Selection criteria for and requirements of active ageing indicators
This chapter discusses the criteria applied in the selection of indicators. Annexes A1-A4 provide data for the indicators included in the four domains. They also provide the rationale, a precise definition (with the help of the survey question) and data sources used for the chosen indicators.

2.1 Outcome indicators, instead of input or process indicators

Most importantly, the AAI has been based on outcome indicators, along the lines of Laeken Indicators. The Laeken indicators are 18 common statistical indicators on social inclusion which accompanied the Lisbon Strategy 2000 for the purpose of the coordination of national policies based on a set of common European social policy goals. These indicators were subsequently revised by the European Commission's Social Protection Committee Indicators Sub-Group (for a discussion, see Atkinson et al. 2004). Instead of ‘process’ indicators or descriptive information about institutional arrangements, the index based on outcome indicators only takes into account the space relativity and not linkages across different phases of life. Thus, by implication, the indicators currently do not incorporate a life-course perspective. Instead, the AAI points to the situation of current generation of older people, and not to the possible implications of current situation for older generation in 30-40 years from now. Similarly, the issues linked with social security sustainability challenges are not addressed in the measurement of AAI; instead they could be treated as part of the contextual environment within which the active ageing outcomes should be assessed.

2.2 International comparability across EU27 countries

Another factor of paramount importance in the choice of indicators has been the comparability of indicators across countries, to the extent possible. This criterion has made EU-SILC (Survey of Income and Living Conditions), the EU-LFS (the Labour Force Survey) and the European Quality of Life Survey (EQLS) the prime datasets used to estimate active ageing indicators. By implications, we have ruled out indicators drawn from national data sources, however more reliable they might be in relation to those derived from the comparative international datasets.

2.3 Coverage of countries

A starting minimum syndical has been the coverage of 27 EU Member States. However, a prospect indicator, one that is pertinent to measuring active ageing and its potential, can sometimes only be drawn from a data source covering only a selected group of EU countries. For instance, the European Social Survey (ESS) covers only 22 EU countries in its 2008 database (missing countries are Austria, Italy, Malta, Luxembourg, and Lithuania). The ESS4, for 2008, contains data for 29 countries, out of which 22 are EU member countries. In the most recent round, ESS5, for 2010, all EU countries are covered, except MT (although data for only 20 countries is available in the first release, as LV and RO are also missing), and the SHARE (Survey of Health, Ageing and Retirement in Europe) covers only 12 EU countries in its latest database. The 1st wave of SHARE was conducted in 2004-2005 in 11 countries (SE, DK, DE, NL, BE, FR, CH, AT, IT, ES and EL and Israel), while the 2nd wave (in 2006-2007) also included CZ, PL and IE. The 3rd wave focused only on collecting data on people's life histories during 2008-2009 (for all wave 2 countries except IE). The 4th wave was conducted in 2010, and four additional countries joined then (EE, HU, PT and SI) – it is in fact the third regular panel wave of the survey following the life history focus in 2008-2009. The scientific use file of the 2010 data would not be released before November 2012. Likewise, the European Health Interview Survey (EHIS) provides data for a limited set of EU countries. On the other hand, such an approach severely limits the indicators that can be selected for the AAI and could render the results and analysis influenced by outliers for specific indicators (see Eurostat 2011, for a stock-taking on existing indicators on active ageing for EU countries). For reasons of limited country coverage, we have not made use of SHARE data and this is despite the fact that SHARE had been identified as a very useful data source to derive active ageing indicators. Upon the advice of the Expert Group, the EQLS is preferred over the ESS because it uses the same questions as the ESS, but has better country coverage than ESS.

One of the challenges in the project has been to also enhance coverage towards non-EU European countries. As mentioned above, the EU-SILC, the EU-LFS and the EQLS have been our main sources of data. The EU-SILC dataset provides additional coverage for (in addition to all EU member States) only Iceland and Norway (and tested in three further countries: Croatia, the Former Yugoslav Republic of Macedonia and Serbia). EU-SILC was launched in 2003 on the basis of an agreement between Eurostat and six Member States (AT, BE, DK, EL, IE and LU) and Norway. It was formally launched in 2004 in 15 countries and expanded in 2005 to cover all of the then EU-25 Member States, together with Norway and Iceland. BG launched EU-SILC in 2006 while RO, introduced the survey in 2007. The EU-LFS dataset provides coverage for the 27 Member States of the European Union, in the acceding country Croatia, three Candidate Countries (Iceland, the former Yugoslav Republic of Macedonia and Turkey), and two EFTA countries (Norway and Switzerland) in 2009.

2.4 Monitoring trends over time
A dashboard of indicators has been used in constructing the overall active ageing index, and it has been considered highly desirable that these indicators (and their aggregation into an overall index) are also available in the future so as to be able to monitor trends over time across countries. For this reason alone, we have ruled out making use of data from special modules included in (say) EU-LFS, ESS or EU-SILC datasets.

