

## Education Syllabus Survey

**Should the IAA have a "Global Actuarial Syllabus " that defines a quality benchmark to the international public for the initial education content appropriate for a generalist actuary able to operate over a range of fields? (disregarding which syllabus we have for that purpose)**

### Comments:

<b>Caribbean</b>	The concept of a Global Actuarial Syllabus would be of benefit by having more uniformity regarding the basic educational background of actuaries around the world. However, this may be at the cost of tailored education that meets the need of actuaries practicing in a particular region. It could also slow actuarial educators' ability to respond to changing circumstances and needs. We support a more detailed core syllabus but we are undecided whether a Global Actuarial Syllabus, whilst ensuring conformance in the education of actuaries, will meet the diverse needs of actuaries that practice in different parts of the world
<b>Canada</b>	For clarity, and referring to our answer to question 7, we believe that the IAA should have a single education syllabus, not two syllabi. That single education syllabus would define a quality benchmark to the public, and one that should be required of an FMA, regardless of any additional requirements that may be imposed by a particular FMA or of skills required for specialization in a particular practice.
<b>Croatia</b>	We believe that introduction of quality benchmarks will give incentive to the development of initial actuarial education in line with development of the actuarial practice.
<b>Finland</b>	It is important for the associations to have a benchmark for the actuarial education given from the IAA. In the case of global mutual recognition, it would be really important to have the same Syllabus, otherwise it's not so relevant. In the case of global actuarial syllabus, the endorsement depends also on how binding the syllabus would be.
<b>France</b>	Not necessary. Subsidiarity means leaving local associations appreciate what is appropriate to answer the needs of industry, public authorities and public interest. The vocabulary "quality benchmark to the international public" pushes towards a two tier membership. "that defines a potential reference for the initial education content"... "would be preferable.
<b>Germany</b>	Yes, there should be one global syllabus that applies to all associations and therefore to the whole profession. Only with minimum standards in qualification the actuarial profession can keep its high recognition from external stakeholders. DAV strongly thinks that there should be only one IAA syllabus (no differentiation between global actuarial syllabus or education syllabus). The one syllabus that defines a quality benchmark should also be used for accreditation purposes.
<b>India</b>	A common global actuarial syllabus would ensure that actuaries across the globe get quality education which will help them to be recognised consistently across geographical jurisdictions

<b>Italy</b>	In the cover letter (12.12.2016) of the Education Syllabus Questionnaire it is written that the IAA Officers and E.C. intend to consider separately the two potential uses of an Education Syllabus, namely: 1) As a set of criteria for use in accrediting actuarial associations as Full Member of IAA. 2) As a quality benchmark so that those FMAs who so choose may give persons who use or rely on actuarial work an indication of the quality and depth of their foundational actuarial education programmes. We observe that "a set of criteria" and the "quality benchmark" should have, as base of reference, the same IAA Education Syllabus. Indeed how could a FMA give persons who use an actuarial work, an indication on something that totally or partially couldn't be considered in its education programme? . In the relationships with Supranational Institutions what Education Syllabus should IAA choose to indicate the quality of FMAs education programme? Then we say yes subject to IAA has only one IAA actuarial Syllabus
<b>Japan – JSCPA</b>	No, it shouldn't. Each FMA's exam and/or education should be evolved imaginatively and inventively in accordance with its own goal and environment. And, it is desirable that they are constantly evolved by exchanging ideas among FMAs. Therefore we don't think that the IAA should have a "Global Actuarial Syllabus".
<b>Netherlands</b>	What all recognized actuaries in the world should have in common is a standard global actuarial syllabus as a benchmark which can be used for quality assurance.
<b>Norway</b>	Considering that actuaries work in all regions of the world, it is therefore necessary to define a strictly minimum of common standards for actuaries in developed as well as developing countries.
<b>Poland</b>	To make the meaning of Actuary universally understood. To have a common understanding what questions/problems may be addressed to and actuary.
<b>South Africa</b>	We support an IAA syllabus that sets a minimum benchmark of what is required to be a fully qualified generalist actuary. We recognise the fact that the environment is changing and that the actuarial profession needs to adapt and ensure that the brand of actuary (or at least IAA qualified actuary) has some sort of minimum benchmark level, with global recognition status. We believe that there needs to be a lot of flexibility to meet local needs, so the syllabus should not be applied without some flexibility. We suggest that the minimum benchmark is one that sets out the cognitive level needed and not just a set of topics.
<b>UK - IFoA</b>	As the IFoA has set out in our free form answer on strategic issues for the IAA in question 12, assuming that the IAA becomes the global standard setter for the professional formation of actuaries, the IFoA strongly believes that there is an imperative for only a single global actuarial educational standard. This should be set through an education framework which is appropriately high in attainment level and breadth of content. This will contribute to the assurance of services delivered by actuaries globally; particularly that they are globally-recognised in terms of actuarial skills and professionalism.

