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Use of longitudinal data for migration statistics

Circular migration: new migration topics and revised tables

Note by Eurostat*

Abstract

In response to the growing interest on circular migration in academic and policy circles, in recent years the statistical community has worked to properly define and measure this phenomenon. On the basis of a report from a UNECE task force, an officially agreed definition of circular migration was endorsed in October 2016 by the Conference of European Statisticians. The following step has been the conceptual development of tables on circular migration, which have been presented to the previous UNECE-Eurostat Work Session on Migration Statistics in 2017. Thanks to the efforts of volunteering countries, those provisional tables have then been tested, providing useful input for further developments. This working paper follows up those actions by proposing new migration topics, presenting a revised version of recommended tables on circular migration, and discussing practical issues in their production.

*Prepared by Mr Giampaolo LANZIERI (Eurostat)

I.   Introduction

1.   This working paper builds upon previous work done on circular migration. On the basis of the report[1] from the UNECE Task Force on Measuring Circular Migration, an officially agreed definition of circular migration was endorsed in October 2016 by the Conference of European Statisticians. The following step has been the conceptual development of tables on circular migration, which have been presented to the UNECE-Eurostat Work Session on Migration Statistics in 2017[2]. Thanks to the efforts of volunteering countries[3] (Belgium, Germany, Italy, Finland, Sweden and Norway), those provisional tables have then been tested for significance of the results and for possible difficulties in production.

2.   Based on that test, it has been possible to identify a few peculiar issues in the statistical production from registers as well as to define new topics applicable in migration statistics, providing the related technical specifications. The provisional set of tables has then been further refined and it is here proposed with a new structure ready for implementation in regular production. All these aspects are described in the current paper, which enhances and expands a previous version presented to the Eurostat Working Group on Population Statistics in April 2018[4].

II.   New migration topics

3.   The test on the provisional tables for circular migration has been the occasion to improve conceptually some of the variables which were used, to the benefit of a clearer understanding of which phenomenona are actually covered and the way they interrelate. The following paragraphs provide the technical specifications of two new topics for the stocks and one topic for the flows in migration statistics.

A. (International) Migration status / ever resided abroad (MST)

4.   This topic applies only to change of residence between countries, i.e. to international migration. A person who has ever resided abroad is a person who has undertaken at least one migration and thus included in the total number of person having immigrated to the country before the reference time. The breakdown applies to the entire population. The following table provides two levels of detail to break down the topic, 'low' (MST.L) and 'high' (MST.H):

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[1] Report "Defining and Measuring Circular Migration", available at: https://www.unece.org/index.php?id=44717.

[2] See the Working Paper 11: "A set of tables for circular migration". Available at:
       https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.10/2017/mtg1/2017_UNECE_Mi
       gration_WP_11_Eurostat_Lanzieri.pdf.

[3] This note would have not been possible without the kind contributions of Patrick Lusyne (STATBEL); Claire
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       produce data on migration according to the provisional tables and have provided useful feedbacks on
       the difficulties they met.

[4] Working Paper ESTAT/F2/POP/2018/WG1/12/GL of 23 March 2018: "Circular migration: outcomes of the test on
       the provisional tables".

MST.L	MST.H
1. Never resided abroad	1.0. Never resided abroad
2. Ever resided abroad	
	2.1. Immigrated
	2.2. Returned

5.   It should be noted that whenever data are meant to provide the size of the 'stock of migrants' (i.e., the number of persons who have experienced at least one migration and currently residing in the reporting country), this is actually the correct breakdown to be applied to the whole population. Any other measure, such as based on the country of birth or on the citizenship, is only an approximation.

6.   The topic is present also in the Conference of European Statisticians Recommendations for the 2020 Censuses of Population and Housing, published in 2015 by the UNECE[5], as core topic *'Ever resided abroad and year of arrival in the country'*, but where the focus is somehow shifted to the duration of stay in the reporting country following immigration. The topic *'Migration status'* remains instead centred on the pure identification of the international migrants. The name of the topic should also help to clarify what is actually meant by *migration status*, preventing confusions due to the adoption of different alternative concepts related to migration[6] .

7.   From the terminology point of view, the wording 'migrant' would better be applied to persons *undertaking* a migration (in the reference period). For those who *had undertaken* a migration in the past (as compared to the reference time), it is here preferred the label 'persons ever resided abroad'. Therefore, the latter should be used for data on stocks, whilst the former ('migrant') for data on flows. This would help to shed clarity whenever data on the 'number of migrants' are requested. Thus, there would be a number of *migrants* in a given year (flow), which modifies the size of the group of *persons ever resided abroad* at the end of the same year (stock)[7].

