



Concept Note

Actuarial Valuation Training in Asia and the Pacific

September 2023

Location: Bangkok, Thailand

► Background

As in other regions in the world, the extension, adequacy and sustainability of social security systems is receiving increasing attention in the policy debate in the Asia and the Pacific Region. The speed of ageing, the impact of climate change and the changes in the world of work, are impacting not only the present but also the future of social security systems, making the capacity to plan more important than ever. In this respect, having adequate analytical tools is essential to guarantee the success of social security institutions and the schemes they manage in both the short and long run.

A social security institution requires the input of qualified actuaries to ensure appropriate analysis can be undertaken and ensure that policy making, financing and reform decisions are evidence based. Actuaries analyse the financial impacts of risk and uncertainty on social security schemes.

Actuarial valuations should be undertaken regularly for existing schemes, when new schemes are discussed and developed and for proposed reforms. Actuarial valuations are subject to actuarial professional standards of practice at the national, regional or international level. All actuarial work should be properly managed and cleared by qualified actuaries to meet the highest standards of quality.

The results of actuarial valuations input into decisions regarding:

- *Financial sustainability*
 - Analysing the present and future financial development and the causes of present or future deficits, appropriate financing and investment decisions can be made.
- *Coverage and benefit adequacy*
 - Assessing the impact of extension measures on costs and benefits
 - Projecting benefit levels across different groups
- *Assessing system fairness*
- *System design and reforms*
- *Communication and disclosure*

In addition, the carrying out of actuarial valuations improves data collection and management within the institution, strengthens public trust in social security provision and improves governance structures and processes.

Building up internal actuarial resources

The [ILO ISSA Actuarial Guidelines](#) state that “the social security institution should aim at creating an **internal actuarial department** responsible for part or all of the actuarial work to be undertaken”. It is essential that internal actuarial resources are built up within a social security institution so that more of the actuarial work can be carried out ‘in house’ and closely reflect the economic, demographic and labour market situation in the country and therefore support evidence based decision making. The ILO has been working for many years with social security institutions in building up these internal resources. However, further support on training and knowledge transfer is required and this training seeks to respond to this need. The process to qualified actuary status is dependent on completing the relevant professional examinations and meeting experience requirements. This training therefore is not focused on this specific process; instead it provides support and training related to the actuarial valuation process and the role of those managing and contributing to that process within the institution, including those who are currently undertaking professional actuarial examinations with a view to qualify as actuaries. It however does not cover any aspects of actuarial valuation work related to modelling and does not seek to train actuaries in actuarial science nor training towards qualification as an actuary. Instead the focus is on issues such as data management, assumption setting, reporting and input of results and recommendations in policy and financing reform

► Relevance

The 5-day training session supports the efforts of social security institutions and the ILO to build up capacity within their institutions in the management and carrying out of different aspects of the actuarial valuation process and other areas where actuarial work is involved. This activity is particularly relevant for social security institutions in the region because:

- There is a shortage of actuarial valuation training opportunities in the region, particularly in respect of social security actuarial work
- This on-site training complements ILO activities on training on actuarial work for social security which forms part of the work undertaken and managed by the Regional Actuarial Services Unit
- Face to face learning is not only more efficient but allows the exchange of experiences and discussion of challenges amongst the different social security institutional actuarial functions represented
- The training will highlight the importance of the actuarial valuation for policy making and financing
- Some actuarial valuation projects managed by the ILO explicitly set out this form of training as part of the project plan
- The invited participants will be from ASEAN countries (as well as three selected South Asia countries). For the SSO, this corresponds to a specific work commitment of the SSO towards ASEAN

► Objectives

- Transfer of knowledge to participants in respect of:
 - Carrying out the actuarial valuation and management of the process
 - Other input of actuaries in the management of the social security institution (eg Risk Management, Investment, Benefit calculations etc)
 - Managing actuarial work
- Highlighting the importance of actuarial work for policy makers and other stakeholders
- Building up contacts between the different social security actuarial functions in the region
- Input into requirements for each social security institution in building up their own actuarial capacities

► Date and duration

The training will take place over 5 days in Bangkok, Thailand. It will be organised in September 2023. The format will be as follows:

- **Day 1-3:** Mandatory initial 3 days on actuarial valuation, data, assumptions and reporting issues of interest to all participants no matter their branch responsibilities.
- **Day 4-5:** Two parallel streams focusing on branch specific issues. *Stream i.* will focus on health actuarial valuation work (2 days) and *Stream ii.* will focus on pension benefits (day 4) and unemployment insurance benefits (day 5) respectively

► Key Content Covered

- **The role of the actuary and importance of actuarial work for social security policy and financial decision making**

Context setting and link to policy making

- **The importance of ILO ISSA Actuarial Guidelines and their impact on how actuarial work should be carried out**

Step by step run through of key elements of the document and how it should impact the actuarial work carried out.

