INTERNATIONAL ACTUARIAL ASSOCIATION

Education Committee Meeting
October 15, 2015 — 08:00-12:30
The Westin Bayshore, Vancouver

The attendance list is available at the end of these minutes.

1. Introduction and Welcome

The Chair Klaus Mattar called the meeting to order and asked attendees to introduce themselves. The chairperson also welcomed the new members to the committee: Audrey Meganck *(Institut des Actuaires en Belgique)*, Olivier Steiger *(Association Suisse des Actuaires)* and Jasna Tenšac *(Hrvatsko aktuarsko dru*štvo).

2. Approval of the London Meeting Minutes and Review of Action Items

The minutes of the previous meeting were approved as presented and the action items were noted.

Action item

Secretariat will post to the website. (Done)

3. A) Education Questionnaires Reviews

1) *Actuarial Institute of Chinese Taipei.* Reviewers, Isabelle Larouche and Warren Luckner, presented their report and indicated that changes made to the education syllabus are compliant with IAA requirements. Changes were approved.

2) *Het Koninklijk Actuarieel Genootschap.* The reviewer, Maja Benko, presented positive feedback in her report and indicated that the association complies with IAA requirements. It was mentioned that the professionalism components will remain under the care of the association. Changes were approved.

B) Full Membership Application

Central American Actuarial Association. Reviewers Lluís Bermúdez Morata and Rafael Moreno, presented their report and indicated that they are not supportive of the documents presented. The association is currently considering their feedback and working on amending their documents.

C) Request of reviewer.

Bulgarian Actuarial Society. Their documentation was received a couple of months ago and sent to a possible reviewer. A new reviewer will be contacted from the reviewers' poll.

Action items:

Secretariat to:

- Send a message to Chinese Taipei and the Netherlands informing of the results of the review
- Send the documents from Bulgaria to another reviewer.

4. 2015 Workplans/ goals

The chairperson indicated that the committee's workplan will be updated following the recommendations received during the Executive Committee and presented at a later date.

5. Education Syllabus Webinars

It was agreed to discuss this point after the discussing the syllabus items.

6. Syllabus presentation at the European Congress

It was reported that the AAE allocated some time to have a presentation on the syllabus during the congress.

7. Actuarial Educators Network Report

This item had been removed from the agenda as there was no news to report. The chairperson informed that the network continues to grow and that the quarterly newsletters have been sent out on schedule. She added that in the coming months the network will work on energizing its work by sending messages on what the role and objectives of the network are and what kind of support it can offer to its members.

8. Syllabus Review Task Force Report

The chairperson introduced this item by indicating that the Syllabus Review Task Force Report will be presented in two sections: the first will be about the Syllabus itself, now at an advanced development stage, and the second one will deal with the accreditation process for the syllabus, which is just being exposed to member associations. By the end of the sessions committee members will be asked to indicate whether their associations support or not the syllabus. If they do not support it, then the committee leadership would like to know the reason and what could be done to gain their support in the months to come.

After a brief introduction of the task force members, the presenter made an overview of the recommendations and requirements that lead to the creation of the SRTF and of the update of the IAA syllabus. He explained that the proposed syllabus is a reply to the Education Future Actuaries Task Force's recommendation to update the IAA syllabus looking at the core needs that the profession will face in the future.

He explained that the first proposal of the new syllabus was introduced during the Zürich meetings education seminar, where the task force receive feedback from the association representatives present at the meetings. Following the meeting, the task force gathered the feedback received and opened a further consultation process where associations could send their feedback for consideration. The speaker thanked associations for their feedback and indicated that all the information received was considered, but to avoid contradictions they could not include it all within the syllabus.

It was emphasized that the syllabus is a common core for all IAA full member associations. Each association can choose to add other elements or increase the level of requirements of the learning objectives they deem appropriate.

Task force members explained the decision making process when making changes to the syllabus, for instance, the cognitive level required for the Risk Management learning area, the balance between mathematical and business skills, how maths is applied to risk management techniques, and so on.

The audience was reminded that the IAA, as an international association, has a membership of actuaries working with a common ground skills set that is important to maintain.

The following are some of the comments received on the syllabus:

American Academy of Actuaries (U.S.). The Academy is an individual membership organization of actuaries, not organizations, and it is the national association in the U.S. Their membership criteria includes education requirements and specific knowledge of US laws and regulations, and their basic education requirements can be met by a candidate who has received credit for obtaining their basic education from another actuarial organization (SoA, CAS, IFoA, CONAC). It is the view of the leadership that 'Enrolled Actuaries' could have problems meeting the syllabus requirements as they focus on very specific topics. Enrolled Actuaries are appointed by the Government and the Academy is not able to change their education requirements. The Academy abstained from expressing a view on the proposed syllabus, as it is not clear how flexibility indicated in the IAA internal regulations will be applied within the accreditation and implementation processes. One suggestion from the Education Committee was that the Academy could create a separate category of members for those that did not meet FQA standard. The Academy strongly prefers a single membership category for its members and is very reluctant to create a separate category.

