of the country to which they are returning and may be invisible to immigration records.

97. Persons returned from abroad after having sought international protection include:

1. Repatriating refugees: Persons, likely to be citizens, who have returned to their home country after having enjoyed asylum abroad. Both refugees returning under internationally assisted repatriation programmes and those returning spontaneously should be included in this category.

2. Repatriating asylum seekers: Persons returning after having attempted to seek asylum abroad. To the extent possible, this category should include persons who return after their asylum applications have been decided negatively as well as persons who may not have been able to apply for asylum but who stayed abroad under temporary protection for some time. While these persons were deemed not to have been in need of international protection, they were previously included in the stocks and flows of asylum seekers and reflected in asylum application recognition rates, and may be of interest to policymakers after their return home.

3. Returning after having received international protection other than refugee status abroad: This category covers persons who received temporary protection or were granted stay for other international protection reasons abroad and who have since returned to their home country. These persons have been previously granted international protection although not full refugee status.

4. Others returning from seeking international protection abroad: This category covers persons who left the country to seek international protection abroad but were not covered by the other three categories above. The category might include those who intended to seek international protection abroad but were admitted by another country for other purposes, such as tourism, study or labour.

B. Measuring populations in need of international protection and with a refugee background: stocks and flows

98. Statistics on refugee and refugee related populations can be measured as stocks and as flows. The population stock gives the size of membership of this population at a single point in time, while the flow is a measure of change of the membership of the population over a defined period of time.

1. Definitions of stocks and flows in demographic context³⁹

99. A stock is a static measure of the size of a population with a specific characteristic in a given country at a particular point in time (also called the reference date). The important aspect here is the point in time, usually mid-year (30 June) or end of year (31 December), when the population holding a specific characteristic is counted (note, this is a similar concept as for population censuses). A person belongs to this population when they hold the specific characteristics at this reference date regardless of when they acquired this characteristic. For example, a person is counted in the international migrant stock if the person resides in a foreign country at the reference date independent of whether the person migrated within the last year or many years ago or if they intend to leave the country shortly after the reference date (United Nations, 2015).

100. In contrast, flow is a dynamic measure, counting the size of a population that acquired the specific characteristic within a particular time period. The important aspect here is the time period, usually one month or one year. Flows have a directional component: they can be counted as inflow (persons entering the population of interest) and outflow (persons leaving the population of interest). The difference between inflow and outflow is called net-flow and can have a positive (more inflow than outflow) or negative value

(less inflow than outflow). In the migration example, a person is counted in the migration flow only if he or she crosses an international border during the given time period or interval, but not if he or she had crossed the border before the start of this period (and is fulfilling other criteria related to the minimum length of stay). Migration flow can be directed into the country (immigration) and out of the country (emigration); the net migration flow gives the balance between immigration and emigration.

101. In the context of refugee statistics, the situation is more complex than crossing a national border, as persons may enter the stock at several points, by birth, by migration or by being granted citizenship of the host country or by changes in their international protection status. They may also exit by death, migration or by changing their legal status or citizenship.⁴⁰

2. How to measure stocks and flows of refugee and refugee related populations

a. Stocks

102. Stocks are largely measured by using data from administrative records and also by censuses and population registers, these data sources are discussed in Chapter 4.
103. The stock of a refugee and refugee related population is determined at a specific point in time according to their specific characteristics outlined in the statistical framework described above. For persons in a country in need of international protection, the stock definitions are given in the previous section and summarised above in Figure 3.1. The total stock is the sum of all these components:
- The total stock of persons in a country needing international protection:** total number of persons in a country needing international protection at a specific point in time, is derived by adding the stock numbers of the categories identified in Figure 3.1 under (a) Persons in need of international protection (prospective asylum seekers, asylum seekers, persons with determined protection status, and others in refugee-like situations).
 - The total stock of persons with a refugee background:** is derived from summing the stock of persons set out in Figure 3.1 under (b), Persons with a refugee background (naturalised former refugees, children born of refugees with the citizenship of the host country, reunified refugee family members from abroad who are not refugees themselves, others with a refugee background).
 - The total stock of persons returned from abroad after seeking international protection:** is derived by summing the stock of persons set out in Figure 3.1 under (c) Persons returned from abroad after seeking international protection (repatriating refugees, repatriating asylum seekers, those returning from international protection abroad and others returning from seeking international protection abroad).

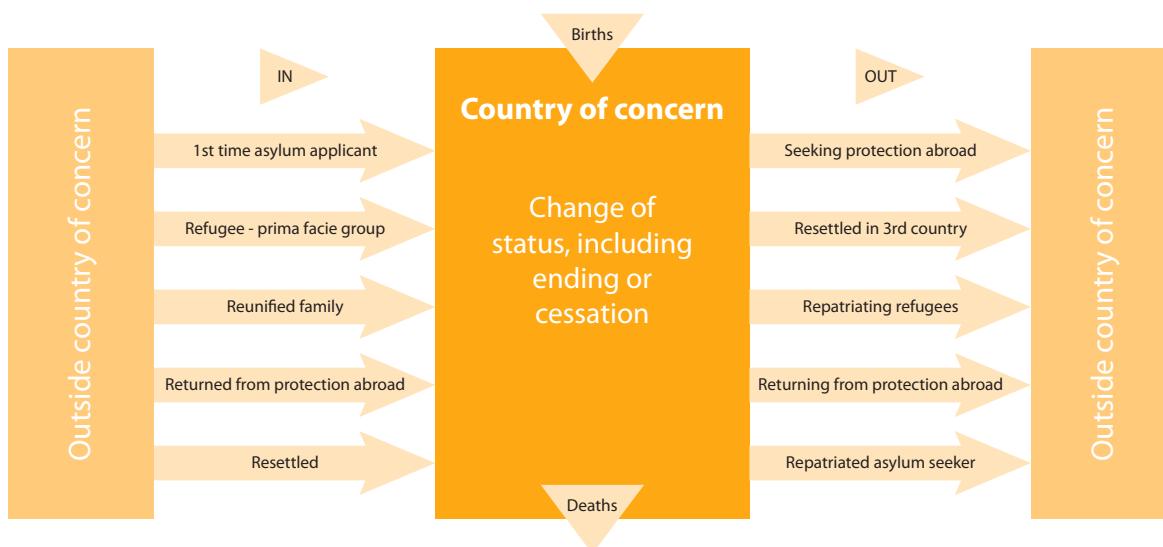
b. Flows

104. The flow of a refugee and refugee related population is the number of persons entering or leaving the specific population within a specific period of time, usually one calendar year (see Figure 3.2). Note, this concept is different from the one used for migration flow, as it takes the “population in scope” as the reference unit and not the country. This means, for example, someone is counted as part of the refugee flow when the person has moved within the reference period from the refugee-population in need of international protection, to a naturalised citizen with a refugee background. This is independent of the time the person had already spent previously in the country as an asylum seeker or refugee. There can also be flow within the stock from asylum seeker to refugee.
105. Flows of refugee and refugee related populations can be considered as international or national, as follows:
- International inflow covers both inflow of persons seeking international protection and citizens returning from having sought international protection abroad. In addition, family members may join existing refugees as part of family reunification procedures. International outflow includes refugees being resettled in a third country, refugees returning home, and asylum applicants who have exhausted all

appeals for refugee status and are repatriated. It can also include citizens fleeing their home country in search of international protection abroad.

- b) National inflow includes births of children of refugee or asylum-seeking parents in the host country. National outflow includes deaths. Within the refugee and refugee related populations individuals may change their status by having asylum applications granted, ceased, cancelled or revoked. Others may receive citizen status by a process of naturalisation.
106. For statistical purposes, the total stock of refugee and refugee related populations covers all the categories and groups described in Figure 3.1. The only exit from the total global stock is death, although for national stock estimates, emigration would be an additional means of exiting the stock. For the stock of individual categories of the refugee and refugee related population, such as (a) those in need of international protection, the exit is defined by not being in need of international protection either because of naturalisation, repatriation or by the ending of refugee status.
107. Measuring each flow may be difficult. Outflow of refugees in particular is sometimes poorly captured and often unmeasured. For this reason, most of the recommendations for flow measurement provided below describe international inflows only, using administrative registrations into a population. Refugees and related persons leaving the population are in many cases unregistered, and therefore largely not measured although in principle outflow they could be.

Figure 3.2: International and national flows within the refugee related population



3. Measuring inflows of persons in need of international protection

108. This section discusses the measurement of international inflows in the population in need of international protection. The flows can be considered in terms of international inflows of persons in need of international protection. Other elements of flow between categories are disregarded for statistical purposes. The flow categories are described in Box 3.1: Description of inflows of persons entering a country for international protection reasons, below. It should be noted that the categories should not be summed up at all. The same person may appear in more than one place within the same reference period.

Box 3.1: Description of inflows of persons entering a country for international protection reasons

Inflow of prospective asylum seekers: Number of persons entering the country with the intention of applying for international protection within the reference year. (There is potential for double counting the same individual as an asylum seeker, once the application has been filed if this occurs within the same reference period. Therefore, categories may be combined where necessary as in Figure 3.3)

New asylum seekers: Number of persons who have applied for asylum within the reference year for the first time. This number should include only first applications to avoid double counting of asylum applicants. Applications granted, rejected or withdrawn within the time period should be ignored in this context.

New prima facie refugees: Number of persons having entered the country with prima facie refugee status within the reference year. (Refugees recognized on an individual basis would have first been asylum seekers and would have been captured above.)

New resettled refugees: Number of persons entering the country within the reference year who have been resettled from another host country to this (third) country as a result of resettlement programmes.

Reunified refugee family members: Number of foreign citizens entering a country within the reference year who have been authorised to join existing refugee family members.

Note: These categories should not be summed.

Figure 3.3: International inflows into population in a country for international protection



4. Measuring flows of persons returned from abroad after seeking international protection

109. The population flows can be measured not only for the foreign persons who are entering a country for international protection reasons, but also for citizens who have returned to their country of previous habitual residence after having sought international protection abroad (see Figure 3.2). Since persons of this group are usually citizens of the country to which they are returning they are counted in the concept of stocks as well as flows. The stock figure of former refugees in the country of return has limited informational value as well as practical limitations. Consequently, Box 3.2 describes only the flow definitions of different populations within the group of returning citizens. Unlike a stock measure, it is possible to aggregate the flow numbers over several years in order to get estimate of the total size of the returned population within the specified period.⁴¹

Box 3.2: Description of flow measurements of citizens who have returned to their country after having sought international protection

Repatriating refugees: Number of repatriating former refugees within the reference year who are citizens of the country.

Repatriating asylum seekers: Number of returning asylum seekers within the reference year.

Returning from international protection abroad: Number of returning persons within the reference year who have received international protection abroad other than refugee status.

Other persons returning after having sought international protection abroad: Number of other repatriating persons returning within the reference year after having sought protection abroad other than refugee or subsidiary, complementary or temporary protection.

C. Statistics and indicators relating to stocks and flows of refugee and refugee related populations

110. This section suggests statistics and tabulations on refugee and refugee related populations that may be adopted in the national context. The lists presented are extensive, but in no way exhaustive. Not all of them are relevant to every country. The specific statistics and tabulations to be produced will depend on the priorities of each country. The possibility of producing them also rests on the type of information collected, available data sources as well as the statistical capacity of the country.
111. The section contains five sub-sections covering: (1) stocks of persons in need of international protection; (2) flows of persons in need of international protection; (3) stocks of persons with a refugee background (flows are not covered); (4) stocks of persons returned from abroad after having sought international protection; and (5) flows of persons returned from abroad after having sought international protection. Each subsection provides a list of (a) basic statistics; and (b) key indicators that can be potentially derived by countries.
112. In addition to the magnitude of refugee and refugee related populations, there is strong policy and research interest in their characteristics, which feature prominently in the proposed indicators and tabulations. Countries may find it useful to distinguish refugee and refugee related populations on the basis of the following characteristics. Additional suggestions for more detailed analysis of refugees relating to their living conditions, access to rights and integration with the general population can be found in Chapters 5. Recommendations on collecting data can be found in Chapter 4.
113. The following variables are recommended as the basis for collecting and compiling refugee statistics.

Basic classificatory variables

 - a) Age or date of birth
 - b) Sex
 - c) Country of birth
 - d) Country of citizenship (including stateless, undetermined status and multiple citizenship)
 - e) Date of arrival in country
 - f) Reason for migration (harmonise responses as indicated in Chapter 4)
 - g) Country of previous or last residence (for both refugees in the country and refugees returning to the country of citizenship)

- h) Date of first displacement/leaving previous country of habitual residence
- i) Parents' refugee statuses
- j) If an unaccompanied child (under age of 18 years and separated from both parents or legal guardian)
- k) Legal residential/international protection status as applicable to the national context:

Persons in need of international protection

- i) prospective asylum seeker
- ii) asylum seeker
- iii) individual refugee status
- iv) prima facie refugee status
- v) subsidiary or complementary protection status
- vi) temporary protection status
- vii) refugee resettled in a third country
- viii) refugee-like (state form of protection granted)

Persons with a refugee background

- ix) naturalised former refugee
- x) child born of refugee parents without own refugee status
- xi) reunified family member
- xii) others with refugee background

Persons returned from abroad after seeking international protection

- xiii) repatriated refugee
- xiv) repatriated asylum seeker
- xv) returning from other form of international protection
- xvi) returning from international protection other than categories xiii-xvi.

1. Stocks of persons in need of international protection

a. Basic statistics

114. The most basic statistics to be derived are the counts of each type of refugee and refugee related populations identified earlier (Figure 3.1) in category (a) 'persons in need of international protection'. The numbers are cross-tabulated by sex and age or age group. If age groups are used then it is important to distinguish children from adults aged over 18 years, and for some purposes it may also be helpful to identify those under 16 years of age. The country of citizenship could also be considered as a basic classificatory variable, and this should include stateless persons and those with undetermined citizenship status. The corresponding statistics are:

- a) Total number of persons in a country for international protection, by sex and age.
- b) Total number of asylum seekers, by sex and age.
- c) Total number of refugees, by sex and age.

- d) Total number of persons admitted for subsidiary, complementary protection, by sex and age.
- e) Total number of persons admitted for temporary protection, by sex and age.
- f) Total number of persons with refugee-like status, by sex and age.
- g) Total number of persons with a refugee background, by sex and age.

b. Key indicators of (a) Persons in need of international protection

115. Some key indicators relevant to the stocks of refugee and refugee related populations are listed below. These represent a modest set of indicators that can be potentially produced. The desired indicators will depend on the information needs of the country. As needed, the indicators below may also be calculated for subgroups of interest, such as for major countries of citizenship, for different periods of arrival, etc.
- a) Percentage of the total population who are in a country for international protection.
 - b) Proportion of females among persons in a country for international protection.
 - c) Percentage of persons present in the country for international protection who are asylum seekers.
 - d) Percentage of persons present in the country for international protection who have determined status.
 - e) Total number of unaccompanied and separated children under 18 in a country for international protection, by sex and age.
 - f) Proportion of persons in a country for international protection who have remained for 5 years.
 - g) Proportion of persons in a country for international protection who have remained for 10 years.
 - h) Proportion of persons in a country for international protection who have remained for over 10 years.
116. Basic demographic characteristics, such as age, sex and marital status, can be used to analyse the impact of refugees on the demographic and social structure of the country, and in particular the incidence of unaccompanied minors. Demographic variables are also used as control variables when comparing important socio-economic characteristics, of which educational attainment, labour force status, occupation, fertility and mortality garner some of the strongest interest. Again, the indicators shown are but an illustrative sample of the innumerable socio-economic indicators that can be produced on immigrant stocks. This is discussed in detail in Chapter 5.

2. Flows of persons in need of international protection

a. Basic statistics

117. The most basic flow statistics to be derived are the counts of each type of refugee and related population groups of category (a) 'persons in need of international protection', identified earlier in Box 3.1.
- a) Total number of persons who entered a country for international protection who intended to submit an application for asylum for the first time during a period of time and were unable to do so, by sex and age.
 - b) Total number of persons who entered a country for international protection who submitted an application for asylum for the first time during a period of time, by sex and age.
 - c) Total number of persons who entered a country for international protection during a period of time who were prima facie refugees, by sex and age.
 - d) Total number of persons who entered a country for international protection during a period of time who were resettled refugees from another host country, by sex and age.

- e) Total number of persons who entered a country for international protection during a period of time who were reunified refugee family members, by sex and age.
 - f) Total number of persons under the age of 18 years who entered a country for international protection without accompanying parent, by sex.
118. Other key characteristics to further disaggregate the other flow statistics include country of citizenship or country of previous residence. Whenever possible, stateless persons who are also in need of international protection should be identified.

b. Key indicators

119. The following related indicators are related to the administrative procedure and could be used to provide an indication of:
- a) Total number of asylum seekers who received a decision during a period of time, by sex and age.
 - b) Percentage of asylum applications decisions that are positive (or negative) during a period of time, by sex and age.
 - c) Percentage of determined refugee status granted during a period of time, by type (prima facie, individual, derivative, complementary/subsidiary, temporary protection), by sex and age.
 - d) Percentage of rejected asylum seekers who left the country during a period of time, by sex and age.
 - e) Recognition rate during a period of time [the added value of the use of longitudinal information in more adequate calculation of the recognition rate should be acknowledged].
 - f) Percentage of persons entered for international protection during a period of time who were resettled elsewhere.

3. Stocks of persons with a refugee background

120. The basic stock statistics to be derived are the counts of each type of refugee and related population groups in category (b) 'Persons with a refugee background', identified earlier in Box 3.1.

a. Basic statistics

- a) Total number of persons with a refugee background, by sex and age.
- b) Total number of naturalised former refugees, by sex and age.
- c) Total number of descendants of refugee parents who are not refugees themselves, by sex and age.
- d) Total number of persons in the country as a result of refugee family reunification, by sex and age.
- e) Total number of other persons with a refugee background, by sex and age.

b. Key indicators

- a) Percentage of the total population who have a refugee background.

4. Stocks of persons returned after having sought international protection abroad

a. Basic statistics

121. The basic stock statistics to be derived are the counts of each type of refugee and related population groups in category (c) 'Persons returned from abroad after seeking international protection', identified earlier in Box 3.1.
122. The most basic statistics to be produced are:
 - a) Total number of persons returning to their country of habitual residence after having sought international protection abroad, by sex and age.
 - b) Total number of repatriated refugees, by sex and age.
 - c) Total number of repatriated asylum seekers, by sex and age.
 - d) Total number of persons returned after having received international protection other than refugee status abroad, by sex and age.
 - e) Total number of other persons returned from seeking international protection abroad, by sex and age.

b. Key indicators

123. Indicators on returnees that may be useful include the following:
 - a) Percentage of persons returned from having sought international protection abroad among all returned citizens.
 - b) Proportion of females among persons returned from having sought international protection abroad.
124. It is also possible to compare the characteristics of refugees returned from different countries, the indicators proposed in Chapter 5 can be adapted for this purpose; or to compare more recent returned refugees with those who have returned for a longer period. The method is to calculate the desired indicator by country of previous residence, by length of stay in the country of citizenship, or by any other variable of interest to the country.

5. Flows of citizens returning from having sought international protection abroad

a. Basic statistics

125. The most basic flow statistics to be derived are the counts of each category of citizens who have returned to their country after having sought international protection, identified earlier in Box 3.2.
 - a) Total number of persons who returned to their country of habitual residence after having sought international protection abroad during a reference period, by sex and age.
 - b) Total number of repatriated refugees during a period of time, by sex and age.
 - c) Total number of repatriated asylum seekers during a reference period, by sex and age.
 - d) Total number of persons returned after having received international protection other than refugee status abroad during a period of time, by sex and age.
 - e) Total number of others returned after seeking international protections abroad during a period of time, by sex and age.

4

Measuring the number of refugees

A. Introduction

126. This chapter describes the measurement of refugee and refugee related population using population censuses, surveys, and data from administrative records in order to produce the statistics and indicators recommended in Chapter 3. Part B makes recommendations on the core data which need to be collected to identify the refugee and refugee related populations discussed in Chapter 3. It describes the core topics that need to be included in population censuses, national household surveys, and specialised refugee surveys to enable refugee and refugee related populations to be identified and statistics produced. Part C describes the national data sources available, while Part D reviews international data sources. Part E looks at the methods available for integrating multiple data sources to improve their utility, including big data and other non-traditional methods.
127. The sections on national and international data sources (Part C and Part D) include: (a) a description of the data sources; (b) references to relevant international recommendations; (c) data quality considerations; (d) advantages and limitations of the data source in general, and for estimating refugee related populations in particular; and (e) recommendations for improving future data collection methodologies, drawing on recent experiences and practice.

B. Recommendations on core questions for measuring refugee and refugee related populations

1. Major classifications of the refugee and refugee related populations

128. The concepts and classifications set out in Chapter 3 need to be translated into core questions that will enable the identification of refugee and refugee related populations in data sources, in a way that is both practical and cost effective. Because of the complexity of the legal definitions of refugees (see Chapter 2), simplification is needed to arrive at a workable sequence of questions in surveys and censuses. This is particularly problematic for population censuses where the addition of questions is very expensive, as each question must be asked of every person in the country for the reference date.
129. This section recommends core questions for population censuses and for household surveys. Recommendations for household surveys are made for a simple question sequence adequate for identifying likely refugees in national household surveys designed to cover multiple topics or specific non-refugee topics, for example labour force, general household, multiple indicator cluster surveys or demographic

and health surveys. A more detailed set of questions suitable for use in specialised refugee surveys will be described in the forthcoming Refugee Statistics Compilers' Manual. If needed and likely to be cost-effective, the more specialised questions could also be used in surveys with wider coverage.

130. Chapter 3 identifies three distinct sub-groups of the refugee population: (a) persons in need of international protection; (b) persons with a refugee background; and (c) persons who have returned home after seeking international protection abroad. More detailed questioning than that described below will be required to identify these three sub-groups, this will be described in the forthcoming Refugee Statistics Compilers' Manual.

2. Proposed core identification questions

a. Population census core questions

131. The following question topics identify whether respondents are migrants based on the *Principles and Recommendations for Population and Housing Censuses, Revision 3* and are recommended as core topics in a population census:
- a) Country of birth
 - b) Country of citizenship
 - c) Acquisition of citizenship
 - d) Year or period of arrival in the country
132. In addition, it is recommended to include as a core census question:
- a) Reason for migration, with response categories:
 - i) Employment (including military service)
 - ii) Education and training
 - iii) Marriage, family reunification or family formation
 - iv) Forced displacement (refugees, asylum seekers, temporary protected status, others)
 - v) Other
133. The topic "Reason for migration" should refer to the main reason that drove the respondent to undertake the most recent migratory move. It is recommended that only one main reason for migration be recorded. The response category "Forced displacement" refers to the population in scope of the IRRS as described in Part A of Chapter 3. Some countries may also want to include a response category for "Returning home after seeking international protection abroad" that refers to the population category "Persons returned from abroad after seeking international protection".

b. National household survey core identification questions

134. The recommended core questions for identifying the refugee and refugee related populations in household surveys are:
- a) Country of birth
 - b) Country of citizenship
 - c) Acquisition of citizenship
 - d) Year or period of arrival in the country
 - e) Reason for migration, with response categories:

- i) Employment (including military service)
- ii) Education and training
- iii) Marriage, family reunification or family formation
- iv) Forced displacement (refugees, asylum seekers, temporary protected status, others)
- v) Other

C. National data sources for refugee statistics

1. Population and housing census

a. Data source description

135. For most countries in the world, the population and housing census (hereafter census) is not only the primary source of demographic data on the general population, but also the most important tool for obtaining an estimate of the stock of migrants (United Nations, 2004). As such, the census also presents an opportunity to describe the stock and demographic composition of refugee and refugee related populations. It can provide data on their housing and living conditions, and allow this information to be compared to general migrant groups in the country, as well as to the general population. However, in most countries affected by forced displacement, the census rarely allows a proper identification and measurement of refugees in a systematic and comparable manner, and consequently its usefulness is limited. While this might be largely due to technical, financial and political constraints, it might also be due to the lack of clear and systematic guidance and best practice recommendations. Thus, there seems to be a gap between the potential use of the population census to describe refugee and refugee related populations, and what is currently practiced.
136. There are several methods of census taking. Many countries use a “traditional” census, which involves a comprehensive individual enumeration of the entire population. Even among the countries that practice traditional censuses, there is an increasing trend for using mixed methods to reduce costs and to increase coverage. Some of these methods include posting the census questionnaire to a list of dwelling addresses and requesting respondents to post back the completed questionnaire, as well as the use of online Internet questionnaires. However, these methods might not be possible in many developing country contexts where there is no reasonably complete address list available, and where the digital divide makes Internet administered questionnaires unfeasible. Even where conditions are favourable, mixed methods potentially undercount refugees who may be living in camps, reception centres or unregistered dwellings; respondents may have problems completing forms in the language of the host country, or may not have easy access to the Internet.
137. Many countries have moved or are planning to move away from the traditional census to alternative approaches based on administrative data, sample surveys or a combination of data sources. Despite methodological differences, the statistical exercise and the data produced by these alternative approaches may still be referred to as a census. Each type of census will have its own strengths and weaknesses for measuring the number of refugees. Consequently, when considering the use of census data, it is important to consult its metadata to understand the impact of the data source on the resulting refugee statistics.
138. This chapter focuses on traditional censuses that include a separate statistical data collection with the following characteristics: (a) mapping of enumeration areas; (b) listing of dwellings/addresses; (c) deployment of enumerators in the field; and (d) completion of census questionnaires for persons, households, dwellings and institutional populations. This may be followed by a post enumeration survey to estimate undercounts and census errors.
139. Countries have a choice in either conducting a *de jure* census (usually resident population) or a *de facto* census (present at the time of the census). Countries increasingly prefer a usually resident (*de jure*) population

count because this count offers better information for planning and policy purposes, on the demand for services, households/families and on internal migration. The choice may also have an impact on refugee statistics. For example, in cases where a family splits and some members move abroad to seek humanitarian protection ahead of other members of the household, these already emigrated family members may still be included in the *de jure* census counts of their home country as they may not yet have settled in a destination host country. The *de jure* census may also fail to include asylum seekers, or those planning to file for asylum as these people may fail the 'usually resident' criterion because of uncertainty over their future destinations (see Chapter 3). It is important to pay attention to these points when planning for a population census.

140. The institutional component of the population census may cover the refugee and refugee related populations in ways that are superior to those of surveys, which routinely exclude refugee camps and reception centres; or population registers, which may exclude the refugee and refugee related populations.
141. There are a number of different approaches that can be used to identify refugees in censuses. These can include an additional questionnaire designed specifically for refugee households living in reception centres, refugee camps (camp only population) or informal settlements that accommodate a high proportion of refugees and asylum seekers.
142. The recommended core questions for censuses are country of birth, country of citizenship, acquisition of citizenship, year and period of arrival in the country, and the reason for migration. These questions can identify those who are likely to have migrated on international protection grounds, as refugees or related categories (see Part B Section 1). In some censuses, there are specific questions on refugee status, on forcibly displaced persons, or histories of displacement.
143. A census can be used to develop a longitudinal perspective by matching or linking census data to other data sources. Matching of census data to other data sources has been carried out in Australia, Canada, England and Wales. The legal changes which occur to refugees over time, must be considered when conducting longitudinal analysis from censuses, as in most cases, a census is only conducted every ten years. In times of humanitarian emergencies, censuses can quickly become outdated in respect of refugee and refugee related populations.

b. Relevant international recommendations

144. According to the United Nations' *Principles and Recommendations for Population and Housing Censuses, Revision 3* (United Nations, 2015), asylum seekers and refugees should be counted as part of the usually resident population.
145. The recommendations only partly resolve possible confusion in the treatment of refugees, as it may not be clear how long those applying for refugee status intend to reside in the country. Intended length of residence may depend on outcomes of the asylum process and other factors such as quota sharing in the EU, and on national asylum policies. The recommended criterion for usual residence is defined as having remained in the country for at least the last 12 months, or having the intention to remain in residence for at least 12 months. The recommendations also give countries a second option, which is: having remained in the country for most of the last 12 months or having the intention to remain in residence for at least 6 months. Refugees and asylum seekers, whether having commenced the formal procedures of asylum or not, should therefore be included in the total population count if they meet the criterion for usual residence, but distinguished as refugees or asylum seekers in any analysis. They should also be included in the total migrant count if they meet the criteria which define international migrants.
146. The recommendations also note that refugees in camps and reception centres should be covered and the occupants counted and their numbers distinguished as a separate group. The inclusion of asylum seekers in transit to another country should be considered, since these numbers can be large in some countries at times of crisis. Transiting asylum seekers should be counted and included in the census counts as a separate group, although they are ruled out of the population in scope of these recommendations.

Box 4.1: Persons to be considered in the usually resident population

There are various population groups for which some uncertainty may arise about their inclusion in the usually resident population. The following persons would generally be considered in the usually resident population:

- Persons who may be illegal*, irregular or undocumented migrants, as well as asylum seekers and persons who have applied for or been granted refugee status or similar types of international protections, provided that they meet the criteria for the usual residence in the country.

Source: Principles and Recommendations for Population and Housing Censuses, Revision 3, Paragraph 2.53. (* the term 'illegal' quoted from this document is not recommended for use by UNHCR)

147. Censuses, because of the scale of the operation, can only include a limited number of questions on migration and matters related to refugees, and thus cannot provide the detailed information needed for a comprehensive analysis of refugee and refugee related populations, or the causes and consequences of forced displacement.
148. The United Nations *Principles and Recommendations for Population and Housing Censuses, Revision 3* covers three core topics on international migration characteristics: (a) country of birth; (b) country of citizenship; and (c) year or period of arrival in the country. These questions and those on previous residence, along with any ethno-cultural characteristics (non-core topic) can be used to give indirectly an estimate of persons likely to be refugees or refugee related populations. Nevertheless, if there is not a question on reason for migration, this is a less precise approach, and in any case not all refugees are migrants. The recommendations also include the following migration-related core topics: (a) place of usual residence; (b) duration of residence; (c) place of previous residence; and (d) place of residence at specified date in the past.
149. Overall, there are few references to refugees and asylum seekers in the *Principles and Recommendations for Population and Housing Censuses, Revision 3*. This is also the case for regional recommendations, with the exception of the UNECE *Conference of European Statisticians Recommendations for the 2020 Census of Population and Housing* (UNECE, 2015). While the topic "reason for migration" is not mentioned in the United Nations' recommendations, it is listed as a non-core topic in the UNECE version. The UNECE recommendations also include "population with a refugee background" and "internally displaced persons" as derived non-core topics with guidance on how to obtain such data. Moreover, the UNECE recommendations include the non-core topic "country of birth of parents", which may be of use for distinguishing native-born children of refugee parents.

c. Quality considerations

150. Key questions to consider are:
- a) Are refugee and refugee related populations, whether they have formally applied for protection or not, included in the census coverage in both in principle and practice?
 - b) If they are included, is it possible to identify them as such in the data?
 - c) What is the likely extent of the undercount, and is this recognised as a topic for the post enumeration census?
 - d) How coherent are the results when compared to other sources such as surveys and administrative data?

d. Advantages and limitations of the population census as a data source

Advantages

151. The census is an indispensable source of information on the impact of migration on the size, composition, and nationality breakdown of the population at the aggregate, regional and local level and could be used to estimate the refugee population. Global coverage of the census and widespread adherence to the international recommendations for censuses enable cross-country comparisons that few other data sources allow. The nationwide coverage of censuses allows for comparisons between the total population and subgroups on

a number of topics, and at sub-national levels. Censuses provide complete coverage of the population and produce comprehensive and rich data on the demographic characteristics and living conditions of the population from a single source. As such, they are ideal for establishing population stocks and they can serve as a frame for more specific surveys. Moreover, international data archives have made census data available for further analysis. Censuses can also serve to validate administrative registers and in a few cases even to establish population registers.

Refugee specific advantages

152. There are several advantages to using censuses for the purposes of refugee statistics. These include:
- a) Censuses offer huge potential for establishing stock numbers of refugee and refugee related populations with the potential for disaggregation by age, sex and other characteristics. Censuses can also provide limited flow data, e.g. on the number of refugees and asylum seekers immigrating in the past 12 months.
 - b) If refugee and refugee related populations can be identified in the census data, then comparisons with other population groups, such as general migrants, become possible. This is not normally possible with surveys targeted at refugees, although it may be possible with national multi-topic surveys under certain conditions.
 - c) If likely refugee and refugee related populations can be identified in a census, then the data can be used as a sampling frame for designing prospective sample surveys, which can give an estimate of the number and types of refugees, and provide more detailed information on changes which occur to refugee and refugee related populations over time.
 - d) In some instances, questions directed to households can be used to estimate the number of persons who left the country, including those who have left to seek international protection. However, this does not cover situations where complete households have emigrated as the census is not designed to capture people not living in the country, and will almost certainly underestimate emigration.
 - e) Most censuses include a mapping phase in which key facilities and enumeration areas are geo-referenced. This provides an opportunity to develop sampling frames for refugee-focused surveys, and to link census data with other sources of refugee data.

Limitations

153. Despite their many advantages, censuses do have several limitations, which should be taken into account:
- a) The administrative use of statistical information, particularly at the level of individual respondents, is controversial and illegal in some countries due to data protection and statistical confidentiality rules. The *United Nations' Fundamental Principles of Official Statistics Implementation Guidelines* recommend that "[statistics] legislation or policy absolutely guarantees: the privacy of data providers (households, enterprises, administrations and other respondents) and the confidentiality of the information they provide; the security of information received from data providers; [and] its use only for statistical purposes" (United Nations, 2015). This limits the extent to which census data can be reused to supplement administrative records.
 - b) Censuses are conducted infrequently and they are extremely costly. Specifically, they are generally only carried out every ten years and are the most expensive data collection that a national statistical system undertakes. For most countries, there is a considerable time lag between data collection and data release, which makes the data less relevant.
 - c) There is a move towards non-traditional census data collection methods which may make comparisons of data over time and between countries less reliable.
 - d) Censuses utilise an already crowded questionnaire (due to history, national contexts, sensitivity and costs etc.), and for most countries there is little flexibility to add additional questions or topics. This is particularly true in countries where refugee and refugee related populations are only a small proportion of the total population, and so adding questions (beyond those required to identify probable refugee and refugee related populations) may not be cost effective.
 - e) Censuses are only suitable to a limited extent for measuring population flows, and are likely to underestimate emigration. Few countries have questions on emigration as it is difficult to enumerate

people who have left the country. The results are also unreliable in respect of immigration/emigration that occur between censuses. In the 2010 round of censuses, more than 50 member countries included questions on emigration of household members (Juran & Snow, 2017)⁴².

- f) Censuses are historically underutilized, due to complexity of data sets. Census data collection does not consistently translate into the widespread availability of such data. As a result, much data may end up not being published.

Refugee specific limitations

154. Apart from methodological advantages and disadvantages, censuses have specific limitations for the enumeration of refugee and refugee related populations:
- a) Few countries have census questions that can directly be used to identify refugees, and even fewer have published stock numbers of probable refugees. For example, only 66 per cent of countries in the 2010 census round included questions on both country of birth and citizenship, which limits the possibilities of identification for studies of integration and discrimination (Juran & Snow, 2017).
 - b) Similarly, only 50 per cent of countries asked the year of arrival as a question in their censuses, which again limits the opportunities to disaggregate data by length of stay (Juran & Snow, 2017), and in using the census to estimate flows.
 - c) Questions on migration are not always easy to collect retrospectively, accuracy may be impacted when migration took place a long time ago or when there are incentives to misreport. It is also usual for a "household representative" to respond on behalf of all household members. This representative may not be sufficiently knowledgeable about the migration history of all members of the household.
 - d) The few available examples from the 2010 census round suggest that it is difficult to compare figures from censuses with administrative data on refugees, as census questions are based on self-identification as refugees, whereas administrative data are based on legal status. In fact, this difficulty applies to all other data collection tools, including surveys, which are based on subjective questions to respondents.
 - e) Studies show that censuses tend to underestimate the number of refugees (and all other hard to reach groups). This weakness also applies to other data collection tools based on field interviews. Refugees are generally considered to be hard to count, although the impediments to counting refugees fully, differ according to the data collection tool that is used (traditional census, sample survey or administrative data). In particular, there may be language barriers for refugees in completing census questionnaires. Refugees may also try to avoid contact with government authorities altogether or be suspicious about the reasons for data collection. These can be overcome in part by the use of enumerators or interpreters with appropriate language skills, and by ensuring that targeted census information and publicity are available in appropriate languages and locations. Similarly, contacting refugee representatives, support agencies and charities to explain the purpose of the census and reassure respondents could help mitigate the risk of undercounting.
 - f) Non-traditional census data collection methods may reduce the effectiveness of censuses in covering refugee and refugee related populations.

e. Recommendations to improve census data on refugees

155. The following actions are recommended to improve the usefulness of censuses to measure the stock (and flow) of refugee and refugee related categories:
- a) Encourage all future censuses to include all three core migration topics (country of birth, country of citizenship, and year or period of arrival).
 - b) Include "reason for migration" as an additional core topic in the international census recommendations in order to identify probable refugees.
 - c) Include persons living in refugee camps, reception centres, temporary structures and collective accommodation in all census enumerations. The questionnaires used for both dwellings and collective accommodation in which refugee and refugee related populations are likely to be accommodated

should include questions which can help to identify refugees, including: country of birth, country of citizenship, year or period of arrival in the country, and the reason for migration.

- d) Exploit other data sources, such as registers, other administrative sources and sample surveys, and combine these with census data to produce more extensive and detailed refugee statistics (see section below on integrating data sources).
- e) It is advisable that questions on migration be thoroughly tested to improve their reliability, including the testing of core migration questions in respect of refugee and refugee related populations. More than 20 countries had questions on the reason for migration in the 2010 census round (Juran & Snow, 2017), and a study of the questionnaires used revealed a large heterogeneity in response categories (Aalandsliid, Lund, & Berglund, 2014). Harmonization of the response categories to the question on reason for migration would enable comparisons between countries.
- f) Advocate for wider release of census data, and exploit refugee data to the fullest. To ensure maximum use of available census data, detailed geographically referenced data should be made available, while protecting the security and confidentiality of respondents (see Chapter 6 on protecting confidentiality). Spatial information would enable the analysis of the spatial distribution of the refugee and refugee related population and, possibly, the integration of data with other sources.
- g) Use individual census data to update the sampling frames for social surveys to ensure coverage of refugee and refugee related populations, or use as a sampling frame for specific post-census surveys of refugees.
- h) Analyse census data to identify small geographical areas with high proportions of foreign citizens or foreign-born people, which can be used for oversampling refugees in the design of surveys intended to study refugee and refugee related populations.

