#### **Appendices**

## Detailed Information on Indicators used for the Active Ageing Index 2014\*

#### December 2014

These appendices accompany the Policy Brief

Zaidi (2014) 'AAI 2014: Active Ageing Index for 28 EU countries',
Policy Brief presented at the UNECE/European Commission stakeholders event
"The Active Ageing Index – Potential for Evidence-Based Policy Development:

A Dialogue with Policymakers"

14 November, Brussels

#### \* For a first account of the description of AAI indicators, see:

Zaidi, A., K. Gasior, M. M. Hofmarcher, O. Lelkes, B. Marin, R. Rodrigues, A. Schmidt, P. Vanhuysse, and E. Zolyomi, "Active Ageing Index 2012: Concept, Methodology and Final Results," (2013), Methodology Report Submitted to European Commission's DG Employment, Social Affairs and Inclusion, and to Population Unit, UNECE, for the project: "Active Ageing Index (AAI)," UNECE Grant No: ECE/GC/2012/003, Geneva; European Centre for Social Welfare Policy and Research, Vienna, March 2013.

# Annex A.1: Information on AAI indicators for the 1st domain: Employment

# 1.1 Employment rate for the age group 55-59

Definition	Employed persons are those:
	• who are aged 15 year and over (16 and over in ES, IT, UK and SE; 15-74 years in DK, EE, HU, LV, FI and SE);
	<ul> <li>who during the reference week performed work, even for just one hour a week, for pay, profit or family gain;</li> </ul>
	• who were not at work but had a job or business from which they were temporarily absent because of, e.g., illness, holidays, industrial dispute or education and training.
Goal (rationale)	To capture employment activities of workers at a late stage of their careers.
Survey question	Did you do any paid work in the 7 days ending Sunday the [date], either as an employee or as self-employed?  1 Yes 2 No
	Even though you were not doing paid work, did you have a job or business that you were away from in the week ending Sunday the [date] (and that you expect to return to)?  1 Yes 2 No 3 Waiting to take up a new job/business already obtained
Source	European Union (EU) Labour Force Survey (EU-LFS)
Year	2012
Notes	The rationale for choosing employment rate over economic activity is that employment activity (and not being available to undertake employment) is important in measuring the experiences for active ageing. Also, in many countries, workers in the age group 55+ are so discouraged that they do not even search for job, and thus categorised as inactive. One limitation of the indicator is that it makes no distinction between part-time and full-time workers. Thus, the indicator provides the level participation not employment intensity.
	Another limitation of the indicator is that it may underestimate the activity potential of elderly in countries with (temporally) high old-age unemployment.
Comparability	Data derived for all three years (2008, 2010, and 2012) use comparable definitions.
	For details, see <a href="http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/Ifsa_esms.htm">http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/Ifsa_esms.htm</a>

## 1.2 Employment rate for the age group 60-64

Definition	Definition of employed persons the same as for indicator 1.1
Goal (rationale)	To capture employment activities of older workers at a late stage of their careers, especially during the ages when a good majority of workers in the EU countries exit the labour market for retirement
Survey question	Same as for indicator 1.1
Source	EU Labour Force Survey (EU-LFS)
Year	2012
Notes	Same as for indicator 1.1

Comparability	Same as for indicator 1.1.

## 1.3 Employment rate for the age group 65-69

Definition	Same as for indicator 1.1
Goal (rationale)	To capture labour market engagement of older people close to or beyond the normal retirement age
Survey question	Same as for indicator 1.1
Source	EU Labour Force Survey (EU-LFS)
Year	2012
Notes	Same as for indicator 1.1
Comparability	Same as for indicator 1.1
Notes for 2008	For Lithuania, Luxembourg, Malta LFS-2009 is used, instead of 2008. For Luxembourg and Malta employment rate of women calculated from total and men employment rate using population sample weight.
Notes for 2010	For women in Luxembourg and Malta calculation of this indicator is based on employment rate total and that for men, using population sample weights from EU-SILC 2010;
Notes for 2012	For women in Malta, calculated from total and men rate using population sample weights for the employment rate of 65-69.