Casualty Actuarial Society (U.S.). CAS abstained from providing a view on the syllabus. It is fully supportive of the Educating Future Actuary Task Force recommendations. It also fully supports the addition of the Data & Systems learning area. CAS's comments come from the lens of actuaries working in the general insurance area. While it agrees that every actuary ought to obtain a base level of knowledge and skills, the proposed syllabus does not reflect the minimum knowledge that actuaries should have. Specifically it would include more requirements in the Data & Systems learning area and less in the Assets area. CAS recommends that the Education Committee allows flexibility in the implementation of the specific learning areas, by allowing associations to apply a lighter approach to certain learning areas and a heavier approach on others. It was suggested that CAS could provide the task force with a list of the learning objectives that they believe are best covered as specialist matters.

Aktuarvereinigung Österreichs (AVÖ) (Austria). Austria does see the need for changing the syllabus. However it does not fully agree with the proposed syllabus because the mathematical foundations, as described, draw the misleading picture of suggesting that this is all the mathematics that will be required for an actuary. It proposes to:

1) State in the syllabus (introduction) that the mathematics included is not the only maths requirement for a fully qualified actuary but only a foundation.

2) Instead of having a Foundation Mathematics learning area, to include in the introduction that an actuary has to have an adequate mathematical foundation to develop and apply the additional mathematical skills required for success in subsequent actuarial education.

Although it is not fully satisfied with the elements included in the other chapters, it could compromise to approve the syllabus if the recommendations above are taken into consideration.

Suomen Aktuaariyhdistys (Finland). Finland outsources its education to other education institutions. This poses the problem of organizing all the extra courses that must be added, especially Machine Learning, as to teach it they are required to seek the approval of government bodies. As they are a small association they do not have the resources to follow and comply with the examination standards that their governing bodies require.

Institute and Faculty of Actuaries (U.K.). They support the syllabus and do not have any concerns.

Actuarial Association of Europe. The chairperson of the AAE Education Committee reported that in their September meeting they discussed the proposed syllabus with their members. He indicated that discussion was split between the support of the syllabus and the implementation and accreditation process. Some of the comments include:

- Concern on a low level of mathematical content
- Concern over how the IAA syllabus will be incorporated into university syllabuses
- The 10 learning areas indicate some weighting within the groupings of the learning objectives, but the syllabus does not indicate the weighting among the learning areas
- The view that this is a minimum that should allow associations the flexibility to be more rigorous on the application of some learning areas and less rigorous in other.

The AAE is waiting for the final IAA syllabus so it can use the IAA syllabus as a base and broadening the topics according to what is required in Europe. It all comes down to 'what is an actuary' as this means different things in different countries.

Canadian Institute of Actuaries / Institut Canadien des Actuaires (Canada). Canada fully supports the syllabus. However, it shares the concerns on weightings raised by the AAE and recommends allowing associations to apply flexibility.

Society of Actuaries (U.S.). The SoA fully supports the syllabus and believes that all IAA member associations should work towards a minimum syllabus. It also believes that once this happens, all member associations should assess their candidates and determine which candidates have met the minimum syllabus and only then grant them the FQA designation.

Association Suisse des Actuaries (Switzerland). Switzerland faces a similar situation to the Academy whereby its pension actuaries are part of the Swiss Association but are not considered Fully Qualified Actuaries as they do not meet the IAA education standard. These actuaries are classified under another category of membership. These pension actuaries were thought to be indifferent to the fact that the IAA did not consider them FQA. The association does not believe that Data & Systems topic belongs to the core syllabus but instead it might be a specialist topic. It considers that the maths included in the syllabus is more at a high school level, rather than demonstrating that an actuary is a mathematician. However, overall it supported the new syllabus, if some flexibility will be given.

Professionalism Committee. The suggestions previously put forward by the Professionalism committee had been mislaid and the Taskforce will now consider these comments. Suggestions included to add what the areas of Professionalism actually are, for example, specify that they include Professional Standards, Code of Conduct etc.

Institut des Actuaires (France). France does not support the syllabus as it does not include enough information on mathematics and what is included is very basic. It also indicated that topics on insurance are not sufficient. It expressed concern that the syllabus is not carrying the message of the actuary being a mathematician but instead being an expert on business administration and finance. However, if the suggestions from Austria are considered, then it could support the syllabus.

Instituto Italiano degli Attuari. Italy supported the syllabus but indicated that there is not enough material on mathematics and general insurance. It recommended including more information on non-life insurance.

Institute of Actuaries of Japan: Japan supported the syllabus if there is a level of flexibility on implementation. It noted that their actuarial work has a traditional focus, so they do not see a real need for the syllabus to change.