Table 4.1: Examples of direct refugee-related questions/questionnaires from the 2010-round of censuses

Region	Country	Census Question/Topic	Response Category
Africa	Zambia	What is the main purpose of your stay in Zambia?	Employment, Family formation, Education/training, Refugee/Asylum, Investor, Tourist, Other
	Sudan	Population Group/Type of Household	Private Household, Nomads, Internally Displaced, Institutional Household, Homeless, Refugees, Cattle Camp, Overnight Travelers
	Burundi	Household location. Reason for leaving Burundi. Have any members of your household moved abroad since October 1993?	Urban, Rural, Site of the displaced, Refugee camp Studies, Job search, Marriage, Family reunification, Family conflicts, Crisis/war/Insecurity, Medical care, Other
	Somalia	What was the main reason why the household left place of origin?	Insecurity, drought, floods, loss of livelihood, economic opportunities, access to services, other
	Ivory Coast	Displacement or exile	Because of the crisis/war, including year of displacement
	Liberia	Has ... been displaced by war since 1990? Has ... been resettled?	Yes/No/Don't know Yes/No/Don't know
	Djibouti	What was the main reason for changing place of residence?	Professional reasons (hiring, transfer, establishment of business), urgent reasons (drought, flooding, food shortages, war), personal reasons (family reunification, health reasons), school reasons, seeking amenities
	South Africa	Questionnaire directed to institutionalized populations. What type of living quarter is this?	Hospital, Prison, Defence barrack, Frail care centre, Refugee camp, Convent, Orphanage, Hotel, Hostel, Student residence, Other

Region	Country	Census Question/Topic	Response Category
Europe	Croatia	Reason of immigration	Work, school attendance, family reason, forced migration, other reason
	Belarus	Why did you arrive to Belarus for the permanent abiding place?	Employment, studies, marriage, return to previous place of residence, family circumstances, asylum seeking, other reason
	Belarus	Please indicate the main reason for arriving in Belarus for permanent residence (2019)	Asylum seeking
	Bosnia-Herzegovina	Reason of arrival in Bosnia-Herzegovina	Work, study, family reasons, forced reasons, other reasons
	Kosovo under UNSCR (1244/1999)	What was the main reason why you moved to your current place of usual residence?	For employment reasons, For education or training reasons, For family reasons, For 1998-1999 war reasons, For other reasons
	Serbia	The main reason of arrival/return to Serbia	Work, Family reasons, School, Forced migration, Agreement on readmission
	Montenegro	Reason for last moving in/return in Montenegro?	Economic, Family reasons, War, Education, Other
	Greece	Main reason for staying in Greece	Work, Family reunification, Repatriation, Studies, Asylum
Asia	Afghanistan	Type of household	Settled Households, Mobile Households, Household as IDP/Refugees, Homeless Households
	Armenia	Main reason for change of residence	From other countries as a consequence of war actions, from other countries because of fear of persecution, family, repatriation, other
	Azerbaijan	Have you been a refugee/forced migration from where?	Yes/No
	Cambodia	Give reason for change of residence. Reason for migration	Transfer of workplace, in search of employment, Education, Marriage, Family moved, Lost land, Natural calamities, Insecurity, Repatriation or return after displacement, Orphaned, Visiting only, Other
	Kazakhstan	Purpose of visit to Kazakhstan Refugee status	Work, Construction, Other jobs, Study, Refugee, Business, Transit migrant, Other purposes Yes/No
	Sri Lanka	Reason for migrating to this usually residing district	Marriage, Employment, Education, Displaced, Resettled after displacement, Development projects, Accompanied a family member, Other
	Middle East	Palestine	Refugee status
Jordan		Main reason for coming to Jordan	Armed conflict in country of origin, Work, Study, Accompanying, Tourism, Medication, Other
Americas	Colombia	The main reason why... changed its place of residence	Difficulty finding work or lack of means of subsistence, Risk of natural disaster (flood, avalanche, landslides, earthquake, etc.), Education needs, Health reasons, Family reasons, Member of nomadic people or another reason, Threat or risk to your life, your freedom or your physical integrity caused by violence

2. Sample surveys of population

a. Data source description

156. National sample surveys have the potential to measure the main characteristics and living conditions of refugee and refugee related populations and to enable comparison of them with other population groups. To a lesser extent national surveys can also be used to measure both stocks and flows. Surveys can be designed to overcome the lack of data on specific topics by collecting reliable and representative multi-topic, retrospective and comparative data on refugee and refugee related populations. In investigating flows of refugee and refugee related populations, surveys can provide data on the migration process, routes and behaviour, as well as on the determinants and consequences of their legal status. For studies of stocks of refugee and refugee related populations, information on their living conditions, satisfaction of basic and ongoing needs, integration and mobility can also be collected. There is the choice of adding refugee related questions to an existing national multi-topic household, or to design a specialised survey for refugee populations. A specially designed refugee survey has the potential to collect broader and deeper information than is possible with either censuses or administrative data, or with a more general national multi-topic survey. The national multi-topic survey allows refugees to be compared with other groups in the general population. Where there are to be both types, the national multi-topic survey and the specialised survey should be designed to complement one another.
157. However, the value of the survey as a source of statistics on refugees depends on many considerations, especially on the sample design and the ease of identification of eligible members of the population. Hence, there is a need for standards dealing with the complexities involved in locating respondents, collecting sensitive information, and assuring potential respondents of the confidentiality of the data collected.
158. The addition of questions to existing national multi-topic household surveys on migration and the reasons for migration would enable the identification of refugee and refugee related populations as well as migrants, and allow for comparisons of their characteristics with other population groups. However, there needs to be careful consideration of the feasibility of utilising existing national surveys, both in respect of design and implementation.
159. Where the proportion of refugee and refugee related populations within the general population is relatively high, it may be feasible to add a module to an existing national survey, such as a Labour Force, Living Standards Measurement Survey, or Demographic and Health Survey. However, a sampling expert should be consulted at an early stage in the sample design to advise on the probable sampling errors surrounding the refugee and refugee related populations. Where the proportion of refugee and refugee related populations in the general population is low, a targeted survey may be more appropriate. A targeted survey design would be likely to oversample areas where refugees are more prevalent, or use information drawn from administrative records to develop a sampling frame for refugees.

b. Relevant international recommendations

160. Although not all refugee and refugee related populations are migrants, since many were born in their host countries, while others are former refugees returning to their home country, the United Nations' *Recommendations on Statistics on International Migration, Revision 1* provides useful guidance for the production of refugee statistics. According to the recommendations, field inquiries, particularly sample surveys, are most appropriate for the collection of detailed information on the characteristics of immigrants and also for the assessment of the immigrant stock (United Nations, 1998). The same recommendations mention the inappropriateness of surveys for measuring flows of migrants:

In general, household-based field inquiries do not yield reliable statistics on international migration flows since, by their very nature, they cannot cover the movements of persons who have left the country by the time the inquiry is carried out.[...] Given the low levels of international migration registered by most countries, it is not recommended that sample surveys gather similar information because, unless the survey's sample is large, the results obtained are likely to be greatly affected by sampling variability. (United Nations, 1998)

c. Quality considerations

161. There are several challenges when conducting national multi-topic household surveys or specific refugee surveys, including:
- a) Difficulty in developing a nationally representative sample, since refugees tend to be concentrated in particular regions/cities, especially in cases where refugee and refugee related populations have a low prevalence in the general population.
 - b) The omission of refugee camps from many national household surveys.
 - c) Lack of an adequate sampling frames for surveys targeted at refugee populations, as the sample frames used to identify the refugee respondents in practically all cases studied appear to have been inadequate.
 - d) With highly mobile populations such as refugee and refugee related populations, especially in ongoing crisis situations, distributions may change rapidly. This impacts on the adequacy of sampling frames as the numbers identified at the time of the selection of the sample, and at the time of the interview may differ considerably.
 - e) The design of the questionnaires and the formulation of the questions must take into account the low educational level and or the low host country language skills of some of the refugee and refugee related populations.
 - f) Lack of standard questions and standard definitions of specific issues affecting refugee and refugee related populations make it difficult to choose an appropriate model for a questionnaire to study specific issues concerning refugee and refugee related populations. The complexity of the possible legal statuses of the population of interest makes this particularly problematic.
 - g) Non-compliance with international standards of sample survey methodology.
 - h) Difficulties in asking very sensitive questions of vulnerable persons. This requires extensive and expensive training, particularly where topics are to be investigated in depth.
 - i) Sensitivities surrounding the confidentiality of data require particular attention, and respondents will tend to need more reassurance than other populations, and their data will need to be carefully protected by the authorities (see Chapter 6).
162. There are several considerations that need to be considered in relation to the quality of refugee surveys (see Box 4.2).

Box 4.2: Considerations for selecting survey methodology

Institution commissioning the survey and implementing agency

- Government agencies, UNHCR, NSOs, NGOs, Universities/Research Centres/Consortium, etc.

Objective or theme of the survey

- Measuring stocks and/or flows
- Dealing directly or indirectly with the integration of refugee and refugee related populations in society
- Dealing with the attitudes or opinions of refugee and refugee related populations
- Socio-economic characteristics and living conditions of refugee and refugee related populations
- Health/nutrition, gender based violence, HIV status, fertility, other
- Education, host-language training, job training, labour-force participation, work experience

Type of refugee related population and settlement covered (see Chapter 3 and Jacobsen (2001))

- Exclusively refugee camps
- Refugee and related populations in camp and non-camp situations
- Refugee and related populations in camp situations and in neighbouring non-refugee populations
- Refugee and related populations in households as part of the migrant population (excludes non-migrant refugees)
- Refugee and related populations in non-camp settings
- Undocumented or transitory populations in informal settlements
- Returned refugees in their home countries

Sample design

- Module in existing survey (depending on prevalence of population of interest in general population)
- Purposively selected sample of refugees only
- Mixed sampling procedure
- Non-probabilistic sample methods: Snowball sampling
- Selection of respondents within household (who is the respondent)
- De facto or de jure approach to household membership

Sampling frame selected

- Administrative registers (kept by government agency responsible for migration or refugee issues)
- Refugee-registration system (kept by UNHCR or other humanitarian organization)
- Census database
- Satellite imagery/remote sensing for area frames
- Combining sources
- Updating of sampling frame

Approach adopted: longitudinal versus retrospective

- Retrospective approach aids to memory issues
- Longitudinal panel maintenance and keeping in contact with mobile respondents
- Refreshing the panel

Field operations

- Data collection methods
- Dealing with non-response
- Training interviewers in refugee related subject matter
- Dealing with sensitive topics and vulnerable persons
- Translation and interpretation needs
- Publicity and contact with relevant civil society group

Confidentiality and data sharing

- Special measures needed to assure safety and security of respondents
- Ethical issues

Sampling methodology

163. It is useful to define the target population, considering which of the refugee categories described in Chapter 3 is within the scope of the survey. The populations of interest for the survey are often both: (a) “rare element” in the statistical sense; and (b) not distributed randomly in a population. The appropriate sampling approach will be based on principles of sampling rare elements (Kish, 1965), and expert advice should be sought at an early stage.
164. Displaced persons, especially refugee and refugee related populations, are considered as “rare” or “hard to reach” populations. Recently sampling methods have been developed to deal with this issue (Bilsborrow, 2013).⁴³ Probability sampling is the preferred option as it provides numerical estimates and other population parameters that can be qualified with estimates of sampling errors. This is important when comparing the characteristics of refugees with those of non-refugee migrants, or the general population.
165. To collect survey data on refugees it is necessary to have a plan for identifying a sufficiently large sample of the target population in the host country. The sample needs to be nationally representative, and may also need to be regionally representative. It also has to be cost-efficient. Consideration should be given to whether stocks or flows are to be measured, as the number of refugees who migrated within a reference period will be fewer than the total stock of refugees.
166. To design an effective and efficient sample it is desirable to draw on existing data sources, which may be of variable quality. It is necessary to know the approximate prevalence and distribution of the target population. The addition of questions in national multi-topic household surveys to identify refugee and refugee related populations may be helpful in this respect. Existing sampling frames may be outdated, particularly at times of crisis when flows of those seeking international protection may be high. This may indicate the need to update frames with recent records from administrative sources or records kept by NGOs supporting refugee and refugee related populations. The use of spatial information from satellite imagery and remote sensing for sampling purposes in the context of new camps and settlements, should also be explored. In designing the sample, special methods may be needed, such as the use of disproportionate sampling with oversampling from strata with high proportions of refugees. Based on the available budget, the purpose of the survey should be clearly defined, together with the design specifying the intended survey domains, distribution and target sample size.
167. The sampling methods and designs identified to date are, with the exception of non-probabilistic samples, variants of cluster sampling. They include:
 - a) Probabilistic or probability sampling design
 - b) Small area sampling method
 - c) Non-probabilistic sample methods (purposely selected sample, snowball sampling or Respondent Driven Sampling (RDS))
 - d) Mixed or combined sampling procedures

Sampling frames

168. There are two main sources of sampling frame:
 - a) Register-based surveys: the sample frame is based or derived from administrative data (government or UNHCR which are likely to be sourced from the national agency responsible for migration or refugee issues, or from UNRWA refugee registration systems).
 - b) Census-based surveys: the sample frame is based on or constructed from the most recent population census. In some cases, auxiliary questions related to migration or refugee status included in the census can support the sample design. In other cases, census data can be augmented by other data sources such as register data which have a geographical identifier, or by information from satellite imagery.
169. For some of the especially hard to reach refugee and refugee related populations, such as asylum seekers in transit and those who have not yet registered an asylum claim, finding appropriate records may be difficult. They are unlikely to appear either in censuses or in official records. Some alternative sources might include the records of NGOs or humanitarian organisations who specialize in supporting refugees and asylum

seekers. These records may be incomplete or out of date, and should be tested thoroughly and used as a starting point for the development of a frame which meets statistical quality standards.

170. The sample designs of surveys on refugees should reflect the complexities of drawing a sample of the refugee population. Where complex samples are involved, consideration should be given to estimating variance and sampling errors for the domains of interest.

Coverage

171. The adequacy of the sampling frame should be considered where probability sampling is used. Refugee and refugee related populations can be highly mobile, and difficult to locate. The sampling frame should consider both institutional and household based populations, and may need to include temporary dwellings. Many countries omit refugee camps from their household surveys, and risk excluding a large proportion of the refugee population. Those designing samples might consider supplementing sampling frames and official sources with other sources from satellite images, from civil society or other knowledgeable organisations with an interest in refugee and refugee related populations.

Sampling errors

172. Where the population of interest is highly clustered in particular locations, and where there are large differences in the population's characteristics from place to place, the variance and consequent sampling errors are likely to be high and the estimates are likely to be less accurate unless a large sample size is used.
173. If the intention is to add modules to existing national surveys, such as a Labour Force or a multi-topic or Integrated Household Survey, the prevalence of the population of interest is of primary importance. Unless there is a high prevalence, sufficiently large samples for analysis are unlikely to be obtained, particular where difficulties in locating refugee and refugee related populations are anticipated. It is highly recommended that specialist sampling advice is sought at the survey planning stage.

Non-sampling errors

174. The survey results are based on an interviewee's responses, but surveys cannot provide accurate data on some topics, particularly those involving legal and administrative processes. The quality of the information collected may not be accurate due to problems related to memory, perception, past trauma, trust in the survey, interviewer effects, and understanding on the part of the respondents of complex legal processes. Errors can also occur when a household member responds on behalf of other members of the household. In addition, this can lead to gender bias in collecting information on attitudes, intentions to move, decision-making power in the household, domestic violence and reproductive health. Similarly, the choice of enumerators, the time, and location of interviews are all relevant considerations for ensuring that a survey can produce accurate information reflecting the situation of refugees of all genders and in different situations.

Data collection approaches for measuring changes over time

175. There are two approaches that are generally adopted for collecting data needed to analyse how sociodemographic characteristics change over time. The reference period can be treated in different ways: whole life histories, or since leaving the country of origin for the last time, or since residing in the host country, or only for a specific time period. There are two main data collection processes:
- a) The retrospective approach: based on collecting data on the refugees' history in the preceding period before the survey including their migration history. This allows a comparison of their situation over time, with migrants or with the general population if applicable. However, this information can be affected by memory bias, and subject to errors, omissions and distortions, particularly where household members have different histories.
 - b) The prospective approach using panel surveys: these consist of following a cohort or a sample of refugee and refugee related populations over time, in order to collect repeated data on the same people, in order to study changes in their status, movements and conditions.

- i) Advantages: Refugee panel surveys are the only method of data collection that is able to provide accurate time series data on the changes over time of individual refugees and their families, and provide insights about their integration into their host country. The results related to changes are not impacted by sampling errors.
- ii) Limitations: This panel approach is complicated to maintain and analyse. Refugee circumstances may change rapidly, along with the relevance of that information and the respondents may move on to other locations or countries. There may be high rates of attrition among those living in refugee camps. Tracking the sample/cohort may increase the costs considerably, and may be subject to high levels of non-response. In addition, panel decay will need to be taken account of to reflect newer arrivals in the population.

d. Advantages and limitations of surveys

Advantages

176. There are several advantages to using surveys:
- a) Surveys in particular, provide comprehensive and rich data sets that can provide insights into demographic and socio-economic characteristics, together with migration history, as well as living conditions, perceptions, attitudes, and levels of integration with the general population.
 - b) Questionnaires can be designed to meet the specific priorities required by data users.
 - c) Change over time in the status and the circumstances of respondents can be estimated where a panel or longitudinal approach is used. A particular cohort can be followed to estimate changes to individuals and households over time. This is particularly helpful when assessing flows, although it is important to refresh the panel over time to take account of newly arrived refugees.
 - d) The statistical unit considered in surveys is generally the household and the individual persons living in that household at the time of the survey. Administrative data from registration systems are often based on cases, files or applications which may or may not equal individuals or family units and tend to use a *de jure* approach.
 - e) Survey data are usually more accessible than data from administrative records, as they are generally produced by NSOs where data are more accessible to users and use microdata systems with which data can be shared with users.
 - f) Data are collected by direct contact with respondents, and can be subjected to editing and estimation techniques to improve data quality.

Refugee specific advantages

177. There are several advantages to using surveys for producing refugee statistics:
- a) Multi-topic household surveys can be used to estimate the incidence of migrants in the population, and with an additional question on the reason for migration, likely refugees can also be estimated, subject to their prevalence in the population.
 - b) Depending on the sample selected, it is possible to make comparisons with other population groups, such as general migrants, and to track change over time through prospective or retrospective approaches (see previous section).
 - c) If well designed and implemented, surveys can provide information on undocumented populations seeking international protection who do not appear in official administrative systems.
 - d) Data collectors can be specially trained to collect good quality data from refugee and refugee related populations. A good understanding of refugee related legal and administrative issues is required, as is special training on interviewing sensitive and vulnerable respondents.

- e) Regular border surveys, which are a different technique to household surveys, are usually conducted at international border crossings and can be useful to measure flows of refugee and refugee related populations. The usual methodology is to interview a sample of travellers at border posts. It may not be possible to use this approach at a border where many persons are crossing following a recent displacement. The population is likely to be in distress and administering even a few questions may be very difficult.
- f) Provide an independent source of refugee data to augment or to check results from administrative records.
- g) Survey data collection for official statistics is usually performed by independent statistical offices or research institutes. Refugees and asylum seekers may be more trusting of statistical bodies than the authorities responsible for administrative data where the information they provide can impact on refugee determination decisions. They may provide more accurate data, as decisions on their future status do not depend on the responses given. Where those administering the survey are not independent or are connected to the authorities responsible for refugees, there may be perverse incentives for misreporting among both respondents and data collectors.

Limitations

178. Notwithstanding the benefits outlined above, there are several limitations to using surveys:
- a) It can be difficult to design a survey sample if the population of interest has a low prevalence in the general population, is difficult to locate, or is clustered in particular localities.
 - b) Surveys are costly compared with administrative data particularly if face-to-face interviews are required. However, the resulting data may be less costly to analyse than the alternatives.
 - c) Many surveys collect information from a household representative, or in some cases the head. This may lead to gender bias in the selection of the respondent(s) if not controlled for.
 - d) If the survey requires responses from specific types of individuals from within the household, for example women, children or those with particular characteristics in order to collect attitudinal, sensitive or personal information the costs can be even greater.
 - e) Surveys impose a burden on respondents, which may impact on accuracy and quality.
 - f) Comparability of surveys over time and between countries can be problematic if there is no globally harmonized survey methodology.
 - g) Surveys are not generally carried out regularly, particularly if the costs are high and the logistics required for data collection are difficult. This affects the frequency and regularity of available data which limits its usefulness for policy, as one-off surveys are soon out-of-date.

Refugee specific limitations

179. There are also specific limitations associated with using survey data for refugee statistics. These include:
- a) Few countries conduct surveys dedicated to refugee topics, and adding modules to general surveys may result in high sampling errors around estimates of refugees. Funding is often not available for specialised refugee surveys.
 - b) Obtaining an adequate sample size of refugee and refugee related populations may be a constraint particularly where data are to be disaggregated by the recommended refugee categories.
 - c) Other quality issues should be considered when designing the survey, taking account of the issues described above which impact on coverage, sampling and non-sampling errors.
 - d) Responses to survey questions can be influenced by the respondents' perceptions of the survey's purpose, situation in which the interview occurs, the attitude or gender of the interviewer, as well as memory issues.

- e) Some respondents are vulnerable and the topics covered may be sensitive. Thus, some recommendations on ethical standards and protecting respondents must be established and respected to protect the targeted/interviewed population. Specially trained interviewers will be required to interview respondents who have been traumatised by their experiences.
- f) Under-representations are likely, due to the high levels of mobility of the population and difficulties in reaching them. This is particularly the case for those living outside refugee camps, reception centres and other refugee settlements.
- g) Information related to the steps in the asylum procedures and different legal statuses (asylum seeker or the beneficiary of special protection status) is complex and not well-defined, and interviewers will require detailed training to fully understand the steps involved. Accuracy of responses pertaining to dates is likely to be impacted by memory problems. This kind of information is better collected in administrative registers.
- h) There may be political resistance to the release of results.

e. Recommendations to improve survey data on refugees

- 180. In order to enhance the quality of survey data on refugees, the involvement of NSOs is highly recommended, since they have the requisite expertise in conducting household surveys, have a nationwide network of local offices, and well-trained staff and field workers. NSOs can help ensure that the survey meets national and international quality standards to enhance the comparability of the data and its protection under law.
- 181. When carrying out specialized surveys that aim to capture the volume and main characteristics of refugee and related populations, the sample should include those living in camps, reception centres and in dwellings outside camps, the methodology should be specially designed to deal with the various issues, limitations and national context concerning refugee related populations.
- 182. In order to maximize the quality, utility and comparability of data collected in various countries, it is recommended that a model questionnaire with a set of core and optional questions and/or modules is developed, designed and tested.
- 183. The core set of topics recommended for identifying refugees in surveys is set out in Part B of this chapter. The core topics should be modified to reflect national priorities and domains of interest before use. It is possible to adapt the core questioning to include or exclude certain categories of the refugees and refugee like population, depending on national needs. The recommended core topics for identifying refugees for surveys are (see part B):
 - a) Country of birth
 - b) Country of citizenship (including multiple citizenship)
 - c) Acquisition of citizenship
 - d) Year or period of arrival in the country
 - e) Reason for migration (paragraphs 132 & 133)
- 184. Where national priorities and conditions allow, panel surveys should be considered as the preferred method for collecting information about refugees' integration and absorption into communities. The list of indicators recommended for measuring and monitoring refugees needs, living conditions, integration and absorption are set out in Chapter 5. Questions should be developed and tested in order to provide data for these indicators.
- 185. Where it is feasible, the core questions should be added to national multi-topic household surveys which utilise a large sample size in order to establish refugee related households and individuals. The questions relating to legal status and reason for migration should be well-tested allowing identification of such populations. Where possible standardized questions developed by the international community should be used. The surveys already collect rich and comprehensive socio-economic and demographic information, if

the refugee related populations are identified then comparisons can be made between refugees and other groups of the population such as general migrants.

186. Where the prevalence of refugee and refugee related populations in the country makes a specialised module viable, then a core module is proposed for periodic use in existing national multi-topic household surveys such as the Labour Force Survey (LFS), Living Standards Measurement Survey (LSMS), Demographic Health Survey (DHS), Multiple Indicators Cluster Surveys (MICS) and other multi-purpose surveys. Adding material to existing surveys may be cost-effective where the resulting estimated sample size of refugees is likely to be sufficient, but there will be constraints on the length of the questionnaire module. The detailed design of the module will depend on the country's needs and priorities, and the characteristics of the population. There are several advantages to adding a module to an existing national survey including: (a) they are conducted regularly across many countries; (b) they are administered by NSOs; (c) they use relatively large sample sizes, which may yield a sufficient number of refugees depending on prevalence in the population; (d) they have national coverage and representation; (e) the surveys already collect key data and contextual questions; and (f) dissemination mechanisms and access protocols for wider use of the data are already established. However, many such surveys exclude refugee camps and institutions likely to house refugee and refugee related populations and may under-represent some important groups.
187. Sampling frames for surveys where information on refugee and refugee related populations is needed should include refugee camps, reception centres, informal settlements and collective accommodation (institutions).
188. The coverage of refugee/migrant populations in surveys can be improved by oversampling the areas in which migrants are clustered. Sampling methodologies could be improved by utilizing alternative data sources and satellite imagery to supplement existing frames, and by adding questions to national population censuses to help with identifying areas where refugees are clustered.
189. Refugee specific facilitation of interviews and survey administration is required (e.g. translation of questionnaires, multilingual interviewers, dedicated training for interviewers).
190. The sensitivity of the subject matter and the vulnerability of many refugees will require specially trained interviewers, and particular care is required to protect the confidentiality of the respondents and to reassure them about the confidentiality of the information given (see Chapter 6, Part E Confidentiality and data sharing).
191. It is also important to consider gender during the design and implementation stages of a survey, especially when developing questions and responses. For example, a question on why children are not attending school should have context-appropriate gendered answers. The choice and training of enumerators is very important to ensure that both women and men feel comfortable responding to questions.
192. At the international level, it is recommended to:
 - a) Establish an international (or regional) depository of refugee surveys, including questionnaires, sampling plans and analyses.
 - b) Develop an international refugee surveys programme with: defined mandates and priorities; funding and key infrastructure; tools and manuals; and capacity building and training tools for use by countries.
 - c) Promote and reinforce awareness of international standards for surveys.
 - d) Develop survey standards for refugee and refugee related populations, based on internationally agreed definitions and the operationalization of key concepts.
 - e) Develop a set of recommendations for designing and implementing surveys on refugees covering:
 - i) Institutional arrangements for commissioning and implementing the survey
 - ii) Objectives of the survey (dedicated survey or a module in other surveys)
 - iii) Specialised targeted refugee population surveys, including type of refugees' settlements to be considered (households/camps/others)
 - iv) Sampling frame and design, and dealing with non-response methods

- v) Set of questions to identify the eligible population
- vi) Question and response formats for the core questionnaire
- vii) Field data collection including methods/tools/ethics, and how to reach/approach interviewees
- viii) Approach to be adopted in survey, e.g. longitudinal or prospective versus retrospective.

f. Examples of recent practice

193. The number of surveys aimed at investigating the characteristics, causes, consequences and experiences of refugees, as well as aspects of refugees' decision-making is still very small, but there are several promising experiments on this. One of the few examples is the Mediterranean Household International Migration Survey Programme (MED-HIMS), which includes a special section on refugees and displaced persons. This survey has so far been carried out in Egypt and Jordan, and is expected to be implemented in other countries of the Middle East and North Africa before the end of this decade, including Morocco, Algeria, Lebanon, Tunisia and Palestine.
194. The MED-HIMS Individual Questionnaire for Forced Migrants (MQ-5) is designed for non-citizens identified as potential forced migrants. As such it excludes some groups of refugees such as those protected under the UNRWA mandate in UNRWA fields of operation or those who have acquired citizenship by birth or naturalisation. This questionnaire includes many interesting sections on refugees to be considered (see Box 4.3).
195. In the EU Labour Force Survey (EU-LFS) ad-hoc module on Labour market situation of migrants and their immediate descendants from 2014 is an example of including 'Reason for migration' as a variable allowing identification of some refugee and refugee related populations and deriving statistics allowing comparisons with nationals and with other migrant groups.⁴⁴

Box 4.3: Core questions of MQ-5 (MED-HIMS Manual 1 module questionnaires)

- What was the main reason for moving from your country of origin for the last time? Include response categories?
- When you left your country for the first time, did any members of your family or relatives leave with you?
- Did any (other) member of your family join later after your moving to this country?
- Since you first left your country of origin, did you stay in any other country?
- What were the main reasons that made you decide to move onwards from your first country of asylum?
- What were the main reasons for immigration/choice of country of destination?
- What were the main reasons that made you decide to move onwards from your last country of asylum to (THIS COUNTRY)?
- Have you ever applied for asylum in any country, either to the Government or UNHCR?
- Have you ever been recognized as a refugee?

Box 4.4: National surveys of refugees

Africa and MENA Region

- 2011 Jordan: The socio-economic conditions of Jordan's Palestinian camp refugees
- 2012 Lebanon: Survey of Syrian Refugees in Lebanon
- 2012 The Palestinian Central Bureau of Statistics: The fourth survey on clusters in Palestinian refugee camps in Lebanon
- 2013 Egypt: Household International Migration Survey (MED-HIMS)
- 2014 Jordan: Household International Migration Survey (MED-HIMS)
- 2013 Lebanon: Shelter Poll Survey on Syrian Refugees in Lebanon
- 2004 Kenya: Behavioral Surveillance Surveys among Refugees and Surrounding Host Population, Kakuma, Kenya

America

- 2001-2005 Canada: Longitudinal Survey of Immigrants to Canada (LSIC)
- 2011 USA: Refugee Integration Survey & Evaluation (RISE)
- 2013 USA: Annual Surveys of Refugees
- 2014 Ecuador: Urban Profile of Columbian Population in Quito, Ecuador

Asia

- 2002 Pakistan: Afghan Refugee Camp Surveys
- 2013 Turkey: Syrian Refugees in Turkey, Field Survey Results

Europe

- 2010 Sweden: Living Conditions among Immigrants in Sweden
- 2010 United Kingdom: Survey of New Refugees in the United Kingdom
- 2005-2006 Norway: Living Conditions among Immigrants in Norway
- 2015-2016 Norway: Living Conditions among Immigrants in Norway
- 2016 Germany: IAB-BAMF-SOEP Refugee Survey
- 2016 Italy: World Bank migrant/refugee survey
- 2016 Greece: World Bank migrant/refugee survey

Australia

- 2011 Australia: Economic, Social and Civic Contributions of First and Second Generation Humanitarian Entrants
- 2011 Australia: Settlement Outcomes of New Arrivals

See also examples from the Global MICS programme where refugee specific design and data collection have been applied. See for example Syria surveys 2000 and 2006 with focus on 'Palestinian Refugee Camps and Gatherings' and 2001, 2006, and 2011 surveys in Lebanon with focus on 'Palestinians'. Survey reports can be accessed at: <http://mics.unicef.org/surveys>

3. Administrative data including population registers

a. Data source description

196. Administrative data are a useful source of information for measuring both the stock of refugee and refugee related populations, and potentially the flows, if they include variables allowing the identification of the target population, or if the specific administrative source can be linked at the individual level to another data source allowing the identification of refugee and refugee related populations.
197. Very diverse types of administrative data may be of interest from a statistical point of view:
 - a) Specific registers maintained by administrations or organisations responsible for refugees (including registration of refugees in camps and/or elsewhere).
 - b) Databases maintained by humanitarian organisations supporting refugees in informal settlements.
 - c) General population registers of the total resident population of a country and/or registers of foreign citizens.

- d) Other administrative registers (residence permit registers, tax registers, social security registers, register of border crossings etc.).
- e) Integrated administrative registers in specific countries.⁴⁵

198. Such administrative registers are, in particular, the main data source for statistics on asylum applicants and decisions taken during the asylum application process in regions such as Europe and Northern America. In the EU and in a few additional neighbouring countries, they are also the main source of statistics on the number of refugees living in the country through specific sub-categories of reasons to stay in the residence permits statistics (refugees legal status, subsidiary protection, humanitarian reasons) and statistics on persons who are the subject of pending applications for international protection (asylum seekers whose application is still being examined).

b. Relevant international recommendations

199. The United Nations' *Recommendations on Statistics on International Migration Revision 1* (1998) provides useful guidance for utilising administrative data sources for migration statistics in general, and refugee statistics in particular. According to these recommendations, two types of administrative sources should be considered for the collection of migration statistics:

- a) Administrative registers, defined as "a data system providing for the continuous recording of selected information pertaining to each member of the target population" and including "population registers, registers of foreigners and other special type of registers covering particular groups of persons, such as registers of asylum seekers" (United Nations, 1998, p. 17).
- b) Other administrative sources derived "from the operation of administrative procedures designed to control international migration" including sources related to "the issuance of residence permits", "the issuance of work permits", "applications for asylum", "tax or social security", and "border collections" (United Nations, 1998, pp. 20, 23).

200. The use of "registers of asylum seekers" is specifically recommended for estimating the stock of asylum seekers (by length of stay in the country) and the number of new asylum applications within a given year (United Nations, 1998, p. 19), and for producing statistics on the outcome of the asylum procedure.

- a) Two types of units are used to record applications, "cases or applications" and "persons [covered by these cases or applications]" and consequently to be registered.
- b) Three main types of outcome of registration are to be distinguished in statistical products; "foreigners seeking asylum", "foreigners admitted as refugees", "foreigners permitted to stay on humanitarian grounds".

c. Quality considerations

201. Statistics derived from administrative sources usually reflect administrative procedures rather than people, for example, the number of asylum applications may underestimate the number of asylum seekers when a single application can be filed on behalf of a family (United Nations, 1998, p. 20). Additionally, asylum applicants may not be formally registered in an administrative register immediately after expressing their wish to apply for asylum.

202. How can general quality assurance mechanisms for administrative data sources be implemented? Some of the issues listed below should be considered in data quality measurement and monitoring of statistics drawn from administrative data sources, which should include the validation of data derived from administrative registers against results from surveys and population censuses. Quality issues should be reported in standardized quality reports for refugee statistics and published regularly.

203. Key questions to be considered in identifying suitable administrative databases include:

- a) Are refugee and refugee related populations included in the administrative database, and if so which categories (see Chapter 3)?⁴⁶
- b) If they are included, is it possible to identify them as such in the data?

- c) What is the precise coverage of the database/data?
 - d) Which time period does the data cover?
204. Some specific quality considerations relating to administrative processes include:
- a) *What is the coverage of the data source?* A precise knowledge of the rules for registration is needed to be able to identify the potential use and limits of the data source. Administrative databases often relate to the registration by a specific administration in a particular set of circumstances. If the activity of an administration is limited to specific subgroups, the coverage of the database may be partial, excluding important categories (e.g. those granted residency for humanitarian reasons). It is recommended to verify the treatment of asylum seekers whose applications are still pending, as they may not be included in some administrative data sources, such as population registers and residence permits' register.⁴⁷
 - b) *What is the risk of double counting when more than one administrative database is used?* If multiple, complementary administrative databases exist, there may be the possibility of linking the different registers. If linking is possible, then this may allow for a longitudinal/cohort approach to study the asylum procedure (Van der Erf, Heering, & Spaan, 2006), integration (Rea & Wets, 2014), or the creation of a general database on the subject (Telford & Dobak). However, if it is not possible to link separate databases on refugees, there is a risk of multiple counting of individuals, and other statistical inconsistencies.
 - c) *How and when are data extracted from the administrative register for statistical purposes?* In some cases, data extraction may take place several months before the statistics are published, and consequently recent arrivals may not be reflected in the data extract. This will impact on stock figures.
 - d) *How are the administrative registration data stored?* The process of maintaining the databases should be understood. All the new registrations should be dated, and new information should not delete previous information of the same type.
 - e) *What is the statistical unit used in the database?* It is necessary to confirm that all family members are counted, in particular spouses and minors. In many countries, the statistical unit for asylum statistics at national level is the number of applications or cases and not the number of applicants or persons. Minors, and in specific cases, spouses, were not counted. This situation may persist in several countries.⁴⁸
 - f) *How are refugees' family members, who arrive in the country later as part of a family reunification programme, classified in the administrative system?* The treatment varies widely between countries. They may be classified as asylum seekers, refugees, family members of refugees, or persons benefiting from family reunification with no indication of the legal status held by the sponsor of the family reunification (i.e. not identified as refugees-related at all). The classification of this group may have a non-negligible impact on statistical results and should be classified according to the statistical framework set out in Chapter 3.
 - g) *How reliable is the process for registering asylum seekers and refugees?* If compliance with registration rules is not assured by authorities, then the reliability of statistical results will be compromised.
 - h) *To what extent do barriers to accessing asylum procedures cause delays in formal registration?* In specific cases, impediments to accessing asylum procedures may result in a non-negligible underestimation of the population of concern due to delays in registering applicants on the system. In extreme cases, it may result in a definitive underestimation of the stock population of concern, if there are individuals who have expressed the wish to apply for asylum but do not lodge, or do not have the possibility to lodge an application. Estimates of flows will be seriously impacted by delays in potential applicants filing their claims for asylum.
 - i) *How efficient are procedures for deregistration from the administrative databases in case of death, emigration, changes of legal status, acquisition of citizenship?* If this is not well managed then the database may overestimate the size of the refugee or asylum seeker population. The specific case of deregistration from administrative databases after negative decisions related to the asylum process should be well managed.
 - j) *Can the accessibility of the administrative system limit the quality checks carried out by statisticians?* As opposed to sources developed specifically for statistical purposes, administrative statistics are only a by-product of administrative sources. Statisticians may have no direct access to the information for legal or

technical reasons. In specific cases, this may simply be the result of a lack of willingness to share the data. Privacy, data protection or security reasons may be an obstacle preventing access to the databases. The use of anonymized data sets may facilitate the finding of a solution in this context.

d. Advantages and limitations of administrative data sources

Advantages

205. There are several advantages to using administrative data sources for statistical purposes, including:
- a) The low cost of data collection. Data are collected for administrative purposes and the initial collection cost does not fall on the statistical system. The additional cost of making the data useable for statistical purposes may be low, but will require expertise to understand the data and its limitations. The burdens on the respondents is limited.
 - b) The frequency of data updates. Registers are continuously updated using a standard methodology and statistics can be produced frequently over time.
 - c) Potential for linking different administrative databases. If a national personal identification number (PIN) exists, then different administrative registers can be linked to enable more complex analyses for statistical purposes, in particular employing the longitudinal or cohort approach. If it is possible to link administrative data to survey data, then a richer analysis may be possible.
 - d) In general, registers are capable of producing high quality data. Authorities should assure the reliability of the data, by cross-checking these against official documents or during vetting procedures. Additionally, data are collected during an administrative procedure with certain legal requirements, which usually results in low rates of item non-response or errors.