# 1.4 Employment rate for the age group 70-74

Indicator name	Employment rate for the age group 70-74
Definition	Same as for indicator 1.1
Goal (rationale)	To capture labour market engagement of older people well beyond the normal retirement age in many of the countries in question.
Survey question	Same as for indicator 1.1
Source	EU Labour Force Survey (EU-LFS)
Year	2012
Notes	Same as for indicator 1.1; also, in many EU countries people of this age might not declare that they worked at least one hour for pay (or profit) during the reference week (the ILO definition in the EU Labour Force Survey), especially since they work only occasionally.
Comparability	Same as for indicator 1.1
Notes for 2008	For Lithuania, Luxembourg, Malta, Slovakia no gender difference for age group 70-74 is assumed. For Belgium, Hungary employment rate of women calculated from total and men employment rate using population sample weight
Notes for 2010	For Lithuania, Luxembourg, Malta, Slovakia, no gender difference in the employment rate of 70-74 are assumed; for women in Bulgaria calculation is based on total and men rate using population sample weights from EUSILC2010; for Slovakia LFS2011 is used as data for 2010 are not available due to low reliability.
Notes for 2012	For Luxembourg and Slovakia, due to lack of data, no gender differences are assumed in the employment rate of 70-74. For women in Bulgaria, Malta, Iceland calculated from total and men rate using population sample weights for the employment rate of 70-74. For men in Lithuania, calculated from total and women rate using population sample weights for the employment rate of 70-74.

# Annex A.2: Information on AAI indicators for the 2<sup>nd</sup> domain: Participation in Society

# 2.1 Voluntary activities

Definition	Percentage of older population aged 55+ providing unpaid voluntary activity through the organisations (at least once every month)
Goal (rationale)	To capture non-market unpaid productive activities of older population offered in the form of organised voluntary activities.
Survey question	Please look carefully at the list of organisations and tell us, how often did you do unpaid voluntary work through the following organisations in the last 12 months?  a. Community and social services (e.g. organisations helping the elderly, young people, disabled or other people in need).  b. Educational, cultural, sports or professional associations Social movements (for example environmental, human rights)or charities (for example fundraising, campaigning)  c. Other voluntary organisations Scale:  1 Every week 2 Every month 3 Less often/occasionally 4 Not at all
Source	European Quality of Life Survey (EQLS)
Year	2011-2012
Notes	Voluntary activity undertaken through the organisations is captured, thus missing out informal voluntary activities often undertaken by older people. This definition may introduce systematic bias against some countries where there are lower levels of organised volunteering activities.
Comparability	Indicator drawn from EQLS 2007 is based on a different question that uses a different scale. Thus, the comparability over time is restricted.
	Question in EQLS 2007: How often are you involved in any of the following activities outside of paid work? Voluntary and charitable activities
	2 Several days a week 3 Once or twice a week 4 Less than once or twice a week 5 Never Despite of the less restrict definition, results from EQLS2007 indicate considerably lower average level of voluntary activities participation. It might be the case that people miss out reporting voluntary activities when asked in general. When they are asked more specifically (as in EQLS 2012), much higher levels of voluntary participation are observed.

## 2.2 Care to children, grandchildren

Definition	Percentage of older population aged 55+ providing care to their children, grandchildren (at least once a week)
Goal (rationale)	To capture activity of older population in the form of care provision to their own children or grandchildren.
Survey question	In general, how often are you involved in any of the following activities outside of work?  a. Caring for your children, grandchildren  1. Every day;  2. Several days a week  3. Once or twice a week  4. Less often  5. Never
Source	European Quality of Life Survey (EQLS)
Year	2011-2012
Notes	No restriction for resident or non-resident children in this definition of the indicator, and also no age restriction for children and grandchildren. The restriction applied is that the care provision should be at least once a week. The occasional care, provided less often than once a week, is not included.
Comparability	Indicator drawn from EQLS 2007 is based on a slightly different question. Thus, the comparability over time is somewhat restricted.  Question in EQLS 2007:  How often are you involved in any of the following activities outside of paid work?  Caring for and educating children  1 Every day
	2 Several days a week 3 Once or twice a week 4 Less than once or twice a week 5 Never
	It is not clear if all respondents included caring for their own children and grandchildren only or also included children outside their own family. The latter is a possibility since the 20007 EQLS referred to the possibility of not just caring but also educating children.
	The results from EQLS 2007 are clearly lower for all countries, except Germany and Poland.