- **Expert sessions and input into decisions on assumption setting**

A range of presentations from external experts on the actuarial valuation process and setting assumptions

- **Improving data collection and management**

Good quality data is a key requirement of a valuation. Sessions will focus on data requirements and how data collection and management can be improved within social security institutions.

- **Link of actuarial results to policy making and operational issues**

How the results of the valuation should link to discussions on reform to provision and financing . Role of actuarial work in operational issues (eg setting appropriate rates)

- **Building up actuarial capacity within a social security institution (training, Actuarial Department creation and development, recruitment and retention of appropriate staff)**

Information on issues to consider and international experience on approaches to take to build up capacity

- **Risk management and investment policy**

The importance of scheme and operational risk management and the input of actuaries into these processes. Financing and investment policy.

- **Theme based sessions**

From day 4, the training will split into two parallel sessions as follows:

Stream i.: actuarial work for health benefit schemes (days 4 and 5)

Stream ii. actuarial work for retirement benefit schemes (day 4) and actuarial work for unemployment insurance schemes (day 5))

► Participants

Practitioners from social security organisations in the region are invited. They will include:

- Those undertaking actuarial work or related analysis
- Those managing actuarial work and analysis and/or responsible for building up actuarial resources within a social security institution
- Other professionals

Whilst the training is focused on participants currently or planning to undertake actuarial examinations, it is open to those managing such work or those whose work supports actuarial work (E.g. economists, demographers, data specialists). Participants will be invited from the following countries:

- Thailand
- Cambodia
- Viet Nam
- Lao PDR
- Malaysia
- Indonesia
- Philippines
- Nepal
- Sri Lanka
- India

► Presenters and trainers

The following presenters would be considered (tbc):

- ILO Speakers to include Head of the Regional Actuarial Services Unit, Senior Social Projection Specialists, Regional Health Specialist, ILO Bangkok and Geneva based Technical Officer & Social Security Health Actuary
- Participants from social security institutions will present their experiences
- External presenters on site – for example, Senior Actuary and Modelling Actuary from ILO Actuarial Valuation projects in the region, Universities and the national actuarial profession
- External presenters (remotely) – for example, leading specialists in actuarial work able to provide an international perspective

► Proposed outline of training

Day 0: Sunday. Arrival

Day 1: Monday. Theme – The importance of actuarial work and key data and assumption issues to consider

Elements covered:

- Keynote speaker
- The importance of actuarial work
- The development of actuaries within an internal social security actuarial function
- ILO ISSA Actuarial Guidelines – Scope, contents and the Actuarial Valuation (*Section A*)
- Focus on data and assumptions

Day 2: Tuesday. Theme – The actuarial valuation report and link to policy; key reporting principles; professional issues

Elements covered:

- The 4 Rs – reporting, reviewing, reforms and recommendations
- ILO Conventions and the actuarial valuation
- ILO ISSA Actuarial Guidelines – policy issues, risk
- Focus on professional issues (*Section F* Actuarial Guidelines)

Day 3: Wednesday. Theme – Operational issues; risk management and investment; building actuarial capacity

Elements covered:

- Financing Policy and link to investment policy
- ILO ISSA Actuarial Guidelines – *Section B* (Operational issues)
- ILO ISSA Actuarial Guidelines – risk management and investment overview
- Actuarial expertise, staffing and training (*Section H* Actuarial Guidelines) with a focus on examinations

Day 4 and Day 5: Thursday and Friday– parallel sessions on actuarial work for health schemes; retirement benefit schemes / unemployment insurance schemes

Parallel session: Stream i: Actuarial work for health schemes

Elements covered:

- Health Scheme-specific Data:
- Health Data requirements, Challenges and recommended approaches
- Scheme-specific Assumptions
- Actuarial Valuation results and reporting
- Financing Policy, reserves and investment
- Group Exercise: Actuarial Projections using a simplified approach

Country example - Thailand: Overview of actuarial valuation approaches to Health benefit provision and financing

Parallel session : Stream ii Day 4: Thursday – Retirement Benefit Schemes

- Actuarial principles – projection period, methodology and financing approach
- Specific data issues
- Input into reform and transition issues
- International examples of reforms and financing
- Investment of retirement benefit scheme assets

Day 5: Friday – Unemployment Insurance Benefit Schemes

- Actuarial principles – projection period, methodology and financing approach
- Specific data issues
- Scheme design with a focus on eligibility criteria, duration of benefits and part time / full time work
- Role of employment services
- International examples of reforms and provision