<b>USA - AAA</b>	<p>We fully support the development of model syllabi that FMAs may adapt and implement as appropriate for their jurisdictions, just as we support the development of model ISAPs. Therefore, in response to the question: • No, if it is intended to be a criterion for membership; but • Yes, if it is intended to be a model or directional syllabus that is not imposed as a criterion for membership into the IAA, but that FMAs may at their discretion freely use as an example of the current best practices global educators have identified as a resource for improving their own syllabi. We continue to applaud the significant work that has been carried out by the IAA to develop this general syllabus over the past few years. However, there must be clear agreement among the members of the IAA on how this exceptionally detailed and prescriptive syllabus will be used. We believe that it is an excellent model that can be used as a basis from which FMAs can develop their own individual syllabi, but it is much too broad and extensive to be used as a membership criterion. Given the increasing specialization of the profession, we also question whether the new syllabus – taken in its entirety – necessarily represents the best course of study for all individual actuaries. The Academy believes that, given the diversity and specialization of the profession, the development of additional model syllabi – such as a model syllabus for General Insurance – may well be appropriate and useful. Such additional model syllabi should address not just the specialization that exists in the developed world, but should also be flexible enough to accommodate the emerging specialties that will certainly arise as actuarial needs and practices evolve within developing economies. Just as with ISAPs, it must be clearly recognized that a model syllabus only becomes binding when adopted by an FMA for its member actuaries.</p>
<b>USA - ASPPA</b>	<p>Do not like the word "benchmark". However, we do not have a problem with the definition below, with emphasis on the "appropriate local flexibility".</p>
<b>USA - CAS</b>	<p>While the IAA must have a framework for advancing the qualifications and skills of actuaries with non-actuarial organizations operating in the international domain, this should not be accomplished through a single, comprehensive IAA syllabus. Rather, the IAA should focus on broad topics of knowledge and skills common to all actuaries. The IAA should be careful to caution external parties that introductory education, specialized education and experience are all fundamental to actuarial qualifications. Actuaries must understand the environment in which they operate in order to be effective. That understanding generally comes through experience under the supervision of an actuary qualified in that area of practice, possibly (and we believe increasingly in the future) combined with further, specialized education. A generalist education, while potentially relevant within the actuarial community, would not in itself qualify the professional to practice in any specific area of practice and therefore should not be used as a benchmark in communicating with the external public regarding the knowledge and skills of the actuary. Further, the use of the term "fully qualified actuary" within a generalist framework is misleading and inappropriate.</p>
<b>USA - CCA</b>	<p>A global actuarial syllabus for the education of a generalist actuary may be useful but should be used carefully. It could be useful as a model for FMAs to improve their education programs. It would be less useful as a quality benchmark to the international public. Such usage could be misinterpreted as a requirement and could undermine the accreditation process of individual FMAs. The IAA does not need to define quality benchmarks for the international public.</p>
<b>USA - SOA</b>	<p>The Society of Actuaries fully supports the adoption of a single syllabus as a quality benchmark which defines educational guidelines to define a generalist actuary, capable of working in a wide range of practice areas. The SOA further supports the notion that a single syllabus is important in defining the actuarial profession and that maintenance and promotion of a common standard in</p>