Refugee specific advantages

206. There are also specific advantages to using administrative data sources for producing refugee statistics, including:
- a) The relatively low cost of collecting data on refugees through administrative records compared with alternative methods of data collection, as refugees are a relatively rare and hard-to reach population.
 - b) An administrative register of asylum applicants (or applications) may offer a direct and accurate insight into the asylum procedure. The variables related to the complex steps of the asylum procedures, and different legal statuses (asylum seeker or beneficiary of specific protection status) are usually well defined and well documented in the administrative databases of authorities in charge of refugees. This type of information is hard to collect accurately through surveys.
 - c) Flow and stock data and status changes can be computed from a register of asylum applicants: theoretically the system should be able to provide information on flows and stocks of refugees as well as status changes. However, outflow will normally be highly underestimated in these registers, making their usefulness limited for outflows, and stock estimates inflated.

Limitations

207. There are a number of disadvantages to using administrative data sources for statistical purposes:
- a) Statisticians may have no direct access to the database due to privacy, data protection and security measures in place. Access to administrative data for statistical purposes requires a legal foundation, and changing the legal mandate of statistical offices is often cumbersome and time consuming. This in turn impedes statistical offices from reacting to a changing demand for information in a timely manner (e.g. in times of mass inflows of asylum seekers).
 - b) Administrative data represent the legal point of view of the authorities in charge of registration, and this point of view may differ from the point of view of the persons concerned. The individual may have a different perspective and understanding to that of the authorities. Additionally, persons who are not

affected by specific administrative procedures and/or persons who do not follow established procedures are not included in administrative registers.

- c) Removal from the databases relies on (de)registration rules and their implementation. If registration and deregistration rules are not well defined, then the quality of the information may be compromised. Moreover, if registration and deregistration practices do not comply with registration and deregistration rules, the quality of the statistics may be limited for some groups.
- d) A variable must be relevant for administrative purposes in order to be recorded. If a variable is not considered relevant, it may be omitted or not checked carefully. Inclusion of additional variables for purely statistical purposes may be difficult to impose, or the results may not be reliable.
- e) The statistical unit within the administrative database may not be suitable for statistical purposes. The statistical unit is often the “case”, “file”, or “application” and not each person concerned with an application, decision or event. The production of statistics by persons may not be possible if the necessary information on related persons (family members) is not recorded.
- f) If administrative files are located at local level, centralisation of the information at national level may be difficult to obtain (or establish) and national figures may not represent correctly the situation at local level. This may also reinforce problems of double counts.
- g) Double counts may result from insufficient elements to identify individual persons (e.g. name, surname, PIN, biometrical data etc.). In cases where it is not possible to link separate databases at central level, a risk of multiple counting of persons or inconsistencies between statistics may result.
- h) Comparability of results may be limited at international level due to different national legal arrangements and practices. For the same reason, adaptation of registration rules and categorisations for statistical reasons (compliance with international statistical recommendations) may be difficult to implement. In the case of administrative databases, the harmonisation of output is certainly the option to be preferred rather than the harmonisation of data sources.

Refugee specific limitations

208. There are additional limitations associated with using administrative data for refugee statistics. These include:
- a) Appropriate databases may not exist in specific contexts, in particular in emergencies with massive flows of refugees and asylum seekers.
 - b) The quality of registration may be poor in many countries, in particular in emergencies with massive flows of refugees and asylum seekers.
 - c) Some categories of refugee and refugee related populations may not be adequately captured in databases, e.g. repatriated refugees, asylum seekers in transit etc.
 - d) It may be difficult to identify refugees as such in databases which are not specifically about refugees or migrants (e.g. education, health, social security databases).
 - e) Due to the sensitivity of the asylum process, access to databases on refugees may be particularly difficult and this may limit the possibility of linking separate databases and their use for statistical purposes.
 - f) The refugees and asylum seekers who provide information for administrative processes, may not trust the authorities responsible for administrative data collection and this may affect the quality of the collected information.
 - g) Refugees may feel that there are concrete advantages or disadvantages to being registered, and this may ultimately affect the quality of the collected information.

e. Recommendations to improve administrative data on refugees

209. In many countries, there is no guaranteed access to administrative sources for statistical purposes. Access to specific administrative databases related to refugees should be guaranteed for the NSO in compliance with legislation related to privacy and data protection. It may be necessary to revise or enforce legislation on this in some countries to enable this access.
210. Cooperation and partnership between the NSO and the authorities in charge of these specific databases should be improved in order to increase the mutual understanding of statistical needs and the potential benefits of better statistics for the authorities concerned. Experience shows that statistical use of a database improves the quality of the data, and close collaboration between the administrative and statistical partners will help to support the use of the data by the authorities concerned.
211. Precise registration and deregistration rules must be established between the statistical and administrative agencies to ensure that the statistical and administrative concepts are fully coordinated. The rules applied in defining these concepts should be tested and fully assessed for statistical data quality purposes.
212. A common PIN for individual refugees and asylum seekers must exist at national level to facilitate the exchange of information and avoid duplicates. This PIN should be included in all databases to be used for refugee statistics.
213. Persons should be considered as the standard for statistical units in administrative databases, and family ties should be registered in a way that would make it possible to construct each family as a statistical unit.
214. The numbers of administrative databases where refugees can be identified should be maximised, either by including a specific variable or by authorising the linkage between different databases to a central database identifying refugees for statistical purposes.
215. Additional socio-economic information on refugee and refugee related populations should be collected by the responsible authorities, if their quality can be assured within the resources available.
216. There should be an exchange of administrative data between countries within legal constraints and in accordance with the United Nations' *Fundamental Principles of Official Statistics*.

Box 4.5: Country examples of good practice

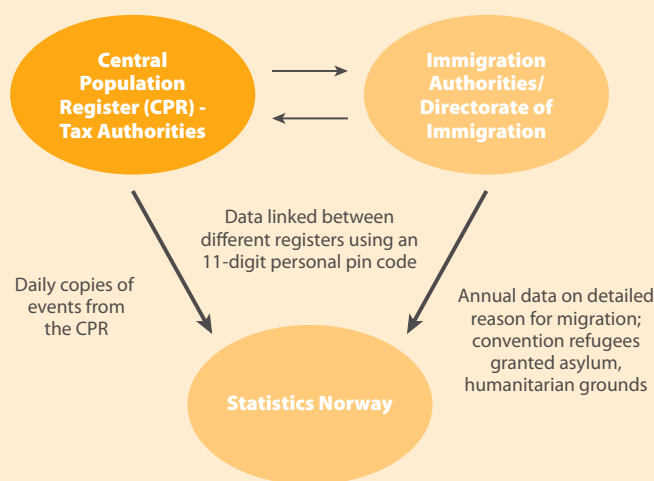
- Australia (see Telford and Dobak, 2016)
- Austria
- Belgium (see documents provided for the first WG meeting "Statistics on asylum seekers and persons granted refugee or subsidiary protection status in Belgium")
- Canada (Citizenship and Immigration Canada-CIC – Statistics Canada)
- Côte d'Ivoire
- Ethiopia
- Germany
- Greece
- Jordan
- Kenya
- Lebanon
- Netherlands
- Nigeria
- Norway (Statistics Norway and Norwegian Directorate of Immigration UDI)
- Thailand
- Turkey

Box 4.6: Linking administrative data on refugee and refugee related populations in Norway

Statistics on persons with a refugee background in Norway

Both Statistics Norway and the Norwegian Directorate of Immigration (UDI) produce statistics on forcibly displaced groups in Norway. UDI produces statistics on the number of asylum applications, reception of UN convention refugees as well as asylum decisions, whereas Statistics Norway produces statistics on persons with a refugee background (this broadly includes former asylum seekers and UN convention refugees) that are residents in Norway. The statistics on persons with a refugee background are published as a part of statistics on 'Reason for migration' for all non-Nordic immigrants who reside in Norway. These statistics form an integral part on the official population statistics on migrants (both stocks and flows) in Norway.

Production of statistics on persons with a refugee background



Data from the Central Population Register form the basis of all official population and migration statistics in Norway. For production of migration statistics, Statistics Norway receives a nightly copy of the CPR and utilizes a set of status variables and flow variables.

Central status variables from the CPR

- Personal Identification Number
- Residence status (resident, deceased, emigrated, disappeared etc.)
- Municipality
- Place of birth (municipality or country)
- Citizenship
- Country of immigration
- Country of emigration
- PIN of mother and father

Central flow variables from the CPR

- Births (date of birth)
- Deaths (date of death)
- Emigrations (date of emigration)
- Immigrations (date of immigration)
- Citizenship changes (date of citizenship change)

Once a year, Statistics Norway receives data from the UDI about all persons who have been granted residence permits. The information covers (among others) the grounds for settlement (reason for immigration). Based on this information, Statistics Norway creates the variable 'reason for immigration' for all non-Nordic immigrants to Norway. Statistics Norway links the information from the Aliens Register to the CPR data using the 11-digit personalized PIN-code. This information is used to produce statistics on 'Reason for Migration' for all non-Nordic migrants that come to Norway and to establish a stock number for persons with a refugee background. For more information see: <http://www.ssb.no/en/flyktninger>

D. International data sources for refugee statistics

1. Registers of UNHCR

217. Registration of refugees and asylum seekers remains the responsibility of States and UNHCR assumes an operational role for registration only if needed. However, UNHCR has been registering the persons under its mandate since its inception in 1951. Registration of refugees is an essential tool for the protection of individuals, for the management of operations, and for the achievement of durable solutions.
218. UNHCR may work jointly with national authorities or undertake registration activities independently where necessitated. The division of roles and responsibilities between UNHCR and the national authorities varies widely from operation to operation; in some locations registration is done without any support or involvement of UNHCR, while in other locations, UNHCR is responsible for all aspects of registration.
219. UNHCR data structures and data set details can vary with the conditions on the ground, and in some circumstances other international organisations, listed below, collect information.

a. Data source description

220. The scope and detail of the data collected by UNHCR varies depending on the nature of the refugee situation, for example a mass influx or emergency situation may differ from stable situations where there is ongoing registration. It may also depend on the availability of resources and capacity, and the cooperation of the population and the host government.
221. UNHCR's registration system and processes adhere to the minimum registration standards established by UNHCR's Executive Committee in its Conclusion No. 91 of October 2001:
- a) Basic registration, meeting minimum standards, will be undertaken in the same way for asylum seekers and refugees everywhere, and these approaches should also govern the registration of other persons of concern, such as internally displaced persons and stateless persons.
 - b) An individual record, consisting of a prescribed minimum amount of core bio-data, will be established for each person of concern, from arrival through to solution; and minor variations are possible in registration procedures and in the information collected, depending on the operational context or the focus population.
222. UNHCR recommends a continuous registration approach, whereby identity records are strengthened over time, with data elements being reconfirmed, updated and added to with each subsequent contact. The process that records essential information both at the time of initial displacement and changes in the refugee population, such as births, deaths, new arrivals, and departures occur.

Household registration

223. Household level registration is used for organizing movements of populations, to facilitate assistance distribution and scheduling for individual registration. Information collected at the household level is not accepted as formal registration given that information required to determine whether an individual may be inadmissible for registration is not adequately collected at this level. Data sets normally include: household or case size, age cohorts/sex breakdown, location of household or case name of household representatives, specific needs, unique identifier, and registration date.

Individual Registration – Core data set

224. Individual registration involves the collection of core data for the principal applicant and for each individual within a household or case (see Table 4.2). The core data set is needed even in initial onset of a large refugee influx for the purposes of facilitating protection and programming in an emergency. It meets a core UNHCR

standard for registration that it enables individual protection interventions. However, it does not contain all data required to undertake refugee status determination process or to find durable solutions.

Individual Registration - Basic data set

225. The basic registration data set includes biographical data on each individual within a household or case. This data is considered the start of a continuous registration process, and enables the planning of assistance and service interventions. (see Table 4.2)

Individual Registration – Comprehensive data set

226. Comprehensive data for registration includes additional data on each individual within a family (see Table 4.2). The additional data is the preferred set to be collected because it enables: (a) issuing of individual identity documents to all persons and individual entitlement documents as necessary; (b) targeting of assistance and services; (c) processing RSD; and (d) implementation of durable solutions. However, there are several drawbacks to collecting additional data, including the high cost, and the time intensive process (an interview with a family of five is estimated to take approximately 60 minutes).

Table 4.2: Individual Registration - Core, Basic and Comprehensive

Core	Basic (additional data)	Comprehensive (additional data)
Individual names	Place of origin	Names of spouse(s)
Sex	Date of arrival	Names of parents
Date of birth	Registration date and place	Additional personal names
Relationship to principal applicant/ Head of Household	Addresses (Country of Origin/ Country of Application)	Names of all children
Marital status	Nationality	Place of birth
Country of origin	Status of person	Existing personal documents
Specific needs	Educational level	Occupation (ISCO)
Photo (strongly recommended)	Occupation/skills	Languages
Biometric data (recommended)	Religion	Relatives' details
Consent/prohibition to share information	Ethnicity	Voluntary repatriation status
		Resettlement case status
		Local settlement status
		Specific events related to individuals and to the groups to which they belong (e.g. reasons for flight)

227. Individual Enhanced Registration (IEHR) may be used for the collection of supplementary data in addition to the individual registration data elements. This is for the purposes of facilitating specific protection case management and/or programming interventions, that does not result in a recognition of refugee status. IEHR may include: additional questions relevant for processing RSD, durable solutions or protection intervention; or additional questions to determine eligibility for targeted assistance or programming. The source is not yet publicly available.

2. Registers of UNRWA

a. Data source description

228. UNRWA is mandated to provide relief, humanitarian and human development assistance and protection to Palestine Refugees and other persons eligible for the receipt of services in its five fields of operation (Gaza, West Bank (including East Jerusalem), Jordan, Lebanon and Syria), pending a just and durable solution to the

plight of Palestine refugees in accordance with international law and relevant General Assembly resolutions. The criteria and standards for identifying those who are entitled to be registered in its registration system and/or to receive UNRWA's services are set out in the Agency's *Consolidated Eligibility and Registration Instructions* (CERI). If an individual meets the registration requirements as set out in the CERI and relevant administrative issuances, core information is recorded for the family and for each individual. The scope of UNRWA's registration system is generally limited to data on Palestine Refugees in their area of operations (according to the CERI there are some categories of persons who are not meeting all Palestine refugee criteria, but are registered for the purposes of receiving UNRWA services without being count as part of the official registered refugee population of the Agency). Information about persons registered with UNRWA is made available through bulletins and publications and describe number of persons registered.

Table 4.3: UNRWA registration data set

Family data	Individual data
Name of head of family (first name, father's name, grandfather's name and family surname)	First name
Place of birth	Father Name
Nationality of origin/birth	Grandfather Name
Religion	Family Name
District of origin in Palestine	Mother Name
Field, area and district of residence	Sex
Camp or non-camp resident	Place of Birth
	Date of birth (Day/Month/Year)
	Marital status and relationship to Head of Family
	Original Nationality
	Current Nationality
	Host Government ID
	Registration Status
	Registration Address
	Physical Address

E. Statistical data sets on refugee and refugee related populations

1. Joining administrative data and survey data

229. Integrating data sources is a promising approach when trying to shed more light on the situation of refugee and refugee related populations. The intuitively appealing idea of combining already available information is a cost-effective way to arrive at new empirical conclusions and hence increasingly attracts attention in research, official statistics and also in commercial (Big) data analytics.
230. Most countries hold data on refugee and refugee related populations, but typically the available information is spread across many different data sets. This hampers the possibility of analysing the full range of information incorporated in these data, because the analysis is limited to the variables included in each single data set only.

231. Typically, countries hold some administrative data on residence status of foreigners and survey data on demographic and socio-economic characteristics of the overall population. For instance, EU Member States are obliged to collect at least the following information with EU-wide standardized definitions:
- by Directive 2003/109/EC to provide harmonized statistical data on long-term non-EU residents by citizenship, gender, length of stay and residence title; and
 - by Council Regulation (EC) 577/98 to provide harmonized individual micro data on a wide range of demographic, socio-economic and labour-market related subjects in the framework of the EU-LFS.
232. As separate sources of information on refugees, both data sources have significant limitations. While administrative data on foreigners' residence status identifies and may comprehensively cover refugees, it does not provide much additional information on their demographic characteristics and living conditions. In contrast, survey data provides detailed socio-economic information but usually neither identifies nor comprehensively covers refugees. Where administrative data and survey data are stored separately, statistical offices are often unable to analyse the full range of available information on refugees, and as a consequence, policymakers cannot rely on the best possible empirical foundation to derive policy implications.
233. Unified data sets leverage the potential of the separate data sources by enabling the analysis of variables from administrative and from survey data jointly. Thus, they provide much more insight into the situation of refugee and refugee related populations in their host countries. For instance, unified data sets allow drawing a more detailed picture of refugee and refugee related populations with respect to demographic variables, housing situation, labour market integration and educational background (e.g. highest educational or vocational degree). Policymakers rely on such a nuanced picture of the situation of refugee and refugee related populations in order to derive implications for refugee policies.
234. In principle, countries differ greatly in the opportunities available for creating such unified data sets. First, differences largely depend on whether or not a common unique PIN exists in administrative databases. Second, even where PINs exist the legal framework must allow their use in official statistics for identifying individual units. Given an administrative data infrastructure that meets both criteria, data warehouses can be created that provide centralized access to a variety of information held for different administrative purposes.
235. However, only a few countries currently meet both criteria. Moreover, there are difficulties combining full coverage register data with representative population surveys, since PINs only provide linkages to those observations actually interviewed in the survey. Typically depending on the prevalence of refugees in the population, this is only a very small sample of the overall register, leaving most of the observations without survey information. Consequently, the focus lies on possibilities for data integration in an environment where PINs cannot be used.

2. Further data sources to enrich data sets on refugees

236. Other data sources should also be considered for further enriching integrated data sets. Regarding data on refugees, two data sources deserve particular attention by NSOs: spatial data and big data.

Figure 4.1: Integrated Data Set

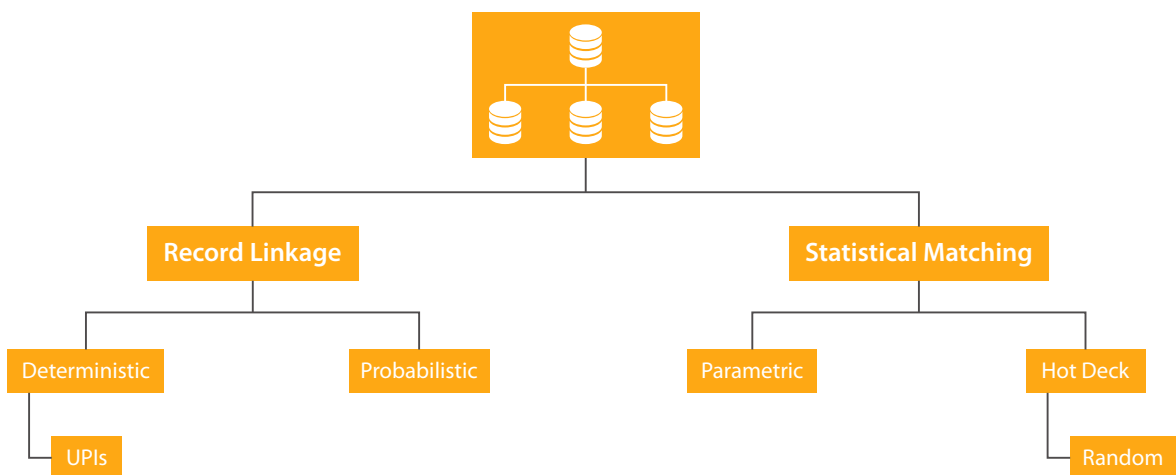
237. Spatial information enables NSOs to significantly enrich administrative and survey data sets. Geo-coordinates for the place residence either explicitly via GPS receivers during survey or census fieldwork or implicitly via addresses are commonly collected. Using geographic information systems (GIS), geographic coordinates in turn allow surveys and registers to be linked to a variety of map based information. For refugees in host countries, information on access to health (e.g. proximity to nearest hospital), education (e.g. proximity to nearest school) and mobility (e.g. proximity to nearest road) can be linked to administrative and survey data sets. Further, spatial information on their current place of residence or accommodation can be used to derive density measures to assess spatial clustering. Spatial clustering of migrants in general and of refugees in particular is considered an important indicator for integration (see Chapter 5 social inclusion indicators).
238. Besides spatial information, NSOs should further consider big data as a potential source to enrich their databases on refugee and refugee related populations. The challenge as well as the potential of big data is to extract actionable information from the vast amount of unstructured, high frequency data that is created as a by-product of today's digitalized environment. With respect to data on migration flows in general, big data applications are considered promising mainly in providing information about aggregate migration flows. GPS information derived from mobile phones and geo-located social media content have the potential to improve the currently available options for mapping migration flows and migration routes (Zaghenni, Garimella, & Weber, 2014). Due to high penetration rates of mobile phones worldwide, data obtained from mobile phones could fill data gaps on migration flows in developing regions. Another frequently cited advantage of such data sources is their ability to provide information in (close to) real-time, whereas survey data are usually collected retrospectively once refugee and refugee related populations have arrived in host countries. In this vein, other big data applications even aim at predicting future migration flows based on search query data. The underlying hypothesis is that migrations flows can be anticipated from volumes of online search queries that imply an intention to migrate (UN Global Pulse, 2014). Social media content on Facebook and Twitter may further be useful to analyse the public sentiment towards refugees once they have arrived in host countries (Benček & Strasheim, 2016).
239. With respect to the feasibility of using big data in migration statistics, an assessment conducted by the European Commission identifies three major bottlenecks: (a) data accessibility; (b) legal obstacles; and (c)

proliferation of relevant databases (Hughes, et al., 2016). Similar issues prevail regarding the use of big data for refugee statistics:

- a) Access to privately held big data sources is a particularly delicate bottleneck. While some data can be accessed openly with the appropriate technical skills (e.g. via web scraping); others need to be purchased or require partnerships with companies (e.g. Yahoo!, Facebook, LinkedIn, and mobile phone providers) and others are not shared by companies (Google only shares, e.g. Google Trends or Google Ngram).
 - b) Today, private corporations no longer consider the data they collect as a by-product but as a valuable asset. Data providers are therefore reluctant to enter into data sharing agreements with NSOs without a legal obligation to do so. A legal framework is required not only to guarantee data access but, from the citizens point of view, also to tame government agencies' appetite for their data. The overall balancing of privacy concerns with governments' need for empirical guidance must be rethought in the light of potential uses of big data.
 - c) Relevant data sets may be distributed across a great number of providers. For instance, the number of mobile phone providers grew rapidly in last years. Selecting certain data providers inevitably introduces selection bias, since different providers have different customer target groups (e.g. Facebook vs. LinkedIn).
240. Additionally, despite potentially promising attempts in the context of providing timely migration statistics, big data sources have not yet proven to allow for a reliable identification of refugees within the migrant group, and it cannot include refugees who are not migrants. For big data sources to become applicable in the context of refugee statistics, they must provide reliable information on an individual migrant's reason for migration or residential status.
241. It is too early to judge whether these hurdles will be overcome and in turn whether big data will become a valuable source for refugee statistics in the future. Meanwhile, this section focuses on the potential of integrating: (a) administrative data, which allows credibly differentiating refugees from other migrant groups; and (b) survey data, which provides a broad set of detailed socio-economic information.

3. Overview on data integration methods and their use for refugee statistics

Figure 4.2: Data integration



242. Different data integration tools have been proposed and used in official statistics for integrating administrative registers and survey data. For potential practical users in the field of refugee statistics, it is particularly useful to obtain an overview on what method is suitable in their own specific data environment. As a starting point, it is useful to distinguish between two fundamental data integration concepts: (a) Record linkage; and (b) Statistical matching.

243. Record linkage (Deterministic and Probabilistic Matching) deals with linking information on identical units from different data sources. Record linkage can be considered given the data sets to be joined overlap in terms of observations, meaning they contain the same individuals.
244. In the best-case deterministic record linkage scenario, identical units can be identified by means of a Unique Personal Identifier (UPI) which is available in all the data sets to be linked.
245. Country Example: For instance, in Belgium deterministic record linking via UPIs has been successfully implemented in the context of migration and refugee statistics. The Belgian National Register contains information on residence permits which can be matched with other official data sources via a unique PIN (National Register Number). Further, access to administrative data on socio-economic characteristics is facilitated by means of an integrated data warehouse. The Belgian “Data Warehouse Labor Market and Social Protection” contains a broad set of labour market characteristics like wages, working hours and social security contributions that can be linked deterministically to an individual’s residence status. This favourable data infrastructure allows researchers and the Belgian Statistical Office to derive valuable insights about the integration of refugees into the Belgian labour market (Rea and Wets 2014).
246. Linking via unique identifiers is certainly favourable in terms of providing high quality integrated data sets that enable reliable empirical inference and should hence be considered as the gold standard for data integration. At the same time, this integration method imposes high demands on the administrative data infrastructure that will not be met in the majority of countries within the foreseeable future. This in turn places the spotlight on less demanding data integration methods.
247. Even in the absence of unique identifiers record linkage methods can be applied in order to identify observations that are most likely to derive from the same unit in different data sets.
248. There are two main types of linkage algorithms: deterministic and probabilistic. Deterministic algorithms assess whether observations in different data sets agree or disagree on a set of common variables. In the deterministic matching approach agreement is determined as a discrete — “yes-or-no” — outcome. Only agreement on each single identifier leads to a match.
249. Thereby, the deterministic approach ignores that agreement on certain identifiers have more discriminatory power than agreement on others. In expectations, the probability of two randomly chosen individuals to share the same month of birth is 1/12, while their probability to share the same birthday is only 1/365.
250. Probabilistic algorithms take into account that not all identifiers have an equal discriminatory power and that identifiers must not always agree even for true matches. The probabilistic approach determines the likelihood of two records being a true match based on an overall assessment of agreement and disagreement on the available identifiers. Disagreement on a certain identifier does not automatically disqualify two observations to be a match. Indeed, identifiers for identical individuals can diverge in different data sets for several reasons. In registers, data entry errors occur and changes addresses or surnames cannot always be reproduced immediately.

Box 4.7: The Australian Census and Migrants Integrated Dataset

The Australian Bureau of Statistics (ABS) provides several examples on how to enrich census data with administrative data with information on immigrants’ residence status in order to arrive at new empirical conclusions. One specific data integration project is aimed at linking individual-level data from Australian Census with settlement records collected by the Australian Department of Immigration and Border Protection (DIBP). The value added by the resulting unified data set is described as following:

“By effectively attaching ‘visa category’ and other immigration information to records on the Census file, variation in family information, labour market and other socio-economic outcomes across different migrant groups can be more readily identified and understood” (Dobak 2016: p. 3)

Finally, the data set unified via probabilistic matching (The Australian Census and Migrants Integrated Dataset) produces valuable empirical insight for Australian government agencies in charge of managing the Australian migration program. For instance, the data allows for comparing industry of employment, average wages and English language proficiency between owners of skilled, family or humanitarian visas. The project was first conducted using the 2006 Census and subsequently repeated using the 2011 Census. In order to increase public acceptance of the project, the ABS particularly emphasized their effort in maintaining strict privacy and confidentiality conditions.

Box 4.8: Canada's Longitudinal Immigration Database

The Longitudinal Immigration Database (IMDB) in Canada, which links records from immigration data with tax and death data, is another example of using data linkages to measure the integration of refugees in the absence of UPIs. To produce the IMDB, Statistics Canada matches micro data on immigrant and refugees provided by Immigration, Refugee, Citizenship Canada (IRCC) with tax data from Canada Revenue Agency and data on date of death. The IMDB uses a deterministic method to match the records and has an overall match rate of 97 percent (Statistics Canada 2017). This data set provides longitudinal information about the demographic characteristics and integration of refugees in Canada, such as gender, duration of residence, language knowledge, education, labour market outcomes, income, and benefits.

251. While deterministic linking via UPIs does not require substantial effort of assessing the quality of the linkages, probabilistic methods are only able to identify identical units with a certain margin of error. Consequently, the probability of producing missing and false links must be carefully evaluated in light of the discriminatory power of commonly available variables in the data sets to be integrated.
252. In contrast to linking information on identical units, statistical matching deals with imputing information in one data set based on similar units ("statistical twins") identified in another data set. In an exemplary statistical matching scenario two data sets represent the same population but not necessarily contain the same units. Accordingly, statistical matching involves imputing missing information on a target variable for units i in a recipient data set based on realizations of R observed for similar units j in a donor data set. In order to identify similar units in both data sets, a set of common variables C ("matching variables") is required. In other words, the final objective in statistical matching is to arrive at an estimate of the relationship between the target variable and the variables in the recipient data set that were not jointly observed.

Figure 4.3: Typical statistical matching

Donor		Recipient		Synthetic Dataset	
R	C	S	\hat{R}	C	S

253. Different imputation methods have been proposed in the context of statistical matching: Parametric imputation techniques aim at estimating a model $F(\theta C_i) = R_i$ in the recipient data set which can then be used to predict $\hat{R}_j = F(\theta C_j)$ in the target data set. In contrast to parametric statistical matching, hot deck methods involve imputing the target variable for each unit j in the recipient data set using actual realizations of R in the donor data set. Hot deck methods can further be distinguished by how they attribute donors to recipients. In distance based hot deck methods, distance metrics (e.g. Euclidian distance) with respect to the matching variables are computed in order to select nearest neighbours as donor units. Rank based hot deck methods allocate donors to recipients based on their relative positions after having sorted the data sets according to the matching variables. Random hot deck imputation starts by dividing both recipient and donor data set into appropriate subsets ("donation and recipient classes") based on the matching variables. Subsequently, donors are drawn randomly for each recipient unit from the respective donor class. As a result, the distribution of the target variable in a donor class is transferred to the respective class in the recipient data set.

254. One specific problem arises in case of using sample surveys as donor data set. In sample surveys, weights are attached to donor observations and as a consequence statistical matching has to transfer the weighted distributions to the recipient data set. In this case, drawing donors completely at random within donation classes is inappropriate, since this procedure would replicate the unweighted distribution. Weighted random hot deck procedures preserve weighted distributions by drawing donors with a probability proportional to the weight attributed to each specific donor.
255. Just as for probabilistic matching methods, the feasibility of data integration via statistical matching has to be carefully assessed on a case by case basis. According to the related literature (Eurostat 2013), the quality of the resulting synthetic data set and with it the validity of any inference based on this data set should be assessed in light of three basic requirements:
256. As a sound starting point for a data integration project, a thorough assessment of the metadata aims at assuring coherence of the data sets involved in the integration project: The baseline requirement claims that the data sets to be joined refer to the same target population (“coherence of the target population”). Especially the use of administrative data in data integration projects requires a careful study of the underlying registration and deregistration rules. Considering survey data, it has to be assured that the target population is contained within the sampling frame and finally within the sample. In this context, the correspondence of the reference period in the data sets to be joined is another essential condition. Further, a prudent analysis of the metadata ensures that variables considered as matching variables are based on the same definitions (“coherence of definitions”) and refer to the same unit of measurement (“coherence of units”). Once coherence on the metadata-level is ensured, empirical coherence of marginal and joint distributions can be tested statistically for the variables common to both data sets. A measure that is regularly applied in this context is the Hellinger Distance. Finally, coherent distributions of the common variables are a strong sign for both data sets to refer to the same population.
257. As a second requirement, a set of variables must be available among the common variables that act as good predictors of the target variables. The explanatory power of common variables with respect to the target variable is usually assessed in terms of pairwise correlations, stepwise multivariate regressions or Cramér’s V in case of ordinal target variables.
258. Finally, all statistical matching approaches implicitly assume conditional independence between the variables that are analysed jointly in the synthetic data set but were not jointly observed in the separate data sets. Precisely because the variables were not jointly observed, this assumption remains untestable by its nature. As described in the previous section, random hot-deck matching transfers the distribution of a target variable from a donation class to the analogue class in the recipient data set. Hence, in this case the assumption of conditional independence translates to assuming a distribution of our target variable in the recipient class that is identical to the one observed in the donation class. Whether or not this assumption is well founded must be evaluated on a case by case basis. As a general guideline, it is particularly noteworthy that the assumption of conditional independence becomes the more innocuous the stronger the explanatory power of the matching variables.
259. In practice, the potential of statistical matching methods for filling data gaps in statistics on refugee and refugee related populations has remained unexplored. So far, statistical matching has been applied mainly in the context of: (a) statistics on labour, income and consumption (Eurostat 2013); (Donatiello, D’Orazio, Frattarola, Rizzi, Scanu, & Spaziani, 2014); (b) micro simulation: Social Policy Simulation Database (SPSD); and (c) marketing research.⁴⁹
260. To fill this research gap, a case study will be provided for the forthcoming Refugees Statistics Compilers Manual. This case study will explore the possibility of joining administrative and survey data using statistical matching as a potential solution for countries lacking unique identifiers. For this purpose, the German Central Register of Foreigners (CRF) and the Micro-Census (MC) – the German version of the European Labour Force Survey (EU-LFS) – will be integrated into a synthetic unified data set applying weighted random hot deck imputation.

4. Advantages and disadvantages of integrated data sources

261. On the one hand, certain general advantages and disadvantages of the individual data sources considered for joining may also apply for the unified data set (see previous subchapters). Administrative data in

particular may not always meet the quality standards usually applied in official statistics, since it is collected for administrative not statistical purposes. For instance, problems related to the consistent implementation of registration and deregistration rules in administrative data that is considered for data integration projects, will also apply to the resulting unified data set.

262. On the other hand, unified data sets are further associated with some specific advantages and disadvantages:

a. Advantages of integrated data sources

263. Data integration is cost effective: administrative data, collected as a by-product of administrative procedures, is a cost-effective means for enriching (fairly expensive) survey data.
264. Integrating data sets creates additional information without additional response burden. The possibility of obtaining certain individual-level information from registers may even allow shortening questionnaires and in turn reduce non-response rates in surveys.
265. Once the feasibility of integrating certain data sources was thoroughly assessed, an established matching procedure can be repeated regularly. Longitudinal data sets can then be produced at low additional cost.

Refugee specific advantages of integrated data sources

266. The motivation for data integration emerges from particular shortcomings of administrative and survey data. While administrative data on foreigners' residence status identifies and comprehensively covers most refugee and refugee related populations who are not citizens, it does not provide much additional information on their demographics and living conditions. For survey data, the opposite is true. The synergetic effect in integrated data sets lies in the combination of reliable information suitable for the identification of refugees with detailed survey data providing a broad set of socio-economic characteristics. Thereby, integrated data sets have the potential to fill critical data gaps on the integration of refugees in their host country.
267. Data integration offers a way to produce statistics in a timely manner.
268. Different integration methods impose different demands on a country's data infrastructure. Especially methods that are capable of producing information on refugees in the absence of unique identification numbers (PINs), and centralized population registers offer a pragmatic contribution to fill data gaps in the short term. Accordingly, the different data integration methods can be considered as a toolkit containing various tools providing customized solutions in light of a country's specific data infrastructure.

Disadvantages of integrated data sources

269. Making administrative databases accessible for data integration projects may require lengthy and tedious negotiations with data providers and the enduring political will to provide the necessary legal basis.
270. Identifying and linking individuals in different data sets is a delicate issue. The required legal basis may not be easy to establish considering privacy concerns about individual-level information that had never been jointly available before. Privacy and confidentiality concerns are of particular importance in probabilistic record linking scenarios. In this context, serious effort must be devoted to anonymization and pseudomization measures in order to obtain access to the sensitive information (e.g. names and addresses) that enables to confidently identify individuals.
271. Given universal person identifiers do not exist, joining data sources can only be accomplished using more advanced matching techniques. However, there exist no generally applicable guidelines for these matching techniques. In general, statistical matching is an imputation problem. Imputation of unobserved characteristics in turn heavily rest on the assumptions of conditional independence and on the explanatory power of matching variables. As a consequence, whether the newly created joint data set maintains sufficient validity and reliability can only be judged on a case by case basis.
272. Durability of linked data sets due to changes in input data sources must be monitored.

273. Less developed statistical systems may require additional support to cope with the technical challenges of matching in the absence of a unique personal identifier in the data sets to be used.