On the same grounds, when a suitable indicator is available only from a special study (for example, indicators available from a special Eurobarometer Survey on active ageing), and it has not been obvious whether such an indicator can be calculated again in the future, we have had reasons to drop them from our chosen set of indicators. The exception in this case has been the indicator on physical exercise (i.e. share of people aged 55 years and older doing physical exercise or sport at least 5 times a week) is derived from the Eurobarometer Special Edition 334, for the year 2010 (European Commission 2010b). This exception is warranted since our expectation is that such physical exercise data will be collected in the future in one of the mainstream international surveys (such as EU-SILC and the EQLS).

2.5 Access to micro datasets

EU-SILC and EU-LFS have been among the most suitable datasets for many of the indicators on active ageing, whose data is available readily from the Eurostat website. Thus, it is not a necessary condition in all cases to have the access to micro datasets for the calculation of indicators of our choice. It is nonetheless an important advantage for researchers to have access to micro-data, especially when a breakdown is necessary by gender and by finer age groups, and in testing the sensitivity of the specification of an indicator to the index value. Fortunately, the micro-data of EU-SILC and EU-LFS is available from EUROSTAT and the EQLS was made available by Eurofound at the crucial last stages of the project. Likewise, via UNECE, an access to micro-data of Gender and Generations Survey was also made possible, although the GGS data was not used in the end.

2.6 Data quality, timeliness and availability considerations

The index is as good as the quality of data in its underlying indicators. Robustness (i.e. meeting the statistical requirements of accuracy, reliability and validity) has indeed been sought for in each of the indicators included in the AAI. The adherence to this criterion has not allowed us to use some indicators of relevance. For instance, in many cases, there were doubts about the quality and relevance of ‘subjective’ response variables. In many cases, the international comparability of subjective responses is also restricted even in the very well composed subjective questions, such as self-reported health questions and questions related to the job satisfaction. For these reasons, a choice has been made that when a subjective variable is subject to serious quality doubts in its international comparability, we avoid using such a variable in the construction of the index.

Furthermore, one crucial goal had been that indicators to estimate indicators using latest sources of data for the EU countries. For this reasons, a decision has been made quite late in the project, upon the advice of the Expert Group, to make use of the EQLS that provided timely data (for year 2011) and provided good coverage (for all 27 EU Member States) for data on older people’s participation in society (for the indicators included in the 2<sup>nd</sup> domain). Upon examining data sources to improve data coverage for the indicator on mental well-being, the EQLS has been preferred over other alternatives, for the fact that it contains the WHO 5-item mental health index.

2.7 Seeking to measure ‘unrealised potential’ of older people

One of the key endeavours of the AAI is that it should become a stock taking exercise for European countries to identify avenues for policy reforms and, once implemented, also assess their impact. A good feature of the empirical work reported here is therefore identified as reflecting on ‘unrealised potential’ of active ageing in individual EU Member States. The UNECE and the European Commission can use this information to encourage countries to identify and undertake appropriate policy reforms. This choice element has been an important consideration in our decision to choose indicators and domains, and it also has implications for the form in which the index would be presented.

To this end, one methodological choice has been to interpret each indicator in reference to an upper goalpost and seek to measure the unrealised potential from the most desired active ageing status (see chapter 3 for more details). For example, the employment domain index of a country will give us the quantitative assessment of what potential can additionally be realised in promoting employment of older workers, either in comparison to the utopian full employment state or a more realistic target in comparison to the best performing benchmark country within, say, EU Member States.

2.8 Assigning normative value judgement
For all indicators to be included in the aggregation to the AAI, it is essential to assign the same normative value judgement of being a positive indicator (i.e. more is better). In some cases, this has not been possible as such. For example, in the case of indicators on care provision, the argument that they are positive indicators is only justified when taking the perspective of valuing informal care in terms of contributions made to the family and society. However, the care provisions by older adults, either to their partners or parents, or to their grandchildren, can also be a constraint impinging on the quality of life of informal carers.

Upon the advice of the Expert Group, a particular attention was drawn to specify the goal of each of the indicators, ensuring that the indicators selected for the first three domains measure the actual activity of older people that makes a positive contribution to the society. It was decided to leave out the normative judgments of the impact on the quality of life of those who are undertaking the activity in question. It was also carefully analysed whether the indicators included in the 4th domain measures the capacity and the enabling environment aspects of active ageing.

In view of this, definitions and data sources were reviewed and additional indicators were discussed at length during the Expert Group meetings and a good number of revisions made to the initial set of indicators proposed by the AAI project team. For example, the indicator on job satisfaction for workers aged 55-64 was excluded, keeping in mind that the sole goal of the 1st domain is to measure the activity in employment of older people and not the quality of jobs. Likewise, it was decided to extend the definition of the political participation beyond working for a political party or action group. Also, the indicator on long-term care benefits and living in institutions was dropped, and replaced with the indicator 'Independent living' with a goal of capturing the freedom to live in one's own home during old age.