	<p>actuarial education is similarly a significant hallmark of a profession. The SOA is further hopeful that the IAA will ultimately adopted the syllabus approved by the Education Committee in January 2016 as the single education benchmark for the profession. The learning objectives of that proposed syllabus provide greater clarity of the depth and breadth of coverage expected for each topic area. The new syllabus is not overly prescriptive, but rather provides greater details over previous syllabi by defining core learning areas. The new syllabus proposal was established following the best practices in current education philosophy. In fact, standard practice in education demands that any syllabus must include not just a topic list, but a listing of intended core learning areas, and, the intended scope for depth and breadth of coverage for each area. Modern educational experts use this methodology when designing any curriculum, for any discipline – the approach is not in any way unique to actuarial science, and, would be immediately recognizable by academics worldwide as a model syllabus similar to those in every field of academic discipline or major.</p>
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**Should such a syllabus be used or supported by the IAA in establishing a performance benchmark for Full Member Associations (FMAs) and/or their outsourced education providers?**

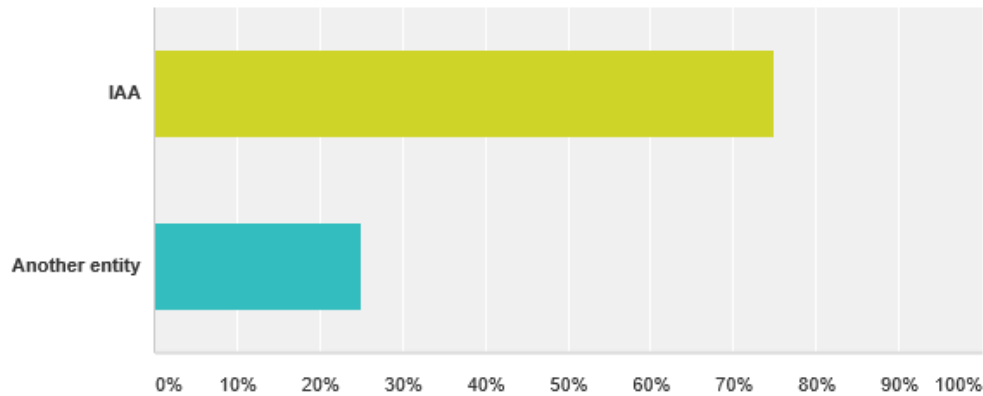
**Comments:**

<b>Caribbean</b>	We would need to understand fully what the function of such a performance index would be and how it would be calculated and used. The CAA does not educate its actuaries i.e. we are reliant on other actuarial associations to set the educational content and examinations that our students must pass to become actuaries. Given that this is the case, how will we be ranked on this performance benchmark
<b>Canada</b>	If the intent of a "performance benchmark" is to go beyond the "quality benchmark" described in question 3, then our answer is no. The CIA's position is that a single syllabus (as approved by the Education Committee) should be adopted by the IAA and that it should be the minimum syllabus used for the purposes of accreditation. If an organization meets the requirements, it is accredited. There should be no further evaluation of whether an organization also meets some other aspirational performance benchmark.
<b>Croatia</b>	We strongly think that such syllabus should have clear identification of the certain level of the benchmark.
<b>Finland</b>	I would be good to have such a benchmark. Anyway, it is important to keep in mind adaptation to local environments (i.e. local GAAP, local solvency regulation, local insurance contract and insurance company regulation, countries where only microinsurance is needed)
<b>France</b>	IAA is not a two tier association
<b>India</b>	It is very much necessary for the member associations to have a common performance benchmark to enable members to be evaluated consistency across jurisdictions. This will encourage easier movement of members from one jurisdiction to another and/or where there is a demand for their skills.
<b>Germany</b>	Performance benchmark only with a link to "is the syllabus fulfilled" or "is the syllabus not fulfilled".
<b>Japan – IAJ</b>	I believe that such a syllabus should be a goal or target for each FMA and FMAs themselves should self-assess their performance, not the IAA.
<b>Japan – JSCPA</b>	No, it shouldn't. As mentioned in the previous answer, we strongly oppose to the IAA having such a syllabus. Using it as a performance benchmark can lead to the situation where such a syllabus is virtually mandatory, and FMAs not completing it are treated discriminately.
<b>Netherlands</b>	Not only as performance benchmark but also as condition for membership for (candidate) association to become member of the IAA
<b>South Africa</b>	We believe that there is a need for some minimum benchmark to ensure a measure of globally recognized minimum required quality. However, this process should not aim at exclusion and narrowing of the global profession, but should rather bring along everyone (even if over a period) to a minimum quality level in a cooperative manner.