8.   Crossing the migration status with the country of birth (COB) of the people allows distinguishing those persons who have returned to the country following a previous emigration (the so-called 'return migration') by those who have firstly migrated to the country (immigrated persons). Thus, in the former case the first migratory event (as for the reporting country) concerning the person was emigration, in the latter it was immigration. In consideration of the

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[5] Available at: https://www.unece.org/publications/2020recomm.html

[6] 'Migration status' is sometimes intended as the fact of being born abroad, or the holding of a foreign citizenship, or a foreign background, or as the reference to the *legal* migration status (i.e., a valid permit of stay), etc.

[7] This implies that very common term *migrants stock / stock of migrants* is a contradictory wording. In this paper is then written within apostrophes to remind the implicit miswording, but still used given its widespread understanding.

relevance of such additional breakdown, this is added to the topic 'Migration status', although strictly speaking it is[8]:

$$MST.L \times COB.L = MST.H.$$

being 'immigrated' the foreign-born persons ever resided abroad, and 'returned' those native-born persons having resided abroad.

9.   The Figure 1 shows an example of breakdown by migration status applied to the volunteering countries. It should be noted that the figure reports the correct 'migrants stock' in a country, which is different from the number of those born abroad or with foreign citizenship. The Figure 2 then focuses on those persons who have ever resided abroad to distinguish between 'immigrated' and 'returned', which allows to appreciate the more or less relevant share of return migration in the general immigration to the selected country.

B. Circularity status (CST)

10.   The 'circularity status' aims to identify those persons whose migratory past can be qualified as circular. This topic applies to the population, resident in the reporting country on a selected date, having migrated at least once in their life; in common words, it applies to the 'stock of migrants'. When combined with the 'Migration status' (MST), it applies to the entire population[9]. Its breakdown focuses on immigrations, because this is logically the last migratory event which could have occurred to the person. As compared to the version used for the test, the breakdown is simplified by align it to the one used for the flows (see below).

11.   The following table reports the 'low-' and 'high-detail' breakdowns for this topic. It should be noted that its application is based on a 10-year time window, consistently with the adopted definition of circular migration.

CST.L	CST.H
1. Non-circular status	
	1.1. One immigration only, whenever it occurred
	1.2. Two or more immigrations, but only one in the last10 years
2. Circular status	
	2.1. Two immigrations in the last10 years (+ any number earlier)
	2.2. Three or more immigrations in the last10 years (+ any number earlier)

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[8] The breakdown COB.L simply splits the total population in native-born and foreign-born persons. See also the Eurostat manual "Dataset Definition for Demographic and Migration International Data Collections" (current version 3.0 of 19.4.2018).

[9] The category MST.1 'Never resided abroad' is in fact the virtual category 'non applicable' in the circularity status.

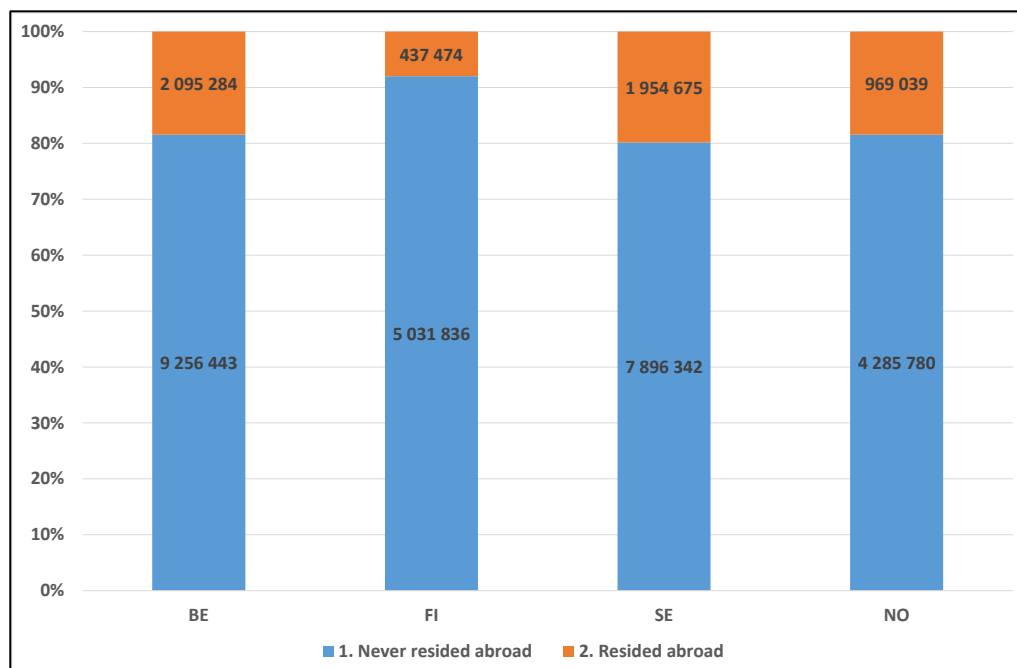Figure 1: Population by migration status on 1.1.2017 (low detail)