5. Conclusions and recommendations

a. Conclusions

274. In summary, different data integration techniques qualify to produce valuable information on refugee and refugee related populations and to fill critical data gaps that arise where data on residence status and socio-economic characteristics cannot be analysed jointly. Which integration method can be applied in order to join administrative data on residence status to survey data depends on the specific data environment prevailing in a given country.
275. In few countries, refugees can be identified and matched deterministically in databases via PINs in order to obtain a detailed picture on their socio-economic characteristics. In the absence of an integrated administrative data infrastructure, probabilistic linkage and statistical matching offer alternative solutions.
276. Probabilistic matching can be considered under three conditions: First, given the data sets to be joined overlap to great extent, meaning they contain same individuals. Second, whether or not probabilistic matching will finally produce reliable individual-level matches depends on the discriminatory power of the common variables available for statistical purposes. Third, legal basis privacy concerns.
277. For refugee statistics, it may be possible to join administrative data on residence status with survey data on socio-economic characteristics, and this may be possible even where data sets share only small fraction of observations. Statistical matching is promising to provide a practical solution in the foreseeable future, it is less problematic with respect to privacy concerns since only distributional information is transferred without attempting to identify identical units using sensitive information.
278. However, based on the conditional independence assumption (CIA), explanatory power with respect to the target variable is crucial and requires careful assessment on a case by case basis.

b. Recommendations

279. The recommendations aim to answer the following question: What is needed to enable NSOs to implement data integration projects in order to fill data gaps on refugee and refugee related populations? Building an integrated data infrastructure is a desirable, but distant goal in most countries. A project launched in 2016 by the High-Level Group for the Modernization of Official Statistics, aims to develop a practical guide of best practices in data integration for official statistics. The following steps are suggested:
- a) Countries should produce case studies on alternative data integration methods:
 - i) Collect and share case studies on matching procedures in the absence of PINs (probabilistic data linkage or statistical matching) in a common repository in order to arrive at best practices.
 - ii) Assess the untapped potential of statistical matching methods as a source of information on refugee and refugee related populations.
 - iii) Data integration in the absence of PINs is based on assumptions. The outcome should be assessed in a common quality framework.
 - b) Institution building:
 - i) Get an overview by establishing a register of available administrative data sources.
 - ii) A plurality of administrative agencies is in charge of collecting and processing data that is potentially highly useful for statistical purposes. Consequently, NSOs representing the public demand for reliable information is an important stakeholder and coordinator.

- iii) Establish continuous collaborative arrangements between statistical offices and the authorities in charge of administrative databases in order to establish databases that fulfil administrative as well as statistical requirements.
 - iv) Aim to improve the quality and availability of information on refugees, by establishing cooperative arrangements between NSOs and the authorities in charge of registering foreigners and issuing residence permits.
 - v) Exchange metadata between the cooperating producers.
- c) Improve general acceptance for data integration projects:
- i) Provide a legal basis.
 - ii) Establish a framework to assure privacy and confidentiality to improve public acceptance of data integration projects. This framework must ensure that data integration projects do not violate the existing laws.
- d) Improve international environment for data integration:
- i) Development of specific refugee related surveys or modules to the international existing surveys allowing identification of refugees.
 - ii) Integration of data from existing data sources including surveys and administrative data throughout data linking and data matching or other reliable statistical methods.
 - iii) Development and use of reliable and well documented estimation methods.
 - iv) Promotion of exchange of data between countries.
 - v) Promotion of national/regional and international harmonisation of statistical methods aiming at collection of data and metadata on refugees and asylum seekers including exchange of best national and regional practices.
 - vi) Promoting the idea that the presentation of migration data be accompanied by comprehensive metadata. This is because complementary use of the variety of sources is hampered by the lack of data sharing between administrative data collection institutions and NSOs, and inconsistencies in the concepts and definitions among different sources.

5

Measuring integration and the satisfaction of the immediate and ongoing needs of refugee and refugee related populations

A. Introduction

280. From a legal perspective, durable solutions for refugees occur when refugees can once again enjoy the protection of a state, either through voluntary repatriation to their country of origin, integration in their host country, or resettlement to a third country. However, given the protracted nature of many conflicts, repatriation is not an immediate prospect for most refugees, and resettlement and naturalization are solutions for only a small minority. In reality, the majority of refugees aspire to, or enjoy, *de facto* integration in their host countries. Rather than a one-off event, the integration of refugees involves an incremental process. This chapter focuses on the satisfaction of refugees' immediate and ongoing needs, their access to rights and on their integration. Living conditions can serve as a proxy for the satisfaction of these needs, and as data about peoples' living conditions have been routinely collected across the world for over 25 years, the results for the general population are already widely available. The satisfaction of basic needs, and the acquisition of rights is the first step in the integration of refugees.
281. The integration of refugees presents some differences when compared with the integration of general migrants, such as labour migrants (many of whom enter their new country with a job offer). Refugees have particular challenges compared to general migrants. Due to the forced nature of their migration and the traumatic experiences frequently associated with it, they often suffer from psychological distress and disabilities. Moreover, unlike labour migrants who tend to settle where their skills can be used more productively than in their home country, refugees may settle in areas with limited or no employment or other livelihood opportunities.
282. Article 34 of the 1951 Convention provides that States are to facilitate the integration of refugees, and that this is most effectively accomplished by granting them the same rights as permanent residents or nationals. Acquisition of rights speeds up the process of self-reliance and integration, which is of benefit both to the refugees and the host society. The process of integration begins when the asylum seeker or refugee arrives in the host country. Satisfying basic needs early on in the stay of asylum seekers and refugees improves the prospects of integration, return and resettlement. Measures of living conditions which relate to the satisfaction of basic needs, are widely available from household surveys and can, if refugees are identified in the data, provide indicators of the extent to which many of their immediate and ongoing needs are satisfied. These needs include adequate means of subsistence, access to suitable housing, to education, and to medical care; as well as access to integration programmes such as language and orientation courses. Special measures are also needed to meet the specific needs of children, women, and the elderly, and to monitor the mental health of refugees.
283. Despite the fact that countries are increasingly recognizing the importance of integrating asylum seekers and refugees, much remains to be done to promote their legal, economic and social integration in host societies. It is important to collect appropriate data and produce statistics that characterize the situation of refugees around the world in order to monitor trends in outcomes and to inform activities to improve their integration. Furthermore, it is important to standardize the indicators of the satisfaction of basic and ongoing needs, rights and integration, so that they are internationally comparable and enable an assessment of the success of integration efforts across time, regions and countries.

284. The New York Declaration, which was adopted by all 193 member states of the United Nations in September 2016, sets out the elements of a Comprehensive Refugee Response Framework (CRRF), and requests UNHCR to engage with States and all relevant stakeholders in its implementation and further development for situations involving large movements of refugees.⁵⁰ The framework presents a comprehensive response designed to ensure rapid and well-supported reception and admission measures; support for satisfying immediate and ongoing needs (e.g. protection, health, education); assistance to national/local institutions and communities receiving refugees; investment in the resilience capacities of refugees and local communities (livelihoods); and, expanded opportunities for durable solutions.⁵¹ The measurement of the characteristics, access to rights and the satisfaction of basic needs and integration of refugees is clearly critical for measuring progress under the CRRF.
285. This chapter includes proposals for a common set of characteristics and indicators that can measure the satisfaction of refugees needs and the progress towards integration of all refugee and refugee related populations on a global basis. This includes individuals seeking international protection, refugees, those returning to their home countries after having received protection abroad, as well as those who have settled in their host countries. The indicators proposed have been selected pragmatically as the most salient, those for which data are likely to become available from national statistical systems, and with reference to the current development framework of the 2030 Agenda for Sustainable Development. Post 2030 it is anticipated that the indicators will align to the prevailing international development framework.

B. Measurement issues

1. Identification of refugees within the population

286. Chapter 4 discusses the different types of data used for measuring the stocks and flows of refugees. Many of these sources—population registers, data from administrative records, censuses, and surveys—can also be used to measure the characteristics and integration of refugees within the general population. The first methodological issue is the identification of refugees in the population, as many surveys do not yet include questions that would enable the identification of refugee-like populations. The process of identifying refugee and refugee related populations is described in detail in Chapter 4. Once the population has been identified, the next issue is how to define and operationalize statistics on the integration of refugees.
287. Population registers and administrative records may produce the most precise data for identifying refugee and refugee related populations and their legal status within a population. Censuses and surveys generally include more detailed demographic, social, and economic information than population registers or administrative data, however, it is harder to identify refugees using these types of instruments. Censuses and surveys can only be used to measure the characteristics and integration of refugees if the data include information specifically about migration and the reasons for migration, and other variables relevant to identifying refugees. Surveys of migration may include specific questions about refugee status, but these questions are unlikely to be found in a national multi-topic household survey or census and this is a major impediment to deriving indicators of integration. An example of where this identification is done is the ad hoc module of the EU-LFS on the labour market situation of migrants and their immediate descendants.
288. Some demographic or labour force surveys ask respondents about their reason for migration. The response categories will typically include economic, educational, family related, and humanitarian reasons for migrating. Migrants citing circumstances suggesting forced displacement can be used as a proxy for refugees, if no other indicators are available. Recommendations on the questions needed to identify refugees in censuses and surveys are discussed in Chapter 4.
289. Increasingly, NSOs are linking data from administrative records to other data sets such as censuses and surveys. This approach leverages the precision of administrative data with the detailed social, health, and economic indicators found in other data sources. In order to link different data sets, there must be common identifying information between the data sources. For the data linkage, it is optimal to have a unique identifier that is the same in both sources such as an identification number (Personal Identification Numbers or PINs). When such a unique identifier is not available, the records can be matched using variables such as name, date of birth, and address that are common to both data sets. However, the use of unique PINs

which can identify individuals in household surveys and the same individuals in administrative data, is not common practice in surveys worldwide. See Chapter 4 Section C.

290. To measure refugees' conditions globally, it is strongly recommended that countries with significant refugee populations include questions which would help to identify the refugee population in a national multi-topic household survey such as LSMS, DHS, MICS, or similar, as described in Chapter 4. In addition to asking the usual questions relating to living conditions, socio-economic and demographic characteristics of both refugee and national populations, some additional questions are needed which would enable the construction of indicators relating to satisfaction of refugees' basic needs and their integration.
291. Refugees also return to their countries of origin and it is important to measure their living conditions there and reintegration into their home country. These indicators can be selected from those listed below as relevant and available. Former conflict countries may have limited statistical systems in place from which to access data. In any case, returning refugees generally enter in a spontaneous manner as citizens and can be indistinguishable from other non-refugees in the migration statistics. Where UNHCR has assisted the return, records may be available. It is recommended that censuses and surveys in these countries include a method for identifying former refugees in order to measure their living conditions and integration into population. However, these methods should maintain the privacy of the return refugees so as to ensure their safety.

2. Definition of integration

292. The nature of the integration process differs from country to country, and varies over time. Integration is a mutual, dynamic, multifaceted and ongoing process and can be described with reference to the three main dimensions outlined below:

"From a refugee perspective, integration requires a preparedness to adapt to the lifestyle of the host society without having to lose one's own cultural identity. From the point of view of the host society, it requires a willingness for communities to be welcoming and responsive to refugees and for public institutions to meet the needs of a diverse population." (UNHCR, 2002)⁵²

293. Broadly speaking, integration can be understood as the gradual inclusion of refugees, asylum seekers, and other refugee related groups in their host country. This entails the progressive enjoyment of rights, increasing access to national services and social and cultural networks, and an absence of discrimination. Ideally, this process results in full integration, which occurs when refugees and other persons of concern enjoy the same rights and access to national services and systems as nationals and non-refugee permanent residents (UNHCR, 2014).
294. They are not discriminated against on the basis of their legal status or country of origin, and they enjoy peaceful co-existence with the local population and participate in the social and cultural life of the wider host community. Full local integration is enjoyed when persons of concern enjoy inclusion across legal, economic, social, cultural, and political spheres.
295. To concretize the definition of integration, it is helpful to consider four broad dimensions of integration (UNHCR Statistical Yearbook, 2014):
- a) **Legal:** A permanent or renewable legal residency status entailing a range of rights and entitlements by the host State that are broadly commensurate with those enjoyed by its nationals and, in some cases, the acquisition of nationality in the country of asylum. When individuals are recognised as refugees, they may obtain the right of residence and a range of associated rights. Those granted complementary/subsidiary/temporary forms of protection may have a more limited range of rights and more temporary status according to national legislation.
 - b) **Economic:** Enjoyment of economic rights and services, including the right to work, access to income-generating opportunities, access to financial services, and access to social security benefits (to the extent that they exist) such as welfare and unemployment insurance, commensurate with that of nationals and of non-refugee permanent residents. Most asylum seekers and refugees arrive in host countries with few belongings or financial resources, and consequently require a means of subsistence. Access to the labour market or in developing countries the ability to support themselves with small-scale agricultural activities, can enable refugee and refugee related populations to become increasingly self-sufficient. This allows them to support themselves and their families, as well as contribute to the local economy.

- c) **Social and cultural:** Access to national and local services (to the extent that they exist) including health care, education, public housing, etc., through the same pathways and to the same level as nationals and non-refugee permanent residents. An environment that enables refugee and refugee related populations to live among or alongside the host population, without discrimination or exploitation, and to contribute actively to the social life of their country of asylum. Successful integration includes refugees' participation in, and contribution to, the social, political and cultural life of the host country, involving a process of acclimatisation by refugees and accommodation by the host population. In addition, refugees need to move towards an acceptance of the host country's institutions and values.
- d) **Civil and political:** Access to justice (courts and other complaints mechanisms, including lack of discrimination in judicial procedures) and enjoyment of civil and political rights, including the right of association, the right to join political parties, freedom of speech, etc. to the same degree as nationals or non-refugee permanent residents. Also, to the furthest extent possible depending on legal status, enjoying the right to vote.
296. These four dimensions are firstly the acquisition of legal rights whereby refugees are granted a progressively wider range of rights and entitlements by the host State that are broadly commensurate with those enjoyed by its citizens. These include freedom of movement, access to education and the labour market, access to public relief and assistance, including health facilities, the possibility of acquiring and disposing of property, and the capacity to travel with valid travel and identity documents (Da Costa, 2006). Beyond securing these legal rights, the economic and socio-cultural dimensions of life in the country of asylum are also integral to successful integration.
297. The concept of integration with respect to refugees can have a number of meanings. At one end of the spectrum is the broad notion of integration as assimilation, i.e. acceptance of, and behaviour in accordance with, host country values and beliefs, including similarity of economic and social outcomes. At the other end of the spectrum is the notion of an economic/social convergence between the refugee and host population with similar socio-economic characteristics with respect to a number of dimensions (e.g. participation in the labour market, standard of living, educational attainment, material conditions, fertility rates, voting behaviour, participation in community organisations, etc.), without this similarity necessarily implying any abandonment of home country culture and beliefs (OECD, 2007).
298. This concept of integration described above highlights the degree to which refugees are able to participate in institutions in the host country, especially the education system and labour market. The EU initiative on the Common Basic Principles on Immigrant Integration in the EU, adopted in 2004, is in line with this concept. Integration is here defined as a "dynamic, long-term, and continuous two-way process of mutual accommodation" (EU, 2004), which "involves adaptation by immigrants, both men and women, who all have rights and responsibilities in relation to their new country of residence" but also "involves the receiving society, which should create the opportunities for the immigrants' full economic, social, cultural, and political participation".⁵³ The additional value of such a definition is that it can be operationalised and transposed into a set of indicators (OECD/EU, 2015). For this reason, the proposed indicators listed below include measurements of integration efforts made by refugees, the host government and the host population. They cover the four dimensions listed above and include the following topics:
- Legal indicators
 - Civil-political indicators
 - Demographic and migration indicators
 - Education indicators
 - Economic indicators
 - Social inclusion indicators
 - Health indicators
299. The use of one comprehensive measure (or composite of several indicators together) is not considered as part of these recommendations. The integration process may provide contradictory results in different policy area; it is possible to be well integrated in the school system, but have poor housing conditions, or be successful in accessing the labour market but still feel discriminated against.

300. The definition of refugee integration must also reflect the unique legal, social, and economic circumstances that make refugee and refugee related population groups different from general migrants. Refugees are often granted protected legal status in their host country, the most basic being the principal of *non-refoulement*, that ensures continued legal residency and prevents involuntary return or expulsion. The granting of legal rights forms an important part of the process enabling refugees to integrate. UNHCR notes that:
- [G]ranteeing recognized refugees a secure and durable residency status upon recognition (either automatically, or within a relatively short time, and with conditions facilitated for refugees), such as permanent residence, and facilitating conditions for their naturalization will contribute immeasurably to a positive integration process and the formation of durable ties, not least because it will facilitate access and implementation of rights, and end the uncertain situation of refugees who would otherwise lack an effective citizenship. (Da Costa, 2006)
301. Some countries provide refugees with access to programs, such as language training or workforce development, in order to facilitate integration. Refugees may also be eligible for state benefits or employment opportunities that general migrants may not receive. Refugees' skills are more likely to be discounted on the labour market over the first years spent in the host country, more than for general migrants who can negotiate pay and conditions in advance of their arrival. However, well-educated and qualified refugees can potentially improve their economic and social situation over time.
302. Measuring refugee integration requires considering the additional obstacles that refugees face in the host country society. A convergence analysis towards the economic and social outcomes of native population and other migrant groups is relevant, it is expected that refugees will not be well integrated during their first years in the host country, but can potentially show a positive trend if they get the opportunity to overcome initial barriers.

3. Satisfaction of immediate and ongoing needs

303. In order to be more precise and internationally comparable in measuring progress of outcomes and to compare the situation of refugees with those of the non-refugee migrant population or host community, a standard set of global indicators is required. The measurement of living conditions towards the fulfilment of basic and ongoing needs and enjoyment of rights (including e.g. access to shelter, food, water, sanitation, and health care) provides a set of indicators many of which are routinely collected by national statistical systems and aligned to current development frameworks. This set of indicators corresponds loosely with the OECD definition of wellbeing; "the ability of people to meet human needs, some of which are essential (e.g. being in good health), as well as the ability to pursue one's goals, to thrive and feel satisfied with their life".⁵⁴ In these recommendations, indicators were chosen which are likely to be linked to refugee integration into the host community; to be comparable and specifically relevant for refugee and refugee related populations and because they are likely to be measurable in many countries worldwide.
304. The programme of action of CRRF includes ensuring refugees have access to health, education and livelihood opportunities and are included in their host communities from the very beginning. Refugee integration is a multifaceted concept and there are various indicators for measuring different aspects of integration, the main ones being related to access to legal, education, health, economic and social needs. The integration pathway of refugees shares many similarities with those of general migrants or even native-born vulnerable and marginalised groups. For this reason, many of the indicators shown below, beyond the legal issues, are universal indicators of integration into society such as employment status and poverty, or are migrant specific indicators such as language proficiency or recognition of qualifications.
305. Not all indicators are likely to be relevant or measurable in all countries and contexts, for this reason they are arranged in three levels, the first priority category is intended to be universally measured, and has been chosen for reasons of salience, and likely availability. Level two indicators are also important and should be collected where possible and when capacity constraints allow. The level three indicators are desirable, but their availability may be restricted by capacity constraints, methodological difficulties or applicability.
306. Together, the indicators proposed below aim to provide a basis for comparison of different aspects and paces of integration of refugees, in particular in relation to their legal rights and the satisfaction of basic

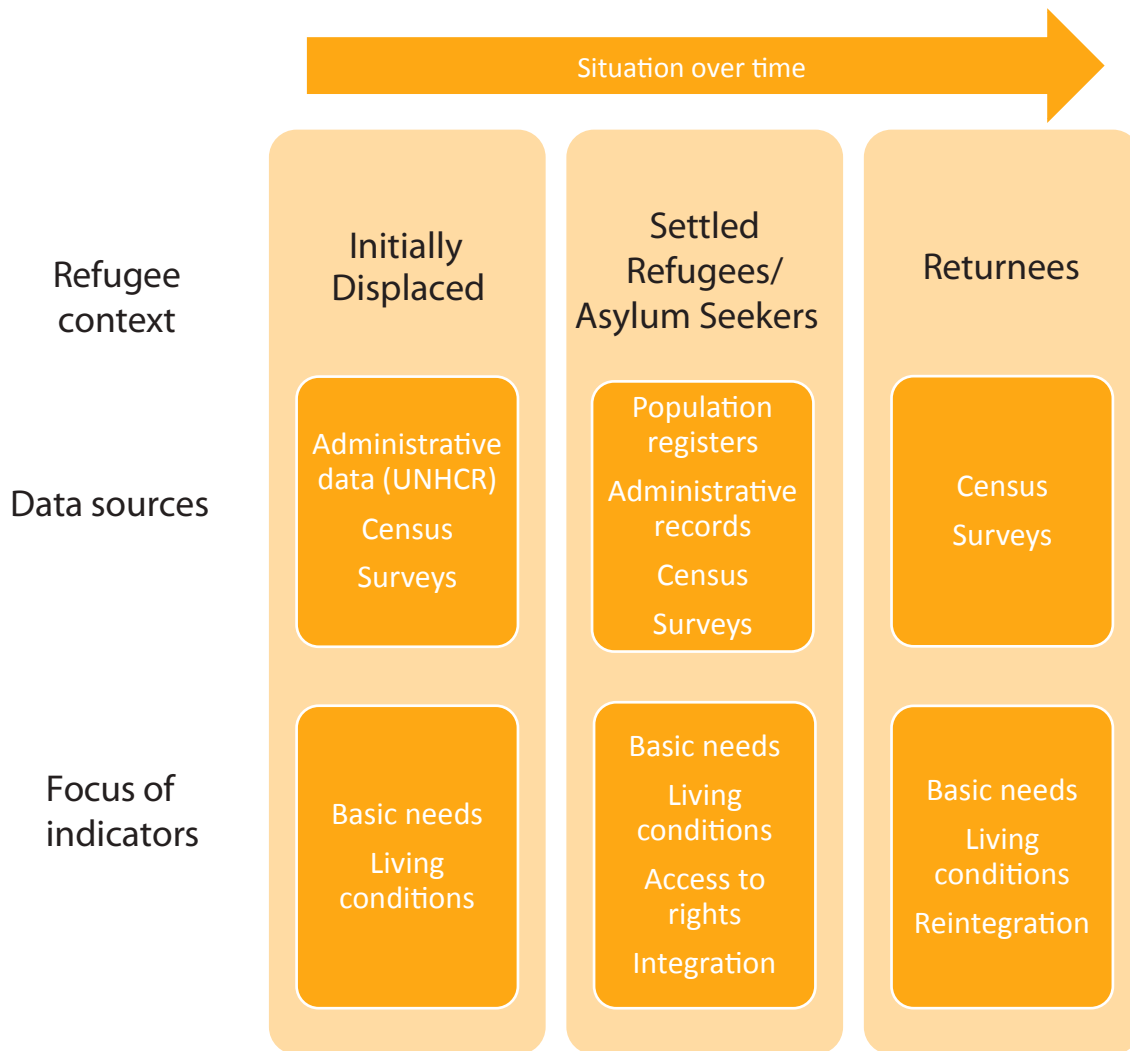
needs. These include measuring refugees' living conditions and access to services such as education, health, economic and social protection.

307. Finally, it should be noted that in many circumstances the living conditions of refugees and asylum seekers are important issues to be considered as a pre-requisite to integration. The majority of the refugee and refugee related population groups are located in the developing world, and their circumstances need to be compared with those of local populations. In addition, when refugee populations are in transit or living in temporary accommodation, they are confronted with extreme living conditions ranging from poor access to clean water and sanitation to limited access to school for children.
308. The indicators of the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development are currently relevant for refugee integration, reflecting strategies to address a range of social needs including education, health, social protection and job opportunities within which refugees should be included. It is especially relevant to apply the SDG indicators to refugee and refugee related populations, and to compare them with those of the host country population. It gives meaningful information on the gaps that need to be filled between the two groups in terms of meeting needs. The SDG indicators should then be disaggregated, where relevant, by migratory status which should include refugee status if available. However, the very limited supply of data available to measure these indicators for refugees may limit their application. Depending on national contexts, the SDG indicators could be applied to other refugee and refugee related population groups as described in Chapter 3. It should be noted that any future development frameworks which succeed the SDGs may require the indicators to be adapted.

4. Refugee situational contexts for measurement

309. Refugee experiences vary over time, from the initial displacement, to transit arrangements, to more settled situations in host countries or in the case of persons returning after seeking international protection, countries of return. In situations where refugees live for long periods or permanently settle, they may arrive through an asylum claim inside the host country, by a process of group determination of refugee status, or for a fewer number, via a resettlement program. For all countries, the data and methods for producing accurate statistics will vary based on the specific type of refugee context. Included in the term 'refugee' as used here, are all persons in scope of this report as described in Chapter 3, paragraph 88 who are: those seeking international protection, persons with a refugee background and persons returned from seeking international protection abroad.
310. In this section, we discuss data sources and the focus of indicators for three types of refugee situations: i) initially displaced persons in need of international protection, ii) settled refugee and refugee related populations, and iii) persons returning home after seeking international protection abroad. While we acknowledge that countries have a wide variety of statistical systems with differing capacities, this framework is less about differences between countries and more about the difficulties with producing statistics for the different types of refugee situations. To be clear, these refugee situations can be found in both developed and developing countries and a country may need to produce statistics on more than one type of refugee situation. Figure 5.1 provides a conceptual framework for producing statistics on the basic needs, living conditions, and integration of different situations of refugee and refugee related populations. In addition, the figure lists the data sources and focus of indicators for each refugee situation. Data sources reflect the source of information used to produce statistics on refugees. The focus of indicators distinguishes between indicators focused primarily on meeting basic needs, living conditions, access to rights, integration, or all. In situations where refugees have returned to their own countries, then it can be assumed that they have access to the full rights of all citizens.
311. Initially displaced persons seeking international protection take up residence in the first asylum country, living either in designated camps/reception centres or among the host population. The most common data sources for refugee camps are administrative data from international organizations such as UNHCR or surveys conducted in the camp. The focus of indicators should be on the immediate needs and living conditions of the refugees and not their long-term integration. Over time, initially displaced refugees may settle in the country of first asylum or in another country, or they may also return to their country of origin.

Figure 5.1: Conceptual framework for developing statistics on access to basic needs and rights, living conditions and integration of refugees



312. Settled refugee populations may live for long periods or permanently settle, originally through a direct asylum claim inside the host country, a resettlement program or family reunification scheme. Some countries in which refugees settle may have very advanced statistical systems and may have data on refugees from population registers, administrative records, censuses, or surveys. On the other hand, many refugees live long-term in countries with less advanced systems. To measure refugee living conditions and integration, it is recommended that resettlement countries include questions in the labour force, demographic and general household surveys to identify the refugee population. The focus of indicators in resettlement countries should include ongoing needs, and on integration, including access to rights. Settled refugees may either continue to live in the host country or return to their country of origin.
313. Refugees also return to their own countries and it is important to measure living conditions and reintegration for this population. Former conflict countries may have limited statistical systems in place and data on return refugees may not be available. It is recommended that censuses and surveys in these countries include a method for identifying former refugees in order to measure the integration of this population. However, these methods should maintain the privacy of the return refugees as to ensure their safety. The focus of statistics in countries of origin should be on the basic needs and reintegration of return refugees.
314. The conceptual framework presented above does not reflect the progression of refugees from one country to another, but focuses on changes in the context or situations for producing statistics on specific types of refugees. In fact, all three refugee situations—initially displaced, settled, and resettled—can be present

in the same country. For instance, a country with a longstanding refugee population may find that a new conflict in a bordering country is causing initially displaced persons to seek asylum in that country, while at the same time receiving their own nationals back who have returned after being displaced by an earlier conflict. The data and indicators needed to measure the living conditions, wellbeing, rights, and integration of these populations will be different.

C. Indicators of integration and the satisfaction of immediate and ongoing needs

1. Introduction

315. This section presents recommendations for indicators that can be used to measure satisfaction of needs, access to rights and the integration of refugees with their host country or original country communities. The recommendations are grouped into three levels of indicators: priority, second level, and third level indicators. Table 5.1 presents the proposed indicators organized by the dimension of need and integration that it measures, specifically the following: (a) legal; (b) civil-political; (c) demographic and migration; (d) education; (e) economic; (f) social inclusion; and (g) health. In addition, several core classificatory variables are also recommended for the production of comparative analyses.
316. These classificatory variables are cross-referenced to those tabulations recommended in Chapter 3 using the appropriate paragraph number. These include country of birth, age, sex, reason for migrating, legal status, citizenship and length of time in the host country. Length of residence in the host country is especially important for statistics on integration because integration is a temporal process that begins when the refugee arrives in the host country. The pace of integration is usually different for refugee and refugee related groups compared with general migrants.
317. The characteristics of age and sex are used to disaggregate indicators of refugee living conditions and integration. For instance, using the sex variable to look at the difference in employment status between male and female refugees can highlight gender differences for that indicator. Classificatory variables are described in detail in Chapters 3 and the method of collecting from the data sources discussed in Chapter 4. As far as possible the proposed indicators correspond with those of the SDGs. Where they correspond, the equivalent SDG indicators have been noted in Table 5.1, the correspondence is often not direct. Guidance is given on the composition of the proposed indicators. Additionally, metadata for the SDG indicators are published by the United Nations Statistical Division on their website.⁵⁵ The last column of Table 5.1 gives the closest SDG indicator equivalence, it is not proposed that all these indicators are used.

2. Description of indicators

318. The required classificatory variables are described in Chapter 3, and the type of questioning from which they might be derived discussed in Chapter 4. The classificatory variables in the tables below are cross-referenced with the paragraph number in the relevant chapter. Other variables, such as educational attainment and employment status are listed as both classificatory and core indicators as they will provide useful additional analytical dimensions.
319. The indicator descriptions are arranged by level in Table 5.1 below. The division of indicators into priority, second level and third level does not denote any hierarchy or greater importance of one indicator over another, but rather their likely global applicability and availability of data to populate them. Table 5.2 arranges the same indicators in another way, by classificatory indicators, and indicators of need and integration in order to illustrate the concept of a continuum from the satisfaction of immediate and ongoing needs to full refugee integration.

Table 5.1: Typology of indicators of the satisfaction of the immediate and ongoing needs and integration, and correspondence with SDG indicators

Dimension	Level of Indicator			
	Priority	Second level	Third level	SDG Equivalence for the category (indicator number)
Legal	Refugee status/ Legal basis of stay in country (classificatory: 113.11)			
Civil-political	Citizenship (classificatory: see 113.4) Legal access to the labour market Right to own property Eligibility to state benefits (1.3.1) Access to justice	Possession of a bank account Possession of valid travel documents Freedom to travel Registration of birth (16.9.1)		1.3.1 Proportion of people covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable
Demographic and migration	Age (classificatory: see 113.1) Sex (classificatory: see 113.2) Country of birth (classificatory: see 113.3) Country of birth of mother and father Reason for migrating (classificatory: see 113.6 & 132.1) Marital status Years of residence in host country (classificatory: 113.5) Family and household situation	Mixed marriages (between foreign- and native-born) Fertility history	Age at first marriage Reasons for choosing current country	
Education	Educational attainment Participation in education (4.1.1 & 4.5.1) Participation in preschool education (4.2.2) and access to childcare (Host country) language proficiency	Literacy and numeracy (4.6.1) Participation in language courses	Years spent out of education as a child Support received as a child integrating into the school system	4.1.1 Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex 4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex 4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict affected, as data become available) for all education indicators on this list that can be disaggregated 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex

Dimension	Level of Indicator			
	Priority	Second level	Third level	SDG Equivalence for the category (indicator number)
Economic	Employment status (8.5.2) Informal sector employment (8.3.1) Income and Consumption (10.2.1 & 2.3.2) Youth (15-24) neither in employment, education or training (8.6.1) Access to land for growing food (2.3.2)	Type of contract of employees (permanent temporary or casual) Full-time / part-time contract Average hourly earnings (8.5.1) Current occupation (ISCO) Invisible under-employment (last occupation in origin country) Participation in work support programmes and training	Working environment, physical and psychological (8.8.1) Sector or industry of employment Recognition of foreign qualifications in host country Main obstacles to finding a job Remittance costs (10.c.1) Child labour (8.7.1)	8.3.1 Proportion of informal employment in non-agriculture employment, by sex 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities 8.5.2 Unemployment rate, by sex, age and persons with disabilities 10.2.1 Proportion of people living below 50 per cent of median income, by age, sex, and persons with disabilities 2.3.2 Average income of small-scale food producers, by sex and indigenous status 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training 8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age 8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status 10.c.1 Remittance costs as a proportion of the amount remitted
Social inclusion	Poverty (1.1.1 & 1.2.1) Material deprivation (1.2.2) Housing conditions (11.1.1) Overcrowding	Internet use Attitudes towards refugees Discrimination (10.3.1 & 16.b.1)	Residential segregation Voter participation Participation in local activities/ groups (16.7.1)	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural) 1.2.1 Proportion of population living below the national poverty line, by sex and age 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions 11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing 10.3.1 Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law 16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group 16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions

Dimension	Level of Indicator			
	Priority	Second level	Third level	SDG Equivalence for the category (indicator number)
Health	Self-reported health status Coverage of essential health services (3.8.1)	Under 5 mortality rate Stunting and malnutrition among under 5s (2.2.1 & 2.2.2) Women's health decisions (5.6.1) Disabilities Access to healthcare and unmet needs Mental health	Suffered violence (16.1.3 & 5.2.1)	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population) 2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age 2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight) 16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months 5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age 5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence 5.6.1 Proportion of women (15-49) who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care

N.B. Tier 1 (Priority level) selected for likely global applicability and ease of measurement

Table 5.2: List of classificatory variables and indicators of satisfaction of immediate and ongoing needs and of integration

Dimension of Integration	Classificatory Variable (see paragraphs 113 & 132)	Indicator of needs and integration (bold indicates priority indicator)
Legal rights	Refugee status /legal basis of stay in country (113.11)	
Civil rights	Citizenship including multiple citizenship (113.4)	Legal access to the labour market Right to own property Eligibility to state benefits (1.3.1) Access to justice Possession of a bank account Possession of valid travel documents Freedom to travel Registration of birth (16.9.1)
Demography and migration	Age (113.1) Sex (113.2) Country of birth (113.3) Country of birth of mother and father Reason for migrating (132.1) Marital status Years of residence in host country (113.5)	Family and household situation Age at first marriage (5.3.1) Fertility history (3.7.2) Mixed marriages (between foreign- and native-born) Reasons for choosing the current country
Education	Educational attainment	Participation in education (4.1.1 & 4.5.1) Participation in pre-school education (4.2.2) and access to childcare Literacy and numeracy (4.6.1) Years spent out of education between the exact ages of 5 and 16 Educational attainment (Host country) language proficiency Support received as a child integrating into the school system Participation in language courses
Economic	Employment status	Employment status Informal sector employment (8.3.1) Type of contract of employees (permanent/casual/temporary) Full-time / part-time work Income and consumption (10.2.1 & 2.3.2) Average hourly earnings (8.5.1) Access to land for growing food (2.3.2) Remittance costs Child labour Working environment, physical and psychological (8.8.1) Sector/industry of employment Recognition of foreign qualifications in host country Main obstacles to finding a job Youth (15-24) neither in employment, education or training (8.6.1) Participation in work support programmes (ALMP) Current occupation (ISCO) Invisible underemployment (last occupation in origin country)

Dimension of Integration	Classificatory Variable (see paragraphs 113 & 132)	Indicator of needs and integration (bold indicates priority indicator)
Social inclusion		Internet use Poverty (1.1.1 & 1.12) Material deprivation (1.2.2) Housing conditions (11.1.1) Overcrowding rate Residential segregation Voter participation Participation in local activities / groups Attitudes towards refugees, and towards immigrants in general (10.7.2) Discrimination (10.3.1 & 16.b.1)
Health		Self-reported health status Coverage of essential health services (3.8.1) Under-five mortality rate (3.2.1) and neonatal mortality rate (3.2.2) Disabilities Stunting and malnutrition among under 5s (2.2.1 & 2.2.2) Mental health Access to healthcare and unmet needs Suffered violence (16.1.3 & 5.2.1) Women's health decisions (5.6.1)

3. Legal indicators

Refugee status/legal basis of stay

320. The legal status of the refugee as described in Chapter 3 (Figure 3.1) is an important classificatory variable and indicates the likely access to rights in the host country according to national laws. Refugee and refugee related populations are entitled to a range of residency rights, from permanent residence to a temporary right to remain in the host country. In addition to being an important classificatory variable it is likely to be an important predictor of integration, enabling individuals and families to integrate and take part fully in society, and to access the full range of rights.

4. Civil indicators

321. Civil rights are an essential first step towards full integration with the host country population. Refugees may progressively be granted a wider range of rights, services and entitlements by the host country that are broadly similar to those enjoyed by its citizens. These legal rights include freedom of movement, access to education and health services (see indicators in these categories below), access to the labour market, access to public relief and assistance, right to own property, possession of a bank account, and the possession of valid travel and identity documents. When they are recognised as refugees, they may obtain a range of rights from the right of residence to full citizenship through a process of naturalisation. Other categories of refugee related populations may have a more limited range of rights and more temporary status according to the national legislation. Asylum seekers have a much more limited range of rights.

a. Priority indicators

Citizenship

322. In some host countries recognised refugees are able to embark on a process of naturalisation to gain citizenship of the host country. Sometimes, refugees can go through a simplified naturalisation procedure. In addition, children born in the host country of refugee or asylum seeker parents may acquire citizenship rights in some host countries. Acquisition of citizenship enables an individual to enjoy the same rights and

entitlements as host country citizens. In addition to using citizenship as a classificatory variable to identify and group individuals, citizenship is a measure of an individual's ability to enjoy the rights and entitlements of the host population.

Legal access to the labour market

323. Refugee and refugee related populations may or may not have access to the labour market in the host country. Having the legal right to work hastens the process of integration, allows an individual to support their family, and to be engaged in decent work with the full range of legal employment rights.