<b>UK - IFoA</b>	As the IAA becomes the global standard setter for the professional formation of actuaries, compliance with its educational standard must form one of the significant indicators used in the assessment of national actuarial associations for IAA membership; and for ongoing review of membership. The IFoA believes that the IAA should only benchmark the educational standards of national actuarial associations. Whether the standard of an outsourced education system meets that of the IAA is a matter for the national association, not the IAA. It is our view that the route through which conflicts between international and national educational standards are resolved was illustrated particularly well by the Spanish Actuarial Association at the Cape Town Education Committee meeting.
<b>USA – AAA</b>	We believe that a performance benchmark for FMAs is not meaningful in this context. The requirements for an appropriate syllabus for any particular FMA will vary due to multiple environmental factors. A syllabus that serves life insurance actuaries may be inadequate for general insurance actuaries, for example. However, just as easy access to an extensive library in the next office or online encourages frequent exploration and education on myriad subjects, so should the existence of a high quality model syllabus raise the awareness of FMAs to key topics that may be considered for the individual FMA’s syllabus. Good, extensive models like this one can provide continuous improvement ideas and opportunities to all FMAs. More fundamentally, we do not believe it is the role of the IAA to grade FMAs “ to determine that one FMA is better than another. Any “performance benchmark” will inevitably be interpreted to mean that some FMAs” credentials are more legitimate than others. This is inherently divisive, and completely antithetical to the inclusiveness and community that the IAA has spent decades fostering. The IAA cannot be involved in activities that create a competitive advantage for one FMA over another FMA, or for one education provider over another.
<b>USA - ASPPA</b>	Again, we do not like the phrase performance benchmark.
<b>USA – CAS</b>	We believe that a syllabus should be used or supported by the IAA in establishing a performance benchmark for Full Member Associations (FMAs) and/or their outsourced education providers; however, the most appropriate syllabus for this purpose would be defined through Learning Areas and Topics, but should NOT include specific Objectives and Associated Bloom’s cognitive levels. The IAA should focus its attention on an “IAA Education Syllabus” and should not use a “Global Actuarial Syllabus” as the basis for a performance benchmark of FMA education frameworks. The educational framework established by the member associations should be a consideration (but not the only consideration) in evaluating whether the member association meets the requirements to be a Full Member Association. Further, , the IAA should recognize that member associations will develop syllabi that are responsive to the needs of the profession within their jurisdiction(s) and should allow flexibility in its consideration of member association educational frameworks. Such flexibility would also encourage innovation in syllabus content and assessment methods.
<b>USA – CCA</b>	No. It is not the role of the IAA to establish performance benchmarks.

**USA - SOA** In accordance with long-standing and time-tested practice of the IAA, and, its mandate to further the profession, and protect its viability and credibility world-wide, the IAA can and ought to continue utilizing a single syllabus as a performance benchmark for FMA status. The SOA further believes that the IAA has the necessary resources and expertise to continue the practice of syllabus review and consultation for membership status within its Education and Accreditation Committees. It is vital here to point out that this practice is not a change from current practice, the only change would be the use of an updated syllabus. Please also refer to the final paragraph of our answer to question number 10: It is useful to compare these educational standards, and regard them as consistent with the other standards which the IAA expects all member associations to establish and maintain: a minimum requirement that an association should maintain a code of conduct; a minimum requirement that an associations should establish and maintain a discipline system; and, a minimum requirement that an association should establish and maintain a standards development process.