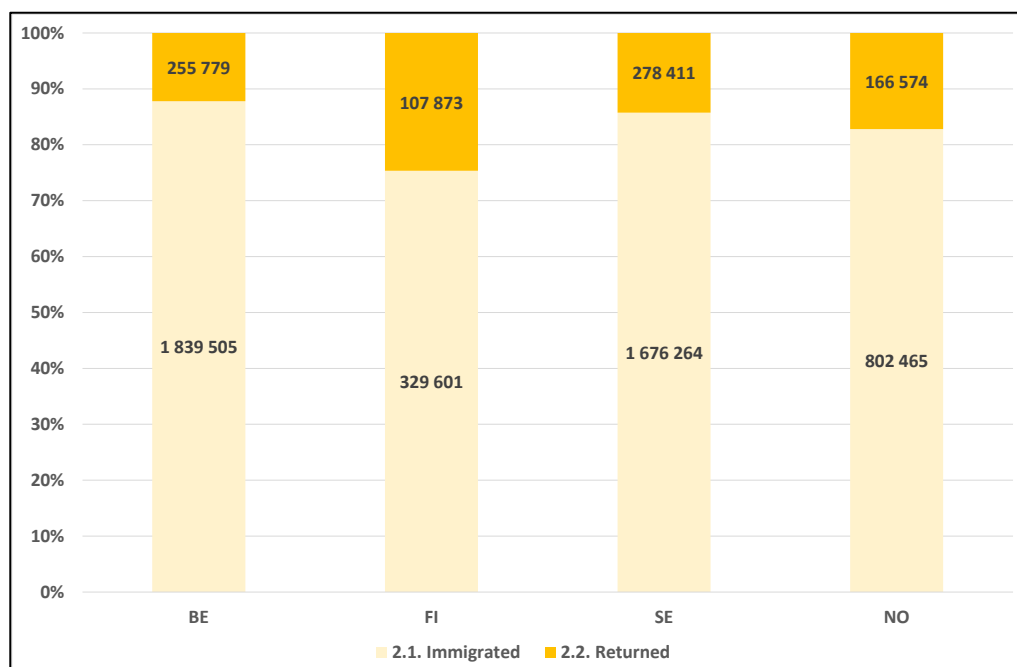Figure 2: Population ever resided abroad by migration status on 1.1.2017