### 2.3 Care to older adults

Definition	Percentage of older population aged 55+ providing care to elderly or disabled relatives (at least once a week)
Goal (rationale)	To capture valuable activities of older population in the form of care provision to older adults.
Survey question	How often are you involved in any of the following activities outside of paid work?
	c. Caring for elderly or disabled relatives
	1. Every day;
	2. Several days a week
	3. Once or twice a week

	4. Less often
	5. Never
Source	European Quality of Life Survey (EQLS)
Year	2011-2012
Notes	It includes care provision for resident as well as non-resident adults and not just the elderly but also the disabled relatives. The occasional care, provided less than once a week, is not included in the indicator.
Comparability	Neither change in question nor scale when comparing EQLS 2007 and EQLS 2012.

## 2.4 Political participation

Definition	Percentage of older population aged 55+ taking part in the activities of meeting of a trade union, a political party or political action group
Goal (rationale)	To capture the wider participation of older population in political and trade union activities and thus their abilities to influence decision making of these organisations.
Survey question	Over the last 12 months, have you?  a. Attended a meeting of a trade union, a political party or political action group; b. Attended a protest or demonstration; c. Contacted a politician or public official (other than routine contact arising from use of public services)  1 Yes
	2 No
Source	European Quality of Life Survey (EQLS)
Year	2011-2012
Notes	Participation recorded not just in political parties but also in trade union activities is included here.
Comparability	Minor differences between EQLS 2007 and EQLS 2012, thus the comparability of the indicator across the two years is somewhat restricted.
	The survey question in EQLS 2007 is:  Over the past year, have you?
	1. Attended a meeting of a trade union, a political party or political action group
	2. Attended a protest or demonstration, or signed a petition, including an e-mail petition The second category is modified in EQLS 2012 by splitting it into two parts
	<ul><li>b. Attended a protest or demonstration;</li><li>c. Contacted a politician or public official (other than routine contact arising from use of public services)</li></ul>
	The definition used for this indicator therefore differs in 2007 and 2012: 2007 includes also in addition "signed a petition, including an e-mail".

# Annex A.3: Information on indicators for the 3<sup>rd</sup> domain: Independent and secure living

# 3.1 Physical exercise

Definition	Percentage of people aged 55 years and older undertaking physical exercise or sport almost every day.
Goal (rationale)	This indicator is part of the domain on independent and autonomous living. While the health benefits of moderate physical activity in old age have been widely recognized by research, performing moderate physical activity can also be seen as an indication of maintaining the necessary balance and mobility to allow people to remain active in their communities and able to function independently.
Survey question	The EQLS 2012 survey contains a question on the frequency of physical activity:  Take part in sports or physical exercise / How frequently do you do each of the following?
	1 Every day or almost every day 2 At least once a week 3 One to three times a month 4 Less often  Those replying "Every day or almost every day" to the above question have been considered as being physically active for the purpose of this indicator.
Source	European Quality of Life Survey (EQLS)
Year	2011-2012
Notes	While strenuous physical exercise can be harmful in some circumstances, given the questions on which the indicator is based, it is likely that this refers not to more demanding or physically intense activities, but to those involving only moderate exercise.  The awareness of what could be defined as physical exercise may differ between countries. Also definition of sports and physical exercise may differ between different social groups. It is also not clear if for instance gardening and walking more than 20 minutes is included or not under physical exercise.
	<u>Alternative data:</u> We examined the potential use of the Eurobarometer (European Commission, 2010b) and European Social Survey (ESS), but rejected it due to the lack of replicability of that data. Eurobarometer covers only 2010 and in ESS, question is included only since 2012.
	Please note that Active Ageing Index (AAI) was using in its first version data from Eurobarometer 2010.
	The Eurobarometer 2010 survey contains two questions on the weekly frequency of physical activity:  1. How often do you exercise or play sport?  2. And how often do you engage in a physical activity outside sport such as cycling or walking from a place to another, dancing, gardening?
	Those replying "5 times a week or more" to any of the above questions could be considered as being physically active for the purpose of this indicator.
	Now, the AAI for the year 2010 and 2008 is also revised in order to improve time trends.

