





Call for expressions of interest

Support of a national actuarial expert in developing a curriculum and a resource book for training of trainers on actuarial principles and techniques of social security pensions for MOHRSS actuaries

The ILO Country Office for China and Mongolia is seeking expressions of interest from qualified Chinese individuals or institutions to work with the ILO Senior Actuary to develop a curriculum and a resource book for training of trainers on actuarial principles and techniques of social security pensions for actuaries of the Ministry of Human Resources and Social Security (MOHRSS). The assignment is part of the EU-China Project "Improving China's Institutional Capacity towards Universal Social Protection (CHN/18/01/EUR)".

For further details about the assignment, please see the **Terms of Reference** below.

Applicants are requested to submit the application letter in English or Chinese at least including the following information:

- 1. Technical elements:
- Curriculum Vitae in English or Chinese
- Availability and timeframe
- At least one copy of a publication or training material developed related to actuarial principles and techniques
- Demonstration of ability to train with references to applicants' experience with training on actuarial principles and techniques in China
- 2. **A budget proposal** including daily fee rate and other relevant costs

The technical elements and the budget proposal must be placed in two separate emails, and submitted to frotal@ilo.org. The submission must be marked: "China EU Social Protection Project: national actuarial expert – technical elements" and "China EU Social Protection Project: national actuarial expert – budget proposal."

Submissions should be received no later than 30 October 2020. Work should start no later than 1 December 2020.







Terms of Reference

Support of a national actuarial expert in developing a curriculum and a resource book for training of trainers on actuarial principles and techniques of social security pensions for MOHRSS actuaries

1 December 2020 to 30 June 2021

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1. Background

The EU-China Project "Improving China's Institutional Capacity towards Universal Social Protection" funded by the European Union aims to improve the coverage, adequacy and sustainability of the social security system in China. The ILO and the Ministry of Human Resources and Social Security (MOHRSS) jointly implement the project. One of the collaboration areas is to strengthen the actuarial capacity of MOHRSS and its provincial branches through training and development.

ILO and MOHRSS organized a pilot actuarial training course in June 2020, primarily targeting provincial actuarial staff of MOHRSS. The pilot training aimed at providing an introduction or refresher to actuarial principles and techniques in the field of social security pensions. The final objective was to test a first set of training materials to ultimately develop a resource book for training of trainers (TOT) at a later stage of the project.

To develop a tailored TOT curriculum and material, the project is recruiting a national actuarial expert to work with the ILO Senior Actuary to jointly carry out this assignment. These TORs define the conditions for engaging the national actuarial expert.

2. Objectives

The objective of this activity is to develop a TOT curriculum and a resource book (a set of up to five units with content and pedagogic instructions for trainers on how to use the contents through class exercises and activities, and accompanying PPT slides) on principles and







techniques of actuarial services on social security pensions for Social Insurance Administration of MOHRSS.

3. Deliverables and activities

(1) **Learning needs assessment report** (5 pages, Arial 12 spaced 1.5, <u>by 10 December 2020)</u>

A survey was administered to assess the existing sets of skills, the gaps in skills and therefore the learning needs to bridge the skills gaps for the actuaries at MOHRSS at national and provincial levels.

The learning needs assessment report is a 5-page document that contains the recommendations for the objectives of the training of trainers, the target audience of the training, the outline of contents and generic pedagogic approaches (Online, face to face, blended approaches) recommended. This paper will form the introductory part of the TOT curriculum. Based on the existing information from the survey and any additional information collected with MOHRSS, the national expert will draft the report, which will be reviewed by the ILO Senior Actuary and MOHRSS Social Insurance Administration.

Responsibility:

• National expert: drafting the assessment report (5 days)

(2) **Structure and contents of the proposed curriculum** (3-5 pages, Arial 12 spaced 1.5, by 20 December 2020)

Based on the learning needs assessment, the existing materials produced for the trial training and the materials already available at the Social Insurance Administration, the national expert will develop a proposal for the structure and contents of the proposed curriculum. An example of existing materials available from SIA is the book "Actuarial Theory and Practice of Pension Insurance" (2008) handbook currently used for training their established actuarial model for pension.

It is anticipated that the training includes an introduction to internationally recognised actuarial principles supporting actuarial valuations of social insurance schemes, as well as experience and practice in respect of managing, developing and reporting on actuarial valuation results. The training will refer to the current actuarial model for pension developed and used by the National Social Insurance Administration and applied nationwide, but does not intend to train on the use of this model. Specific topics include approaches to collecting and managing data, setting assumptions, principles of actuarial modelling techniques, methods of







producing life tables, risk analysis, financing approaches, assessment of social insurance funds and the link from investment policy to liabilities, actuarial report writing and writing skills, peer review etc.