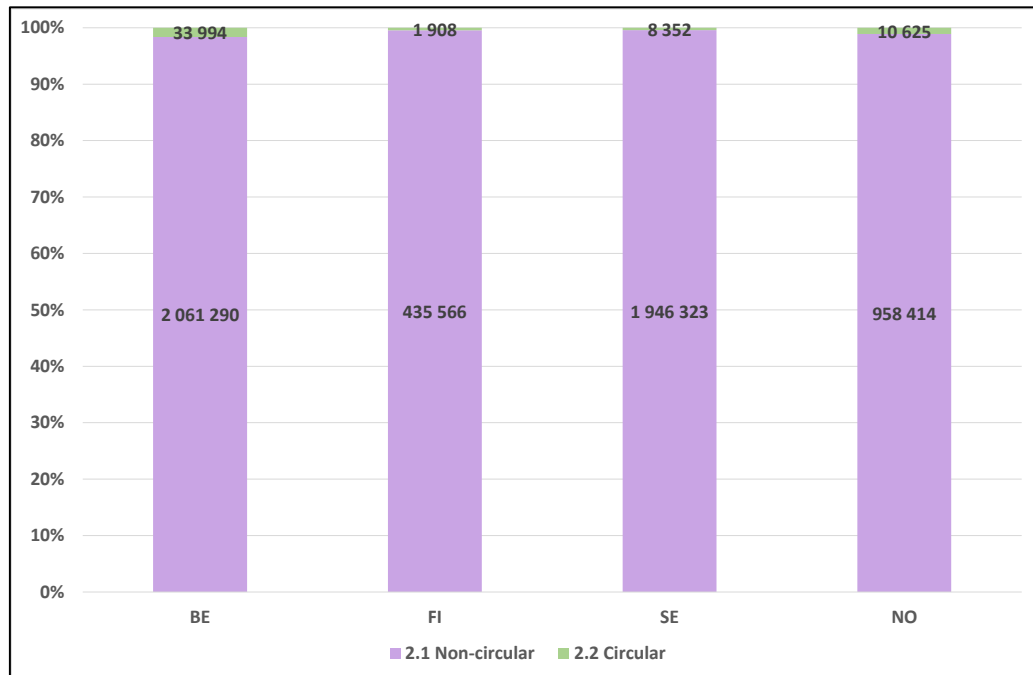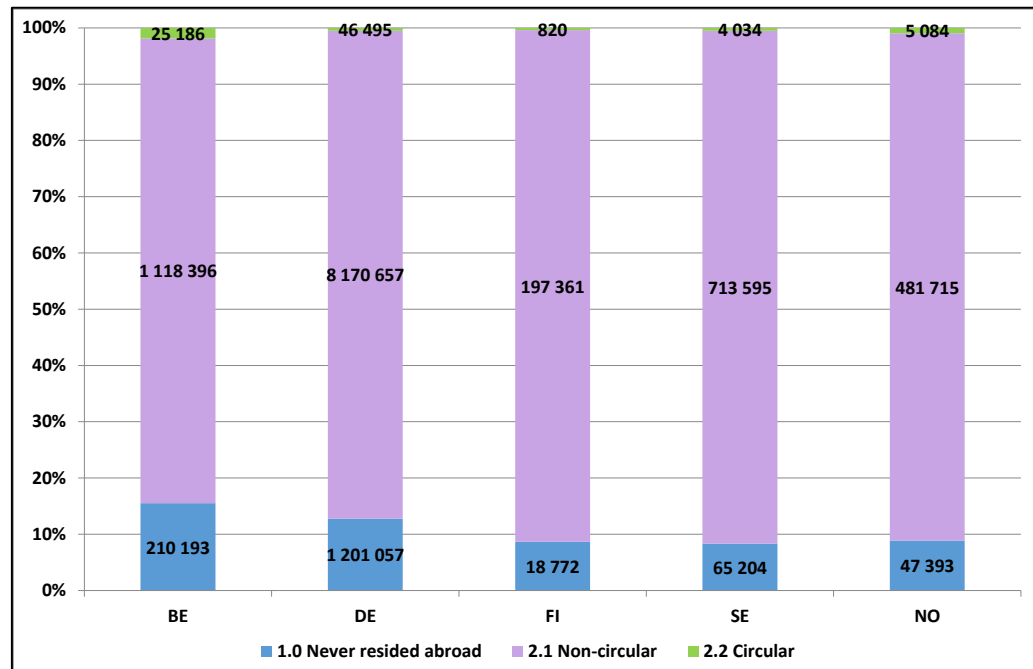Figure 3: Population ever resided abroad by circularity status on 1.1.2017

Figure 4: Foreign citizens by migration status and circularity status on 1.1.2017

12.   The Figure 3 shows a simple example of the application of the 'low-detail' breakdown of circularity status to the population who has resided abroad at least once in their life (the 'migrants stock'). The Figure 4 is a step further ahead, in that it crosses the data on circularity status with those on migration statuses (to cover the entire population) and with the citizenship, selecting the sub-population with foreign citizenship. By doing so, it is possible to appreciate to what extent the number of foreign citizens includes persons who have actually never migrated in their life, as well as to distinguish those foreign migrants (note that some of them may have been born in the country) who have repeatedly entered the reporting country.

13.   A possible option would be to merge the two topics 'migration status' and 'circularity status' in a single topic on circularity directly applicable to the entire population. The choice has been made here to keep these two topics separated because this allows a clearer statistical focus on the phenomenon of interest (whether a person has ever migrated and whether a migrant can be considered circular) which, although strictly connected, may well be used in different policy contexts.