Japanese Society of Certified Pension Actuaries. They supported the new syllabus, but would like changes in a few areas. They are a small association therefore they may rely on other associations, and may take longer to implement the new syllabus. Also, they may need additional time for translation.

Actuarial Society of South Africa. ASSA supports the syllabus as it supports a wide breadth of the areas in which actuaries are currently working.

Actuaries Institute Australia. Australia fully supported the new syllabus.

Actuarial Institute of Chinese Taipei. Chinese Taipei abstained from presenting a view on the syllabus, as it follows the SoA and CAS.

Society of Actuaries in Ireland. Ireland fully supported the new syllabus.

Het Koninklijk Actuarieel Genootschap. The Netherlands fully supported the new syllabus.

Deutsche Aktuarvereinigung e. V. (DAV) Germany fully supported the new syllabus.

Secretarial note: Following the meeting the feedback below was sent by the Instituto de Actuarios Españoles.
The association supports the syllabus and find that the learning objectives included are appropriate. They suggest the task force to consider the following points:

- Renaming "Machine learning" to "Statistical learning" or to "Statistical (machine) learning".
- Assigning more than 10% to "Survival models".
- Including explicit learning objectives referred to "Pension schemes and private and public systems" as well as to "Welfare benefits and health and long-term care insurance" and assign to these objectives more than 30%.

Response from the TF:

On the topic of the inclusion of a Foundation Mathematics learning area, it was mentioned that the SRTF had had a good debate on whether they should or should not add a learning area on mathematics. They decided to include it as they wanted to send the message that at the core, actuaries are mathematicians, however they did not want to specify every aspect that the actuary would need as this was implicit in many other areas. The Taskforce recognized that this might have been a mistake and that, as suggested, one of the solutions could be deleting that learning area under the reasoning that mathematics is so implied in the work of the actuary that it crosses all the learning areas.

With regards to the inclusion of topics such as Machine Learning, the task force acknowledges that small associations will have to invest some time and efforts to set up these courses, but the Education Committee and the Task Force agreed that this is an important element for the toolkit of the actuary of the future. They also expect to provide assistance to all those associations that are finding it challenging to set up the courses.

The difference between absolute compliance and material compliance was made. It was noted that the intent of the task force is ensuring that all member associations do not deviate in any material way from intent of the syllabus.

Task Force members agreed to update the syllabus with the comments received to date and share the new version with associations with the intention of having an electronic vote so the syllabus can go to Council.

Task Force members explained that after the meetings in Vancouver there will be the possibility of providing a second consultation process so they can include that feedback received into the syllabus by making minor changes.

The Executive Committee (EC) Liaison with Education presented a brief report on the 2015 FMA engagement and the comments the EC had received on the proposed education syllabus. He indicated that EC carried out a logistics survey to some member associations, and this year they included a question on whether the association supports the proposed syllabus. After emphasizing that this is not the official opinion of the FMA, he indicated that out of the 19 FMAs surveyed: 10 fully supported the review, 5 supported it with some comments on flexibility on implementation, 3 did not support due to the content included and 1 did not support it. Following this result he indicated that this indicates a strong support from member associations with the requirement of allowing flexibility on the implementation.

<u>Accreditation</u>
Task Force members emphasized that the proposal for accreditation is not final as input from associations is expected.

It was noted that during the accreditation process, associations are called to share the issues they face and their best practices. It is believed that this will help to share best practices with associations facing similar situations. The Education Committee would like to assist each association requiring assistance to achieve their goals.

The proposed implementation timeframes include the following three steps:

Step 1 – July 2017: FMA to set out their implementation plan.

Step 2 – July 2019: FMA will set out their new education system. This will include timings for the implementation or introduction for the various elements included in the syllabus. In the case of University based education, it will indicate that the association has spoken with universities which have agreed to put in place the plan. Any new student starting studying from September 2019 will be required to study the new syllabus. As most changes will only affect third year courses, for most Universities, changes will not need to be made until 2021.

Step 3 – Dec 2022: FMA will report back on how their material changes to their education system have worked by Dec 2022.

'Derivative' associations would only need to indicate that they rely on another association's education system.

A suggestion was to survey FMA at the end of 2016 to find out if they needed assistance with implementation and any major obstacles they see.

The initial view of the SRTF was to request complete compliance with the core elements included in syllabus, as per the current IAA requirements. However, this could change to 'material' compliance. IAA internal regulations indicate: "*Components of the Education Syllabus may be given different weight by different actuarial associations, and subjects may be arranged and material from various topics within the Education Syllabus may be combined in an education system as appropriate. An education system may be assessed based on the overall balance between depth of coverage and breath of coverage, rather than a narrow focus on each part of the Education Syllabus.*" This allows associations to be flexible on the implementation of the syllabus and right now it does not require 100% compliance.