**If you answered Yes to the previous question, who should be involved in measuring quality on behalf of the public?**



Answer Choices	Responses	
IAA	75.00%	18
Another entity	25.00%	6
Total		24

<b>IAA</b>	Chinese Taipei; Croatia; Germany; India; Italy; Latvia; Lebanon; Macedonia; Poland; Portugal; Serbia; South Africa; South Korea; Switzerland; UK – ACA; UK – IfoA; USA - SOA
<b>Another entity</b>	Finland; Hong Kong; Hungary; Netherlands; Norway

**Comments:**

<b>Canada</b>	The IAA should be the body that measures whether a member organization meets the minimum standard for accreditation; however, it should ensure that any task force, committee, or other body designated to perform such evaluation has balanced representation from smaller and larger member organizations, and no single country should dominate.
<b>Croatia</b>	As mentioned before, such syllabus should have clear identification of the certain level of the benchmark providing to the local FMA to have clear objectives and self-assessment of the objectives. IAA should have control role in the measuring quality or compliance with the certain level of benchmark.
<b>Finland</b>	Each country should decide by its own on the required actuarial education. The syllabus can be used as a benchmark or target. In the case of accreditation to the IAA, the IAA may also evaluate also the quality of the given education and give feedback to the FMA in concern. We note that current discussion has been concentrated on the quality of the syllabus but not quality of education and quality of the examinations. The ultimate goal would be to measure how well the qualified actuary may perform the duties that he/she is entitled to perform after getting the qualification. This is demanding because then also the difficulty of the exams should be measured and also how easy it is to pass those exams. We also not that the actuaries have also fit and proper requirements in accordance with code of conduct of actuaries. So, the actuary may be qualified but may not have experience on a specific position.
<b>Germany</b>	If the IAA has a standard in place for actuarial qualification there is a need to monitor the compliance with this standard.
<b>India</b>	IAA is best suited to take up this role, however, the same can also be managed through local actuarial bodies (FMAs) through establishment of benchmarks and regular monitoring/reviews
<b>Italy</b>	IAA with the active involvement of FMAs
<b>Netherlands</b>	The IAA has to measure quality of their own members in case of accreditation. We suggest an independent committee of the IAA should review quality assessments.
<b>Norway</b>	It should be an independent committee which consist of for example; members from IAA, members of national financial supervisory authority and the civil ombudsman or other advocacy groups
<b>Poland</b>	The measurement has to be independent and internationally reliable.
<b>South Africa</b>	We do not think that IAA members would want to fund an external quality provider. The IAA itself does have limited resources, and would rely largely on volunteers. Hence this would mean that the reviews would by nature be lighter touch, comparable perhaps to the current CERA review process (but less rigorous than the CERA process given resources available and overall scope of what would be needed).
<b>Switzerland</b>	Global (overall) quality should be measured by the IAA, whereas quality of the education delivered to the students should be measured by the local FMAs