Right to own property

324. The right to own and dispose of land and property is another key indicator of convergence with citizen rights.

Eligibility to state benefits

325. This is both an indicator of the satisfaction of needs as it may provide income sources, and an indicator of integration as it entitles refugee and related populations to the same benefits as the general population. The level of benefits provided indicates the commitment of governments to supporting refugees and the ability of refugees to participate in society. Access to social benefits may be granted gradually, depending on the legal status of the refugee or asylum seeker. Most asylum seekers do not have access to social benefits while their application is processed. Some host countries do provide a lump sum or provide some benefits in kind (e.g. food, provisional housing). Access to the labour market is another way to limit dependency on social benefits. State benefits reduce the income gaps that can occur between refugees and the general population. Therefore, to estimate the effect of social transfers and benefits on refugees' income, the effect of received transfers must be compared with that of non-refugee citizens. A gradual reduction of benefit dependency could also be a relevant aspect of integration and self-sufficiency. State benefit transfers can include unemployment, sickness, disability, education, family, and housing benefits (old-age and war veteran pensions are usually not included).
326. Access to social protection is reflected in SDG indicator 1.3.1: "Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, new-borns, work-injury victims and the poor and the vulnerable". Relevant questions are included in most migrant-targeted surveys and several household surveys identifying refugees, such as MED-HIMS, Migration and the New African City survey⁵⁶ as well as surveys in France, Switzerland, Australia, United States and Canada. However, in the latter two, the comparison with native-born persons is not possible, although a comparison with general migrants is. Questions about benefits are also asked in surveys conducted in refugee camps and reception centres, such as those carried out in Leeds (United Kingdom), Milan (Italy), Germany and in the Za'atari camp (Jordan). A question on benefits provided by humanitarian aid agencies is included in the survey on Syrian Refugees in Turkey (AFAD 2013).

Access to justice

327. Access to justice is an important right towards full integration. Refugees should be asked whether they have been able to access legal advice and courts in pursuit of their claim to protection and/or other legal actions. Suitable questions need to be developed in order to measure this indicator for refugees, general migrants and for the host country population.

b. Non-core indicators

328. Issues relating to legal rights will differ from country to country, and the selection of indicators should be guided by the issues that are likely to put refugees at a disadvantage compared to the host population.

Possession of a bank account

329. In many countries, the possession of a bank account is important in performing daily activities such as working, accessing housing, and verifying the status of individuals. However, documents needed to open

a bank account are difficult, or even impossible to obtain for refugees. The possession of a bank account is collected in DHS and MICS, which have wide and regular coverage in the developing world. However, neither DHS nor MICS include questions that are sufficient to identify refugees or asylum seekers. Should this change, the possession of a bank account might become a core indicator.

Possession of valid travel documents

330. Another important right is the possession of valid travel documents, which enable a refugee to travel for business or to take a vacation. Some refugees are restricted in their travel in the host country and, if this is the case, then data on the ability to travel internally and externally should be collected. Relevant travel documents could include both passports and national identity cards.

Ability to travel freely in the country

331. Even if a refugee has a valid identity card, he or she may still be restricted from traveling freely within the host country. The freedom to travel in the country is a non-core indicator.

Registration of births

332. This is also a SDG indicator. Birth registration is the process by which a child's birth is recorded in the civil register by the government authority. It provides the first legal recognition of the child and is generally required for the child to obtain a birth certificate and as a result any other legal documents and rights. It is important that refugees have the opportunity to register births in the host country as legal recognition of the child's existence in the host country as well as in the country of origin or a third country in case of repatriation or resettlement.

5. Demographic indicators

333. Demographic and migration variables are often used as classifying variables and not indicators of integration. These classificatory variables are outlined in Chapter 3 paragraph 113 and include age, sex, country of birth, years of residence in the host country, country of birth of parents and reason for migrating. In addition to being classifying variables, some of the demographic indicators are also indicators of integration. It is recommended that additional demographic variables are used including marital status and family and household structure. Marriages between refugees and the host population and women's fertility history are recommended non-core indicators of integration.

a. Priority indicators

Age, Sex and Country of Birth

334. These are basic core classificatory variables discussed in Chapter 3.

Country of birth of mother and father

335. The country of birth of parents gives information about the background of an individual, particularly those who have been born to refugee families. For those with two foreign-born parents, the mother's country of birth is usually considered. This information is particularly important for returned refugees. This is not a core classificatory indicator recommended in Chapter 3.
336. The country of birth of mother and father is available in most population registers, where these exist, but is captured in very few surveys covering refugee populations and even fewer national multi-topic household surveys or specialised surveys covering particular population groups. For instance, the EU-LFS ad hoc module (EU-LFS AHM) and some specific migrant population surveys gather this information including the Longitudinal Survey of Immigrants to Australia (LSIA), Trajectory and Origins Survey (TeO) in France, National Immigrant Survey (ENI) in Spain, Living Conditions of Immigrants (LKI) in Norway, and survey among displaced persons in Germany. This indicator is sometimes available in censuses (although not usually with a question to identify refugees).

Reason for migrating

337. This is a core classificatory variable required in surveys and censuses to identify refugee populations. It is discussed in Chapter 4 in paragraph 131 (census) and in paragraph 134 (surveys) as a core survey question.

Marital status

338. Information on marital status is an important variable. It can be particularly relevant for women with absent partners. The whereabouts of absent marital partners should be collected. Research indicates that absent husbands are more likely to provide support for wives, than they are to partners to whom they are not married. This may be important for women left behind in emergency situations. This is not a core classificatory variable recommended in Chapter 3, but is asked in almost all censuses and household surveys.

Years of residence in host country

339. This is another core classificatory variable, see paragraph 113.5, the indicator allows for analysis of the pace of integration of refugees.

Family and household situation

340. Family situation takes into account the composition of the family unit, and the absence of family members. The composition of the family unit is of particular interest for refugees, since the forced nature of their migration often results in the separation of family members who may be still in the country of origin, or in danger. Such situations are likely to undermine their capacity to smoothly integrate into the host country.
341. Basic information on the marital status and on the composition of the family is almost always available in household surveys, although information on absent family members who are not usual residents of the household is rarely collected. For surveys of refugees this should be considered as a core information to be collected.

b. Level 2 indicators

Mixed marriages (between foreign- and native-born)

342. The mixed marriage rate is the share of foreign-born individuals whose spouse is native-born. Although being married to someone from the same community is not *per se* the sign of bad integration, a mixed marriage can be seen as an indicator of sociocultural integration, as it demonstrates mixing between communities. To be calculated, the country of birth of the spouse must be recorded.
343. Information about the country of birth of a spouse is captured in many household surveys, particularly those directed at migrant populations, but rarely asked in surveys of refugees. The only exception is *l'Enquête de surveillance comportementale chez les réfugiés et la population* carried out in several African countries. Information on country of birth of spouses is available in at least 15 immigrant surveys identifying humanitarian migrants, as well as in many registers, by record linkage.

Fertility history

344. There are additional demographic and migration variables that are recommended to measure the integration of refugees. For women, fertility is highly correlated with other indicators of integration, especially early childbearing. It is recommended that *birth history and period fertility* are included as additional variables. In countries where the data are available, the recommended indicators are: (a) current total fertility rate; (b) adolescent birth rate for women aged 10-14 and 15-19 (also a SDG indicator); (c) mean number of children ever born to women age 45-49; and (d) age at first birth.

c. Additional variables

Age at first marriage

345. Age at first marriage is a measure of a woman's exposure to the risks of fertility and is highly correlated with educational attainment and employment outside the home. This indicator should be formulated to match the SDG equivalent indicator 5.3.1 "Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18".

Reason for choosing the current country

346. Refugees may have different reasons for choosing a specific transit, host or resettlement country. These may include geographical proximity to their country of origin, family relationships, cultural connections, or language ability. It may distinguish those who moved to benefit from familiarity with the language or the existence of a community of compatriots which may aid an individual's integration.

6. Education indicators

347. Adults' education, qualifications, literacy and numeracy contribute to finding a place in society, finding work, and cultural acclimation. Ensuring inclusive and equitable quality education is Goal 4 of the SDGs. While the host country may play a limited role in educating foreign-trained refugees who built at least part of their skills as adults in their country of origin, it has a key role to play for refugee and asylum seeker children. Refugee and asylum seeker children often have gaps in their schooling because of time spent in conflict-affected areas or due to obstacles to education in areas of displacement.

a. Priority indicators

Educational attainment

348. Educational attainment is an important indicator of the human capital an individual has at their disposal. It also indicates an integration outcome (e.g. education levels of refugee children compared to children in the host population) and is an explanatory factor when looking at labour market outcomes (individuals with higher education levels tend to have better labour market outcomes).
349. Educational attainment refers to the highest level of education attained through formal learning, which is typically confirmed by the award of a recognised certificate. While education can refer to various forms of learning such as informal learning (non-structured learning resulting from daily life activities related to work, family or leisure) or non-formal learning (structured learning but outside of the formal system and without certification), these are not included as part of this indicator. The educational attainment level should be codified according to the International Standard Classification of Education (ISCED) 2011 statistical framework maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO) which ranges from 0 (early childhood education) to 8 (doctoral or equivalent level). These are commonly grouped into three main categories of low (ISCED levels 0-2), medium (3-4) and high (5-8) levels of educational attainment. National adaptations of ISCED may not adequately capture qualifications held by refugees as many will have been gained abroad, or may not accord with current classifications. Statistical offices will need to provide correspondence tables and training for those gathering educational data from refugee populations, both for those collecting administrative data and data in surveys and censuses.

Participation in education

350. The participation rate in education for refugee children and those with a refugee background is a good indicator of long-term integration and the acquisition of qualifications to enable this. The measure is primarily directed at school aged people, but as many refugees will have had gaps in their educational background, the proposed age denominator will be broader than normally used for educational analyses. It is recommended to use 15-34 years of age for this indicator.

351. The indicator used should be based on a simplified SDG indicator 4.1.1: “Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary, by sex” and refugee status. achieving at least a minimum proficiency level in (i) reading and (ii) mathematics.
352. Another indicator of relevance, but which may be feasible where data are available, is the SDG indicator 4.5.1: “Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated” by refugee status. Parity indices require no additional data other than the specific disaggregation of interest, but as refugees are a ‘rare population’, this kind of disaggregation may not be possible, due to sample size issues. The ratio of the indicator value for one group is compared to that of the other. Typically, the likely more disadvantaged group is the numerator. A value of exactly 1 indicates parity between the two groups.

Participation in preschool education and access to childcare

353. The use of kindergartens or other childcare facilities is important both for refugee children and children born to refugees. It provides an opportunity for children to learn the host country language, prepare for school (access to preschool education tends to facilitate performances at school), and develop networks with host country children. The difference in use between refugees, general migrants and the host population should be compared between countries. It is recommended to use SDG indicator 4.2.2: “Participation rate in organized learning (one year before the official primary entry age), by sex” and refugee status.

(Host country) Language proficiency

354. Mastering the host country language is the single most important skill refugees need for integrating into the host country. The level of host country language proficiency can be measured either by self-declaration or through oral tests. On one hand, performing oral tests in surveys, such as in the OECD Programme for International Assessment of Adult Competencies (PIAAC), is complicated to organise and costly. On the other hand, almost all immigration surveys include questions on self-assessment of host country language skills, (e.g. Longitudinal Immigrant Surveys in OECD countries; MED-HIMS and the Migration and the New African City survey). Information on language proficiency is also available in some administrative data, such as the longitudinal immigration database in Canada or the register of foreigners in Germany. However, surveys conducted in refugee camps gather little or no information on language knowledge.
355. Furthermore, the number of ways to self-assess language proficiency is different from one survey to another, but it is recommended to follow the general practice, i.e. offering at least three response options (good, medium, low). In countries with more than one official language, the question should consider the self-assessed language proficiency of the best spoken official language.
356. Another indicator to estimate host country language knowledge is the share of refugees who learn and usually speak the host country language at home. Three categories of respondents can be distinguished according to their language proficiency. Host country language/mother tongue refugees are those who state that the host country language is the language or one of the languages that they learned during childhood and still understand (language of origin, or native tongue). Then, a distinction should be made between foreign-language refugees who usually speak the host country language at home and those who do not.

b. Level 2 indicators

Literacy and numeracy

357. Beyond language proficiency, information on reading and writing skills in the host country language is also relevant, although rarely available and comparable at the international level. As stated in SDG indicator 4.6.1, it is recommended to provide information on the “Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex”. Results for refugees can be compared with other population groups.
358. However, few surveys provide comprehensive information on this matter. The OECD regularly conducts PIAAC surveys for a limited number of countries. Literacy skills are scored on a six-level scale according

to respondents' ability to find information in written material of varying complexity. The same method is adapted for numeracy and other skills.

359. In addition, the PIAAC survey contains information on language or languages (no more than two) respondents learned as children and still speak. By comparing that information with the language in which the literacy test is conducted, it is feasible to distinguish the results for refugees who speak a foreign language (i.e. those who did not learn the test language in childhood) and those whose native tongue is the same as the majority language in the host country. It should however be noted that extending the coverage of these surveys to low and medium income countries could be problematic due to budget constraints.

Participation in language courses

360. Language training tends to form the core of introductory programmes for new arrivals in host countries. Therefore, participation in such courses must be assessed against other measures of integration.
361. Language training attendance is asked in most surveys targeting migrants (except in the US and in the Latin American Migration Project (LAMP)). Information on integration course attendance (including language courses) can also be recorded in registers, such as the register of foreigners in Germany. Questions on participation in educational courses, including Turkish literacy, are also included in the survey on Syrian Refugees in Turkey (AFAD).

c. Level 3 indicators

362. Educational attainment is one of the core indicators for measuring the integration of refugees. To provide context for this indicator, it is recommended to collect data on *years spent out of education as a child* and *support received as a child integrating into the school system* as additional variables. Refugee children often have gaps in their schooling because of time spent in conflict-affected areas or due to obstacles accessing education in displacement sites. These gaps may impact their educational attainment. In addition, it can be difficult for refugee children to integrate into the school system of the host country because of language and cultural barriers. Determining if a refugee received support as a child integrating into the school system and the type of support provides information about educational performance and attainment. The indicator denominator should cover all children under the legal upper age limit to attend school in the host country.

7. Economic indicators

363. The economic indicators that are recommended include access to the labour market and employment, access to land for growing food for the family, recognition of qualifications, and the main obstacles to finding a job. Some countries restrict refugees' and general migrants' access to the labour market (see legal rights indicators above). Therefore, this information is important when evaluating employment status, which is a core indicator of integration. Indicators include whether or not the host country recognizes qualifications obtained in the origin country, the formality of any employment contract, income and wages and working environments. These additional variables provide valuable context for the employment status core indicator.

a. Priority indicators

Employment status

364. Labour force status is a key indicator of integration. The situation of a refugee in the labour market is not only an important indicator of labour market integration but also of their social integration. Individuals are classified into one of three categories: employed, unemployed or (economically) inactive. The international definitions of the three statuses are specified in the 1982 *Resolution of the 13th International Conference of Labour Statisticians*. According to the International Labour Organisation (ILO), employed persons are those who worked for any amount of time, even if only for one hour, in the course of the reference week or had a job but were absent from work. It includes both paid employment, unpaid work in family businesses and self-employment which is particularly important for women. Unemployed persons are adults seeking a job (within the four weeks prior to the reference date) and who are available within the time period, usually the week preceding the reference date and the two weeks following the date. The economically inactive

are individuals who have no type of work, are not looking for work and are not available for any work. This definition sometimes differs from that used in national statistics. Those working in subsistence agriculture outside the cash economy can present classificatory problems and may be treated differently in countries where they make up a large proportion of the working population.

365. Standard indicators derived from the labour force status are the proportion of employed persons among the working-age population (15-64) (employment rate), the proportion of unemployed among the labour force (employed plus unemployed) and the labour force as a share of the working age population (activity rate). It is recommended, for the purposes of international comparisons, to define the working age population as being 15-64 years old. In many countries in the world, it is legal to start working at 15 years old and the legal retirement age is 65, but conditions may vary between countries.
366. SDG indicator 8.5.2: “Unemployment rate, by sex, age and persons with disabilities” could be adapted, disaggregated by refugee status.

Informal sector employment

367. In many developing countries, the majority of the labour force is employed in the informal economy, generally defined as working for informal enterprises, and in informal employment.⁵⁷ Entry into the formal economy is often reserved for well-qualified or highly skilled individuals. As refugees are often disadvantaged in the labour market, access to the formal sector is a good indicator of integration in low and middle-income countries. However, asking about the formality of the employment could be sensitive in some countries, and the questions should be developed with reference to the national circumstances.
368. SDG indicator 8.3.1 “Proportion of informal employment in non-agricultural employment, by sex” could be adapted disaggregated by refugee status.

Income and consumption

369. Income is compensation received on a regular basis for work, investment or from social protection measures. While not all compensation is in the form of money, income is generally measured using the monetary value of goods or services received. It is recommended to use SDG indicator 10.2.1: “Proportion of people living below 50 per cent of median income, by age, sex, and persons with disabilities”. This is a relative measure, as income measures may be difficult to compare between countries at different levels of development.
370. Consumption is the value of all goods and services consumed, generally collected by household surveys for the household unit. Consumption is the preferred welfare indicator for a number of reasons. Income is generally more difficult to measure accurately. For example, the poor who work in the informal sector may not receive or report monetary wages; self-employed workers often experience irregular income flows; and many people in rural areas depend on agricultural incomes much of which may be consumed in kind by the household. Moreover, consumption accords better with the idea of the standard of living than income, which can vary over time even if the actual standard of living does not. Thus, whenever possible, consumption-based welfare indicators are used to estimate the poverty measures reported here. But consumption data are not always available. The local market value of all consumption in kind (including own production, particularly important in underdeveloped rural economies) should be included in total consumption expenditure. Consumption is measured by using household survey questions on food and non-food expenditures as well as food consumed from the household’s own production, which is particularly important in the rural areas of many developing countries.
371. An additional indicator for small-scale farmers is included for countries where a large proportion of income is generated from small-scale farming. In low income countries, data on income may be considered as non-core while information on poverty and material deprivation are particularly relevant, as is the non-core SDG indicator 2.3.2 related to income of small scale farmers: “Average income of small-scale food producers, by sex and indigenous status.”
372. The most important comparisons are between refugees and general migrants, and between refugees and the native-born population in the host country. There should be a comparison of the income (or consumption) distribution of these various groups (refugees, migrants and native-born populations). The SDG indicator uses the proportion of the population receiving less than 50 percent of the median. The ratio between the first decile and the ninth decile is also a useful indicator of income inequality.

Youth neither in employment, education or training

373. Standard labour market integration indicators are not sufficient to evaluate to what extent new entrants are barred from the workplace. Some new entrants, particularly where work is in short supply, do not become part of the work force when they complete their schooling and are likely to end up economically inactive. The indicator “Youth neither in employment, education or training (NEET)” helps to address the issue which is specific to the young generation.
374. The NEET rate is complementary to the unemployment rate. It better explains how many and why young people are excluded from the labour market. Many young people not in employment may still be in education, which distorts labour market participation and unemployment rates. The NEET indicator requires information on employment status, as well as participation in education and training.
375. At least 20 surveys worldwide collect information from which the NEET rate can be derived. Among those, humanitarian migrants are identified in the EU-LFS AHM, MED-HIMS, Migration between Africa and Europe (MAFE), *Enquête de surveillance comportementale chez les réfugiés et la population*, as well as in surveys in Australia, Spain, France, Switzerland, Montréal (Canada), and Leeds (United Kingdom). The latter interviewed refugees and asylum seekers in non-ordinary households. The NEET rate can be compared with that of the native-born in half of those sources.

Access to land for growing food

376. Camp-based populations and those in low income countries are often not able to access the labour market, or jobs can be very limited for both the refugee and host populations. Access to land for growing food can be an important indicator for satisfying basic subsistence needs and self-sufficiency.

b. Level 2 indicators

Type of contract of employees (temporary/permanent/casual)

377. The security of a person’s employment contract affects their ability to plan their finances in the longer term, receive training from employers and is linked to job quality (Eurofund, 2016). Moreover, discrimination or legal uncertainties linked to a person’s status as a refugee might make employers reluctant to hire them on permanent contracts. Hence, measuring if a person is employed on a casual (zero hours or no fixed arrangement), temporary (fixed duration) or permanent (indefinite duration) contract can be a relevant indicator of labour market integration of refugees. The Resolution concerning the International Classification of Status in Employment (ICSE), known as ICSE-93 provides a classification which can be assigned to the variable “type of contract which a person has with other persons or organizations when performing a particular job” when that is measured in a statistical survey or registered in other administrative files. The “type of contract” for a job is determined by the type of economic risks and authority which are involved when carrying out the tasks and duties of the job⁵⁸.

Full-time/part-time work

378. The number of working hours gives an indication of how well the labour market uses human capital. The term “part-time” suggests that only part of labour potential is used, although many part-timers undertake unpaid work or work in multiple jobs. It is associated with lower wages, poorer training or career prospects, and less job security than full-time work.
379. There is no universally agreed definition of part-time work. The ILO describes part-time work as “regular employment in which working time is substantially less than normal”. Where the dividing line lies between part-time and “normal” (i.e. full-time) varies from country to country. In international organisation publications, part-time work usually denotes a working week of less than 30 hours.
380. Questions about hours worked, or at least, if the job is part- or full-time, are asked in a large number of household surveys and registers. This information is available in surveys identifying humanitarian migrants in Australia, Canada, France, Norway, Spain Switzerland, United Kingdom, and in the EU-LFS AHM, LAMP, and Migration and the new African City survey. Most of these sources also interviewed native-born persons, allowing a comparison to be made between the two groups.

Average hourly earnings

381. Work is the main source of household income and even more so in the case for refugees. This is a good indicator of integration in the labour market for refugees who are employees, as they often attract lower pay rates than the host population. It is recommended to use SDG indicator 8.5.1: "Average hourly earnings of female and male employees, by occupation, age and persons with disabilities."

Current occupation (ISCO classification)

382. Occupation gives an indication on how human capital is used in the labour market. The International Standard Classification of Occupations (ISCO) drawn up by the ILO describes the tasks and duties undertaken in some 400 jobs divided into families of jobs. ISCO enables jobs to be grouped by skill levels and qualifications required.
383. Jobs may be divided into three main skill levels: highly skilled – senior managers, professionals, technicians and associate professionals (ISCO 1-3); low-skilled – elementary occupations (ISCO 9); and medium-skilled – all other (ISCO 4-8). The three skill levels draw on respondents' self-reported ratings of their jobs and may therefore be over- or underestimated.
384. Questions on occupation are included in most household and labour force surveys worldwide. The classification is often amended to suit national economies. ISCO is not used in New Zealand, France, Latin America (LAMP) or the US, but in most cases a correspondence table is available between ISCO and other national classifications. In particular, the United States' Standard Occupational Classification (SOC) system precludes distinguishing between low- and medium-skilled occupations.
385. ISCO classification is available in several household surveys designed to collect information on refugee and refugee related populations, e.g. *Panel suisse de ménages* in Switzerland, MED-HIMS, EU-LFS AHM, LSIA (Australia). This information is also available in a survey on refugee camps in Burundi carried out by the Norwegian Refugee Council in 2007. ISCO is also recorded in many population and registers of foreigners.

Invisible underemployment (Comparing last occupation in country of origin with current occupation)

386. Forced displacement requires a refugee to abandon his or her job in the country of origin. The first work experience in the host country may be less skilled, more poorly paid or with poorer conditions of service. Refugees' qualifications and skills are often not immediately transferable. Educated refugees may need more time to get their skills recognised in the host country labour market, and may need additional language skills and new qualifications. In this context, information on work experience in the country of origin, and more specifically on the last job they held before leaving their country, enables an analysis of underemployment and the potential of the refugee population. The occupation should be recorded by ISCO code as above.
387. Since this type of information is migrant and refugee-specific, it is rarely available in general surveys. This type of information is generally available in migration surveys.

Participation in work support programmes and training

388. During the 1990s, many countries introduced Active Labour Market Programmes (ALMPs) in an effort to reduce unemployment. A large variety of different ALMPs exist among countries. They can consist of job search assistance, training, education, subsidized work and similar programmes. Some of the programmes (such as subsidized work, training and education) demand full-time participation over a long period of time (e.g. several months), while other programmes (such as job search assistance and education) are part-time and have a short duration (e.g. few days/weeks). Participation in programmes to support access to the labour market is particularly important for recently arrived refugees and asylum seekers, and in particular women. These programmes are intended to alleviate barriers to the labour market, due to lack of information about the local labour market in the host country and limited social and professional networks to assist in finding work. Some countries have put in place targeted refugee programmes while others rely on general measures for the overall population. In most OECD countries, public employment services are responsible for managing and evaluating these programmes, however little information is available in

statistical sources about immigrant or refugee participation in these measures. Questions on participation in work support programmes and training could be included in labour force or household surveys.

c. Level 3 indicators

389. Additional economic variables include: (a) working environment; (b) sector or industry of employment; (c) recognition of foreign qualifications; (d) main obstacle to finding a job including responsibilities for caring for other family members; remittances; and (e) child labour. These additional variables provide valuable context for the employment status core indicator.

Working environment, physical and psychological

390. Refugees and immigrants are more likely to work in occupations that produce physical or psychological stress. They will also more often be exposed to the risk of accidents at work, due to both their kind of work and to (linguistic) problems with understanding safety instructions. Of relevance is SDG indicator 8.8.1: "Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status". This could be obtained from administrative data if available by migrant and refugee status. Alternatively, questions could be introduced into surveys after thorough testing.

Sector or industry of employment

391. The sector (public or private) and the industry in which the individual is employed gives an indication of where human capital is used in the labour market. It is not an indicator of integration per se, because access to one sector rather than another does not necessarily indicate a level of integration, even if recruitment in the public sector is firm evidence of the host country's commitment to integration. Nevertheless, the sector of employment provides an important indication of which sectors are providing more or less chances for economic integration. For the purpose of international comparisons, the International Standard Industrial Classification (ISIC) must be used for classifying the industry in which a person is employed.

Recognition of foreign qualifications

392. Whether or not the host country recognises qualifications obtained abroad influences the type and quality of jobs available to refugees. Access to and the final outcomes of a recognition procedure are also important when evaluating employment status and jobs' qualifications.

Main obstacles to finding a job

393. Identifying the main impediments to accessing the labour market is also a relevant indicator to measure obstacles to economic integration. For instance, being inactive due to the obligations to provide care for children or an elderly relative provides useful information about gender equality, including gender disparities in employment or wages. Location can also be a potential obstacle to labour market integration, since refugees may be located in remote areas with available housing but limited job opportunities or transport. Poor health or a debilitating disability can also prevent a person from actively searching for work. Additional obstacles may include lack of host country language skills, lack of foreign qualifications, discrimination etc.

Remittance costs

394. Refugees may be required to support absent family members and the cost of sending remittances may be a burden that impinges on households. SDG indicator 10.c.1: "Remittance costs as a proportion of the amount remitted", could be considered as an additional indicator.

Child labour

395. Finally, in some circumstances vulnerable children may find themselves required to work to support themselves or their families. It is recommended to use SDG indicator 8.7.1: "Proportion and number of children aged 5-17 years engaged in child labour, by sex and age".

8. Social inclusion indicators

396. Social indicators of integration range from the ability of refugees to provide for their basic needs to accessing and using the Internet. They also focus on access to opportunities, discrimination, and civic engagement. Many of the indicators outlined below are already part of the SDGs, and it is recommended that countries use the SDG framework and metadata when appropriate to develop statistics. Table 5.1 shows the relevant SDG indicator next to those proposed for refugees.

a. Priority indicators

Poverty

397. Poverty is the condition of being below a minimally acceptable standard of living, it could be included in the economic section but is retained as a measure of social inclusion. There are absolute and relative measures of poverty. Absolute measures use a defined standard of living such as the international poverty line of US\$1.90 a day or a national poverty line to assess if a person is living in poverty as defined nationally. Relative measures of poverty compare an individual's standard of living with the general population. For instance, some countries determine that if an individual's income is below half of the median household income then he or she is living in poverty. Poverty is one of the most common indicators of wellbeing and can be used to measure integration as well. In fact, reducing poverty is central to the SDG framework (Goal 1 is to end poverty) and SDG indicators 1.1.1 and 1.2.1 are recommended.
398. It is recommended that poverty be measured using the threshold of the national poverty line where this exists (SDG indicator 1.2.1), as national poverty lines reflect the particular conditions, cultural norms and food baskets in each country. The data used is based on the household's consumption as described above under Economic Indicators. Where there is no national poverty line then the proportion of the population living below the international poverty line (SDG indicator 1.1.1) is recommended. The use of Purchasing Power Parity (PPP) rates rather than market exchange rates ensures that differences in price levels across countries are taken into account. However, it cannot be categorically asserted that two people in two different countries, living below US\$1.90 a day at PPP, face the same degree of deprivation or have the same degree of need. This poverty line is not appropriate for high-income economies and may not be appropriate for upper-middle income countries.
399. In medium- and high-income countries, the Eurostat and OECD measures of poverty based on income distributions can be used to measure poverty. Where countries have existing statistics on poverty, it is important that the data can be disaggregated by refugee status.

Material deprivation

400. Material deprivation is similar to poverty in that it reflects the ability of households and individuals to benefit from the goods and services enjoyed by the general population and considered by most people to be desirable or even necessary to lead an adequate life. Poverty is generally measured using information on income and consumption, whereas material deprivation is measured by the lack of access to basic necessities. These can include food, water, sanitation, and housing, as well as some durable items.
401. It is difficult to develop a global indicator of material deprivation, since the necessities of life in a particular country are culturally defined and dependent on the income levels of the general population. Therefore, the definition of material deprivation will vary between countries and will require national definition. The most important comparison is not between different countries, but between refugees and the non-refugee population within each country. Refugees can also be compared with general migrants if this is of interest.
402. For all countries SDG indicator 1.2.2 is relevant, defined as the: "Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions," however metadata was not available for this indicator at the time of writing. For low income countries many of the SDG indicators already address material deprivation (i.e. Goal 2: Zero Hunger, Goal 6: Clean Water and Sanitation).
403. It is recommended that countries use indicators that can be drawn from national household surveys, such as SDG indicators for hunger, clean water, and access to power, for example: SDG indicator 6.1.1: "Proportion

of the population using safely managed drinking water services”; and SDG indicator 7.1.1: “Proportion of the population with access to electricity”.

404. An alternative approach may be to use the Wealth Index constructed from data on asset ownership collected in DHS, which is conducted in over 90 developing countries on a regular basis. The Wealth Index is a composite measure of a household’s cumulative living standard. It is calculated using easy-to-collect data on a household’s ownership of selected assets, such as televisions and bicycles, materials used for housing construction; and types of water access and sanitation facilities.⁵⁹ Alternatively, the possession of assets could be used. The 2017 standard DHS module includes several assets (Table 5.3), and has the option for countries to add additional assets if required.

Table 5.3: DHS questions on household and individual access to assets

Does your household have:	Does any member of this household own:
Electricity?	A watch?
A radio?	A mobile phone?
A television?	A bicycle?
A non-mobile telephone?	A motorcycle or motor scooter?
A computer?	An animal-drawn cart?
A refrigerator?	A car or truck?
	A boat with a motor?
	Does any member of this household have a bank account?

405. MICS includes a very similar range of assets, and is conducted in around 100 countries across the developing world. However, neither DHS nor MICS include questions that are sufficient to identify refugee and refugee related populations.
406. The purpose of the integration indicators is to compare, within a country, the integration of refugees and satisfaction of needs as compared with general migrants and the general population. The choice of assets will depend on the national context. For high-income countries, the Eurostat indicator could be used, where material deprivation is measured as the percentage of the population that cannot afford at least three of the following nine items: (a) mortgage or rent payments, utility bills, hire purchase instalments or other loan payments; (b) one week’s holiday away from home; (c) a meal with meat, chicken, fish or vegetarian equivalent every second day; (d) unexpected financial expenses; (e) a telephone (including mobile telephone); (f) a colour TV; (g) a washing machine; (h) a car; and (i) heating to keep the home adequately warm.

Housing conditions

407. Housing conditions are a key dimension of the satisfaction of basic needs. SDG Goal 11.1 strives to ensure access for all to adequate, safe and affordable housing and basic services and upgraded slums. SDG indicator 11.1.1: “Proportion of urban population living in slums, informal settlements, or inadequate housing,” measures this for urban populations. Housing conditions are especially relevant for refugees who may be living in inadequate housing in both urban and rural areas, in camps or in individual accommodation outside of camp environments. Questions on a household’s housing situation are asked in most household surveys worldwide. Most household surveys do not use a form of questioning which would enable refugees to be identified in the sample, and in many surveys refugee camps, reception centres and other collective housing units are not always included.
408. The indicator could utilise the components of SDG indicator 11.1.1 in conjunction with data that identifies camp and non-camp dwellings to identify the structural quality or durability of dwellings. A house is considered as ‘durable’ if it is built in a non-hazardous location and has a structure permanent and adequate enough to protect its inhabitants from the extremes of climatic conditions. The following criteria are used to determine the structural quality/durability of dwellings:
- Permanency of structure (permanent building material for the walls, roof and floor; compliance with building codes; the dwelling is not in a dilapidated state; the dwelling is not in need of major repair); and

- b) Location of house (hazardous location; the dwelling is not located on or near toxic waste; the dwelling is not located in a flood plain; the dwelling is not located on a steep slope; the dwelling is not exposed to land-slip; the dwelling is not located in a dangerous right of way – rail, highway, airport, power lines).

Overcrowding

409. Overcrowding is a component of SDG indicator 11.1.1 described above. There are different grounds for describing accommodation as overcrowded. It can be a subjective measure, i.e. occupants perceive their own living space to be too small, or based on an objective measure such as the floor area per inhabitant, although this latter approach is difficult to apply and costly to collect in the field.
410. The methodology proposed for SDG indicator 11.1.1 defines overcrowding as “A dwelling unit is considered to provide a sufficient living area for the household members if there are fewer than three people per habitable room,” although alternatives are also offered in the SDG metadata.
411. The Eurostat definition of overcrowding takes into account the number of rooms, the number of adults cohabiting and not cohabiting, and the age and sex of children. The Canadian definition is based on the number of bedrooms and not the total number of living areas and lessens the incidence of overcrowding compared with European definitions, especially in single-room accommodation. It is recommended to apply the national definition if this exists, taking into account the ease of data collection in the field.

b. Level 2 indicators

Internet use

412. The Internet provides access to communication services and carries email, news, entertainment, and data files. The Internet connects individuals to the rest of the world. It is a powerful instrument for searching for a job, and can enable contact with family members in other locations. In higher income countries, an Internet connection is a vital means of accessing public services, and is increasingly important as a learning tool. The indicator should measure the proportion of the population of secondary school age and above, to encompass the learning opportunities it offers learners at school. No access to the Internet is an element of material deprivation, but it can also limit the integration of refugees.
413. Not all surveys include this question, but it is included in MICS and DHS. Among surveys targeting refugees, Internet use is only included in *Enquête Longitudinale sur l'Intégration des Primo-Arrivants* (ELIPA) and TeO in France, in *Panel suisse de ménages* in Switzerland and MED-HIMS.

Attitudes towards refugees

414. The nature of the relationship between a host society and its refugee population is a critical factor for integration. If such social cohesion is strong, it will promote integration. If it is weak, immigrants will find it harder to fit in. The SDGs provide a number of indicators that may help to measure this variable.
415. From the point of view of the general population, attitudes to refugees can be collected, and measured over time to monitor changes in attitude. Internationally, several public attitudes surveys such as the Eurobarometer and Afrobarometer surveys conducted across countries on several continents are able to provide information of this kind. Alternatively, questions can be included in national surveys.

Discrimination

416. Discrimination on the grounds of ethnicity, race or nationality can be an obstacle to refugee integration in the host country. It prevents refugees taking part fully in the society (labour market, education, health service, public life etc.), but it can also give the individual feelings of not belonging in the host society. In this regard, special attention must be paid to discrimination against refugee women, since they suffer both ethnic and gender discrimination. Opinion polls and national surveys provide a means of assessing the levels of discrimination perceived by refugee and immigrant populations.
417. Relevant SDG indicators include 10.3.1 and 16.b.1: “Proportion of the population reporting having personally felt discriminated against or harassed within the previous 12 months on the basis of a ground

of discrimination prohibited under international human rights law.” This proposed indicator is intended to monitor the following SDG targets: 10.2 (inclusion), 10.3 (equal opportunities), 16.3 (rule of law) and 16b (non-discriminatory laws and policies).

418. Discrimination can be addressed by asking questions of peoples’ experiences of discrimination in a number of social and economic contexts, supplemented with question on whether the discrimination was related to refugee or immigrant backgrounds or not. There are examples of this being measured in national surveys on immigrants’ living conditions. Repeating the questions in consecutive surveys can show whether there have been changes in the level of discrimination over time.

c. Level 3 indicators

Residential segregation

419. This is a classificatory variable which refers to the region or district of residence and the geographic location where the refugee lives within the host country. Region of residence can also refer to the type of geographic location such as urban/rural or central city/suburban. Residence can also refer to a specific neighbourhood within a large metropolitan city. This enables an analysis of the degree of geographic integration of the refugee population.
420. This classificatory information is almost always collected in surveys and census, and can provide information on the clustering of refugees in particular areas of the host country, which can contribute to measuring integration geographically. It may be possible to use existing census, survey or administrative data to plot the location of refugee and refugee related populations, without the necessity of asking questions. If questions are asked then it may be desirable to ask questions that make a distinction between voluntary segregation (e.g. I prefer to have many of my compatriots in my neighbourhood) and forced segregation (e.g. I feel confined to this ghetto because I cannot afford to live elsewhere or for any other reason).
421. This indicator illustrates the degree to which refugees live in a neighbourhood with many or few other refugees, generally and from his/her home country of origin. It is difficult to give an internationally comparable definition of neighbourhood.

Voter participation

422. Becoming actively involved in the host country’s society is a key element in refugee integration. By making their voices heard, taking an interest in how society works, and participating in the decisions that shape its future, refugees show that they are an integral part of their new country. The right to vote will depend on national legislation, or upon naturalization. The requirements are normally different between local and parliamentary elections. For eligible refugees, it is recommended to ask if they participated or not, preferably in the last national elections. When refugees have the right to vote, for instance upon naturalization, the degree to which they are represented in local councils and in the national Parliament should be considered as an additional indicator.

Participation in local activities/groups

423. Participation in local activities and/or groups is one aspect of civic involvement. It can take various forms such as: membership of community associations, to sporting or leisure activities, to neighbourhood committees, participation in trade unions, political parties, and volunteer activities.
424. Several surveys report on at least one of these aspects (e.g. Australia, Canada, France, Italy, and the United Kingdom). However, their questions usually focus on participation, not on the quality of engagement. It is important to include membership of groups that encompass the wider host community, as this allows refugees to network with the local community and to acquire the skills and knowledge relevant to integrating with the local community. Few surveys ask respondents for these details. One of the best surveys asking a comprehensive set of questions about participation in local activities is the Australian Humanitarian Settler Survey (AHSS) or the Norwegian survey on immigrant living conditions and it is recommended to build on these good practices to propose a meaningful indicator.