A question about different ways to deliver education was posed, specifically with regards to allowing work place experience. It was noted that parts of Personal and Professional Practice allow work place experience, however the association will be required to assess that the work place experience does comply with requirements. The task force recognizes that there are various ways of implementing the syllabus and that associations are best suited to assess how they will implement the syllabus and can ask for assistance from the committee.

Any association waiting for translations or experiencing other difficulties would just need to inform the Education Committee, so that timelines could be adjusted accordingly.

It was emphasized that the IAA does not favor one education system over another. The IAA recognizes that each association should be able to choose the education system that accommodates its needs. If the association follows a university based system, they will be required to have an understanding of what is being done in their universities to accommodate the requirements of the new syllabus.

The objective of the Education Committee is to partner with IAA associations in the successful delivery of the syllabus, and to assist those that encounter problems.

The chairperson of the committee invited all associations to send out their comments on what is included in the syllabus to Karla from the IAA secretariat. He also noted that any association having problems with the proposal is invited to have a one-on-one conversation with the leadership of the committee and a member of the taskforce so they can work together towards achieving the vision of the syllabus.

9. Other items

In Zürich the Executive Committee created a task force looking into mandatory CPD requirements. The committee will be informed of the decisions made by the Executive Committee.

10. Meeting adjournment

The meeting was adjourned at 12:30.

Respectfully submitted, Karla Zúñiga-Cortés

Attendance List

Chairperson: Klaus Mattar (Deutsche Aktuarvereinigung e. V.)

Vice-chairpersons:
Steve Eadie (Society of Actuaries)
Bozenna Hinton (Actuaries Institute Australia)

Secretary:
Karla Zúñiga-Cortés, Coordinator, Communications and Development

Members:

Christian Buchta, Aktuarvereinigung Österreichs (AVÖ)
Ruth Chu, Actuarial Institute of Chinese Taipei
Régis De Laroullière, Institut des Actuaries
Andrew Gladwin, Actuarial Society of South Africa
Hirota Ito, Japanese Society of Certified Pension Actuaries
Isabelle Larouche, Canadian Institute of Actuaries
Warren Luckner, American Academy of Actuaries
Yvonne Lynch, Society of Actuaries in Ireland (for part of the meeting)
Tomio Murata, Institute of Actuaries of Japan
Ermanno Pittaco, Instituto Italiano degli Attuari
Patricia Teufel, Casualty Actuarial Society
Marjon Tjia through proxy John Oost, Het Koninklijk Actuarieel Genootschap
Olivier Steiger, Association Suisse des Actuaires
Mark Stocker, Institute and Faculty of Actuaries
Henning Wergen, Deutsche Aktuarvereinigung e. V. (DAV)
Lan Wu, China Association of Actuaries

Ex-Officio
Isabelle Larouche, Chairperson Actuarial Educators Network

Executive Committee Liaison
Peter Raymond Doyle

Observers:
Kikuo Asano, Institute of Actuaries of Japan
Bob Beuerlein, American Academy of Actuaries
Ralph Blanchard, Casualty Actuarial Society
Peter Braumüler, Aktuarvereinigung Österreichs (AVÖ)
Jeremy Brown, Society of Actuaries
Cecil Bykerk, Co-vice- chairperson Health Committee; IAA past president
Renata de Leers, ED AWB section
Mary Downs, American Academy of Actuaries
Nick Dumbreck, Institute and Faculty of Actuaries
Jacqueline Friedland, Canadian Institute of Actuaries
Francis Gota, Actuarial Society of Ghana
Ken Guthrie, Society of Actuaries
Paul King, Institute and Faculty of Actuaries

Tarmo Koll, Chairperson, Advice and Assistance Committee
Yoshiaki Maebayashi, Institute of Actuaries of Japan
Mary Downey Miller, American Academy of Actuaries
Jari Niituinperä, Suomen Aktuaariyhdistys
Magne Nilsen, Den Norske Aktuarforening
Lauri Saraste, Suomen Aktuaariyhdistys
John Shepherd, Actuaries Institute of Australia
Martha Sikaras, Society of Actuaries
Lindsay Smartt, Actuaries Institute of Australia
Rob Stapleford, Canadian Institute of Actuaries
Akio Tokuda, Japanese Society of Pension Actuaries
Yoshihiko Tsuji, Institute of Actuaries of Japan
Christian Walter, Institut des Actuaires, France
Trevor Watkins, Institute and Faculty of Actuaries
Kurt Wolfsdorf, Deutsche Aktuarvereinigung e. V. (DAV)
Cynthia Ziegler, Casualty Actuarial Society

Regrets
Anna Flodström, Svenska Aktuarieföreningen
Audrey Meganck, Institut des Actuaires en Belgique
Rafael Moreno, Instituto de Actuarios Españoles