<b>UK - IFoA</b>	In our view the global public interest is served by there being an agreed international educational standard for an 'actuary' in terms of both skills and professionalism. This should be demonstrated through compliance of FMAs to the IAA educational standard. This places an onus on the IAA to review on an on-going basis FMA compliance with its standard. Such a process would be consistent with the current initial assessment of prospective FMAs and should be extended to all FMAs on a regular basis. This is consistent with good practice in the wider educational sector and other professional bodies.
<b>USA - AAA</b>	The quality of actuarial education is most meaningfully measured in the context of local needs. Specifically, how well does it prepare an actuary to serve the public in the local jurisdiction in which he or she will actually be practicing? Thus "quality" can only be measured relative to the needs of the users of actuarial services and, more broadly, by the needs of the public served by the profession. It can mean something very different from country to country, culture to culture, or entity to entity. Attempting to force all of this into a single definition of quality is neither realistic nor equitable. The IAA is intended to be an organization of professional organizations. We believe an element of any professional organization's mission involves recognition of their members' responsibilities to the public. This is particularly true for national associations, which are responsible for providing the professionalism infrastructure for their particular jurisdictions. A hallmark of a true professional association is that it serves the public well, and not just the narrow commercial interests of its members (as a trade association does). Consistent with this philosophy, we believe that all FMAs that have been accepted into the IAA will continue to act in the best interests of their respective and often differing publics when developing and maintaining their syllabi.
<b>USA - CAS</b>	While our answer to Question 4 was NO, we believe it is appropriate to respond to this question within the context of the educational framework that the CAS envisions for the IAA. IAA. The IAA, in accrediting Full Member Associations, should evaluate the adequacy of the member association educational framework, based on a self-assessment by the member association and input from the IAA Education Committee. This assessment would be one of several factors that are considered by the IAA in accrediting Full Member Associations.
<b>USA – CCA</b>	This question demonstrates one reason why we answered no to #4. The IAA should not measure quality of FMAs.
<b>USA - SOA</b>	As stated above, the existing and time-tested practices of using teams designated by the Education Committee, with sufficient expertise and experience in the principles of actuarial education and of the profession, should be utilized.

**In the context of the subsidiarity principle, should all FMAs be encouraged to participate in the measurement of their delivered education quality, and if so how?**

**Comments:**

<b>Canada</b>	The proposal for FMAs to self-assess and submit to the IAA for review makes sense.
<b>Estonia</b>	Either examining itself or controlling/influencing the education delivery and/or examination process.

<b>Finland</b>	The answer is "Yes" knowing that the question is ambiguous. The delivered education should not be understood as education that the FMA delivers but also what the FMA recognizes as appropriate education for the actuary to be qualified or educated. For countries whose official language is not understood by other countries, the measurement process may cost a lot if translations are needed. So, we support also self-assessment processes as one alternative.
<b>France</b>	The market competition puts naturally pressure. The local associations should remain free to decide how they control. IAA could ask them to describe how they control.
<b>Germany</b>	IAA governance should include a need to show fulfilment of syllabus.
<b>India</b>	1. Through a executive committee where representative of each FMAs are members. Alternatively a smaller committee could be created where representation from FMA happen on rotation basis for a defined period. 2. There should be some qualitative and quantitative benchmarks that are established by IAA for FMAs. FMAs should be required to report conformity with established standards on regular basis. IAA should also conduct review of quality delivered on FMAs on regular basis. 3. The same can be reviewed by IAA
<b>Italy</b>	It should be a priority for every FMA, that is conscious of its responsibility towards both its members and the IAA, to actively participate in the measurement of its delivered education quality. A constructive dialogue may get easier the procedure of assessment. How? The operative models could be those used some years ago.
<b>Japan - IAJ</b>	The comment is as same as question 4.
<b>Japan - JSCPA</b>	No, they shouldn't. As mentioned in the answer 4, it virtually forces each FMA to conform its exam and/or education to the one provided by the IAA and, as a result, it prevents each FMA from developing its education system autonomously. This deviates from the role of the IAA. Therefore, we will not accept it.
<b>Netherlands</b>	Being a member of a (global) professional actuarial association, FMAs should meet a certain level of quality the actuarial education which is to be determined by the IAA as part of the accreditation requirements
<b>Norway</b>	All FMAs should on a regular basis provide a self-assessment of their education quality and provide a gap-analysis in comparison to the IAAs requirements (Education syllabus)
<b>Poland</b>	It is the responsibility of the FMA to guarantee their members that the association follows international requirements and if the IAA review shaws deficyt in this respect it is an direct indication of a failure of the associaltion's gov. board.
<b>Portugal</b>	By self-assessment of the delivered education actions, supported by the survey answered by participants.
<b>South Africa</b>	We support the view that the subsidiarity principle should be considered when deciding on whether the IAA can set a global education standard and make it a membership standard. However, we believe that the IAA is an association of professional actuarial associations and there must be some minimum standard to join the IAA (as there is currently in terms of education, disciplinary code, etc.). We also believe that in the changing global environment, that standard must change over time and therefore it is appropriate to review membership in the light of changing education standards. As noted, this must be done on a very flexible and co-operative basis. We do not support that any downgrade of membership status of the IAA should be considered, unless there is clear intent NOT to adapt education