### 3.2 Access to health and dental care

Definition	Percentage of people aged 55 years and older who report no unmet need for medical and dental examination or treatment during the 12 months preceding the survey.
Goal (rationale)	The indicator aims to capture the importance of enablement through access to health and dental care. For older people to lead an active, healthy and independent life and to be able to actively participate in society it is essential that they can easily access health care services. This is especially important to older age groups as they are more likely to have a need of such medical services.
Survey question	The indicator refers to respondents who say that there was no occasion when the person really needed medical or dental examination or treatment but was not able to receive it.
Source	European Union Statistics on Income and Living Conditions (EU-SILC)
Year	2012
Notes	The indicator is aimed at assessing access in general to examinations by medical doctors including GPs as well as specialists. The same phenomenon is assessed for the dental treatment. Focus is placed on the actual treatment and not just the formal coverage.
Caveats	Access is conceptualised as a subjective concept of unmet need, that is, responses are based on the person's own assessment (i.e. what constitutes a 'real need' of medical or dental examination), which means that it can be influenced by personal or cultural biases.
Comparability	Years 2008, 2010, 2012, source: EU-SILC. See details
	http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/ilc_esms.htm
Notes for 2008	Results for Croatia are drawn from SILC 2011.
Notes for 2010	Results for Croatia are drawn from SILC 2011.
Notes for 2012	Results for Belgium are drawn from SILC 2011 and for Ireland from SILC 2010.

# 3.3 Independent living arrangements

Definition	Percentage of people aged 75 years and older who live in a single person household or who live as couple (2 adults with no dependent children).
Goal (rationale)	The indicator aims to capture decisional autonomy regarding one's own life in old age.
Survey question	A classification developed by Eurostat for household surveys now refer to the number of adult members, their age and gender, and the numbers of dependent children living with them. For more details, please see: <a href="http://epp.eurostat.ec.europa.eu/cache/ITY">http://epp.eurostat.ec.europa.eu/cache/ITY</a> SDDS/EN/ilc esms.htm
	Derived variable used here is HX060: Household type  5 - One person household  6 - 2 adults, no dependent children, both adults under 65 years  7 - 2 adults, no dependent children, at least one adult 65 years or more  8 - Other households without dependent children  9 - Single parent household, one or more dependent children  10 - 2 adults, one dependent child  11 - 2 adults, two dependent children  12 - 2 adults, three or more dependent children  13 - Other households with dependent children  16- Other ( these household are excluded from Laeken indicators calculation)
	Where dependent children is defined as household members aged 17 or less, or

	household members aged between 18 and 24; economically inactive and living with at least one parent.
Source	European Union Statistics on Income and Living Conditions (EU-SILC)
Year	2012
Notes	This indicator has been selected at the recommendation of the AAI Expert Group as a measure for independent living.
Caveats	Living with other members of the household is not necessarily loss of independence, and multi-generational households can also be seen as independent living.
Comparability	Same as for indicator 3.2.
Notes for 2008	Same as for indicator 3.2.
Notes for 2010	Same as for indicator 3.2.
Notes for 2012	Same as for indicator 3.2.