425. It may also be relevant to examine national level indicators such as the SDG indicator 16.7.1: “Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions,” which could be used to examine the numbers of refugees and those with a refugee background in public positions. The primary data source is administrative and employment records at national level in accordance with the obligations arising from the *International Covenant on Civil and Political Rights* (ICCPR) and the *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW).

9. Health indicators

426. Refugees may have worse health outcomes than the population of the host country or general migrants because of their exposure to unfavourable environments and lack of access to medical facilities. Because of this, several variables are recommended to measure the health of refugees.

a. Priority indicators

Self-reported health status

427. Health is integral to wellbeing and affects the degree and manner of engagement with society as a whole. Compared to general migrant groups, refugees and asylum seekers are particularly vulnerable and may be more prone to certain diseases or mental health problems.
428. Information on health status is collected in many household surveys where the respondent reports his or her health status, and may also provide a recent history of medical consultations and the reason for those consultations. There is no standard question format used, although DHS and MICS provide good models. Some caution should be exercised in interpreting self-reported responses to such questions, since social and cultural differences in self-perception and self-reporting occur across countries and between different population groups. In addition, when information on health status is given by one informant about other household members, its accuracy can be poor, although some international survey formats avoid this weakness. While self-reported status may not be a perfect measure of health status, research suggests that self-reported health status can be used as a predictor of mortality and morbidity (Idler & Benyamini, 1997).
429. Self-reported health status is asked in many surveys, but only some of them identify refugees and general migrants. Information on refugee and refugee related populations is available in Germany, the United Kingdom, the United States, Canada, Australia, France, Norway and Switzerland, the last four surveys also interview native-born persons. The self-reported health status of refugee and refugee related categories is occasionally asked in surveys conducted in refugee camps. Examples are the survey on Syrian Refugees in Turkey, *l'Enquête dans les camps de réfugiés au Burundi*, and the survey on displaced persons in Germany.
430. A single question or a sequence of questions may be asked of refugees and asylum seekers to rate their general health. To the extent possible, questions should only be answered directly by the respondent, but this tends to raise fieldwork costs considerably. To aid comparability across the developing world it is recommended that DHS and MICS introduce questions to enable the identification of refugee and refugee related populations and to ensure that refugee camps are included in sampling frames.

Coverage of essential health services

431. The SDGs include a number of health-related targets and indicators, including SDG target 3.8 to “Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.” This target is particularly relevant to refugee and refugee related populations whose access to health facilities may be limited by living in camps or by being excluded from health insurance or public facilities. It is recommended that SDG indicator 3.8.1 is used: “Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population).” This information could be collected via national household

surveys if the refugee population is identifiable. A methodology for assessing this indicator should be developed for refugees based on the SDG indicator metadata.

b. Level 2 indicators

Under-five morality rate and neonatal mortality rate

432. These indicators measure the risk of dying in infancy and early childhood. In high-mortality settings, a large proportion of all deaths occur before age five and especially during the neonatal period. These mortality levels are influenced by poverty, education, particularly of mothers; by the availability, accessibility and quality of health services; by environmental risks including access to safe water and sanitation; and by nutrition. Neonatal mortality rates are additionally sensitive to access to prenatal and obstetric care. These indicators are also SDG indicators 3.1.1 and 3.1.2. They can be estimated indirectly through surveys or directly through administrative data.

Stunting and malnutrition among children under 5 years

433. A widely measured indicator which is a good indicator of both health and nutrition status is the prevalence of malnutrition and stunting among children aged under 5 years. This data is widely collected in household surveys such as the DHS and MICS surveys, although at present it is not possible to disaggregate the results by refugee status. This indicator relates to two SDG indicators:
434. SDG indicator 2.2.1: "Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age";
435. SDG indicator 2.2.2: "Prevalence of malnutrition (weight for height $>+2$ or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)".

Disabilities

436. The International Classification of Functioning, Disability and Health (ICF), defines disability as an umbrella term for impairments, activity limitations, and participation restrictions. These can include limited hearing, vision, physical ability, cognitive ability, or mental health. Disability status refers to a condition or disability that makes it difficult for a person to perform normal daily activities. Refugees with disabilities have the same health needs as non-disabled refugees for immunization, cancer screening etc. They also may experience poorer health than the general population because of their background. Evidence suggests that refugees with disabilities face barriers in accessing the health and rehabilitation services they need. Therefore, it is necessary to ask a simple question about the kind of disabilities suffered by the respondent.
437. These data are difficult to collect using household surveys as a source. Information may be available in administrative sources, for example refugee records held by UNHCR or immigration authorities that record special needs (see Chapter 4 Section 3).

Access to healthcare and unmet needs

438. Refugees' access to healthcare is an important factor for the meeting of their basic needs and integration into the host country's society. Unmet needs for medical care are defined as when a person's medical needs are not being taken care of. It has been identified as a critical indicator of access problems, as it may result from limited availability of or access to health care services. Research shows that difficulty in accessing medical care when required is associated with citizenship or the status of migrants (Hou & Chen, 2002).
439. Various survey questions are able measure access to healthcare. Examples include the proportion of persons who felt they had needed health care (usually excluding dental examination or treatment) but did not receive it in the reference period, usually 12 months. Other relevant questions include visits to the doctor for preventative and curative health care and medical check-ups (e.g. the vaccination of children, pre and post-

natal checks and screening programmes). Access to healthcare can also be estimated through questions about access to a healthcare insurance, where this is a barrier to accessing healthcare.

440. Many household surveys ask at least one of these questions on access to healthcare, but few are able to identify refugees. Some are able to identify immigrants, but not all refugees are immigrants. Examples of surveys which identify immigrants include the New Immigrant Survey (NIS) in the United States, Longitudinal Survey of Immigrants to Canada (LSIC), TeO in France, MED-HIMS and the Migration and the New African City survey. The three latter surveys also interviewed native-born persons.
441. This indicator should examine the prevalence of self-reported unmet needs for health care and the extent to which they are attributable to ineligibility (because of legal status), cost, service unavailability, or service inaccessibility, especially for the refugees and asylum seekers. These questions are routinely asked in many household surveys conducted in developing countries, but it is important to be able to identify refugee and refugee related populations in the surveys to enable analysis of the results in respect of refugees.

Mental health

442. Mental health is defined as a state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community. The positive dimension of mental health is stressed in WHO's definition of health as contained in its constitution: "Health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity⁶⁰." Refugees are at risk of conditions such as Post-Traumatic Stress Disorder (PTSD) and may need to seek treatment from a mental health professional. Therefore, where access to health questions are asked it is important to include mental health in the definition and collect this where possible. In some situations, statistics on the mental health of refugees may be available from administrative health data. In contexts where mental illness is not stigmatised, self-reported data may be collected from respondents, for example Canada has successfully included questions in surveys on self-reported mental health status.

c. Level 3 indicators

Women's health decisions

443. This dimension is reflected in SDG indicator 5.6.1: "Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care." The culture of refugees may differ considerably from the host culture in matters of women's reproductive decision-making. Measuring this for the host population and for refugees can indicate the cultural integration of refugees in this important policy area.

444. This topic is well covered in DHS, but refugees cannot be identified in the data. Examples of questions recommended for use in DHS are:

'Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?'

'Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?'

'Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?'

Suffered violence

445. Many refugees suffer violence, and for many the violence suffered may be sexual. SDG Goal 16 promotes peaceful and inclusive societies for sustainable development. This is measured by SDG indicator 16.1.3: "Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months." An additional indicator for women and girls who have suffered sexual violence are SDG indicators 5.2.1: "Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of

violence and by age”, and 5.2.2: “Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence.” While these indicators may be of interest, they are very sensitive and difficult to collect requiring special interviewing, particularly where sexual violence is included. Where they are available, they should be disaggregated into violence before migration and violence while living in the host country.

D. Recommendations on indicators of the satisfaction of basic and ongoing needs and integration

446. The indicators presented in this chapter relate to governments, the host country population, and refugee and refugee related populations. The majority of the indicators rely on data sourced from surveys, censuses and administrative records, while some are based on opinion polling and other sources.
447. Some indicators of the integration and satisfaction of basic needs of the refugee population presented in this chapter can be measured for the total population of the host country and compared with refugee and refugee related populations. Applying the indicators to general migrants would also permit comparisons to be made between refugee and general migrant populations. A few indicators are unique to refugees, and are related to legal status, rights, and residence in refugee camps.
448. Almost all the indicators will need to be developed and tested, and for those to be collected from surveys, the questions will need to be thoroughly trialled. At present, there are few large-scale surveys that allow the refugee population to be identified (see Chapter 4).
449. The difficulties for the vast majority of countries to implement such a data collection on indicators of integration are acknowledged and could not be made without a proper improvement in the data sources. Still, considering the high importance on the policy agenda of measuring integration of refugees, efforts should be made to include in surveys or other administrative sources questions and/or variables enabling to estimate the proposed indicators, especially the core ones.
450. Data for indicators of population living conditions are commonly found in surveys and censuses, making them available for most countries. These indicators can be used for refugee and refugee related populations if the core questions recommended in Chapter 4 for the identification of refugees are added to national surveys. This topic will be covered in more depth in the forthcoming Refugee Statistics Compiler’s Manual.
451. As national surveys and censuses will be the major source of data for the proposed indicators, and to accord with the international agenda, as many of the proposed indicators as possible correspond to those used for monitoring the SDGs. This will increase the efficiency and cost-effectiveness of producing refugee statistics.
452. A large number of the proposed indicators are already available from global surveys such as MICS and DHS, but it is not currently possible to identify refugees from the general population in the data. Adding a limited number of additional questions would help to provide the data needed to construct many of the recommended indicators.
453. Indicators derived from general household and labour force surveys can only be used for refugee and refugee related populations when the data can be disaggregated by refugee status, and where the sample size and design is adequate to yield meaningful results for refugees. Alternatively, in some contexts, refugees can be identified through a process of data matching, the techniques required to do this should be developed and tested.
454. In order to assess the basic needs, living conditions and integration of refugees, it is important to establish benchmark populations within the host country who can be compared with the refugee population. The characteristics of the total population can then be used to measure the conditions of the refugee population relative to other residents in the host country. This requires surveys and censuses that include both refugees and the host population.

455. Similarly, measuring the characteristics of general migrants in the host country provides information about how refugees may be different from general migrants. Migrant and refugee living conditions and integration can be measured using the same indicators. However, the process of integration can be quite different for refugees. It is recommended that statistics on refugees focus on differences in the pace and process of integration for refugees compared to general migrants, rather than trying to develop a large number of refugee-specific indicators. Pace refers to the amount of time it takes for the person to integrate into the host society.
456. One of the indicators that is unique to the refugee population is residence in a refugee camp. Residence in a camp is a core indicator, but many household surveys omit camps in their coverage. The information needed for refugee indicators will involve the extension of the scope of many survey sampling frames to cover camp and institutional buildings housing refugees and asylum seekers, in addition to the usual residential dwellings.
457. Some national household surveys omit foreigners. Foreigners should be included in order to capture the required data for refugee indicators.
458. Other indicators of integration applicable to refugees and general migrants, include length of residence in the host country, citizenship status, language ability, or exogamous marriages. These indicators may not always be available on a typical household survey or census and should be considered in future survey designs.
459. Many of the proposed indicators such as participation in local activities and groups, attitudes to refugees, experiences of violence etc. will need to be tested in respect of refugee and host country populations to establish their viability.

6

Coordination and strengthening systems of refugee statistics

A. Introduction

460. The international statistical system derives its core data from national statistical systems. National statistical systems vary from country to country, depending on the national administrative and governance structures, the evolution of the country's statistical system, and the state of development of and resources available for official statistics. At the national level, the production of refugee statistics can require several ministries, departments or agencies, which hold relevant data, to cooperate with the NSO⁶¹ to make the resulting statistics fit for purpose and relevant to users.
461. Many low and middle-income countries draw their data on refugees from records maintained by UNHCR and UNRWA.⁶² Therefore national and international statistical systems interact with each other both at the start of the process in many countries, and at the end of the process of producing refugee statistics, culminating in UNHCR's publication of its annual *Global Trends* report, *Statistical Yearbook*, and online UNHCR Population Statistical Database. However, the collaboration and coordination needs strengthening to ensure the refugee data are accessible to national and international users.
462. More broadly, national statistical systems are guided by a number of international and regional standards, some of which are mandatory and some advisory. These are intended to coordinate the production of statistics internationally, to improve the comparability of statistics between countries, and to maintain quality standards.
463. This chapter discusses some of the challenges to harmonising refugee statistics (Section B) and provides guidance on: improving the coordination of refugee statistics within the international statistical system (Section C); improving the coordination of refugee statistics within national statistical systems (Section D); sharing data between partners (Section E); and meeting quality standards (Section F). Section G distils recommendations for improving the coordination of refugee statistics.

B. Challenges to harmonizing refugee statistics

464. The development of comparable refugee statistics across time and space is an important issue for planning and policymaking, public debate, the international community, as well as both countries of origin and host countries. The production of international refugee statistics calls for the adoption of harmonized and standardized definitions, variables and concepts. The nature of this process is complex and faces various difficulties and limitations, which include:
- a) Limitations concerning determination of population size owing to use of different data sources and different definitions.
 - b) Limitations concerning international comparability and the need to harmonize.

465. There are different sources and multiple approaches available for the collection of refugee data such as administrative registers, population censuses, surveys or combinations of these. In most countries, data are collected using multiple registers, supplemented with information collected through different surveys or census. Each data collection method has its own strengths and limitations (see Chapter 4).
466. Although the 1951 Convention and the OAU Convention provide clear refugee definitions (see Chapter 2), most countries have developed national standard definitions and approaches for measuring and identifying the refugee population. One of the main challenges of accurately defining and measuring the refugee population is how to determine the population size/stock of the refugee population.
467. Many countries have advanced systems for management of asylum applications as well as good registration systems for reception of convention refugees, however once a permit has been granted there is not a uniform system that allows us to continuously count and further follow these groups and see how they integrate into the host population. It is important to use accurate and unambiguous definitions to define the population of concern, and to be aware of how we define and use certain terms and on what basis.
468. Countries with an exclusively administrative approach, such as Norway or Denmark, have a tendency to use static terms for defining different populations, for instance in the definition of immigrant populations or persons with refugee background. These static categorizations limit the population of concern in a way that is not open for adjustments to reflect changing realities on the ground. For example, 2015 was a special year characterized by a massive influx of refugees to Europe, however this group was often invisible in the official population statistics due to the fact that they were not registered as residents. A similar situation exists in several EU Member States because asylum seekers whose applications are still pending are registered in specific sub-registers (e.g. in Belgium, France and the Netherlands), and they are excluded from most of population statistics.
469. Also, the existence of country variations in the threshold for identification of who is to be considered as a refugee in statistical estimates of population stocks is a real challenge for the harmonisation of refugee statistics. In Norwegian statistics, persons who entered the country as refugee would be reflected as refugee for their whole “statistical life” even after naturalisation. In contrast in the United Kingdom (UK), there is no official figure for the number of refugees. Statistics on asylum seekers and refugees in the UK are published by the Home Office and contain data on the number of people applying for asylum and the outcomes of asylum applications. It partly depends on who you consider a “refugee”, given that people’s residence status can change over time after being granted asylum. They may start on a time-limited residence permit, move to permanent residence, through to British citizenship. Someone who arrived in the country as a refugee—perhaps as a child—and is now a UK citizen might or might not still consider themselves a refugee.
470. The United Nations publishes annual estimates of the refugee population, which are based on the number of successful refugee applications in the previous 10 years—the assumption being that after a decade, a refugee will have become a citizen and no longer needs international protection.
471. Also, the application of different legal instruments results in different refugee populations, that are not strictly comparable. In Canada, the Refugee Protection Division of the Immigration and Refugee Board which is responsible for processing claims for the refugee protection process, operates with the conception of “country of alleged persecution” as identified by the claimant in the system for determining refugee protection claims, while the Norwegian Directorate of Immigration (UDI) registers the asylum claims by citizenship.
472. In the Norwegian case, the definition of persons with refugee background limits the population of concern to the persons born abroad, residents in Norway who have come to the country either as a conventional refugee or as a person in a refugee-like situation, as well as family accompanied to these persons. Neither children born in Norway by persons with refugee background nor asylum seekers are included in the definition/the statistics. This is not in accordance with UNECE’s *Recommendations for the 2020 Censuses of Population and Housing*, nor with the United Nations’ *Principles and Recommendations for Population and Housing Censuses: the 2020 Round* (forthcoming).⁶³
473. The stock of refugees and asylum seekers is often difficult to measure because of mobility of persons and changes in the formal status of the refugee.
474. Duplication of asylum applications submitted often leads to the overestimation of the number of asylum seekers. The figures are based on national sources, and double counts resulting from persons seeking

asylum in more than one country cannot be avoided to the extent that these cases have not been detected by the authorities. For instance, UNHCR figures on global trends consider repeated asylum claims as new applications, then UNHCR's RSD operation in that country will appear relatively larger in terms of the number of applications than it really is (UNHCR Statistical Yearbook 2014, 14th edition).

475. As was stressed earlier, countries may use different definitions for the stock of the refugees, with specific legal and administrative applications. How individuals perceive themselves may differ from their legal situation in the host country.
476. The statistical unit in the database can differ considerably from country to country. Some countries (e.g. Norway) count immigrated family members into the population, and have persons/applicants as the statistical unit, while the other countries (e.g. UK) have the number of applications as the statistical unit, and do not include the family members into account.
477. For most countries, the census is the main source of demographic information about the population in general. The census also has a potential to give a description of the demographic composition of forcibly displaced populations. Using the population censuses to determine the population size is related to several limitations. Unfortunately, it is difficult to collect enough information about the refugee population in a census since resource constraints make it unlikely that more than a few questions can be asked. In the case of Kenya, the refugee population was enumerated as conventional households in the 2009 census, and included in the country population figures. Unfortunately, the refugee data and the official statistics based on those data, appear as quite basic due to low priority of refugee statistics among producers of administrative data and a lack of human resources for development and training. In most affected countries, the census rarely allows for the proper identification and measurement of the populations of concern in a systematic and comparable way.
478. A study carried out by the Turkish Statistical Institute with 27 participating countries (EFTA 2015, TurkStat), shows that the most participant countries have national standard definitions for both refugees and asylum seekers. While most countries include refugees in the total population, asylum seekers are kept outside.
479. On a regional level, it is suggested by UNECE to use the common definition of population with refugee background in censuses. The following identifiers are considered as preferable for the common definition of population with refugee background, and recommended for the 2020-round of censuses:
- a) Persons who declared that their main reason for migration was "forced migration".
 - b) Foreign-born persons who declared that their main reason for migration was "Family" and are members of the same family nucleus of a person in group (a).
 - c) Native-born children member of the same family nucleus of the parents in the group (a) and (b).
480. A system based on common classifications will lead to improved comparability of statistics even when different data sources are used. The concept of "persons with refugee background" sketched by UNECE is applicable for both administrative, survey-, and census approach, but it will need some adjustments of national concepts and definitions to improve comparability.
481. Some countries only use surveys to obtain information about refugees. Surveys are often designed to answer specific questions about subpopulations. They also have the added advantage that they can capture how individuals perceive their own situation, information that can be more difficult to cover in a register. As such, they also provide the opportunity to ask more detailed questions about populations of concern. On the other side, there can be numerous of limitations to the data collected by surveys.
482. Non-response may cause biases in the statistics and interviewed persons are not always able or willing to give correct answers. It is also possible that some displaced persons are not willing to be interviewed, as in the Jordan survey, particularly in light of the sensitive and profound nature of their experiences. Some groups can be underrepresented in the sample, for example women relative to men. In the case of Egypt, for instance, a survey to collect data about displaced persons was postponed because of country circumstances. An additional problem was lack of the interpreters for the non-Arabic speaking refugees.
483. The MED-HIMS experience also points out several methodological challenges that need to be addressed in order to improve the understanding and technique of data collection on refugees (see Chapter 4).

484. In some countries, it can be difficult to locate refugees, as in the case of Egypt. In this country, many refugees registered with UNHCR changed their address without notifying UNHCR. In both Egypt and Jordan, many refugees have “self-settled”, that is intermingled with the local population, and they are likely to be overlooked in the targeted samples.
485. With the aim of ensuring comparability when collecting data on refugee populations we should strive to have the same basic meaning for key concepts no matter when or how they are collected. The use of common classifications, will help to increase the comparability of official international statistics.
486. The agreed, harmonized statistical definition of persons with refugee background will allow users of statistics to see a more coherent picture of the refugee population on the world basis.
487. Lack of harmonization can have very significant impacts on both the comparability of the data between Member States, and the accuracy of the aggregate statistics for Europe, underestimating or overestimating crucial data and potentially distorting the overall picture of asylum related phenomena. In general, to be of most use, international statistical data should be accurate, timely and reliable as well as harmonized across countries (UNHCR, 2015).

C. Coordination of refugee statistics in the international statistical system

1. Principles for the coordination of refugee statistics

488. The United Nations’ *Fundamental Principles of Official Statistics* (A/RES/68/26), are adopted by the United Nations General Assembly and emphasize the need for national and international coordination and cooperation to achieve consistency and efficiency in statistical systems.⁶⁴ These principles guide all member states on the production of Official Statistics. They have become an integral part and a common reference in the statistical systems at global and national level and as such are as relevant to refugee statistics as they are to other statistics. These principles are also set out in the *Handbook of Statistical Organization*. The following principles are drawn from the agreed *Fundamental Principles* and guide the coordination of refugee statistics as follows:

a. Independence

489. The independence of a statistical agency is necessary for the credibility of official statistics. To ensure its independence, a statistical agency, whether a line ministry or NSO, should be separate from the parts of government that carry out policymaking, administrative, regulatory, or enforcement activities. It should have the authority to make decisions about the content, methods, and dissemination of statistics. It should be impartial and avoid even the appearance that its collection, analysis and reporting processes might be manipulated for political purposes or special interests.

b. Credibility

490. A statistical agency must work hard to ensure public faith in the reliability of its output, by being extremely rigorous with respect to the standards that data collection must meet, the methods of processing the data and the derivation of the results. This also requires meeting quality criteria described below in Part F.

c. Confidentiality

491. The confidentiality principle is based on the right of an individual to expect that information given in confidence to an administrator or interviewer will be used only for the authorized statistical or administrative purposes stated at the time of collection. In turn, the authority that collects data on refugees and asylum

seekers with a promise of confidentiality should expect that the data reported by individuals are full and accurate, regardless of the sensitivity of the information.

492. Confidentiality of personal information, microdata, and associated statistical reports should be safeguarded and be consistent with national legislation on statistics and data protection, and with the intended uses of these records for specific administrative and statistical purposes. Statistical reports based on data from administrative records, whether derived from a registration system or obtained by any other means, such as a sample survey, should be open to the widest possible legitimate use, consistent with appropriate safeguards of confidentiality to individuals whose data contribute to statistics as described in Part E which discusses the limitations to sharing microdata in respect of refugee and refugee related populations.

d. Dissemination

493. Regular and predictable dissemination of statistics, based on a scheduled and pre-announced timetable is recommended. Where individual RSD is conducted, statistics on monthly asylum claims should be published or, if refugee status is granted on a *prima facie* or group basis, statistics on monthly new registrations should be published. In addition, a biannual, or where possible annual, detailed tabulation of stocks and flows events, disaggregated by demographic and geographic characteristics, is recommended (see Chapter 3).
494. In the planning of the dissemination programme, it is important to ensure that sufficient resources are available for completing it on a regular basis and on a time schedule that will ensure the effective use of the data in the planning and policymaking cycle. This is especially important given the sensitive nature of some of the material, since delays in publication will reduce trust in the products. As far as possible, statistics should be comparable within the country, over time and across demographic data sources and on an international basis to permit international analysis. Where particular circumstances within a country require departures from international standards, publication of the statistics should be accompanied by an explanation of these departures and an indication of how the national presentation can be converted so as to meet or approximate international standards.

e. Coordination

495. Coordination across the system of national statistics spanning different statistical agencies is essential. Although there are differences between centralized and decentralized statistical systems, the overall aim of any system is to produce a comprehensive set of integrated statistics (through common definitions, common concepts, and harmonized nomenclatures and classifications) and to do so the NSO, or primary statistics agency responsible, must have a clear coordinating role. It is recommended that the NSO or primary statistical authority maintains overall responsibility for the integrity and validity of all official statistics and coordinates the process ensuring effective planning, coordination and dissemination.
496. Additionally, the Committee for the Coordination of Statistical Activities (CCSA)⁶⁵ has endorsed Principles Governing International Statistical Activities to enhance the functioning of the international statistical system.⁶⁶

2. Refugee statistics in the international statistical system

497. The administrative, political, and legal systems of each country determine the organisation and functioning of their national statistical systems. These unique national statistical systems need to be guided by international standards and recommendations to enable official statistics to be compared and understood across countries. There is a common core set of official statistics produced by almost all countries, but each country's full range of official statistics will vary. This variation is due to the need to match national and international users' priorities with the resources available for fulfilling them. Refugee statistics are not yet a high priority in many national statistical systems.
498. The United Nations Statistical Commission is the highest body of the international statistical system, and brings together chief statisticians from Member States from around the world. It is the primary decision-making body for international statistical activities especially the setting of statistical standards, the development of concepts and methods, and their implementation at the national and international level. The Statistical Commission is responsible for coordinating the collection, processing and dissemination

of international statistics, and assisting developing countries to strengthen their statistical systems.⁶⁷ The Statistical Commission oversees the work of the United Nations Statistics Division (UNSD), and is a Functional Commission of the United Nations Economic and Social Council (ECOSOC).

499. There are other UN agencies responsible for producing international statistics within their specialist mandate, drawing their core data from national statistical systems, for example WHO for health statistics, and UNHCR for refugee statistics. Other international organizations such as the World Bank and the International Monetary Fund (IMF) also compile international statistics drawn from national statistical systems and others. International organizations play a role in standardising and modelling global data, in order to fill in gaps, standardise estimates and provide global statistics.
500. The Statistical Commission has endorsed several sets of recommendations, published by UNSD, to guide national and international statistical activities. Some of these recommendations impact on refugee statistics, including: *Recommendations on Statistics of International Migration Revision 1*; *Principles and Recommendations for Population and Housing Censuses Revision 3*; *Principles and Recommendations for a Vital Statistics System Revision 3*; and the *Handbook of Statistical Organization Third Edition*.

3. Regional statistical bodies

501. Each region of the world has a United Nations Regional Commission,⁶⁸ which includes a statistical division or department that collects data from Member States and undertakes statistical coordination activities. This usually involves setting regional standards for statistics, formulating recommendations on statistical priorities, and may include publishing technical reports on new developments and good practice.
502. There are other regional organisations, such as the EU, OECD, Association of Southeast Asian Nations (ASEAN) etc., which comprise a number of countries within a geographical area. These regional organisations make recommendations on statistics, which can be either mandatory (as in the case of the EU) or advisory, with the objective of increasing the comparability and quality of statistics produced by their member states. Some of these regional organizations produce and disseminate statistics on refugees, based on data collected from their member states.

a. European Union

503. Within the EU, statistics on international protection are coordinated by Eurostat, the statistical office of the EU. While Eurostat does not itself collect data, it gathers data collected by national authorities, processes it and publishes comparable statistical information at EU level. Eurostat's coordinating role permits the harmonization of statistical concepts and methodologies across reporting countries, allowing for comparison and analysis of European data. Eurostat's role is based on a common set of laws and regulations that determine statistical standards and outputs. The statistical coordination in the EU is therefore mandatory rather than advisory. Most other regional bodies rely on voluntary arrangements.
504. The legal basis for Eurostat's work on asylum-related statistics is the *Migration and International Protection Statistics Regulation*, specifically Article 4 on statistics on international protection.⁶⁹ This Regulation specifies data categories, disaggregation, frequency and delays for data provision by countries. It includes also the requirement to deliver information on data quality. On this basis, since 2008, regular statistics are submitted by countries to Eurostat on: (a) asylum applications, pending and withdrawn applications, submitted monthly; (b) first instance decisions issued in asylum cases including decisions rejecting, granting or withdrawing refugee status, subsidiary or temporary protection, or authorisation to stay for humanitarian reasons, submitted quarterly; (c) final instance decisions taken in appeal or review including decisions rejecting, granting or withdrawing refugee status, subsidiary or temporary protection, or authorisation to stay for humanitarian reasons, submitted annually; (d) applicants for international protection from unaccompanied minors, submitted annually; and (e) persons resettled within the framework of a national or community resettlement scheme, submitted annually. Data are submitted disaggregated by age, sex and citizenship and refers to the count of individual persons. Statistics on first time asylum applicants is not a subject of the above Regulation and data provision by countries is therefore voluntary. These data are collected monthly.⁷⁰
505. Countries also provide annual data to Eurostat on application of the Dublin Regulation system, establishing which country is responsible for examining a particular asylum application.⁷¹ The definitions of the data to

be submitted to Eurostat concerning asylum, and the statistical categories used, closely follow the legal definitions in the EU asylum *acquis*. Thus, the volume and nature of asylum flows faced and processed by European countries uses common concepts and methodology.

506. The European Migration Network is an EU network of migration and asylum experts who work together to provide objective, comparable policy-relevant information. The EMN was legally established under Council Decision 2008/381/EC, as amended. The European Commission (Directorate-General for Migration and Home Affairs) coordinates the European Migration Network. National Contact Points (EMN NCPs) are established in all Member States (except Denmark) and Norway. Each EMN NCPs is appointed by the relevant national government. EMN NCPs are located within Ministries of Interior and of Justice, specialised government agencies dealing with migration, research Institutes, non-governmental organisations or national offices of international organisations. The EMN gathers objective, policy-relevant, comparable and up-to-date information and knowledge on emerging issues relating to asylum and migration in Europe.

b. European Asylum Support Office

507. EASO is an agency of the EU set up by Regulation (EU) 439/2010 of the European Parliament and of the Council. The agency acts as a centre of expertise on asylum; contributes to the development of the Common European Asylum System by facilitating, coordinating and strengthening practical cooperation among Member States on the many aspects of asylum; helps Member States fulfil their European and international obligations to give protection to people in need; provides practical and technical support to Member States and the European Commission; provides operational support to Member States with specific needs and to Member States whose asylum and reception systems are under particular pressure; and it provides evidence-based input for EU policymaking and legislation in all areas having a direct or indirect impact on asylum.
508. EASO's Early warning and Preparedness System (EPS) is a data collection system gathering information under indicators focussing on all key stages of the Common European Asylum System (CEAS). Countries provide monthly data to EASO within 15 days, with all 30 EU+ countries (EU Member States plus Norway and Switzerland) contributing.
509. As the CEAS is a complex process, the roll-out of the data collection is envisaged to proceed in stages: Stage II, launched in March 2014, focuses on the first instance in the asylum process and collects data under four indicators: applicants, withdrawn applications, decisions, and pending cases. Stage III, launched in September 2015, focuses on access to procedure, reception, Dublin and return.
510. In developing EPS indicators, every effort is made to make them as consistent as possible with existing migration statistics collected by Eurostat under Regulation (EC) No 862/2007 — EU statistics on migration and international protection.
511. Detailed information on the data collected may be available from EASO.

Figure 6.1: Indicators collected under EASO Early Warning and Preparedness System

Access to procedures	Reception system	First instance determination	Return of failed asylum seeker	Dublin
Applications made	Stock of persons in	Asylum applicants	Returned decisions	Decisions on request
Scope: EU+ (EU-28, Norway, Switzerland)		Decisions in first instance	Effective returns	Transfer implementation
		Withdrawn applications		Discretionary clause Art. 17(1)
		Stock of pending cases		
		Otherwise closed cases		
Periodicity: Monthly				
Timeliness: 15 days after reference period				

4. Coordinating refugee statistics in the international statistical system

512. Comparing statistical information derived from national statistical systems often reveals inconsistencies in concepts, methods, structures and technical standards. These inconsistencies must be resolved in order to compare the data derived from different sources.
513. At an international level, coordination and collaboration is needed among international agencies that produce refugee statistics. Collaborative mechanisms, such as working groups and advisory bodies, between the international, regional, and national statistical systems and refugee data producers, would enhance the quality of refugee statistics and reduce duplication and inconsistency.
514. Collaboration enables international and supranational bodies to collect the data that NSOs produce, to assess them, and to publish data which meet international standards, classification, concepts and methods. At the same time, it is important that international agencies publish full metadata pertaining to the production of national estimates and why this differs from any nationally published data. It is important that agencies share data between themselves to avoid burdening NSOs, but at the same time good communication is needed between international agencies and the NSOs on national estimates. The production of international data should reflect, as far as possible, the UN's *Principles Governing International Statistical Activities* (CCSA, 2013).
515. A successful example of inter-agency collaboration on statistics at an international level includes the United Nations' Inter-Agency Group for Child Mortality Estimation (UN IGME). It was formed in 2004 to share data on child mortality, harmonize estimates within the UN system, improve methods for child mortality estimation, report on progress towards the Sustainable Development Goals and enhance country capacity to produce timely and properly assessed estimates of child mortality. The UN IGME updates its child mortality estimates annually, working collaboratively to produce harmonized estimates using a common data source and methodology. It has its Technical Advisory Group (TAG) which consists of academia in mortality estimation. The TAG provides guidance on estimation methods, technical issues and strategies for data analysis and data quality assessment. The UN IGME holds a meeting twice a year to discuss and review estimates, and the TAG once a year to provide technical guidance on methods. In addition to the core members (UNICEF, WHO, World Bank, UN Population Division), when possible these meetings are participated by regional bodies such as CELADE and PAHO as well.
516. The UN IGME compiles all available nationally representative data, including data from vital registration systems, population censuses, household surveys and sample registration systems. Data quality is then assessed and data inputs are recalculated, and if necessary adjustments are made by applying standard methods. A statistical model is fitted to these data to generate a smooth trend curve that averages over possibly disparate estimates from the different data sources for a country, and the model is extrapolated to a target year. When draft estimates are ready, joint country consultations are undertaken to give each country's ministry of health and national statistics office the opportunity to review all data inputs and the draft estimates for its country. The objective was to identify relevant data not included in the UN IGME database, and to allow countries to review and provide feedback on estimates.
517. It is important for agencies to form governance bodies, such as advisory groups, expert groups and common collaborative spaces to work on the harmonization of concepts, definitions, methodology and reporting on data collected, and include Member States in these deliberations.

D. Coordination of refugee statistics in national statistical systems

1. Refugee statistics in the national statistical system

518. The production of refugee statistics generally requires the combination of data from several statistical data producers within the national statistical system, some of these may be primarily collectors of administrative data rather than statistical producers. While the United Nations' *Fundamental Principles of Official Statistics* provide guidance for national statistical systems, they do not define a national statistical system. The OECD describes a national statistical system as "the ensemble of statistical organisations and units within a country that jointly collect, process and disseminate official statistics on behalf of national government" (OECD, 2002).⁷² This ensemble may include a large number of government ministries, departments, or agencies involved in the production of official statistics, including custodians of administrative data sets that contribute to official statistics.⁷³ The purpose of a national statistical system is to serve the needs of "the economy and the public with data about the economic, demographic, social and environmental situation" (United Nations, 2014).
519. The production and dissemination of sectoral statistics, such as those relating to refugees, may be decentralized within the national statistical system, whereby sectoral ministries, departments or agencies form "sectoral statistical system" and collect, analyse and disseminate statistics within their subject matter area.
520. National statistical systems are usually, but not always, directed and coordinated by a NSO. There are exceptions to this for example the USA and UAE. The role of a NSO varies across countries, depending on the legislation that describes the authority of the NSO and other agencies in all matters related to official statistics. The responsibilities of the NSO range from the production of statistical information, to the setting of standards and methods, to international liaison such as reporting obligations to the UN system and others.
521. The EU Regulation 223/2009⁷⁴ on European statistics refers to statistical governance and in its article 5 defines the national statistical authority (the NSO) as the body having the responsibility for coordinating all activities at national level for the development, production and dissemination of European statistics. It shall act as a contact point for Eurostat on statistical matters. Eurostat shall maintain and publish a list of NSIs and other national authorities responsible for the development, production and dissemination of European statistics as designated by Member States.
522. In many countries, UNHCR or UNRWA have been invited to carry out refugee registration and, in these cases should be considered as part of the national statistical system. In these cases, it is important that UNHCR continues to have access to such refugee statistics. Where UNHCR conducts registration, it generally does so using its own tools, meaning that visibility of data is not usually problematic. Where this becomes difficult is when a transition to government responsibility for registration takes place, and the government data systems do not provide for UNHCR access. Regardless, UNHCR seeks to maintain visibility on refugee data to the maximum extent possible, both for the conduct of its supervisory responsibility, and also for the purpose of protection or solution interventions, as required.
523. Despite the global need for quality statistics on refugees, many national statistical systems are not yet able to produce or do not prioritise refugee statistics. Where a country does not produce statistics on refugees, UNHCR and UNRWA use their own records to do so for both international and national users. In many countries UNHCR is working to build national capacity, and is developing operational guidance to support the transition of registration responsibility to governments, consistently with protection and data protection standards.
524. Figure 6.2 presents a stylized outline of the flow of data on refugees within a national statistical system.

Figure 6.2: Refugee statistics within the national statistical system

525. Coordination between organisations that collect refugee data and the NSO is essential to achieve consistency and efficiency in the national statistical system. National statistical systems differ with regards to the level of centralization, and statistical units in line ministries can and do collect, analyse and disseminate sectoral data. However, NSOs should be authorized and required to coordinate and lead the national statistics system. Many countries have a compendium or database of standard definitions, classifications and concepts to ensure harmonisation of statistics within national statistical systems.
526. In coordinating the national statistical system, NSOs must take account of prevailing international and global standards. International comparability of refugee statistics is an important dimension of quality, therefore NSOs should coordinate their activities with international statistical agencies and international data producers to ensure that international standards, classification, concepts and methods are applied and adapted to national statistics. Country offices of international organizations such as UNHCR can play a central role in the harmonization of concepts in refugee statistics.