	to meet the IAA minimum benchmark. Any IAA member association trying to adapt its education standard in the direction of the IAA syllabus should be supported and its membership status preserved during the transition process.
<b>Spain - Instituto</b>	Self-assessment
<b>Switzerland</b>	Self-assessment of the areas, topics and objectives covered with respect to the associated Bloom's cognitive level.
<b>UK - ACA</b>	FMA's should measure / assess their education quality against the "Global Actuarial Syllabus" and provide feedback on areas where, although they may not fully measure up, this does not impact on the work that they do.
<b>USA - AAA</b>	The principle of subsidiarity holds that nothing should be done by the IAA, a voluntary organization of professional actuarial associations, that is already being done by its members. In other words, any activity which is performed by IAA members should receive great deference. This principle is a bulwark of the IAA's purpose and mission. It is appropriate for the IAA to have an initial membership requirement that an FMA require its member actuaries to have a bona fide actuarial education – this is a hallmark of a true professional association. The requirements, however, should be both flexible and primarily self-assessed by the FMA. An FMA should determine the educational and other qualification requirements that are appropriate for its jurisdiction. We also believe that it is appropriate for the IAA to provide support, resources and encouragement for its FMA's to use in developing and improving their educational programs. This could include not just model syllabi, but perhaps white papers on best educational practices, the most effective ways to deliver actuarial education, and how educational programs and concepts may best be tailored to meet practice-specific or other local needs. However, a regulatory approach to membership criteria should not be the means used to deliver this "encouragement."
<b>USA - ASPPA</b>	Self determination. Only each FMA (especially those with specialized skills) can accurately determine which portions of the education syllabus are appropriate. As this skill sets change, the FMA's can make adjustments as needed.
<b>USA - CCA</b>	Each FMA should have some level of education appropriate to that FMA as a minimum standard for each designation. And, each FMA should have appropriate continuing education requirements.
<b>UK - IFoA</b>	This question is difficult to interpret. The IFoA has therefore considered its answer in terms of the involvement of FMA's in regular review of their own educational quality. The IFoA believes that this should take place through reflective self-assessment of their educational offer and its compliance with the IAA's educational standard. Such self-assessment should then be independently validated by the IAA; again consistent with good practice in the wider educational sector and other professional bodies.
<b>USA - CAS</b>	In establishing the responsibilities of each FMA to evaluate its educational framework, the resources of the smallest associations as well as the issues associated with derivative- and university-based educational frameworks need to be considered. The IAA should not impose requirements for its member associations to measure the delivered education quality that would disadvantage any FMA. While many of the larger FMA's will have a formal process for evaluating the adequacy of their educational framework to meet the needs of the public within their jurisdiction(s), it is not realistic to impose such a standard on all FMA's. Neither is it realistic to encourage such measurement. For instance, it should be sufficient, in our opinion, for derivative-based associations to rely on the processes of the FMA on which

	their credentials are based to assess educational quality. The specific learning objectives should continue to be the sole responsibility of the FMA.
<b>USA – CCA</b>	Encouraging FMAs to provide a comprehensive education program is a reasonable objective for the IAA. Measurement of how well the FMAs attain this goal should be left to the FMAs.
<b>USA - SOA</b>	Current practice includes a collaborative approach by which education committee volunteers review revised curriculum, or a FMA applicant's education pathway and engage in a process of discussion through which any measurement of the association's syllabus which may appear to deviate from the IAA standard is explained, and mappings to the IAA standard are clarified. Through this practice, improvements and learning are garnered. This practice is valuable to all, and to the profession, and should continue. This is perfectly in keeping with the compliance test for subsidiarity as promulgated by the IAA. A single detailed and clearly defined set of educational objectives to define an actuary is certainly something that would be within the IAA's purview to endorse as part of its mission to represent the profession and to promote the role of actuaries.