### 3.4 Relative median income

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Definition	The relative median income ratio is defined as the ratio of the median equivalised disposable income of people aged 65 and above to the median equivalised disposable income of those aged below 65.	
Goal (rationale)	Independent and autonomous living also incorporates the concept of financial security which is captured by three indicators. The relative median income ratio is the first one of these. Comparing the median income of the elderly with the rest of the population the indicator aims to measure the adequacy of retirement incomes for older people to maintain their living standard after retirement and to ensure financial security in old age. The indicator becomes particularly important for estimating relative poverty, because the distribution of economic resources (i.e. pension systems can play an important role in addressing poverty amongst the elderly) may have a direct bearing on the extent and depth of poverty.	
Survey question	Household disposable income is established by summing up all monetary incomes received from any source by each member of the household (including income from work, investment and social benefits) – plus income received at the household level – and deducting taxes and social contributions paid. In order to reflect differences in household size and composition, this total is divided by the number of 'equivalent adults' using a standard (equivalence) scale, the so-called 'modified OECD' scale, which attributes a weight of 1 to the first adult in the household, a weight of 0.5 to each subsequent member of the household aged 14 and over, and a weight of 0.3 to household members aged less than 14. The resulting figure is called equivalised disposable income and is attributed to each member of the household.	
Source	European Union Statistics on Income and Living Conditions (EU-SILC)	
Year	2012 (survey year) 2011 (income year)	
Notes	It was agreed at the AAI Expert Group meeting that the maximum upper value of 100 will be enforced for this indicator (e.g. for Luxembourg, where the relative median income is higher for 65+, the value for this indicator is fixed at 100).	
Comparability	Same as for indicator 3.2.	
Notes for 2008	Results for Croatia are drawn from SILC 2010.	

## 3.5 No poverty risk

Definition	Percentage of people aged 65 years and older who are not at risk of poverty (people at risk of poverty are defined as those with an equivalised disposable income after social transfers below the at-risk-of-poverty threshold, which is set at 50% of the national median equivalised disposable income after social transfers).
Goal (rationale)	The indicator is one of the three indicators that aim to measure financial security. Low income is known to have a significant impact on people's health and well-being for it may limit access to basic goods and services, and the possibility to live independently.
Survey question	See notes for indicator 3.4
Source	European Union Statistics on Income and Living Conditions (EU-SILC)
Year	2012 (survey year) 2011 (income year)
Notes	For the purpose of poverty indicators, the equivalised disposable income is calculated from the total disposable income of each household divided by the equivalised household size; consequently, each person in the household is considered to have the same equivalised income.
	Poverty risk using the 50% poverty threshold is assumed to capture the extreme poverty risk for older people. Initially, the 40% poverty threshold was used, but it captured a very small share of population in many countries, and there have also been income mismeasurement issues.
Caveats	Poverty is defined in relative rather than absolute terms and is measured in reference to the standard of living in the country in which the individual lives. This, however, may differ significantly across countries depending on their general level of prosperity which should be kept in mind when interpreting the results. Also, income is defined in monetary terms and excludes transfers such as publicly provided goods and services which might be particularly relevant for older people.
Comparability	Same as for indicator 3.2
Notes for 2008	Same as for indicator 3.4

#### 3.6 No severe material deprivation

3.6 NO severe mater	Total deprivation
Definition	Percentage of people aged 65 years and older who are not severely materially deprived. Severe material deprivation refers to a state of economic and durable strain, defined as the enforced inability (rather than the choice not to do so) to afford at least four out of the following nine items:  1. to pay their rent, mortgage or utility bills; 2. to keep their home adequately warm; 3. to face unexpected expenses; 4. to eat meat or proteins regularly; 5. to go on holiday; 6. a television set; 7. a washing machine; 8. a car; 9. a telephone.
Goal (rationale)	It is one of the three indicators that aim to measure financial security. The indicator shows the proportion of individuals and households who cannot afford certain goods considered by most people to be necessary. It measures exclusion by directly capturing people's actual standard of living in the country where they live. Moreover, whereas indicators based on current income (i.e. at-risk-of-poverty rate) are affected by transitory shocks,

	indicators on material deprivation can compensate for such limitations because they tend to be more stable over time and reflect the underlying circumstances of individuals and households.
Survey question	Data on the material items mentioned above is collected using a direct question at the household level.
Source	European Union Statistics on Income and Living Conditions (EU-SILC)
Year	2012
Notes	The indicator is one of the eight headline indicators of the Europe 2020 Strategy. However, it has the limitation that it considers various items of material deprivation with equal weighting (e.g. lacking a TV set is considered equivalent to inability to keep home warm).
Comparability	Same as for indicator 3.2
Notes for 2008	Same as for indicator 3.4