2. Legal basis for coordination and sharing of refugee statistics

a. Statistics laws

527. A well-functioning system for production of statistics requires a stable and transparent legal basis which can guarantee the independence, integrity and accountability of statistical authorities according to the *Fundamental Principles of Official Statistics*. Most countries but not all have a national statistics authority or NSO. Where there is no NSO the statistics law should define the mandates of the various statistical agencies. Where there is a NSO, it gains its power and authority from these laws. Statistics laws determine the basic principles and standards concerning the production and organization of official statistics. They regulate the organisation, duties, and authority of statistical agencies and enable NSOs to compile and assess the quality of data and official statistics. The statistics law enables the production, publication and dissemination of statistics. The law should define the national coordinating role as regards all activities for the development, production and dissemination of official statistics. The statistics law covers and regulates not only the NSOs, but also all institutions and agencies that make up the official national statistical system. This is particularly important for refugee statistics where a variety of national ministries, departments and agencies, including the country UNHCR office, could be involved in producing data on the topic.

b. Census laws

528. The legal basis for the census may be included in the statistical laws or may also be separately legislated to regulate the conduct of individual censuses. It is important to establish census-specific regulations for the countries where permanent census law is absent. The legal basis fixes the primary administrative responsibility, helps to obtain the necessary funds, and determines the general scope of, and the timing of the census. Census laws should not have strict provisions such as the details of the information to be collected or the structure of the census organization, it is more appropriate to specify these details in census regulations promulgated by the census authorities. The census laws should include the obligations of the respondents, and the confidentiality of the individual information collected. Especially in the case of sensitive groups such as refugees, anonymization of the resulting data sets before sharing becomes vital, and a legal assurance about respondents' confidentiality is necessary.

529. At the regional level, there may be census recommendations or regulations. For example, UNECE provides recommendations for European countries, as do the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) for countries of the Asia and Pacific region⁷⁵ and the United Nations Economic and Social Commission for Africa (UNECA)⁷⁶. Eurostat collects census data from NSOs, where the countries have their own legislations. Regulations put into force by the European Commission contribute to the standardized data collection.⁷⁷

c. Laws and regulations concerning administrative data on refugees and asylum seekers

530. Ministries, departments or agencies (e.g. of interior, home affairs, immigration, etc.), are usually the competent authorities for maintaining administrative registers of refugees and asylum seekers. Often, their legal basis and rationale do not include statistical requirements. Moreover, there is often a problem of legal precedence between the law which governs statistics and the laws concerning data protection in government ministries. In these cases, efforts to collaborate and gain cooperation between NSOs and relevant agencies can become problematic. The restrictive laws of ministries that may take precedence over statistics laws, can reduce the power of NSOs and interrupt the production of statistics. It is important that this is clarified in the law.

531. Legislation enabling access to administrative data for statistical purposes, with the relevant caveats protecting confidentiality, supports the production of refugee statistics. For countries in the EU, Article 24 of [Regulation \(EC\) No. 223/2009](#) on European statistics gives NSOs access to administrative data sources from within their respective public administrative system, where these data are necessary for the development, production and dissemination of European statistics, in order to reduce the burden on respondents.⁷⁸ This provision also enables the compilation of refugee statistics. Outside the EU, national laws may not establish the right of access to administrative data for statistical purposes. Even where this legal provision exists, it

may be difficult to operationalize due to the extreme sensitivity of records on refugees and asylum seekers. A process that builds good relations between statistical data producers in the national statistical system is desirable. For example, a statistical programme of work, developed collaboratively by government bodies, would create a shared commitment to producing refugee statistics that meet acknowledged quality standards.

d. Laws and regulations concerning civil registration and refugee vital events

532. It is important that the law covering civil registration enables the collection of statistics on the vital events for refugees as well as citizens.⁷⁹ Data on the vital events for refugees should be included within civil registration systems and in vital statistics, since the whole population is affected by the births, deaths, marriages and divorces of the country's nationals, foreigners and refugees alike. Refugee status should be indicated in the civil registration system or captured by linkages to other registers using a unique person identification number.
533. Good coordination among bodies within the system is also required. Close coordination and collaboration is essential to ensure that concepts, definitions and classifications are the same across sources and that duplication is eliminated (see: Principles and Recommendations for a Vital Statistics System, UN Statistics Division, 2014).
534. In the Nordic countries, there is a system of exchanging information about persons migrating from one Nordic country to another, ensuring that immigrants into one Nordic country from another, equals the emigrants from the other country, even so there are small differences between the published migration flows to and from the Nordic countries, which are mostly due to the different cut-off dates used by the different countries. This exchange is not the case in most other pairs of countries in Europe.

3. Enabling collaboration between statistical agencies

535. NSOs, empowered by law, can enter into data sharing arrangements with data producing agencies to collect, compile and harmonize data, or to collaborate and share data. These may include informal or formal agreements such as: working groups; Memoranda of Understanding (MOU); consultative committees; interagency committees; and a system of focal points between NSOs and data producers. Such partnerships require mutual understanding of priorities, sharing of expertise, consistency in the integration, interpretation and use of data, and continuous communication about data stewardship, with a feedback loop between the agencies concerned when problems arise so that the issues can be resolved between the agencies concerned.
536. Sharing data with NSOs may be perceived as risky by immigration authorities, as data may be misrepresented in statistical publications. To mitigate the risk of data interpretation issues, it is important to implement oversight structures around the use of the data. For example, the establishment of regular meetings to allow for mutual consultation and agreements on nomenclature and methodology to derive concepts. This will ensure that statistical compilations and concepts take account of the data producers' programs, and operational and policies concerns, while ensuring that the statistics published remain independent and free from political influence.

4. National statistical priorities and work programmes

537. Few NSOs, even in countries with large numbers of refugees, publish statistics on refugees and asylum seekers. Although there are some exceptions, statistics laws do not generally specify which statistics will be produced. Rather, this is generally established in government regulations or plans. International and regional obligations, such as monitoring of the SDGs, can substantially influence the scope of a country's statistical work programme. However, currently the SDGs do not include an explicit goal or target on forced displacement that would motivate the inclusion of refugee statistics in national statistical work programmes.
538. Efforts to raise the priority given to refugee statistics in national statistical work programmes may be enhanced by advocacy from regional and international authorities. This approach was successful for improving civil registration and vital statistics, and could be adapted for improving refugee statistics.

For example, a regional ministerial conference could be called, with the aim of agreeing on a regional framework for improving refugee statistics.

539. Participation by government ministers and senior civil servants in promoting refugee statistics may help to attain a significant improvement in the systems for refugee statistics. A joint regional approach to supporting an emerging area of official statistics is often more effective than individual national effort. It is often more successful in promoting funding for building capacity from governments and donors.
540. However, refugee statistics can be very politically sensitive. Reference is made to Principles 3 and 4 of the United Nations' *Fundamental Principles of Official Statistics* where statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics to facilitate a correct interpretation of the data and that statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics. This is particularly important for refugee statistics. NSOs could also establish a mechanism for the peer review of refugee concepts and analysis procedures prior to statistical release, and ensure that results are released free from political interference.
541. A national statistical work programme, which covers all planned official statistical outputs, is a useful tool to promote coordination in the national statistical system. In developing countries, official statistics are often detailed in a National Strategy for the Development of Statistics (NSDS), which provides a national framework for developing statistical capacity across a country's national statistical system with the objectives of: mainstreaming statistics into the national planning process; producing information that is responsive to user needs and priorities; mainstreaming sectors into the national statistics system; enhancing coordination of the national statistical system; and responding to data challenges (PARIS21, 2017).
542. In order to increase national ownership, better mobilize national funding, increase the involvement of local stakeholders and improve dissemination and use of data, it is recommended that refugee statistics should form an integral part of any NSDS. Efforts to improve the collection, analysis and dissemination of data on refugee statistics, should be pursued through the framework of the NSDS. Where there is no NSDS, the statistical work programme should consider the inclusion or improvement of refugee statistics.
543. Statistical work programmes and NSDSs are also helpful in agreeing and publishing the basic principles and standards for the production and dissemination of official statistics, as well as the bodies or agencies responsible for their compilation and publication. They may also give information on the definitions, methods, contents, and classifications, as well as the publication schedule for statistics. In other contexts, 'compendia' or statistical handbooks provide definitions and define responsibilities, and refugee statistics should be added to these national compendia.

5. Dissemination of refugee statistics

544. Statistical data producers should have consulted widely on users' requirements for refugee statistics. Dissemination is the time when the statistical product is released to users, and their needs are satisfied, either fully or partially. It represents one of the most important activities of the national statistical system. Dissemination should be viewed as the link between data availability and the use of statistics for policymaking purposes.
545. Dissemination should be guided by a number of principles including those established in the *Fundamental Principles of Official Statistics*, such as objectivity, impartiality, confidentiality, privacy, timeliness and accessibility. Support should be provided to users, and a variety of formats should be used on the dissemination platform. It is important to use a single platform for disseminating all national refugee statistics. Efforts should be made to increase the accessibility of the results by promoting innovative visualization techniques to present statistical information in a user-friendly manner.

a. Responsibilities for dissemination of refugee statistics

546. The responsibility for disseminating refugee statistics varies from country to country. In many countries, immigration authorities or other government ministries, departments or agencies (e.g. ministry of interiors) provide the NSO and UNHCR with the relevant data for compilation, validation and analysis. After validation, the NSO and/or relevant authorities disseminate the statistics, sometimes in parallel. In some countries, refugee data are collected directly by UNHCR, who also disseminate them.

547. It is important to distinguish between official statistics and operational statistics for the purposes of disseminating refugee statistics (see Table 6.1). Official statistics should be produced using scientific and professional methods, based on the principles of official statistics. They should be published by the NSO or by statistical units within government ministries, which are regulated by the national statistics law and relevant standards. Access to official statistics should be ensured for the widest range of users and all users should have access to statistical releases at the same time. On the other hand, operational statistics are largely used by government ministries for managing their own activities and may not meet quality standards. Operational statistics tend to be timelier than official statistics but the quality of the data may be poorer, since they are not subjected to the same professional rigour and validation. Operational data are not normally released publicly, and if they are, there are likely to be inconsistencies when compared with official statistics. These inconsistencies can undermine public trust in statistics, and the release of operational statistics should be carefully managed and their limitations should be explained.

Table 6.1: Difference between official statistics and operational statistics⁸⁰

	Official statistics	Operational statistics
Basis	Legislative; Enforced compliance; Regulation, convention, technical guidelines	Working arrangement, compliance through added value and common benefit; Handbook, operational definitions, guides, practice
Quality	Harmonisation through standards, revision cycle; Validated, accurate, reliable, ground truth; Periodicity/timeliness: variable, provision lag	Harmonisation through cooperation and coordination; Actionable, granularity based on need; Periodicity, timeliness: common, frequent, timely
Practice	Working groups, practice on communalities; Non-core business of provider (NSO/NSI for EU); Implemented with delay	Networks, coordination, meetings, online exchange; Provider is key stake holder, their daily business; Flexible implementation
Outputs	Statistical reviews / yearbooks / official databases; Evidence basis for policy formulation and evaluation	Situational awareness / snapshots / online portals; Evidence for early warnings and preparedness; Actionable insight delivered to stakeholders

548. Statistics on refugees should be consistent with vital statistics, migration statistics and other relevant national statistics. They should also be consistent at the international level. This means that the statistics published by national and international agencies should show no discrepancies. This requires cooperation and collaboration between national, regional and international agencies prior to dissemination. This has proved problematic in international statistics.
549. The dissemination of asylum and refugee statistics at the regional level should be organized by the lead organization of the regional statistical system. For example, in the European context, official statistics are disseminated by Eurostat while operational statistics are disseminated by EASO.

b. Frequency and timeliness

550. The time lag between data collection and the publication of refugee statistics should be minimized. Where operational statistics are published, these should be published as soon as possible after they become available and marked as preliminary. Official statistics should be released on a quarterly, semi-annual and annual basis following appropriate validation by immigration offices or NSOs.
551. Where census data are the source for the stock number of refugees, these statistics could be disseminated in accordance with the yearly population calculation procedure based on the data of the last census. In countries with good population registers, the source used should be register-based rather than population calculations based on the last census.

c. Methods of dissemination

552. The organisation responsible for disseminating refugee statistics should publish a release calendar, which establishes the dates for public releases of data and publications. This enables users to anticipate releases, and it is good practice for the statistical authorities to discourage delays in data releases for political reasons.

553. Statistical authorities should have a publicly available dissemination policy that includes refugee statistics. The dissemination policy should include information about data access conditions, the range of publications and data available, the support which users can expect, and the availability of metadata. If there are charges for publications then this should be made explicit. The dissemination strategy should take into account the range of likely users including the general public, decision makers, researchers, the research community, and media.
554. Data releases should be accompanied by press releases and meetings with media representatives to maximise public awareness. Statistical booklets should be available to inform the wider public of the salient facts. National databases should always contain the latest version of the most currently published data available, if possible, the web page of the institution should contain a mobile application to enable users to download statistics in a user friendly way. Users should be able to download individual data sets by extracting data directly from the database, but this may present problems in the case of refugee data where direct access may compromise the legislation relating to the protection of privacy and confidentiality (see below - Section E. Confidentiality and data sharing).
555. To enable users to interpret data on refugees, the statistical authorities should provide additional information on metadata, which include information about definitions, classifications, methodologies, legislation and standard code lists. Where quality assessments have been carried out, quality statements should be publicly available with data releases and publications.
556. A range of materials should be considered for publications including: (a) regular statistical reports; (b) statistical abstracts; (c) thematic reports on refugee statistics; (d) micro data (see below for special conditions which might apply to refugee statistics); (e) online data (databases, data-cube applications); (f) maps; (g) spatial analysis; (h) visualisations; and (i) digital geographic data for dissemination.

Box 6.1: Platforms for the Dissemination of Statistics

Examples of platforms for the dissemination of statistics are listed below:

- Devinfo database (www.devinfo.org), which tracks and disseminates key socio-economic development indicators
- NADA database, (<http://www.ihsn.org/software/nada>) which makes it possible to archive technical documents, metadata and microdata from surveys and censuses
- Open Data platform (<http://dataportal.opendataforafrica.org/>), which provides policymakers and a wide range of national and international stakeholders with access to macroeconomic and financial data
- REDATAM – statistical analysis and census data dissemination

557. To fully exploit refugee statistics, official statistics should be linked to other data sources within national statistical systems (see Chapter 4 on data linking). National platforms should be available for the dissemination of statistics, aiming at a single national platform rather than multiple platform, to enhance accessibility and coherence. If it is possible, the web page of the institution should contain a mobile application to enable users to download statistics in a user-friendly way.

d. Open data

558. In principle, “Open data” can be freely accessed, used, modified, re-used and redistributed by anyone for any purpose subject only, at most, to the requirement to preserve provenance and openness.⁸¹ Open data provides opportunities for researchers and the general public to access and analyse data, generate new findings from combined data sources, and utilize data for more informed decision-making. For these reasons, refugee data should be made open to users. An important caveat, however, is that data openness must not compromise personal privacy or risk data confidentiality. This is discussed in detail in Section E.
559. For example, the Government of Canada has firmly established an “open by default” position in its *Directive on Open Government* (Government of Canada, 2014). Canada makes extensive structured machine-readable data on refugees and asylum seekers freely available on the [Government of Canada's Open Data Portal](#).⁸² No published data are sensitive in nature (i.e. personal or confidential) and does not identify or provide ways to identify individuals.

e. Support to users of statistics

560. Refugee statistics should be easily accessible to all persons. To support this metadata should be available using non-proprietary software, and a contact person identified and publicised to support users. Existing users of the statistics should be closely monitored and profiled to support the customization of products and services, and to assess the impact and utility of the statistics provided.
561. The statistical literacy of users of refugee statistics should be developed, particularly when releasing new publications and products. As refugee statistics are not widely available in all countries, new users and the media may need training about the concepts and definitions used to describe the refugee population in new publications, in order to fully utilise the results.
562. All users should have equal access to statistical releases at the same time. Privileged pre-release access to statistics has to be limited, and controlled. Where the principle of equal access has not been met, information about the early access to the statistics must be publicised.
563. The free re-use of asylum and refugee statistics should be encouraged, while respecting confidentiality (see Section E), and ensuring that the sources are cited in research publications.

6. Indicators of coordination within the national statistical system

564. The following indicators are proposed to monitor coordination within the national and international statistical systems:
- a) Country collects comprehensive data on refugees and asylum seekers and the data producers collaborate with the NSO.
 - b) Legislation or other government instruments empower the NSO to collect administrative data from the data producers.
 - c) Governance structures and mechanisms are established for coordination and collaboration.
 - d) Statistics on refugees are harmonized to enable international comparability.
 - e) Reporting of statistics to the relevant international agencies is managed with data management and reporting strategies in place.
 - f) An international oversight body for regional, international and national refugee statistics is in place.
 - g) A responsible national statistical agency responsible monitors and comments on erroneous interpretation and misuse of refugee statistics.

E. Confidentiality and data sharing

1. Protecting the confidentiality of refugee data

565. Data sharing is essential to the production of refugee statistics, particularly where administrative data are a source. However, a major barrier to sharing refugee and asylum seeker data is their extreme sensitivity, as well as concerns over the improper handling of data for this particularly vulnerable group. The sharing or disclosure of data on asylum seekers and refugees should not jeopardize the safety or lead to a violation of the human rights of the individuals concerned, their family members and associates. Additionally, asylum seekers should not suffer the loss of state protection through prejudicial disclosure of data. Therefore, statisticians should take appropriate measures to prevent data from individuals from being published or otherwise released in a form that would allow any subject's identity to be disclosed or inferred.
566. "Privacy" can be described as a data provider's right to decide what information is made available, when it is to be released and to whom it is released (United Nations, 2003). Data "confidentiality", on the other hand, is a property of data, usually resulting from legislative measures, which prevents it from unauthorized disclosure. Ensuring confidentiality is the appropriate response from a statistical agency when it obtains private data (United Nations, 2003). These two terms complement each other, since a breach of data confidentiality can result in an intrusion on the rights of privacy of the data provider.
567. In order to ensure that these two concepts of privacy and confidentiality are properly practiced in statistical production and dissemination, there are certain principles and guidelines that should be observed, including:
- Principle 6 of the United Nations' *Fundamental Principles of Official Statistics*, which states that "[i]ndividual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes" (United Nations, 2014).
 - Clauses 4.5 and 4.6 of the International Statistical Institute's [Declaration on Professional Ethics](#), which require statisticians to keep identities and records confidential, whether or not confidentiality has been explicitly pledged, and to take appropriate measures to prevent the disclosure or inference of identities (ISI, 1985).
 - Principle 5 of *The European Statistics Code of Practice* adopted by the Statistical Programme Committee on 24 February 2005 states that "[t]he privacy of data providers, and the confidentiality of the information they provide and its use only for statistical purposes, must be absolutely guaranteed" (Eurostat, 2011).
568. Data confidentiality should be preserved by ensuring that the risk of direct or indirect identification of individuals or disclosure is managed by agreed rules such as **de-identification** (modifying data by removing any identifiers) or **anonymization** (removing or altering information, or collapsing detail to ensure that no person or organisation is likely to be identified in the data). However, the applicability of these confidentiality rules can differ from one source to the next and are generally specific to each individual or organizational source. In addition to the rules, related parties may also benefit from other methods which preserve confidentiality, such as **data reduction** (the method that maintains the confidentiality of respondents by selecting appropriate aggregations or in manner of presentation of data) or by **data modification** methods (the method that maintain respondent confidentiality by altering the identifiable data in a small way without affecting aggregate results in a significant way).
569. Strengthening existing legal instruments, including countries' statistics laws and census laws, in respect of confidentiality and privacy is essential. Laws supporting data collection about refugees and the release of information on refugees should be in place to: (a) promote public confidence in the arrangements – and to publicise that there are legal constraints that determine what can and cannot be done; (b) ensure mutual understanding between NSOs, ministries and researchers; (c) provide consistency in the way data and research proposals are treated; and (d) establish a basis for dealing with breaches in the law.

Box 6.2: European laws and regulations relating to statistical disclosure⁸³

Within the EU, two laws are of particular importance for statistical disclosure control:

1. *Commission Regulation (EU) No 557/2013 of 17 June 2013 implementing Regulation (EC) No 223/2009 of the European Parliament and of the Council on European Statistics as regards access to confidential data for scientific purposes.* This regulation aims to establish, for the purpose of enabling statistical conclusions to be drawn for scientific purposes, the conditions under which access to confidential microdata may be granted to scientific users (mainly researchers of universities and formally established research institutes).

2. *Commission Regulation (EC) No 223/2009 of the European Parliament and Council of 11 March 2009 on European statistics.* This regulation replaced Regulation 322/97 on Community Statistics and Regulation 1101/2008 (previously 1588/90) on the transmission of data subject to statistical confidentiality. The regulation establishes a legal framework for the development, production and dissemination of European statistics, and includes rules and measures to ensure that confidential data are exclusively used for statistical purposes and to prevent their unlawful disclosure.

EU legislation state that confidential data may be transmitted for statistical and research purposes, provided that this transmission is necessary for the efficient development, production and dissemination of European statistics or for increasing the quality of European statistics and that this cannot be blocked by national laws. However, the data are to be used exclusively for statistical purposes and only accessible to staff working in statistical activities within their specific domain of work. Any further transmission beyond the first transmission shall require the explicit authorisation of the authority that collected the data.

2. Managing data sharing and microdata access

570. Data sharing consists of making data accessible to other statistical producers, researchers and users in the spirit of scientific independence, professionalism and transparency. Data sharing reduces duplication and respondent burden, and provides an opportunity to strengthen the credibility of official statistics. Data can be shared in the form of microdata, aggregated data, structured or unstructured data. Relevant terms and concepts are described in Box 6.3.
571. The release of microdata on refugees and asylum seekers should be consistent with legal and administrative arrangements to protect the confidentiality of the microdata (UNECE, 2007).⁸⁴ Ideally, legal arrangements to protect confidentiality (whether in law or supplementary regulations, ordinances, etc.) should be in place before any microdata are released, and these arrangements should be complemented by administrative measures to regulate access to microdata and to ensure that individual data cannot be disclosed (UNECE, 2007). However, in the absence of legislation, some other form of authorisation is essential. The reputation of the NSO is at risk if there is not some form of authority to enable the release of microdata, even when anonymised. It is also important that the legislation (or authorisation) regarding the release of microdata covers: what can and cannot be done and for what purposes; conditions of release; and consequences if conditions are breached.
572. Microdata sharing between data producers and the NSO is required in the validation stages of statistical production, in order to detect and reduce duplication of records, essential components of maintaining the quality of statistics. This can be enabled through a formal agreement or a Memorandum of Understanding on the sharing and use of the data, together with secure technical infrastructure to house the shared data. All data sharing agreements must make reference to clauses on protection of personal information, as per privacy and data security requirements. Security measures, such as an audit trail, should be implemented in order to ensure the proper access to and management of the data. Regular meetings between data sharers allow for mutual consultation and agreements on nomenclature, and methodology to derive concepts and to discuss data issues before publication of the results.

Box 6.3: Definitions and Concepts

Microdata: Computerized microdata makes it possible to obtain a structured electronic file, where each line (or record) contains information about an observation unit. This information is stored as variables of different types (numeric or alphanumeric, discrete or continuous, etc.).

Macrodata: Data derived from microdata by statistics on groups or aggregates, such as counts, means, or frequencies, and often presented in tables.

Biometric data: Biometrics is defined by the International Standardization Organization as the “automated recognition of individuals based on their biological and behavioural characteristics” (ISO/IEC JTC1 SC37). The biological and behavioural characteristics are those from which distinguishing, repeatable biometric features can be extracted for the purpose of biometric recognition.” Biometric data can include fingerprints recognition, face recognition, DNA matching, eye (iris and/or retina) recognition, and signature recognition. Based on current technologies adopted by both government and private entities, fingerprint and facial photographic images are the most widely used form of biometric data. It should be noted that UNHCR’s Data Protection Policy (and forthcoming Policy on Identity Management and Registration) consider biometric data to be particularly sensitive due to its innate, anatomical nature.

Record linkage: Record linkage is the task of identifying and linking records corresponding to the same entity in one or more data sources. This can be time-consuming and is not always accurate, unless unique identification numbers are used. Entities of interest include individuals, companies, families, households and geographic regions (see Chapter 4). The introduction of ID cards and personal ID numbers in many countries greatly facilitates the possibilities of fast and relatively inexpensive record linkage of individual data from different administrative and other sources.

Big data: Big data are defined as large-scale business and administrative data sets that are being used for secondary purposes other than those for which the data was originally collected, such as official statistics. They comprise large, complex and independent data sets, each with the potential to interact. An important aspect of big data is the fact that they cannot be handled with standard data management techniques due to the inconsistency and unpredictability of the possible combinations. Big data are data sources that can be generally described as: “high volume, velocity and variety of data that demand cost-effective, innovative forms of processing for enhanced insight and decision-making.”⁸⁵

Metadata: Descriptive information or documentation about statistical data, i.e., microdata and macrodata. Statistical metadata facilitates sharing, querying, and understanding of statistical data over the lifetime of the data.

a. Metadata for data sharing

573. The release of microdata should be accompanied by necessary metadata. This is the minimum information required to ensure the long-term viability and functionality of data. In the absence of such information, it is impossible to fully understand the data set and its contents. Metadata should include:
- a) **Source of data:** This describes the units for which the data are recorded, such as individuals, households, migrants, refugees, persons crossing borders and asylum seekers.
 - b) **Methods of data collection:** This describes the instruments and methods used, such as censuses, samples and administrative registers, and how they were developed. It also describes the sampling frame and sampling methodology (if applicable), as well as quality control during collection. Moreover, there this should describe whether the data were entered directly into computers or whether the data were first entered on paper and later computerized at the same or another office, perhaps at a higher geographical level.
 - c) **Structure of the data set:** This includes the relationships between certain files or pieces of information (records) it contains.
 - d) **Technical information:** This includes details of technical infrastructure (e.g. the computer system used to create the files), software used to create the files, data storage medium, and a complete list of files in the data set. There should also be an explanation about how the data are transferred between the involved institutions, and when or how often this is done.
 - e) **Variables and values, coding and classification systems:** It is desirable that the documentation includes the complete list of variables that appear in the data set, with a comprehensive description and

detailed information on the coding and classification systems used for the corresponding information, including how non-response is coded. It should specify the version of the classification system used and the corresponding bibliographic references.

- f) **Derived variables:** Often NSOs create new variables from original data. The method can be very simple and can be translated, for example, by aggregating data by age (e.g. in number of completed years), according to the relevant age classes for the data source in question. Other more complex methods may employ more sophisticated algorithms. The rationale for grouping or derivation of variables should be explained. Any imputation procedures should also be explained.
- g) **Weighting and extrapolation:** A complete list of the weighted and extrapolated variables must be provided, together with information on how these variables are obtained or calculated, and clearly stipulating the conditions for their applicability.
- h) **Confidentiality and anonymization:** It is important to specify whether the data contain confidential information about surveyed units. If so, please specify this data, as well as any contract governing the conditions of use of the data. In the case of anonymization of data to protect the identity of the respondents, the procedure adopted in this framework and its impact on the data should be clarified.

b. Technological resources required for data sharing

- 574. Access to data and the optimal use of data requires an appropriate technological infrastructure, broad international convergence of views on interoperability, and effective data quality control mechanisms. For security purposes, data, as well as metadata and related descriptions, should be protected against loss, destruction, modification and unauthorized access, intentional or otherwise, in accordance with explicit security protocols.
- 575. A suitable technological infrastructure must be set up to cover the different aspects of data archiving (documentation, cataloguing, dissemination, anonymization, conservation). International metadata standards have been developed to formalize documentation of microdata and related resources. These include the [Data Documentation Initiative \(DDI\)](#) and the [Dublin Core](#) standards, specialized metadata editors such as the [IHSN Microdata Management Toolkit](#) and the Norwegian Centre for Research Data's [Nesstar Publisher](#) management software.
- 576. The goal of a microdata catalogue is to provide users with easy access to data and documentation in a format that is convenient for users. Common formats are SPSS, STATA, SAS, and ASCII. This cataloguing must conform to the international standards of metadata using XML, to facilitate the production and maintenance of these catalogues; compliant with the DDI metadata standard and the software tools provided by IHSN, including the Microdata Management Toolkit and the NADA platform (available at www.ihsn.org).

Table 6.2: File formats currently recommended by the UK data archive for long-term preservation of research data

Type of data	Recommended file formats for sharing, re-use and preservation
Quantitative tabular data with extensive metadata A data set with variable labels, code labels, and defined missing values, in addition to the matrix of data	SPSS portable format (.por) Delimited text and command ('setup') file (SPSS, Stata, SAS, etc.) containing metadata information Some structured text or mark-up file containing metadata information, e.g. DDI XML file
Quantitative tabular data with minimal metadata A matrix of data with or without column headings or variable names, but no other metadata or labelling	Comma-separated values (CSV) file (.csv) Tab-delimited file (.tab) Including delimited text of given character set with SQL Data definition statements where appropriate
Geospatial data Vector and raster data	ESRI Shapefile (essential:.shp,.shx,.dbf;optional:.prj,.sbx,.sbn) geo-referenced TIFF (.tif,.tiff) CAD data (.dwg) tabular GIS attribute data
Qualitative data Textual data	eXtensible Mark-up Language (XML) text according to an appropriate Document Type Definition (DTD) or schema (.xml) Rich Text Format (.rtf) Plain text data, ASCII (.txt)
Digital image data	TIFF version 6 uncompressed (.tif)
Digital audio data	Free Lossless Audio Codec (FLAC) (.flac)
Digital video data	MPEG-4 (.mp4) motion JPEG 2000 (.jp2)
Documentation	Rich Text Format (.rtf) PDF/A or PDF (.pdf) OpenDocument Text (.odt)

Source: Managing and sharing data, UK archive, best practice for researchers, May 2011

3. Type of data files for sharing

577. Statistical data used in official statistics exist in several forms. Raw or non-anonymized data files, anonymized data files and aggregated data. Generally, only aggregated data are shared with users because of the special concerns over confidentiality, but for the purposes of compiling official statistics data files are shared between producers.
578. In most countries, the statistical law does not allow the disclosure of individual data, or microdata to users. In some cases, microdata files are developed for official statistics which protect the anonymity of the respondents. These can be disseminated if they meet standards that guarantee confidentiality. However, particular care must be taken in the case of refugee statistics to guarantee the anonymity of the respondents, as breaches will affect the trust of the providers of data and may compromise the ability of the statistical authorities to continue producing statistics.
579. It is important to note that data producers capture data in multiple formats. Hence, NSOs should work with data producers to develop data further and enable consistent data sharing and the maximization of data use. Parameters for data collection and sharing, such as the inclusion of safeguards to preserve privacy, confidentiality, quality and security of personal information in accordance with data collection standards should also be agreed upon in data sharing agreements.
580. Consideration should be given to three types of data files distinguished by their level of accessibility and their degree of anonymization: public use data files; licensed data files; and data files accessible only in secured centres (Dupriez & Boyco, 2010). Due to the advantages of using microdata, some NSOs (INSEE,

Statistics Canada, etc.) have developed anonymization techniques to share their databases under certain strict conditions.

a. Public use files

581. Publicly accessible microdata files are generally created from linking census data files and household surveys. In respect of general use for non-refugee statistics, these files can be consulted if the users agree to comply with certain basic rules on the conditions of use (e.g. sale prohibited). Some public use microdata files are available online unconditionally, but these data have been made publicly available because it is considered that there is no risk of direct or indirect identification of respondents. This is unlikely to be the case for refugee microdata. To prevent the identification of individuals, some records may sometimes be deleted from the files, such as very specific and easily identified cases. However, there are other methods to minimize the risk of disclosure while maximizing the information content of the data (e.g., aggregation of upper and lower extreme values, removal of variables for some respondents and data disruption techniques). Using these files for sharing of refugee statistics should be undertaken with extreme caution.

b. Licensed data files

582. Microdata files may be licensed for use by specific *bona fide* researchers of organisations under very specific terms and conditions. Some countries do not allow the export of certain microdata files to other countries. Where it is allowed, there are two options: firstly, data are provided to a researcher or a team for a specific purpose; secondly, data are provided to an organisation under a blanket agreement for internal use, e.g. to an international body or research agency. In both cases, the researcher's organisation must be identified, as must be suitable representatives to sign the licence. Licensed files are distinguished from public use microdata files by the fact that their distribution is restricted to users granted access authorization after the filing of a duly substantiated request and the signature of the Memorandum of Understanding to use of the data. In general, licensed files are also anonymized in order to minimize the risk of identifying individuals. However, they may contain potentially identifiable data in association with other files. Both direct identifiers and respondent names must be removed from licensed data sets. Licensed file dissemination is preferably based on the development and signing of a contract between the data producer and trustworthy users.

c. Data files accessible only in secure centres

583. Some files may be offered for consultation in secure centres (or data enclaves) under very strict conditions. It is a service equipped with computers that are not connected to the Internet or to an external network and from which no information can be downloaded via USB, CD/DVD or other types of readers. These data enclaves contain data that are particularly sensitive or that allows respondents to be identified directly. Users who wish to access such data sets do not necessarily have full access to it, but only in a restricted manner. They are invited to fill in an application form justifying that access to the data is for statistical or research purposes. The results obtained must be thoroughly scrutinized as part of a comprehensive disclosure control procedure.
584. Data sharing and the operation of a secure data centre are costly. It involves human resources, the laying out of premises and the purchase of special computer equipment. It requires staff with the necessary skills and time to carry out controls to eliminate any risk of disclosure. Data subjects should be familiar with data analysis methods, processing requests and managing file servers. Given the substantial operating costs and the high technical skills required, some statistical institutes or other official data producers have chosen to collaborate with academic institutions or research centres to establish and manage data enclaves.⁸⁶

Box 6.4: Example of Data Sharing in Canada

In Canada, line ministries provide the NSO (Statistics Canada) with files containing individual records on permanent residents (immigrants) and temporary residents (non-permanent residents) as well as current documentation to support these files. Each file also includes identifiable data such as unique client identifier, name, sex, date of birth, address, etc.

The schedule of delivery of these files along with the required security, storage, transmission and management of the data is clearly identified in a Memorandum of Understanding (MOU) between the NSO and the line ministries. Data exchanges between the two Departments is managed through a secure Electronic File Transfer (EFT) Service.

d. Data shared under an open licence

585. Data shared under an open licence allows users to copy, modify, publish, translate, adapt, distribute, or otherwise use the data in any medium, mode, or format for any lawful purpose, as long as the source of the information and the link to the licence is cited.

e. Restricted access programmes

586. Some NSOs use data files that can only be accessed by programmes that produce tables and statistical analyses. Users cannot download any microdata.

f. Sharing biometric data

587. Biometric data are being used, or are proposed to be used, for travel, immigration, nationality and national identification purposes. They are produced by other agencies other than NSOs (Interpol, immigration authorities, UNHCR, identification bureaus, etc.). The use of biometric data is increasingly seen as an efficient method of identifying individuals, however, some countries have restrictions on introducing and sharing biometric data. In particular, sharing biometric data between countries utilizes the greater database resources of partnering countries and can provide a more timely and effective mechanism to identify individuals whose identity are unknown or uncertain, and to combat identity fraud. This is particularly important in eliminating duplicates in data about asylum seekers, who may register in more than one country. In line with national privacy laws and international obligations, biometric data sharing has the potential to allow for efficient and quick identification and information exchange for processing refugee and asylum seeker claims. It assists in identifying vulnerable migrants, identifying asylum seekers or displaced persons who have already received protection from a third country (country of first asylum) or have been registered previously as a refugee by UNHCR. In the EU, an asylum fingerprint database EURODAC⁸⁷ has been used since 2003 for providing fingerprint comparison evidence to assist member state responsible for examining an asylum application made in the EU.
588. For statistical purposes, linking information from biometric data files and statistical surveys or censuses can improve data quality (avoid duplicate information, omissions, etc.), however, this should be carefully tested before being introduced as it may discourage participation from vulnerable migrants.

g. Sharing big data

589. Big data are another potential source of microdata on refugees, but introduces more problems into an already challenging set of requirements for data sharing (Toga & Dinov, 2015). In the biosciences, big data refers to large-scale data sets with a complex structure that arise from different sources in many fields such as genomics, physiology, imaging and health informatics. The core features of big data include data-size, data incompleteness, data incompatibility, data heterogeneity and incongruent sampling. Big data sharing requires innovative policies and clear guidelines that promote cooperation and trans-disciplinary interactions in spite of the technical, financial, security and other complexities introduced by big data.
590. Beyond data collection and storage, algorithmic intelligence is required. Algorithms are clearly defined steps for transforming well-defined input into desirable output. These algorithms can be encoded into a computer to give meaning (intelligence) to the mass of data generated by each individual and his

connected objects. It is machine “learning” and “problem solving”. This algorithmic intelligence aims to group, compare and relate data from various sources to create and characterize statistical groups - based on characteristic trends - in order to decipher and anticipate its behaviours in different environments. It is therefore necessary to contextualize data which alone will have no meaning, but which will acquire the full value in relation to a multitude of other data.

591. In theory, the production of official statistics by using big data could reduce respondents’ burden. But, these data are largely unusable without essential metadata, such as the origin of the sample and data collection parameters, which are necessary for optimal data reduction and [structure determination](#). In addition, the following conditions must be observed:
- a) whether the infrastructure contains viable data and provides flexible methods for data description and relationships among various metadata characteristics (e.g., provenance);
 - b) whether the database is well organized, algorithmically agile and the user access interface is easy to navigate;
 - c) whether the data are derived versions of raw data or the raw data themselves, which may prevent confidentiality and privacy issues for the suppliers of the data, and the concept of “extended” consent for big data cohort compilation;
 - d) whether clear curation and data management systems are in place governing quality control, data validation, authentication, and authorization are in place;
 - e) whether secure data transactions are efficient and support subsequent data derivation (generation of derived data).