C. Migration circularity (MIC) / Immigration circularity (IMC) / Emigration circularity (EMC)

14.   This topic refers to the migratory events, i.e. to the flows occurring in the reference period. The breakdown applies either to the immigration or to the emigration, not to both at the same time. Consequently, the labels of the categories should be adapted to the typology of flow being reported (immigration or emigration). To make it clearer, the topic can be split in two related sub-topics: 'Immigration circularity' (IMC) and 'Emigration circularity' (EMC). Such a distinction is however only for the sake of clarity in the tables, as from the conceptual point of view there is no 'direction' of the circular process in this breakdown, because from the flows in the qualification period it is not possible to identify those whose very first migration was outwards or not[10] (thus the 'circular emigrants' and the 'circular immigrants'[11]). In fact, the breakdown here proposed simply aims to identify those flows which are part of a circular migration process, consistently with the rolling time window of 10 years adopted in the definition of circular migration. Therefore, the distinction between emigration and immigration only refers to the last migration, the one statistically captured in the reference year, and not to the 'direction' of the circular migration. Applying the breakdown allows to assess the share of circularity in the reported migration flows, either entering or leaving the country. Coherently with this rationale and in consideration of the possible application to the extended definition of circular migration, which includes short-term migration, the description of the categories is based on the event (i.e., immigration) rather than on the person (i.e., immigrant).

15.   The following table reports the 'low-detail' and 'high-detail' breakdowns for the migration circularity, the latter helping also in clarifying the content of the lower-level categories.

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[10] Let assume that a person has arrived first time in the country 15 years earlier than the reference year, and that the same person has successively emigrated, re-immigrated and finally emigrated again in the previous 10 years, with the last migration in the reference period. The person will appear in the table referring to 'emigration circularity' although (s)he had actually first immigrated to the reporting country.

[11] Their identification indeed requires the lifetime migration history of the persons. The crossing by country of birth may help in this regard, but it is not necessarily precise, because a person may start its circular migration process from a country other than the one of birth.

MIC/IMC/EMC.L	MIC/IMC/EMC.H
1. Non-circular immigrations/emigrations	
	1.1. First immigration/emigration
	1.2. At least one previous immigration/emigration, but none in the last 10 years
2. Circular immigrations/emigrations	
	2.1. One previous immigration/emigration in the last 10 years (+ any number earlier)
	2.2. Two and more immigrations/emigrations in the last 10 years (+ any number earlier)

Note: it applies either to immigration or to emigration only, not to both. Delete the excluded flow from the labels.

D. Peculiar features of the new migration topics

1. Demographic balances

16.   As for the use of migration circularity in a demographic balance related to the stock of persons with circular status (i.e., the 'circular migrants'), it must be clarified that there is no easy application. In fact, the changes occurring during a selected period to the stock at the beginning of the period are of multiple natures. Considering for instance the category of persons with two immigrations in the last 10 years (CST.H.2.1), the changes in the following period are due to:

  i. Immigrations with a previous immigration in the last 10 years (IMC.H.2.1);

  ii. Emigrations with a previous emigration, but only those undertaken by persons with circular status at the beginning of the period (an undefined part of EMC.H.2.1);

  iii. Losses of circular status, due to the shifting ahead of the date of reference of the stock;

  iv. Deaths of persons with circular status at the beginning of the period.

17.   The case 16.ii needs additional explanation. In fact, there are two possible sub-cases, depending on whether in the qualification period (the previous 10 years) is present or not a second immigration. In the former sub-case, the person is part of the stock in CST.H.2.1 at the beginning of the period (because it is a person with two immigrations in the qualification period) and therefore the last emigration must be included in the demographic balance; in the latter sub-case, the person is <u>not</u> part of that stock and therefore this last migratory event must be ignored in that same demographic balance.

18.   There is another element of complication not taken into consideration in the list above: the qualification period for the flows in a given period is shifted one year backward as compared to the one for stocks at the end of the same period. For instance, for events occurring in 2016 the qualification period is 2006-2015[12], while for the circularity status at the end of 2016 (i.e., on 1 January 2017) is 2007-2016; it is instead the same qualification period of the stock at the end of 2015, thus for the circularity status at the beginning of the year 2016[13] .

19.   All in all, despite the symmetry between the breakdowns of circularity status and migration circularity, the computation of demographic balances incorporating information on circularity must be tackled with particular care and may involve conceptual difficulties not easy to overcome. This is out of the scope of the current paper and it may be the subject of a further note.

