

# **AWG Pension Projection Methodology – Actuarial Considerations and other projects of the GC SSSC**

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- Role of the **Groupe Consultatif Actuariel Européen** and in particular the **Social Security Sub-committee**
- Actuarial considerations relating to AWG pension projection methodology
  - our approach: conduct of survey
  - our suggestions/ ideas for further improvement in the 2015 AWG exercise to be explored
- Additional considerations regarding implementation of above suggestions for the purposes of the 2015 Ageing Report
- Further activities of the Social Security Sub-committee

# Groupe Consultatif Actuariel Européen



- established in 1978 by 12 national actuarial associations
- today, it has 37 member associations in 35 European countries, representing about 20,000 actuaries
- its main purposes
  - to advise European institutions on actuarial issues of public interest
  - to provide a forum for discussion among actuarial associations throughout Europe
  - to promote high standards of education and professionalism
- any communication by the Groupe is totally independent of commercial interests

# Social Security Sub-committee



- established in July 2012, with a main aim to:
  - contribute in the EU public interest on actuarial matters in the areas of demography, ageing, social security and social protection
- **Task Force on Methodology and Projections** set up in October 2012
  - representing actuarial associations of 11 European countries
  - initial aim to provide technical input towards strengthening the methodology, transparency and comparability of AWG pension cost projections

# Actuarial considerations – Our approach



- to conduct a survey with an aim to identify and assess key aspects of national pension projection methodology adopted by MS in the 2012 AWG exercise
  - pension modelling
  - scheme-specific assumptions
- survey feedback
  - 8 participating actuarial associations
  - 18 questions
- areas of possible improvement in the projection methodology
  - 4 regarding pension modelling
  - 3 regarding scheme-specific assumptions

# Actuarial considerations – Our suggestions aim to .....



- strengthen the pension modelling approach by:
  - improving the **accuracy** of projections of pensions
  - ensuring **consistency** of projection outcomes and thus cross-country **comparability**
- improve the framework for setting scheme-specific assumptions in accordance with ISAP2 by:
  - applying realistic, **best-estimate assumptions**, having regard to experience analysis, subject to data availability
  - enhancing the **transparency** and **disclosure** of the assumed values

# Actuarial considerations –

## A. Pension modelling: suggestion #1



- encourage MS to model transitions of status of an insured person (active, inactive and pensioner) in a given year onto next year's status more **accurately**
- use of **transition probabilities** based on standard actuarial mathematics
  - especially those which have a significant financial impact on projection outcomes, such as disability incidence rates
  - full **transparency** on how they are derived
- the use of «financially important» transition probabilities could increase **accuracy** but could add complexity
  - challenge to ensure **consistency** with exogenously supplied population and labour market projections

# Actuarial considerations –

## A. Pension modelling: suggestion #2



- ensure **consistency** between the development of active insured population and evolution of employed population
- this means internal **consistency** between national pension model and EC labour force cohort model
  - ...particularly when pension reform takes place
    - increase in retirement age
    - introduction of incentives for working longer
- encourage MS to have a more active role in assessing the impact of pension reform on labour market
  - some MS could use their own modelling techniques
- enhance the **transparency** of the process

# Actuarial considerations –

## A. Pension modelling: suggestion #3



- **insured population grouping by nationality** could improve the **accuracy** of projections, provided that .....
  - composition of insured population by nationality is expected to change in future;
  - the characteristics, such as level of earnings and past insurance credits, vary by nationality; and
  - non-nationals might be entitled to pro-rata pension even if they do not satisfy scheme's eligibility conditions
- ensure **consistency** with Eurostat's aggregate demographic projections
  - entry/ leaving rates applied in the active insured population, as per pension model, should linked to immigration/ emigration rates, as per Eurostat's population projections

# Actuarial considerations –

## A. Pension modelling: suggestion #4



- pension model could **incorporate the initial stock of inactive insured persons** in order to avoid underestimating the pension cost over the first 25-35 years of projection period
- MS should consider adapting their pension models to be able to **explicitly model the new inactive insured persons**, particularly non-nationals, provided that .....
  - a high level of migration is experienced
  - a social security scheme offers pension benefits which are non-proportional to contributory period, e.g., a minimum pension is granted to those with relatively short periods
  - ...in that way underestimating pension cost will be avoided

# Actuarial considerations –

## B. Scheme-specific assumptions: suggestion #1



- when estimating future eligible pensioners and calculating new pension awards amounts, the **distribution of past insurance credits** and **distribution of insurable earnings** should be explicitly modelled
- ensure **transparency** of...
  - ...the assumed values of the above variables; and
  - how they are derived

# Actuarial considerations –

## B. Scheme-specific assumptions: suggestion #2



- the approach of applying **different mortality rates for certain subgroups of the population** should be discussed
  - in adherence to ISAP2
  - ...but these should combine in aggregate to national mortality pattern and levels, as per Eurostat
  - ...maintaining overall **consistency** with Eurostat's general population projections
- departure from the above consistency rule
  - mortality rates for pensioners living in an overseas country, which, if material to the overall financial projections, could be set at a different pattern and levels
- **transparency** - the assumed values should be clearly specified and reported

# Actuarial considerations –

## B. Scheme-specific assumptions: suggestion #3



- when projecting the survivors' benefits cost, the **probability being married, average age of spouse and number and age of children** should be explicitly or implicitly modelled
- ensure **transparency** by .....

  - ...having all MS to disclose the assumed values of the above variables

# Additional considerations



- our Committee could suggest how our ideas could be technically implemented for the 2015 Ageing Report
- assess their materiality - the sensitivity of the financial magnitude of projection outcomes
  - perhaps at the workshop on pension models (not invited!)
- technical implementation
  - determination of scheme-specific assumptions
  - achievement of consistency through the use of appropriate indicators
- next, our Committee will make suggestions on the effectiveness and transparency of pension projections reporting for the Ageing Report in accordance with best international practice

# Other initiatives of the SSSC



- Response to DGSanco consultation on consumer protection in personal pensions (Pillar 3 and Pillar 1 bis)
- Response to EIOPA consultation on regulation of personal pensions (not covered by Solvency 2 or IORP Directive)
- Report on experience of tracking services in NL, DK, SE, FI
- Extension of study in tracking services to other major MS
- Establishment of Task Force on Adequacy of Pensions
- Pensions Committee to establish task force on decumulation

# Task Force on Adequacy



- chaired by Marianna Papamichail
- recruiting members to the task force
- subject to interests of members of the task force, work on
  - measurement of adequacy of pensions, taking into account situation with other benefits and services
  - how to bring together concepts of sustainability and adequacy
  - fairness between gender and generations
  - use of microsimulation models to investigate distributions
- aim will be to produce a not too long report on the issues
- suitable for publication; also a tool for discussion with ISG

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