F. Evaluation and quality assessment

592. Refugee statistics are particularly vulnerable to quality constraints as they are often drawn from several sources. These sources include administrative records collected for operational rather than statistical reasons, as well as surveys and censuses. In most situations, the agencies involved in collecting administrative data and those collecting data from surveys and censuses are different authorities, and in many countries UNHCR also plays a leading role in collecting data. In surveys, refugees may present sampling problems, as they are generally a rare group of people, or live in highly clustered localities. They can be difficult to enumerate for reasons of high personal mobility, extreme sensitivity to questioning or language difficulties. Moreover, camp populations are often excluded from national household surveys, which may result in underestimation.

1. Quality assessment framework

593. Official statistics on refugees will require periodic quality assessment to ensure that the statistical products about this population are fit for purpose. While there are several general definitions of quality, one of the most commonly used and succinct definitions is fitness for use or fitness for purpose (UN Statistical Commission, 2012). This fitness for purpose assessment is particularly important for countries publishing statistics on refugees for the first time. Many countries already have statistical quality assessment frameworks and quality assurance procedures in place in their national statistical systems, which might be used or extended for refugee statistics. Refugee statistics should be an early candidate for an initial assessment under these national frameworks. Statistical series on refugees should be the subject of a quality assurance plan. This plan should call for periodic reviews particularly after any re-engineering or major changes to the statistical production processes have taken place. For countries adapting their procedures to meet these recommendations on refugee statistics, a quality review both prior to and after the adoption of these recommendations is ideal.
594. For countries that do not yet have a quality assurance process in place, there are a variety of good practices and guidance to draw on. Many generic frameworks exist for assessing statistical quality, both internationally and in several regions of the world. At the international level there are the United Nations’ [National Quality](#)

Assessment Framework (NQAF) and the *IMFs Data Quality Assessment Framework* (DQAF). Regional quality frameworks include the Quality Assurance Framework (QAF) of the *European Statistical System* (ESS) which has been adapted internationally to fit other regional contexts. Regional codes of good statistical practice exist in many regions including Latin America and the Caribbean, Africa and the ASEAN regions. The broad organisation of these three generic frameworks are set out in the table below. All are based on the *Fundamental Principles of Official Statistics*, but tend to organize similar elements in different ways.

a. IMF's Data Quality Assessment Framework

595. The IMF's DQAF uses five dimensions of quality:

- a) **Prerequisites of quality**, including a supportive legal and institutional environment, adequate resources available for statistical programs, relevance of statistics, and quality as a cornerstone of statistical work.
- b) **Assurances of integrity**, covering professionalism, transparency and ethical standards.
- c) **Methodological soundness**, i.e. a methodological basis that follows internationally accepted standards, guidelines, and good practices.
- d) **Accuracy and reliability**, covering the sources of data used, for example the way in which administrative data are recorded, statistical techniques and statistical outputs.
- e) **Serviceability**, including adequate periodicity and timeliness, consistency, and a predictable revisions policy.
- f) **Accessibility**, i.e. that data and metadata are easily available and that adequate assistance is provided to users.

b. European Statistical System Quality Assessment Framework

596. The ESS QAF are organised in three categories as follows:

- a) **Institutional environment**, covering professional independence, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, impartiality and objectivity.
- b) **Statistical processes**, covering sound methodology, appropriate statistical procedures, non-excessive burden on respondents and cost effectiveness.
- c) **Statistical output**, covering the extent to which the statistics are relevant, accurate and reliable, timely, coherent, comparable across regions and countries, and readily accessible by users.

597. Each category contains several principles, which are assessed by a number of indicators. These are measured by means of a series of methods or questions at both an institutional level and at a product/process level.

c. United Nations' National Quality Assessment Framework

598. The *Guidelines for the Template for a Generic National Quality Assurance Framework (NQAF)* was prepared by the Expert Group on NQAF in response to a request by the United Nations Statistical Commission at its forty-first session in 2010. The template is intended to provide the general structure within which countries can formulate and operationalize national quality frameworks of their own or improve existing ones. NQAF covers the context for assessments and reporting arrangements in addition to the elements covered by the two other international frameworks. The NQAF is also accompanied by a useful quality checklist which can be adapted by countries as part of their quality review processes. This checklist is like a variety of tools now available for countries to assess the quality of their statistical systems, these are discussed in the following section.

Table 6.3: International Quality Frameworks

IMF – DQAF	UNSD - NQAF	ESS - QAF
0. Prerequisites of quality 0.1 legal and institutional environment, 0.2 resources available for the statistical program, 0.3 relevance, and 0.4 other quality management.	1. Quality context 1a. Circumstances and key issues driving the need for quality management, 1b. Benefits and challenges, and 1c. Relationship to other statistical agency policies, strategies and frameworks and evolution over time.	Institutional environment Principle 4: Commitment to Quality, Principle 5: Statistical, Confidentiality, and Principle 6: Impartiality and Objectivity.
1. Assurances of integrity 1.1 professionalism, 1.2 transparency, and 1.3 ethical standards.	2. Quality concepts and frameworks 2a. Concepts and terminology, and 2b. Mapping to existing frameworks.	Statistical processes Principle 7: Sound Methodology, Principle 8: Appropriate Statistical Procedures.
2. Methodological soundness 2.1 concepts and definitions, 2.2 scope, 2.3 classification/sectorization, and 2.4 basis for recording.	3. Quality assurance guidelines <i>3a. Managing the statistical system</i> [NQAF 1] Coordinating the national statistical system, [NQAF 2] Managing relationships, with data users and data providers, [NQAF 3] Managing statistical standards.	Statistical Procedures Principle 9: Non-excessive Burden on Respondents, Principle 10: Cost effectiveness.
3. Accuracy and reliability 3.1 source data, 3.2 assessment of source data, 3.3 statistical techniques, 3.4 assessment and validation of intermediate data and statistical outputs, and 3.5 revision studies.	<i>3b. Managing the institutional environment</i> [NQAF 4] Assuring professional independence, [NQAF 5] Assuring impartiality and objectivity, [NQAF 6] Assuring transparency, [NQAF 7] Assuring statistical confidentiality and security, [NQAF 8] Assuring the quality commitment, [NQAF 9] Assuring adequacy of resources.	Statistical output Principle 11: Relevance, Principle 12: Accuracy and Reliability, Principle 13: Timeliness and Punctuality, Principle 14: Coherence and Comparability, Principle 15: Accessibility and Clarity.
	<i>3c. Managing statistical processes</i> [NQAF 10] Assuring methodological soundness, [NQAF 11] Assuring cost-effectiveness, [NQAF 12] Assuring soundness of implementation, [NQAF 13] Managing the respondent burden.	
	<i>3d. Managing statistical outputs</i> [NQAF 14] Assuring relevance, [NQAF 15] Assuring accuracy and reliability, [NQAF 16] Assuring timeliness and punctuality, [NQAF 17] Assuring accessibility and clarity, [NQAF 18] Assuring coherence and comparability, [NQAF 19] Managing metadata.	

IMF – DQAF	UNSD - NQAF	ESS - QAF
4. Serviceability 4.1 periodicity and timeliness, 4.2 consistency, and 4.3 revision policy and practice.	4. Quality assessment and reporting 4a. Measuring product and process quality: use of quality indicators, quality targets and process variables and descriptions, 4b. Communicating about quality: quality reports, 4c. Obtaining feedback from users, 4d. Conducting assessments; labelling and certification, 4e. Assuring continuous quality improvement.	
5. Accessibility 5.1 data accessibility, 5.2 metadata accessibility, and 5.3 assistance to users.	5. Quality and other management frameworks 5a. Performance management, 5b. Resource management, 5c. Ethical standards, 5d. Continuous improvement, 5e. Governance.	

599. It is recommended that each NSO ensure that refugee statistics are assessed for their quality guided by international recommendations. Following this assessment steps should be taken to explain the results to users, and to make improvements to processes to ensure that quality issues, including accuracy and coherence of estimates, are resolved. The results of the quality assessment should be made available to the statistical governance body responsible, for corrective actions to be planned, and to users to improve the accessibility and interpretation of the published results.

2. Quality assurance standards for administrative systems

600. The following suggestions are intended to provide a short list of quality concerns likely to impact on administrative data, a full description of quality assurance procedures for refugee statistics will be provided in the forthcoming Compiler's Manual for Refugee Statistics.
601. **Coverage:** Any deviation from complete coverage, with no duplicate records is measured by "coverage error". Data from administrative records are likely to suffer from duplications and failure to remove cases from the records when individuals die, emigrate or change their refugee status. Surveys tend to suffer from selection bias and under-coverage as refugee camps and temporary settlements may be excluded from sampling frames, in other cases individuals or families of refugees are excluded from enumeration, because they are foreigners or temporary residents.
602. **Accuracy of registration** is achieved when the data items for each registered event have been accurately and completely filled in, i.e., when there are no response errors, duplications or missing items. The measurement of any deviation from correctness is called "content error". In register-based refugee statistics, accuracy means that data items in the statistical report have been accurately and completely filled in and that no errors have been introduced during the transcription of data from the records to the statistical report (if this is the case) or during the data transfer and processing stages (coding, editing, imputation and tabulation).
603. **Availability** means that the data that have been collected are filed, processed and stored in a system and are accessible to users, while protecting confidentiality in a user-friendly format.
604. **Timeliness** in registration means that every asylum registration, granting ending or revoking of refugee status that has occurred in the country (or area) has been reported for registration within the stipulated time allowance. In register-based refugee statistics, it means that for every registered event, a statistical report form has been forwarded to the agency responsible for compiling refugee and asylum statistics within the fixed time schedule established by the refugee statistics programme in that country. The publishing agency should also ensure that the statistics are published according to the agreed release calendar.

3. Direct methods of quality assessment: matching of records

605. Data from both population censuses and surveys can be used to compile estimates of refugee and refugee related populations, in order to obtain estimates of registration completeness. Independent lists, when matched against refugee and asylum registers, can provide indications of errors in registration and can lead to estimates of under-registration.
606. Sample surveys implemented in some countries have included questions on reasons for migration, date of migration and respondents' refugee status. A few countries have also included similar questions in their population census questionnaires. The estimates obtained from such sources can be used to check both stocks and flows estimates from administrative systems.
607. The direct method for the evaluation of the completeness of registration coverage and register-based statistics entails matching registration records with records containing some or all of the same information from an independent source (record linkage). Several independent data sources, such as schools, health or other administrative systems, may be used for making a direct evaluation. Some sources will obviously provide more complete or unbiased information on refugees and asylum seekers than others. A direct method can provide useful information on the sources of underreporting, particularly if the test is carefully designed.

4. Indirect methods: comparison of trends

608. The total number of asylum and refugees registered and reported to the statistical agency in any given period (e.g., a month, a quarter or a year) can be compared with the number registered and reported in a previous time period of similar duration. In most cases, the total number in the later time period will not differ greatly from that in the corresponding previous period, unless some notable event, such as a war, major natural disaster or epidemic that has taken place increases the flow of persons seeking international protection. Seasonal variations may limit the comparability of totals for periods less than one year unless the same seasonal periods are compared. In general, the method assesses the correctness of total events registered only within broad limits and usually cannot be used to estimate the number of unregistered events.

G. Recommendations for improving the coordination of systems of refugee statistics

609. It is important to improve and strengthen systems for refugee statistics. This section briefly describes some of the steps that may be undertaken to improve the coordination of statistical systems in respect of refugee statistics. Activities described in this section include developing national level action plans, engaging high-level political figures in improving refugee statistics, developing governance systems such as stakeholder committees, inclusion of refugees in NSDSs or Programmes of Statistical Work, capacity strengthening plans and studies and pilot studies on best practice.
- a) Efforts should be made to engage ministers and senior politicians at the international and regional levels to elevate refugee statistics as a priority for political and government agendas. For example, a regional ministerial conference could be called, aiming at agreeing on regional plans for improving refugee statistics.
 - b) Consideration should be given in the future to amending the SDGs to include targets and indicators relating to refugee and refugee related populations.
 - c) The priority given to refugee statistics in national statistical systems will need to be highlighted by regional and international statistics authorities, in order to mainstream refugee statistics into national work programmes and National Statistical Development Strategies.

- d) Following the completion of this work, a further inter-agency group on compiling refugee statistics should be established to agree on common concepts, classifications, and methodologies that NSOs can adapt.
- e) International agencies should publish full metadata pertaining to the production of national estimates and why this differs from any nationally published data. The production of international data should be based on the United Nations' [Principles Governing International Statistical Activities](#).
- f) A national statistical programme of work for refugee statistics, developed collaboratively by government bodies and agencies would create a shared commitment for producing refugee statistics that meet acknowledged quality standards. Refugee statistics should be mainstreamed into the NSDS process.
- g) National authorities should form technical governance bodies to strengthen refugee statistics, such as advisory groups, working groups, expert groups and common collaborative spaces to work on the harmonization of concepts, definitions, methodology and reporting on data collected.
- h) It may be necessary to improve the capacity of statistical units responsible for producing refugee statistics in both ministries and NSOs. This should include putting in place or reengineering business processes and appropriate technologies, increasing the trained human resources available. Donor agencies providing capacity building support to national authorities should consider adding refugee statistics as a priority for modernisation, and a lead agency should be identified for providing technical guidance.
- i) National statistical legislation, when reviewed, should meet international recommendations. In doing so it should resolve legal barriers to data sharing between agencies. This would include making provision for statistical agencies to access data from administrative records, where these do not exist.
- j) The websites of NSOs should include refugee statistics where these are not currently included.
- k) To improve the environment for data sharing and making more use of refugee data the following actions are required:
 - i) Interoperability of data platforms between agencies should be improved, including agreeing standards on metadata.
 - ii) Improve communication channels between relevant stakeholders for data sharing, and establish mechanisms to exchange anonymised data, and establish mechanisms for exchanging statistical information and data sharing.
- l) To improve access to refugee statistics at the national level:
 - i) Include refugee publications and statistical databases on national statistics websites.
 - ii) Provide training to the media and users in the concepts and definitions relating to refugee and asylum statistics.
 - iii) Improve access to data by making anonymised databases accessible to users, where possible supporting open microdata in secure data enclaves.

Endnotes

1. Estimates of the number of people displaced by conflict, violence, persecution, or human rights violations increased from 33.9 million in 1997 to 65.6 million in 2016. By the end of 2016 there were 17.2 million refugees under the mandate of UNHCR, 5.3 million Palestinian refugees registered by UNRWA, 40.3 million internally displaced persons (IDPs) and 2.8 million asylum seekers (UNHCR, 2017). During 2016 alone, 10.3 million people were newly displaced by conflict, violence, persecution, or human rights violations, including 6.9 million IDPs and 3.4 million refugees and asylum seekers (UNHCR, 2017).
2. The New York Declaration on Refugees and Migrants is available at: <http://www.refworld.org/docid/57ceb74a4.html>
3. Migration statistics have been discussed at several sessions of the Statistical Commission, but without a focus on forcibly displaced populations.
4. There is no standard definition of the 'quality' of statistics, which may encompass several criteria such as relevance, timeliness, credibility/integrity, completeness, accuracy/reliability, coherence, comparability, and/or accessibility/interpretability. These criteria are discussed in detail in Chapter 6.
5. EASO, Eurostat, Directorate-General Employment, Social Affairs and Inclusion, Directorate-General Migration and Home Affairs, MED-HIMS, and Arithmus Project.
6. For example, in some countries asylum seekers are enumerated when their application is accepted and in other countries, when they arrive in the country. In some countries, data do not include the applicants' family members, who are admitted under different provisions, while other countries count the entire family. Additionally, there are country variations in how refugees are accounted for in statistical estimates of population stocks.
7. UN General Assembly, *Convention Relating to the Status of Refugees*, 28 July 1951, United Nations, Treaty Series, vol. 189, p. 137, available at: <http://www.refworld.org/docid/3be01b964.html> [accessed 6 November 2017]
8. UN General Assembly, *Protocol Relating to the Status of Refugees*, 31 January 1967, United Nations, Treaty Series, vol. 606, p. 267, available at: <http://www.refworld.org/docid/3ae6b3ae4.html> [accessed 6 November 2017]
9. UN General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III), available at: <http://www.refworld.org/docid/3ae6b3712c.html> [accessed 6 November 2017]
10. UN General Assembly, *Convention Relating to the Status of Stateless Persons*, 28 September 1954, United Nations, Treaty Series, vol. 360, p. 117, available at: <http://www.unhcr.org/protection/statelessness/3bbb25729/convention-relating-status-stateless-persons.html> [accessed 6 November 2017]
11. UN General Assembly, *Convention on the Reduction of Statelessness*, 30 August 1961, United Nations, Treaty Series, vol. 989, p. 175, available at: <http://www.unhcr.org/protection/statelessness/3bbb286d8/convention-reduction-statelessness.html> [accessed 6 November 2017]
12. A stateless person is defined under article 1 of the 1954 Convention Relating to the Status of Stateless Persons as "a person who is not considered as a national by any State under the operation of its law". In other words, stateless persons do not possess the nationality of any State. Statistics referring to persons who fall under this definition though, may also include persons of undetermined nationality. UNHCR extends support to stateless persons by seeking to avoid and reduce statelessness. UNHCR has been entrusted by the General Assembly with fulfilling the functions under Article 11 of the 1961 Convention on the Reduction of Statelessness. As the agency designated to act as an intermediary between States and stateless persons, UNHCR provides expertise in the area of nationality and has been requested by its Executive Committee to promote accession to the 1954 Convention relating to the Status of Stateless Persons and the 1961 Convention. Statelessness may be an important reason for fleeing one's place of origin. However, most stateless persons have not fled their country of habitual residence. Because stateless persons who are not refugees are difficult to enumerate, reliable global estimates on the scope of statelessness are currently not available.
13. Home or own country is defined as the person's country of habitual residence.

14. For further details please refer to “Persons in need of international protection”, June 2017, available at: <http://www.refworld.org/docid/596787734.html>
15. UNHCR, Conclusion on International Protection No. 85 (XLIX) - 1998, 9 October 1998, No. 85 (XLIX) - 1998, available at: <http://www.refworld.org/docid/3ae68c6e30.html>
16. A core principle of international human rights and refugee law that prohibits States from returning individuals in any manner whatsoever to territories where they may be at risk of persecution, torture, or other forms of serious or irreparable harm. *Refoulement* can result, for instance, following interception operations, rejection at the frontier, or return to third countries (“indirect *refoulement*”). The most prominent expression of the principle of *non-refoulement* in international refugee law is Article 33(1) of the 1951 Convention. The principle also is part of customary international law and is, therefore, binding on all States whether or not they are parties to the 1951 Convention or other relevant international refugee law or human rights instruments.
17. Article 22 (7) American Convention on Human Rights, 1969 (ACHR); Article 12(3), African Charter on Human and Peoples Rights, 1986 (ACHPR); Article 27, *American Declaration of the Rights and Duties of Man*, 1948 (ADRD); Article 18, *Charter of Fundamental Rights of the European Union*, 2000, (CFREU).
18. Because the 1951 Convention was drafted in the wake of the Second World War, its definition of a refugee focuses on persons who are outside their country of origin or habitual residence and are refugees as a result of events occurring in Europe or elsewhere before 1 January 1951. As new refugee crises emerged during the late 1950s and early 1960s, it became necessary to widen both the temporal and geographical scope of the 1951 Convention. Thus, a Protocol to the Convention was drafted and adopted in 1967.
19. Organization of African Unity (OAU), *Convention Governing the Specific Aspects of Refugee Problems in Africa* (“OAU Convention”), 10 September 1969, 1001 U.N.T.S. 45, available at: <http://www.refworld.org/docid/3ae6b36018.html> [accessed 6 November 2017]
20. Regional Refugee Instruments & Related, *Cartagena Declaration on Refugees, Colloquium on the International Protection of Refugees in Central America, Mexico and Panama*, 22 November 1984, available at: <http://www.refworld.org/docid/3ae6b36ec.html> [accessed 6 November 2017]
21. Although the Declaration is not legally binding on States, most Latin American States apply the definition as a matter of practice and many have incorporated it into their national legislation. The Organization of American States (OAS), the UN General Assembly, and UNHCR’s advisory Executive Committee have all endorsed the Declaration.
22. Directive 2011/95/EU of the European Parliament and of the Council of 13 December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted <http://data.europa.eu/eli/dir/2011/95/oj>
23. The [Office of the United Nations High Commissioner for Refugees](#) (UNHCR), created by the United Nations General Assembly in the aftermath of the Second World War, is mandated by the General Assembly to protect and find durable solutions for refugees and other persons of concern under its mandate. Its activities are based on this framework of international law and standards. UNHCR’s Statute, the 1951 Convention and its 1967 Protocol give UNHCR a specific role in supervising implementation of international instruments on refugees. Paragraph 8 of UNHCR’s Statute gives the High Commissioner authority to supervise the application of international conventions for the protection of refugees, while Article VIII of the OAU Convention commits States to cooperating with UNHCR. In Europe, UNHCR’s supervisory responsibility is also reflected in EU law. At treaty level and in relevant Directives there are provisions for UNHCR to be consulted on asylum policy matters. Under Article 35 of the Convention and Article II of the Protocol States parties are obliged to cooperate with UNHCR in the exercise of its functions and, in particular, to help UNHCR supervise the implementation of the provisions found in those treaties. States parties to the 1951 Convention further undertake to provide information on laws, regulations, and decrees they may adopt to ensure the application of the Convention.
24. See UN doc. A/AC.96/830, 7 September 1994, paras. 8, 10-11, 31-32.
25. Under the first category, **Palestine refugees** are persons whose normal place of residence was Palestine during the period 1 June 1946 to 15 May 1948, and who lost both home and means of livelihood as

a result of the 1948 conflict. Palestine refugees, and descendants of Palestine refugee males, including legally adopted children, are eligible to register with UNRWA to access their services. In addition, UNRWA is mandated to provide services to persons displaced by the 1967 and subsequent conflicts, and their descendants.

26. Pursuant to Article 1D, paragraph 1 of the 1951 Convention Relating to the Status of Refugees, such persons who receive protection or assistance from organs or agencies of the United Nations other than the UNHCR, are excluded from the benefits of the 1951 Convention Relating to the Status of Refugees. Nevertheless, they remain refugees. Pursuant to Article 1D, paragraph 2, however, when protection or assistance provided by UNRWA is considered to have ceased without their position being definitively settled in accordance with relevant General Assembly resolutions, they shall ipso facto be entitled to the benefits of the 1951 Refugee Convention. Among other things, this is interpreted to mean that in the event that Palestine refugees are no longer able to receive protection or assistance from UNRWA because they are outside of UNRWA's area of operation and unable to avail themselves of UNRWA's assistance or protection for reasons beyond their volition or control they may benefit from the 1951 Convention Relating to the Status of Refugees. They may also fall under the mandate of UNHCR based on the UNHCR Statute. This accounts for the second category listed above.
27. The third category concerns Palestinian refugees who were never displaced by any of the past conflicts and were never eligible to receive services from UNRWA, but who, owing to well-founded fear of persecution in their country of former habitual residence for one of the reasons set out in Article 1A of the 1951 Convention, is a refugee under the mandate of UNHCR.
28. For statistical purposes, UNRWA is the only entity that is mandated to report on the number of Palestine refugees registered with the Agency. UNHCR and national asylum offices report on the number of refugees of Palestinian origin, including Palestine refugees, outside of UNRWA's area of operations.
29. In the EU system, the legal term 'applicant' is used, as laid down in the so-called [Asylum Procedures Directive](#), to describe a third-country national or a stateless person requesting protection from a Member State "who can be understood to seek refugee status or subsidiary protection status, and who does not explicitly request another kind of protection [not refugee status or subsidiary protection], that can be applied for separately". In that sense 'applicant' is a narrower category than an asylum seeker as it in principle requires that a request for protection was made, expressing and communicating the need of protection. As with "asylum seekers" a person remains an "applicant" until a final decision is taken in their case meaning that there is no further possibility of appeal. A person who has been granted a form of protection with a final decision is either a refugee or a beneficiary of subsidiary protection, while an application can also be refused without granting any form of protection, if there are no grounds for protection found in the case. In both situations, the person is not an applicant anymore in the legal meaning of the term. Furthermore, the EU asylum acquis introduces a differentiation between making an application and lodging an application. Making of an application refers to all actions, including informal ones, where a person makes known and expresses their need for international protection. Lodging of an application concerns an official process where all formal requirements. This differentiation may become important at times of high influx with numerous applications where a backlog may build with a long time lapsing between applications made can be formally lodged, while a person who made an application is already considered to be an applicant and is entitled to rights deriving from this status.
30. See for further info UNHCR, *Guidelines on International Protection No. 12: Claims for refugee status related to situations of armed conflict and violence under Article 1A(2) of the 1951 Convention and/or 1967 Protocol relating to the Status of Refugees and the regional refugee definitions*, 2 December 2016, HCR/GIP/16/12, available at: <http://www.refworld.org/docid/583595ff4.html>
31. For more information see: UNHCR, *Providing International Protection Including Through Complementary Forms of Protection*, 2 June 2005, EC/55/SC/CRP.16, available at: <http://www.refworld.org/docid/47fd9d49d.html>
32. For more information see: UNHCR, *Guidelines on Temporary Protection or Stay Arrangements*, February 2014, available at: <http://www.refworld.org/docid/52fba2404.html>
33. Council Directive 2001/55/EC of 20 July 2001 on minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof, available at: <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32001L0055>

34. There is no single, universally agreed definition of what constitutes a family, but for many states this usually includes the parents and their children under the age of 18. UNHCR, encourages a culturally sensitive approach which takes into account that flight may lead to separation and loss of extended family members who are in close relationships of dependency. This is why it is important to adopt a more inclusive definition, beyond what is known as the traditional “nuclear family”.
35. UNHCR, Guidelines on Policies and Procedures in dealing with Unaccompanied Children Seeking Asylum February 1997, <http://www.unhcr.org/3d4f91cf4.pdf>
36. United Nations, Department of Economic and Social Affairs (1998). Recommendations on Statistics on International Migration, Revision 1. Sales No. E.98.XVII.14. [UNSD1998]; see also UNPD2012_ ToolkitOnInternationalMigration.pdf
37. Home country means the country of former habitual residence, which may not be the country of citizenship. Former habitual residence may apply to the country of the refugee’s parents or grandparents.
38. This can include those granted permanent resident status as family members of a protected person, who were living abroad at the time of application and whose application for permanent residence was considered concurrently with that of the protected person. A number of countries distinguish are three categories of refugee, refugees, resettled refugees and refugee family members abroad. For example in Canada there is: ‘Protected person in Canada’, ‘Dependant abroad of a protected person in Canada’ and ‘Resettled refugee’. See: <http://www23.statcan.gc.ca/imdb/p3VD.pl?Function=getVD&TVD=323293&CVD=323294&CPV=3&CST=02122016&CLV=1&MLV=4>
39. United Nations, Department of Economic and Social Affairs (1998). Recommendations on Statistics on International Migration, Revision 1. Sales No. E.98.XVII.14. [UNSD1998]; see also UNPD2012_ ToolkitOnInternationalMigration.pdf
40. See also the different flows within the asylum procedure as outlined in *EC 1998 Draft Manual on Statistics of Asylum Seekers and Refugees* and the in the section on “Differences between legal and statistical definitions” in this handbook.
41. Although this aggregate will not account for persons who flee and return more than once over the specific time period – or in general can give any information about the status of the returned citizens (for example if they stayed within the country or emigrated without returning again).
42. See: https://undataforum.org/WorldDataForum/wp-content/uploads/2017/01/TA3.10_Juran.Migration-from-Census_UNFPA-1.pdf
43. Sampling Plans for MED-HIMS Surveys. European Union, Paris; Eurostat/MEDSTAT, Luxembourg; World Bank, Washington, D.C.; United Nations Population Fund, New York; Office of the United Nations High Commissioner for Refugees, Geneva; League of Arab States, Cairo.
44. This EU-LFS ad-hoc module provides statistics on specific topic concerning the labour market outcomes of migrants including refugee and refugee related populations. This ad-hoc module was already carried out in 2008 and the next module is planned for 2021. More information can be found at: <http://ec.europa.eu/eurostat/documents/1978984/6037334/ESS-agreement-LFS-2014-module-with-annex-EN.pdf> and http://ec.europa.eu/eurostat/statistics-explained/index.php/EU_labour_force_survey_-_ad_hoc_modules. An example of statistical analysis based on the 2014 ad-hoc module can be found at: <http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7921&type=2&furtherPubs=yes>
45. For example, in Belgium the population register, register of foreigners, register of residence permits and database recording asylum applicants and decisions taken during the asylum procedure are integrated in a unique database called the National Register, “Registre national/ Rijksregister” in French / Dutch.
46. Are all groups and sub-groups of the population of concern included (asylum seekers, all recognised refugees including those who may be citizens such as UNRWA refugees, persons benefiting from other form of protection registered - e.g. subsidiary protection, humanitarian status, persons with a refugee background...) and covered by the identified database(s)?

47. This is the case in several EU Member States, for example in Belgium, asylum seekers whose applications are still pending are registered in a specific sub-register called "Waiting Register" ("Registre d'attente/Wachtregister" in French and Dutch, and they are *de facto* excluded from most national population statistics because most of the data producers have no access to this sub-register.
48. In Belgium, until 31 December 2015, national asylum statistics reflected the number of applications and excluded minors as well as some spouses.
49. For a more extensive review of the related literature please refer to D'Orazio et al. 2006 and the references therein.
50. For more information on the New York Declaration, please visit: <http://www.unhcr.org/new-york-declaration-for-refugees-and-migrants.html>
51. For more information on the CRRF, please visit: <http://www.unhcr.org/comprehensive-refugee-response-framework-crrf.html>
52. UN High Commissioner for Refugees (UNHCR), Refugee Resettlement. An International Handbook to Guide Reception and Integration, September 2002, available at: <http://www.refworld.org/docid/405189284.html> [accessed 24 October 2017]
53. Communication from the Commission to the Council, the European Parliament, the European Economic and Social committee and the Committee of the Regions - A Common Agenda for Integration - Framework for the Integration of Third-Country Nationals in the European Union/* COM/2005/0389 final */<http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52005DC0389>
54. OECD (2011), How's Life?: Measuring well-being, OECD. <http://dx.doi.org/10.1787/9789264121164-en>
55. See: <https://unstats.un.org/sdgs/iaeg-sdgs/metadata-compilation/>
56. See: <http://www.migration.org.za/newcms/uploads/docs/report-23.pdf>
57. See: http://laborsta.ilo.org/applv8/data/INFORMAL_ECONOMY/2012-06-Statistical%20update%20-%20v2.pdf
58. ILO 14th International Conference of Labour Statisticians, 1987, <http://www.ilo.org/global/statistics-and-databases/statistics-overview-and-topics/status-in-employment/current-guidelines/lang--en/index.htm>
59. More information on the construction of the Wealth Index can be found at: http://www.dhsprogram.com/programming/wealth%20index/Steps_to_constructing_the_new_DHS_Wealth_Index.pdf
60. From the WHO Constitution. The Constitution was adopted by the International Health Conference held in New York from 19 June to 22 July 1946, signed on 22 July 1946 by the representatives of 61 States (Off. Rec. Wld Hlth Org., 2, 100), and entered into force on 7 April 1948. Amendments adopted by the Twenty-sixth, Twenty-ninth, Thirty-ninth and Fifty-first World Health Assemblies (resolutions WHA26.37, WHA29.38, WHA39.6 and WHA51.23) came into force on 3 February 1977, 20 January 1984, 11 July 1994 and 15 September 2005 respectively and are incorporated in the present text.
61. The NSO is the leading organization responsible for the collection, processing and dissemination of official statistics. In some countries, the NSO is known as the Central Bureau of Statistics, Central Statistical Office, National Bureau of Statistics, National Statistics Institute or similar.
62. UNHCR records are collected on behalf of governments, but this function is gradually transferred to national systems as the countries build their capacities to maintain refugee records.
63. See: https://unstats.un.org/unsd/demographic/meetings/egm/NewYork/2014/P&R_Revision3.pdf
64. The Fundamental Principles of Official Statistics were adopted by the United Nations Statistical Commission at its Special Session of 11-15 April 1994. They were reaffirmed by the Statistical Commission in March 2013, endorsed by the Economic and Social Council in July 2013 (Resolution 2013/21), and endorsed by the United Nations General Assembly in January 2014 (Resolution A/RES/68/261). They can be found on UNSD's website at: <https://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>

65. The members of CCSA comprise international and supra-national organisations whose mandate includes the provision of international official statistics. The terms of reference of CCSA can be found at: <https://unstats.un.org/unsd/acsub/TOR%20final.pdf>
66. The *Principles Governing International Statistical Activities* can be found on UNSD's website at: https://unstats.un.org/unsd/acsub-public/principles_stat_activities.htm#fn1
67. Specifically the mandate of the Statistical Commission is to assist the Council in: (a) promoting the development of national statistics and the improvement of their comparability; (b) the coordination of the statistical work of specialized agencies; (c) the development of the central statistical services of the Secretariat; (d) advising the organs of the United Nations on general questions relating to the collection, analysis and dissemination of statistical information; and (e) promoting the improvement of statistics and statistical methods generally. Of particular importance is the Commission's "coordination function and the need to achieve an integrated system in the collection, processing and dissemination of international statistics" including "concerted action to assist the developing countries in strengthening their statistical systems".
68. There are five United Nations Regional Commissions: *United Nations Economic Commission for Europe (UNECE)*, *United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)*, *Economic Commission for Latin America (ECLAC)*, *United Nations Economic Commission for Africa (ECA)* and *United Nations Economic and Social Commission for Western Asia (UNESCWA)*.
69. Regulation (EC) No 862/2007 of the European Parliament and of the Council of 11 July 2007 on Community statistics on migration and international protection and repealing Council Regulation (EEC) No 311/76 on the compilation of statistics on foreign workers, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007R0862>
70. Eurostat database on Asylum and managed migration statistics: <http://ec.europa.eu/eurostat/web/asylum-and-managed-migration/data/database>
71. Further information about the Dublin Regulation can be found at: <http://data.europa.eu/eli/reg/2013/604/oj>
72. The Partnership in Statistics for Development in the 21st Century (PARIS21) suggests the following working definition: "the totality of statistics produced and published by national government" (Edmunds, 2005). For more information see: <https://www.paris21.org/sites/default/files/2101.pdf>
73. United Nations Statistics Commission 1994.
74. Regulation (EC) no 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics, available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009R0223&from=EN>
75. Good practices and recommendations for the use of information technology in population and housing censuses (E/ESCAP/CPR(4)/7).
76. The Africa Addendum to the Principles and Recommendations for Population and Housing Censuses Revision 2.
77. List of EU legal acts on population and housing censuses available at: <http://ec.europa.eu/eurostat/web/population-and-housing-census/legislation>
78. Article 24 states that "In order to reduce the burden on respondents, the NSIs and other national authorities and the Commission (Eurostat) shall have access to administrative data sources, from within their respective public administrative system, to the extent that these data are necessary for the development, production and dissemination of European statistics. The practical arrangements and the conditions for achieving effective access shall be determined where necessary by each Member State and the Commission, within their respective spheres of competence."
79. Vital statistics comprise the collection of statistics on vital events referring to live births, deaths and foetal deaths, dual events including marriages, registered partnerships, separations, divorces, legal dissolutions of registered partnerships and annulment of marriages in a lifetime of a person, as well as the relevant characteristics of the events themselves and of the person and persons concerned.
80. Source: Rationale for the group of provision of statistics - EASO.

81. This definition is drawn from opendatahandbook.org
82. The Government of Canada's Open Data Portal is a public website with structured data that is machine-readable, freely shared, used and built on without restrictions, see: <http://open.canada.ca/en>
83. More information available at: <http://ec.europa.eu/eurostat/web/research-methodology/statistical-confidentiality>
84. See: Principle 3 of *Managing Statistical Confidentiality and Microdata Access – Principles and Guidelines of Good Practice* (UNECE, 2007).
85. See: <https://statswiki.unece.org/pages/viewpage.action?pagelId=77170614&preview=/77170614/80805923/Big%20Data%20HLG%20Final%20Published%20Version.docx>
86. Examples of these include: the MCRDC (census research centre), a joint project of the American Census Bureau and the University of Michigan (www.isr.umich.edu/Src/mcrdc/); The National Opinion Research Center (NORC) at the University of Chicago (www.norc.org/ DataEnclave); The Statistics Canada RDC program (www.statcan.gc.ca/rdc-cdr/index-eng.htm); and the Research Data Center of the US National Center for Health Statistics (<http://www.cdc.gov/nchs>).
87. More information available at: https://ec.europa.eu/home-affairs/what-we-do/policies/asylum/identification-of-applicants_en

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Expert Group on Refugee and Internally Displaced Persons Statistics

International Recommendations on Refugee Statistics

The International Recommendations on Refugee Statistics (IRRS) provide a set of specific recommendations that countries and international organizations can use to improve the collection, collation, disaggregation, reporting, and overall quality of statistics on forcibly displaced populations.

Until recently there were no universally recognized international recommendations on compiling official statistics on refugees. Many national and international agencies had developed their own in parallel. To coordinate and agree a global consensus on the topic and against the backdrop of a growing number of forcibly displaced persons, the UN Statistical Commission (UNSC) set up an Expert Group on Refugee and IDP Statistics (EGRIS) to draft international recommendations on refugee statistics and a report on the feasibility of producing comparable technical recommendations for internally displaced persons (IDPs)*. Approximately 40 countries and 15 regional and international organizations were involved in EGRIS and the drafting of the six chapters of the IRRS. The work was led by a steering committee, comprising Eurostat, United Nations High Commissioner for Refugees, Turkish Statistical Institute and Statistics Norway. The recommendations were agreed by UNSC in March 2018.

The objective of these recommendations is “to improve statistics on an important aspect of international migration and to improve common information about a situation with a significant impact on global welfare” (United Nations, 2015). The recommendations are intended to help improve national statistics on the stocks and flows of refugee and refugee related populations in their countries, and to help make such statistics comparable internationally. This in return will provide the foundation for improved policies, programs and decisions in areas that affect refugees.

* The “Technical Report on Statistics of Internally Displaced Persons: Current practice and recommendations for improvement” is presented in a separate document.

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