2.   Age threshold

20.   A complicacy in the topics related to circularity is that, by its own 'general' definition[14], the circularity can only be acquired after several years have elapsed[15]. Therefore, children at very young ages cannot be 'circular migrants'. A logic option would then be to consider the circularity as 'not applicable' to children up to a defined age threshold, such as 15 years old. This choice would apparently be consistent with an interpretation of circular migration as labour migration. However, in that case the time window for the qualification as circular migrant of a person aged 15 years would cover ages from 5 to 14, which would not be consistent with the interpretation above. A further shift of the age threshold would then be necessary, up to age 20 or 25. Considering the fact that this issue should concern only a limited number of cases (migrant children in very young ages whose accompanying parent is a circular migrant) and it does not apply to the 'extended' definition of circular migration, the choice is here made to drop any age threshold.

3.   Size of the stock and rolling time window

21.   Because the qualification period for circular migration is a 10-year rolling time window, the 'stock of circular migrants' could be not particularly relevant in terms of share on the total number of migrants. In fact, even assuming a relevant share of circular migrants in the flows, as the time window used for the qualification of circularity shifts ahead in time, a number of circular migrants belonging to the population of the country will change their status to non-circular. Therefore, the 'stock of non-circular migrants' will gain the immigrants who are not

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[12] This is based on §37 and §43 of the document on the set of provisional tables (see footnote 2).

[13] There is a further element of complication: if short-term migrations are taken into account, there may be more than one event in the reference period (e.g., the year 2016) and thus it would be appropriate to say that the qualification period for the flows is actually 2006-2016, because qualifying events may occur during the very same period of reference.

[14] According to the 'general' definition, a circular migrant is a person who has crossed the national borders of the reporting country at least 3 times over a 10-year period, each time with duration of stay (abroad or in the country) of at least 12 months.

[15] This restriction does not apply to the 'extended' definition, which says that a circular migrant is a person who has crossed the national borders of the reporting country at least 3 times over a 10-year period, each time with duration of stay (abroad or in the country) of at least 90 days.

circular migrants, plus the 'former' circular migrants already in the population which have lost their qualification due to the shifting time window. This mechanism may lead to an increasing share of non-circular migrants in the population. The counterbalancing factor here is emigration, as if emigration only occurs to non-circular migrants, in turn their share on the 'stock of migrants' will be reduced. These considerations should lead to caution in the interpretation of low shares of circularity in the stocks.

III.   Results of the test and revision of the provisional tables

22.   The tables subject to the implementation test have been described in detail in another document[16]. They are a set of 14 tables, covering both stocks (4 tables on the number of persons resident in the country at a selected moment in time) and flows (10 tables on the number of migration events or persons experiencing migration in a selected period). All these tables should have been further disaggregated by age and sex, which was not possible in the current test. The initial focus was on the so-called 'general' definition of circular migration, which is based on a length of stay of at least 12 months. However, some data have been provided also under the 'extended' definition, which includes the short-term migrations as well. Most of the data which have been provided are reported in the set of tables in the Annex[17].

E. Revision of the tables for the stocks

23.   The Table 1 aims to give a general overview on the population based on the individual migration history. Four countries have provided data based on long-term migrations (Table 1a in the Annex), and two of them including also short-term migrations (Table 1b). The Table 1c and Table 1d report those data expressed as percentage of the total population. The results show that circular 'long-term' migrants are still a small quota of the total population (not more than 0.5% in those countries) and also relative to the number of migrants (i.e., those having resided abroad), where the share is not higher than 1.6%. These figures are obviously larger when short-term migrations are included: in Belgium and in Norway circularity becomes more relevant, growing respectively to 4.1% and 2.5% of the total number of persons having resided abroad. In particular, the highest level of detail for this variable shows that only a negligible number of cases are currently classifiable as circular migrants with more than two immigrations in the last 10 years. Again, that number increases when short-term migrations are included, but still its share on the total population can be considered marginal (this feature has been explained in a previous paragraph).

24.   The structure of the Table 1 is kept in the other three tables looking at the population structure on a given moment in time (stocks), where further disaggregation are proposed. In order to: preserve its nature of main table; remove redundancies with the other data; and reduce the burden on data providers, the Table 1 can be redefined as the product of the topics 'Migration status' (MST), 'Circularity status' (CST), 'Sex' (SEX) and 'Age' (AGE):

Revised table 1: MST.L x CST.L x SEX x AGE

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[16] See footnote 2.

[17] Their numbering follows the one given in the document in footnote 2 to easier the linkage with the methodological description.

where the age breakdown is limited to the 5-year age groups.