#### 3.7 Physical safety

3.7 Physical safety	
Definition	Percentage of people aged 55 years and older who are feeling very safe or safe to walk after dark in their local area.
Goal (rationale)	The objective is to assess whether the responding older person feels safe in his/her local area.
Survey question	'How safe do you – or would you - feel walking alone in this area (Respondent's local area or neighbourhood) after dark? Do – or would – you feel'  1 very safe 2 safe 3 unsafe 4 very unsafe
Source	European Social Survey (ESS)
Year	2012 (see notes for 2012)
Notes	A reference to the area (situated close to the place where the respondent live) is clearly indicated. The age group of 55+ is chosen so as to be consistent with the same age group chosen to measure the activities of older population in the 1 <sup>st</sup> domain (employment) and the 2 <sup>nd</sup> domain (Participation in society).
	Please note that the 2012 Active Ageing Index (AAI) was using data from the same data source, but indicator has now been revised. Previously, the ESS question used was: "How often, if at all, do you worry about becoming a victim of violent crime?  1. All or most of the time 2. Some of the time 3. Just occasionally 4. Never"
	The question is no longer included in the core questionnaire of ESS 2012. In order to meet the comparability aim across years, the indicator has been revised and replaced with the one indicated as follows:
	'How safe do you – or would you - feel walking alone in this area (Respondent's local area or neighbourhood) after dark? Do – or would – you feel'  1 very safe
	2 safe 3 unsafe 4 very unsafe.

Caveats	We assume that both should indicate the perceived safety of the local area. Results show that for majority of countries the same pattern is observed in the two indicators in terms of ranking into quartiles. Still, some important differences also occur, which seem to be specific to the context. In Central European countries (e.g. Czech Republic, Latvia and Hungary) older people are much less worried about the crime than walking in dark in their local area compared to the other countries. In Finland, Sweden, Spain: the opposite trend is observable: they have better ranking in terms of safety of walking in dark, but are much lower ranked in terms of perceived problems like crime in the local area.  The variable a subjective assessment and thus affected by different levels of awareness and sensitivity towards area safety for older people.
Comparability	Question asked in the same format in all ESS survey rounds: 2002, 2004, 2006, 2008, 2010, and 2012. All results for Latvia and Romania are drawn from 2008, for Austria they are drawn from 2006.
Notes 2008	Results for Italy drawn from ESS 2012; results for Lithuania are drawn from ESS 2010 and results for Luxembourg are drawn from ESS 2004
Notes 2010	Results for Italy are drawn from ESS 2012; for Austria, Latvia and Romania from ESS 2008, and for Luxembourg from ESS 2004.
Notes 2012	Results for Greece and Croatia are drawn from ESS 2010; for Latvia, Austria and Romania ESS 2008; Luxembourg ESS 2004.

### 3.8 Lifelong learning

3.8 Lifelong learning	
Definition	Percentage of people aged 55 to 74 who stated that they received education or training in the four weeks preceding the survey.
Goal (rationale)	The indicator measures all education or training, not only those which are work-related. Therefore, it captures the way individuals acquire key competences in the shape of knowledge, skills and attitudes, which are fundamental for each individual in a knowledge-based society. These competences provide added value for the labour market, social cohesion and active citizenship by offering flexibility and adaptability, satisfaction and motivation.
Survey question	Did you attend any courses, seminars, conferences or received private lessons or instructions within or outside the regular education system within the last 4 weeks  1 Yes 2 No
Source	EU Labour Force Survey (EU-LFS)
Year	2012
Notes	The information collected relates to all education or training whether or not relevant to the respondent's current or possible future <i>job</i> . It includes formal and non-formal education and training that means in general activities in the school/university systems but also courses, seminars workshops, etc. outside the formal education.  Data from surveys of vocational training was not considered since the goal of this
	indicator is older people's engagement in all types of training and not those linked with employment or vocation.
Comparability	Years 2008, 2011, 2012, source: EU-LFS. See details <a href="http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/lfsa_esms.htm">http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/EN/lfsa_esms.htm</a>

# Annex A.4: Information on indicators for the 4th domain: Capacity for active ageing

### 4.1 Remaining life expectancy achievement of 50 years at age 55

Definition	Remaining life expectancy (RLE) at 55 divided by 50 to calculate the proportion of life expectancy achievement in the target of 105 years of life expectancy
Goal (rationale)	To capture the life expectancy aspect in determining the capacity for active ageing across EU countries.
Source	European Health and Life Expectancy Information System (EHLEIS)
Year	2009/2010
Notes	For details, see <a href="http://www.eurohex.eu/index.php?option=ehleisproject">http://www.eurohex.eu/index.php?option=ehleisproject</a>
Comparability	See details above. Processing 2011 census data introduce a break in population series for following countries: SK, CZ, LV, LT, BG, PT, PL, CH and IE. For CY this break occurred in 2010.