2.9 Disaggregating indicators, by gender and age

The distinction between men and women has been considered crucial in the analysis of cross-national differentials for many of the specific single indicators of active ageing. This gender disaggregation can be argued to be a richer outcome, and it required careful choice and calculation of gender-specific indicators (especially since it required access to micro-data in many cases).

Further disaggregation by age groups for employment has also been allowed, although such finer subdivision of data has not always been credible given small sample sizes for other aspects of active ageing. In general, active ageing indicators are defined for the age group above 55. There is no reason to specify an upper age limit per se; although in some cases it would make sense to restrict it to an upper age limit on the basis of conceptual and empirical considerations. For instance, it was rendered important that the upper age limit of 74 is used in calculating employment rate indicators. The age limit was also necessary when the data availability imposed certain limitations, as has been the case of the indicator on the ICT usage.

The age limit of the indicator measuring physical safety (within the independent, healthy and secure living domain) has been set at 55 or more, so as to be consistent with the age limit used in measuring the employment and social activities of older populations (in the 1st and 2nd domain).

2.10 Parsimony over number of indicators selected

Parsimony over the number of indicators selected has been required, especially in view of the fact that the inclusion of a greater number of indicators may restrict the robustness of a composite index like the AAI. For the index to remain stable, the list of selected indicators will remain unchanged over time. However, the list could be reconsidered in the future if deemed necessary. Some of the indicators that are not chosen for the AAI, they will still be useful in providing further contexts when analysing in-depth the outcomes within domains and the clustering of countries on the basis of the overall and gender-specific indices.
BOX 3
INDICATORS SELECTED FOR THE ACTIVE AGEING INDEX

The following active ageing indicators have been selected for populating the four domains:

1) Employment
   1.1 Employment rate for the age group 55-59 (EU-LFS 2010)
   1.2 Employment rate for the age group 60-64 (EU-LFS 2010)
   1.3 Employment rate for the age group 65-69 (EU-LFS 2010)
   1.4 Employment rate for the age group 70-74 (EU-LFS 2010)

2) Participation in society
   2.1 Voluntary activities: percentage of population aged 55+ providing unpaid voluntary work through the organisations (EQLS 2011)
   2.2 Care to children, grandchildren: Percentage of population aged 55+ providing care to their children and/or grandchildren (at least once a week) (EQLS 2011)
   2.3 Care to older adults: Percentage of population aged 55+ providing care to elderly or disabled relatives (at least once a week) (EQLS 2011)
   2.4 Political participation: Percentage of population aged 55+ taking part in the activities of a trade union, a political party or political action group (EQLS 2011)

3) Independent, healthy and secure living
   3.1 Physical exercise: percentage of population aged 55+ who engage in physical activity and sport at least five times a week (Eurobarometer Special edition 334/2010)
   3.2 Access to health and dental care: percentage of population aged 55+ who report no unmet need for medical and dental examination (SILC 2010)
   3.3 Independent living arrangements: percentage of persons aged 75 and older living in single or couple households (SILC 2010)
   3.4 Relative median income: ratio of the median equivalised disposable income of people aged 65+ to the median equivalised disposable income of those aged below 65 (SILC 2010)
   3.5 No poverty risk for older persons: percentage of people aged 65+ who are not at the risk of poverty using 50% of the national median equivalised disposable income as the poverty threshold (SILC 2010)
   3.6 No severe material deprivation for older persons: percentage of people aged 65+ not severely materially deprived (SILC 2010)
   3.7 Physical safety: percentage of population aged 55+ who are not worried about becoming a victim of violent crime (ESS 2010)
   3.8 Lifelong learning: percentage of older persons aged 55-74 who received education or training in the 4 weeks preceding the survey (EU-LFS 2011).

4) Capacity and enabling environment for active and healthy ageing
   4.1 Remaining life expectancy achievement of 50 years at age 55, using EHLEIS
   4.2 Share of healthy life years in the remaining life expectancy at age 55, using EHLEIS
   4.3 Mental well-being (for older population aged 55+, using EQLS 2011 and using WHO’s ICD-10 measurement)
   4.4 Use of ICT by older persons aged 55-74 at least once a week (including everyday), using Eurostat ICT Survey
   4.5 Social connectedness: Percentage of older population aged 55+ who meet friends, relatives or colleagues at least once a month, using ESS 2010 / 2008 (for LV and RO) / 2006 (for AT) / 2004 (for LU) / 2002 (for IT)
   4.6 Educational attainment of older persons: Percentage of older persons aged 55-74 with upper secondary or tertiary educational attainment (EU-LFS 2010)