25.   The Table 2 is a table rich in information. By introducing the basic breakdown by country of birth, it allows disentangling returned emigrants from immigrants proper, and computing which share of them is a circular migrant. For instance, in Belgium there are about 256 thousand 'returned emigrants'[18], of which only about 3% can be qualified as circular; the share of circular migrants falls to 1.5% among the 1.8 million 'immigrants proper'.

26.   As explained in the document on the provisional tables, there are combinations of migration circularity and country of birth (COB) which are not possible by definition (although useful for data validation purposes). Considering also the limited size of the number of persons in those sub-categories, this leads to a simplification of the Table 2 as follows:

<div align="center">Revised table 2: MST.L x CST.L x COB</div>

where the breakdown by country of birth may go further than the simple split by native- and foreign-born[19].

27.   Those implausible combinations of the Table 2 do not apply anymore to Table 3, which crosses the data with the country of citizenship (COC) in its basic breakdown 'national' and 'foreign' citizenship. Also in this case, the breakdown for migration circularity can be applied with lower detail. The resulting revised table is[20]:

<div align="center">Revised table 3: MST.L x CST.L x COC</div>

28.   Likewise, the Table 4 can be structured as:

<div align="center">Revised table 4: MST.L x CST.L x EDU</div>

where the breakdown of the migration circularity has less detail.

F. Revision of the tables for the flows

29.   Unfortunately the data received for the test were not enough to a comprehensive assessment, but the provisional values seem to indicate a higher relevance of the circularity in current migration flows. They are therefore re-proposed in its simpler format. Further, the provisional table referring to the other country mostly concerned by the circular migration process (i.e., with migration 'repetition') has been dropped from the list.

G. New version of the tables on circular migration

30.   The following list resumes the new set of 12 tables proposed to collect data on circular migration, simplified as compared to the previous proposal. For the tables on flows IMM 1 and EMI 1, the age can be measured either as 'age completed' or as 'age reached at the end of the year'.

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[18] This is the sum of the native-born persons in categories 2.1.2, 2.13, 2.2.1 and 2.2.2.

[19] For instance, in the case of the voluntary data collection run by Eurostat, the country of birth will be further split in EU and non-EU countries.

[20] Like for the country of birth, in the Eurostat voluntary data collection the country of citizenship will be further broken down in EU and non-EU citizenship, and stateless.

TABLE	TITLE	TOPICS
POP 1	Population at the end of the year by age, sex, migration status and circularity status	MST.L, CST.L, AGE, SEX
POP 2	Population at the end of the year by migration status, circularity status and country of birth	MST.L, CST.L, COB
POP 3	Population at the end of the year by migration status, circularity status and citizenship	MST.L, CST.L, COC
POP 4	Population at the end of the year by migration status, circularity status and educational attainment	MST.L, CST.L, EDU
IMM 1	Immigrations by age, sex and (im)migration circularity	IMC.L, AGE, SEX
IMM 2	Immigrations by country of birth and (im)migration circularity	IMC.L, COB
IMM 3	Immigrations by citizenship and (im)migration circularity	IMC.L, COC
IMM 4	Immigrations by educational attainment and (im)migration circularity	IMC.L, EDU
EMI 1	Emigrations by age, sex and (e)migration circularity	EMC.L, AGE, SEX
EMI 2	Emigrations by country of birth and (e)migration circularity	EMC.L, COB
EMI 3	Emigrations by citizenship and (e)migration circularity	EMC.L, COC
EMI 4	Emigrations by educational attainment and (e)migration circularity	EMC.L, EDU

IV.   Registers-based data on circular migration: issues and possible solutions

31.   All volunteering countries were compiling their statistics from registers. Whilst this has the advantage to rely on structured datasets from which it is virtually possible to extract much longitudinal information, there are difficulties worthy to mention:

i. By its own nature, the registers can only inform about <u>declared</u> immigration and emigration. Therefore, under-coverage of migratory events cannot be excluded and such risk is higher for short-term migrations. In fact, it is not uncommon to detect implausible sequences of events for single persons, such as two consecutive immigrations without one emigration in between.

ii. The registers may cover only a limited period back in time. While for the qualification for circular migration the coverage of the events for a 10-year period is enough, this is an issue when the table aims to measure the totality of migrants. For this purpose, it would be necessary – in principle – that coverage to go back in time of about a century. The more recent is the first year of coverage of the registers, the highest the likelihood of under-estimation of the total number of migrants.

iii. Being used for national purposes, the registers may use definitions of population and migration other than those internationally recommended. Therefore, extracting migration data which are compliant with these latter implies an additional care by the data provider, who may face complications specific to the national register difficult to overcome.