#### 4.2 Share of healthy life years in the remaining life expectancy at age 55

Definition	Healthy Life Years (HLY) a measure of disability-free life expectancy that combines information on quality and quantity of life. HLY measures the remaining number of years spent free of activity limitation.
Goal (rationale)	Capture the proportion of years spent in good health in the remaining life expectancy at 55 as an indicator of the capacity for active ageing.
Source	European Health and Life Expectancy Information System (EHLEIS)
Year	2009/2010
Notes	For details, see <a href="http://www.eurohex.eu/index.php?option=ehleisproject">http://www.eurohex.eu/index.php?option=ehleisproject</a>
Comparability	See details above. Processing 2011 census data introduce a break in population series for following countries: SK, CZ, LV, LT, BG, PT, PL, CH and IE. For Cyprus this break occurred in 2010.

### 4.3 Mental well-being

Definition	Mental well-being (using EQLS 2011 and WHO's ICD-10 measurement model)
Goal (rationale)	To capture mental well-being of older population aged 55+, so as to complement the measure of physical health captured via the healthy life expectancy measure, with the help of an index that measures self-reported feelings of positive happy moods and spirits.
Survey question	Five survey questions are used to calculate a composite measure of mental health Q45a: I have felt cheerful and in good spirits Q45b: I have felt calm and relaxed Q45c: I have felt active and vigorous Q45d: I woke up feeling fresh and rested Q45e: My daily life has been filled with things that interest me  Response categories of each of these five survey questions are:  1. All of the time 2. Most of the time 3. More than half of the time 4. Less than half of the time 5. Some of the time 6. At no time  The raw score is calculated by reversing the value order of the variable, and then totalling

	the figures of the five answers. The raw score converted so as to range from 0 to 25, 0 representing worst possible and 25 representing best possible quality of life. As recommended by WHO, the Major Depression (ICD-10) Inventory is defined if the raw score is below 13 (see <a href="http://www.who-5.org/">http://www.who-5.org/</a> for more details).
Source	European Quality of Life Survey (EQLS)
Year	2012
Notes	Variable is derived using WHO's ICD-10 measurement
Caveats	The WHO-5 index has the limitation of being based on subjective response variable and thus it may be restricted in its international comparability.  It is not accounted for if a person had very low score in any single variable, but overall raw score is above 13. Still, based on robustness check, it affects only marginally the level of
	indicator (results differ on average 1.1 percentage points).
Comparability	Neither change in question nor scale in EQLS 2007 and EQLS 2012.

### 4.4 Use of ICT

4.4 036 01 101	
Definition	Share of people aged 55-74 using the internet at least once a week.
Goal (rationale)	This indicator aims to measure the degree to which older people's environments enable them to connect with others with the help of information and communication technologies, thus reflecting one aspect of their capacity for active ageing.
Survey question	'How often on average have you used internet in the last 3 months?'  - Every day or almost every day  - At least once a week (but not every day)  - At least once a month (but not every week)  - Less than once a month  The question refers to internet use at least once a week (i.e. every day or almost every day or at least once a week but not every day) on average within the last 3 months before the survey. Use includes all locations and methods of access and any purpose (private or work/business related). [Indicator name: i_iuse]
Source	Eurostat, ICT Survey
Year	2012
Notes	A larger number of older people using the internet points to a higher ability to communicate with others, and engage actively in society. While excessive use of the internet can be detrimental to one's health, such phenomena have been observed mainly for younger people thus far. It is therefore reasonable to associate the use of internet among older people positively with their capacity for active ageing (no cap necessary).  The indicator does not account for generational gap inside the given society.
Comparability	Years 2008, 2010, 2012, source: Eurostat, ICT Survey. See details <a href="http://epp.eurostat.ec.europa.eu/cache/ITY">http://epp.eurostat.ec.europa.eu/cache/ITY</a> SDDS/EN/isoc bde15c esms.htm