Responsibility:

- National expert: define and refine the structure of training contents taking into account national literature, discussion with the project team, the ILO Senior Actuary and the MOHRSS (3 days)
- (3) **Draft of training contents** (100 pages written text, Arial 12 spaced 1.5, by 20 March 2021)

Based on the training structure of contents agreed with the project team, the ILO Senior Actuary and the MOHRSS, the national expert will draft the training contents. The contents should be adapted to the Chinese institutional and administrative environment and tailored for actuarial staff of MOHRSS.

Based on existing material, the national expert is responsible for the production of a training of trainers resource book comprising a set of up to five units with content (100 pages). The ILO Senior Actuary will review the draft and provide inputs with discussion of semantics from an international perspective, international principles, experience and practice.

Responsibility:

- National expert: draft the training contents specifically targeting the actuarial staff of MOHRSS (30 days)
- (4) Final draft of training contents (100 pages, Arial 12 spaced 1.5, 20 April 2021)

The draft training contents will be handed to ILO and MOHRSS for review and comments. The national expert, with the assistance of ILO Senior Actuary, will revise the contents incorporating comments from ILO and MOHRSS and produce a final draft.

Responsibility:

- National expert: review and improve the draft (6 days)
- (5) Draft of the pedagogically improved Actuarial Training of Trainers Resource Book including a trainers' guide, embedded in the already produced content (Final document 125 pages, Arial 12 spaced 1.5, 10 May 2021)

A trainers' guide, not separate but embedded in the initial content, will be further







developed to facilitate and advice the future trainers on how to operationalize the training delivery. It will include key session plans, learning points, exercises and activities for groups and individuals integrated in each unit, instructions for trainers, etc. in the modalities of online, face-to-face learning and blended approaches. It will take into account of different training modalities - online, face-to-face learning and blended approaches, and provide oriented options. The ILO Senior Actuary will review and provide inputs to the final version of contents + trainers' guide.

Responsibility:

- National expert: draft the Actuarial Training of Trainers Resource Book including a trainers' guide (6 days)
- (6) Final Actuarial Training of Trainers Resource Book including a trainers' guide (final document 125 pages, Arial 12 spaced 1.5, 20 June 2021)

The final draft takes into account ILO and MOHRSS comments.

Responsibility:

- National expert: final revisions (5 days)
- (7) Accompanying PPT slides (at least 100 slides, 30 June 2021)

Based on the final training contents and the pedagogic exercises and guidance, a set of accompanying PPT slides will be developed for training. The ILO Senior Actuary will review the PPT slides and provide inputs; and develop the PPT slides regarding international principles, experience and practice.

Responsibility:

• National expert: develop PPT slides (5 days)

The following activities will be executed thereafter but under different terms of reference:

- (8) Delivery of a trial training of trainers (by 20th July 2021) The national expert and the ILO Senior Actuary will jointly deliver the trail TOT organized by MOHRSS.
- (9) Adjustments following the trial training (final document 130 pages, Arial 12 spaced 1.5, by 20th September 2021)
- (10)Translation, editing in English and Chinese and graphical layout of the contents in both languages (final document 130 pages, Arial 12 spaced 1.5, 30 November 2021)







and printing. The

The ILO project team will be responsible for translation, editing and printing. The products will be translated, with professional editing and graphic visual lay out for e-printing.

4. Workload

The activity will entail an estimated 60 days of a national expert from 1 December 2020 to 30 June 2021, based on the following estimates:

- Learning needs assessment report: 5 days
- Structure and contents of the proposed curriculum: 3 days
- Draft of training contents: 30 days
- Final draft of training contents: 6 days
- Draft of a pedagogic Actuarial Training of Trainers Resource Book: 6 days
- Final Actuarial TOT Resource Book: 5 days
- Accompanying PPT slides: 5 days

5. Eligibility and selection of candidate

Eligibility

Eligible candidates for this call may be qualified Chinese individuals, institutions, or non-governmental organizations registered in China.

Evaluation criteria

Qualified candidates (individuals or institutions) must be able to demonstrate having the following qualifications:

- Advanced degree in actuarial science, economics, mathematics, social protection, finance, statistical science preferred
- Experience in actuarial studies, actuarial training, and professional advice on actuarial services
- Demonstrated understanding of international and national good practices of applying principles and techniques of actuarial services
- Demonstrated experience in training on actuarial science
- Proven track record of drafting clearly and concisely

Weighting:

Technical assessment 70% and cost proposal 30%

Specific technical assessment criteria (14% each):







- 1. Degree of qualifications
- 2. Nature and relevance of technical expertise
- 3. Knowledge of Chinese social security financing demonstrated by writings and teaching
- 4. Experience in training on actuarial science in China and internationally
- 5. Proven track record of drafting clearly and concisely

The pass mark for the technical assessment is 42 (60% of 70). Only the applications that passed the technical assessment would receive a financial evaluation.