32.   A pragmatic approach can be taken to deal with some of the issues above. In case of missing registration of migratory events and lacking any useful information, a simple rule could be to insert in the middle of the period between two consecutive events the missing migration. For instance, a person who has immigrated to the reporting country in 2009 and again in 2015 but for whom there is no registered emigration in between, may be attributed an estimated year of emigration in 2012[21]. Studies on the duration of stay of migrants with similar characteristics may obviously help in formulating more precise assumptions. It should be noted that the attribution of the missing migration can well be relevant for the classification of the migrant as circular or not.

33.   As for the under-coverage, a rule of thumb to decide whether to publish data based on registers with incomplete time coverage could be to check whether the first year of coverage is earlier than the value given by the following calculation: 'year of reference' minus 'life expectancy' plus 'median age at migration'. The rationale is that checking whether persons have ever resided abroad requires their full history, which ideally would go back of about 100 years. Alternatively, instead of taking a period of time corresponding to the almost complete extinction of a generation, one could look at the life expectancy at birth of that population, approximated at the reference time, to get an idea about the average length of life. A further shortening of the time period to be covered can be obtained by considering the age at migration and limiting the coverage to about half of the events. Therefore, for the volunteering countries, the cut-off year for the register would be:

Country	Reference year	Life expectancy at birth	Median age at immigration	Cut-off year	First year in the register
BE	2016	81.5	28.6	1963	1985
IT	2016	83.4	29.1	1962	2005
FI	2016	81.5	27.6	1962	1983
SE	2015	82.2	27.1	1960	1969
NO	2016	82.5	27.2	1961	1964

34.   Obviously, the rule suggested above is based on very rough approximations of cohort values and the resulting cut-off year should be taken with a grain of salt. In particular, none of the countries in the table above meet this requirement (compare the last two columns), which is consequently relaxed for this test but for Italy. Again, this only affects the measure of the total number of migrants, but not the measure of the number of circular migrants, whose time period of reference is limited to 10 years[22].

35.   To ensure the international comparability of statistics, all countries should produce data based on the same definitions (at least for international purposes). In the case of migration, the internationally recommended concept of usual residence, based on the actual stay in a geographical place, is challenged when the data source is a register, which does not guarantee

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[21] The estimation would better be made with the dates rather than the years, here privileged for the sake of simplicity. In the example, assuming the first immigration on 23 March 2009 and the second immigration on 14 September 2015, the missing emigration would be attributed to 18 June 2012.

[22] For instance, Italy is able to estimate the number of circular migrants despite its register covers migratory events from 2005 only.

per se the actual presence of the person on the territory. The data providers should therefore proceed to a screening of the registered persons and events to select those which qualify as based on the usual residence. In order to do so, it may be necessary to link several databases searching for so-called 'signs of administrative life', i.e. evidences that the person is actually present in the territory.

36.   An additional complication comes from the use at national level of different concepts of migration, such as based on stays shorter than 12 months, because it can quickly become intricate to disentangle 'real' changes of usual residence from short-term moves. These short-term migrations need to be removed / neglected when the data production looks at long-term migrations only (at least 1 year of stay). This cleaning process, probably tedious and complicate, is however an unavoidable prerequisite for internationally comparable statistics.

37.   Last but not least, when the data are including the short-term migrations, a choice must be made by the data producer whether to adjust accordingly the population size or to consider those short-term migrations as events with no consequences in the demographic balance. This may lead to confusion in international comparisons when those population data are used to compute the shares and it is therefore recommended to specify which approach is taken as for the population definition (including or not short-term migrations)[23]. Note as well that with short-term migrations the annual identity between number of migrants (persons) and number of migrations (events) does not apply anymore.

V.   Final remark

38.   The test carried out on the set of provisional tables has provided useful indications for the fine-tuning of the tables on circular migration and, as side effect, it has also given the opportunity for setting further clarity across concepts and definition used in migration statistics. In fact, a coherent and unambiguous terminology is a fundamental feature for such statistics so relevant nowadays, and the statistical producers should pay to it the right attention. Nesting circular migration in a wider tabulation on migration and population helps in serving this purpose.

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[23] The two approaches are represented in this test by Belgium and Norway, who have provided data with and without
          short-term migrations: the former keeps the total population unchanged; the latter reports a change in
          the size (e.g., see the Table 1a and the Table 1b in the Annex).