#### 4.5 Social connectedness

Definition	The indicator measures the share of people aged 55 or more that meet socially with friends, relatives or colleagues at least once a week. "Meet socially" implies meet by choice, rather than for reasons of either work or pure duty. The indicator measures contacts outside the household.
Goal (rationale)	Social contacts are a key element of an active and fulfilling life, and also vital to human health, both mentally and physically. The specific measure focuses on social meetings by choice, thus duty or work related meetings are excluded.
Survey question	'How often socially meet with friends, relatives or colleagues?'  Answers:  1 never, 2 less than once a month, 3 once a month, 4 several times a month, 5 once a week, 6 several times a week, 7 every day.
Source	European Social Survey (core questionnaire)
Year	2012
Notes	The indicator measures contacts outside the household, thus in case the household size is large (multiple generations living together) the bulk of social contacts may take place within the household, rather than outside.
	<u>Alternative data</u> : We examined the potential use of EU-SILC 2006 Special module on social participation, but rejected it due to the lack of replicability. EU-SILC questions differ from those in the ESS and the answer categories have a reverse order (the latter is expected to have an influence on responses): 'Frequency of getting together with relatives' and 'Frequency of getting together with friends' Answers: 1 Daily, 2 Every week, 3 Several times a month, 4 Once a month, 5 At least once a year, 6 Never.
	Robustness check: We compared the outcomes of the ESS and EU-SILC 2006 surveys. In order to control for the potential framing effect related to the reverse order of answer categories, we have created country groupings (quartiles) showing the ranking of particular countries. The comparison of these country groups presents a relatively stable picture across countries. The countries with a low level of social contacts according to the EU-SILC data set also rank in the bottom or 2nd quartile according to the ESS survey. Similarly, it is the case at the top end.
Caveats	Malta is missing from all waves of the ESS; also, not all countries participated in all waves; all results for Luxembourg are drawn from ESS 2004.
	The indicator measures only the intensity of contacts, not their quality.
Comparability	Question asked in the same format in all ESS survey rounds: 2008, 2010, 2012
Notes 2008	Results for Italy are drawn from ESS 2012; results for Lithuania are drawn from ESS 2010
Notes 2010	Results for Italy and Iceland are drawn from ESS 2012; for Austria, Latvia and Romania from ESS 2008.
Notes 2012	Results for Greece and Croatia are drawn from ESS 2010; for Latvia, Austria and Romania ESS 2008.

## 4.6 Educational attainment of older persons

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Definition	Percentage of older persons aged 55-74 with upper secondary or tertiary educational attainment.
Goal (rationale)	The indicator measures relatively high levels of education, but it is not restricted to tertiary education only, given the generally lower prevalence of tertiary education among the older people. Relatively high educational attainment reflects the acquisition of key competences in the shape of knowledge, skills and attitudes. These competences provide added value for social cohesion and active citizenship by offering flexibility and adaptability, satisfaction and motivation.
Survey question	Highest ISCED level attained?
	0 pre-primary, 1 primary, 2 lower secondary, 3 (upper) secondary, 4 post-secondary non tertiary, 5 tertiary
Source	EU Labour Force Survey (EU-LFS)
Year	2012
Notes	Education attainment level is defined as the percentage of people of a given age class (excluding the ones that did not answer to the question 'highest level of education or training attained') having attained a given education level.
	ISCED 3 (Lower/ upper) secondary education: This level of education typically begins at the end of full time compulsory education if such a system is applied. More specialisation may be observed at this level than at ISCED level 2 and often teachers need to be more qualified or specialised. The entrance age to this level is typically 15 to 16 years. The educational programmes included at this level typically require the completion of 9 years of full-time education (since the beginning of level 1) or a combination of education and vocational or technical experience for admission.
Comparability	Years 2008, 2010, 2012, source: EU-LFS. See details <a href="http://epp.eurostat.ec.europa.eu/cache/ITY">http://epp.eurostat.ec.europa.eu/cache/ITY</a> SDDS/EN/lfsa esms.htm