**Should the IAA retain a separate "IAA Education Syllabus" as a basis for IAA accreditation requirements for FMAs (whose members may be more or less specialised)?**

**Comments:**

<b>Canada</b>	The syllabus approved by the Education Committee should be the only syllabus, and it should be the minimum syllabus required for accreditation while allowing some flexibility with respect to potential substitution of a portion of the learning objectives, and the ability to map one's syllabus coverage to less than 100 percent, while ensuring quality standards are met.
<b>Croatia</b>	We believe that minimal standards of the "Global Actuarial Syllabus" should be established as the IAA accreditation requirements for FMAs.
<b>Finland</b>	We consider that the threshold for a new association to become a FMA is currently high and after approval of new syllabus would be even higher. However, involving new developing countries in the activities of IAA is important because the cooperation between the association and IAA teaches professionalism that is required by actuaries. We also state that the actuarial profession has changed during the last years and actuarial expertise has been used also e.g. in risk management and banking sectors. The FMAs have introduced new syllabuses for new areas. A good question is if e.g. a bank actuary is qualified enough to be a full member in the future. We consider that it would be worth reconsidering if IAA should widen its domain to cover some other fields of profession and what are the implications on the syllabuses. As a basis for this decision it would be worth analyzing what education paths are currently supported by FMAs.
<b>Germany</b>	From DAV's point-of-view, the global actuarial syllabus and the education syllabus should be identical. So yes, there should be an education syllabus, but no to "separate".

<b>India</b>	1. IAA could enforce a minimum education syllabus for FMAs to be accredited. This will enable FMAs to tweak a part of the syllabus to meet local conditions/requirements while upholding the overall education quality across jurisdictions. 2.The IAA Education Syllabus should prescribe the minimum knowledge that should be imparted to students through the curriculum. FMAs, however, should also have the flexibility to include additional items within curriculum depending upon the local requirement of the FMA.
<b>Japan - JSCPA</b>	Yes, it should. Without accreditation requirements on education, associations which consist of members who do not complete enough education would be FMAs. Therefore, in order to avoid it, the IAA should have such a syllabus.
<b>Netherlands</b>	We are strongly against maintaining 2 syllabi. Quality assurance of the actuarial education is a requirement for association to be accredited as a member of IAA as a professional association. Maintaining a syllabus for accreditation purposes which is different from the one for quality assurance leads to measuring with two standards which is confusing and not transparent. We suggest to use the "Global Actuarial Syllabus: to recognize the regional differences and for practical reasons we would suggest to lower the total coverage level for accreditation purposes, for example to 60% coverage of the Global Actuarial Syllabus. The coverage below 100% can be justified if specialisation applies to specific members.
<b>Poland</b>	To promote new fields of actuarial practice - optional not obligatory to FMA and its members.
<b>South Africa</b>	We do not see the need for a separate IAA education syllabus, if the approach for the "Global Actuarial Syllabus", as suggested in sections 3 to 6 above, is implemented. The proviso is that the single education syllabus minimum benchmark standard, as suggested above, will apply for the accreditation of FMA status and that this would imply that full members would need to also adapt their education systems when the IAA syllabus (which should be regularly reviewed) changes.
<b>Switzerland</b>	The syllabus used for accreditation requirements should be identical with the above mentioned "global actuarial syllabus".
<b>UK - ACA</b>	We do not believe it is necessary to be rigid but any lack of generality should be noted and explained
<b>UK - IFoA</b>	The IFoA believes strongly that there should be a single syllabus used for both global actuarial professional formation and IAA membership. In our view a multi syllabus system would create confusion about educational standards with global users of actuaries and actuarial services. The IFoA, and a number of other FMAs, have openly expressed their strong view that if the IAA fails to adopt a single high level syllabus, there is a real risk that alternative groupings of national associations could develop; to the detriment of the global actuarial community. The formation of such alternative groupings would impact significantly on the credibility of the IAA and on the resources (financial and human resource) it has available to carry out its activities. The IFoA believes that all major actuarial qualifying associations would be in a position to meet a single educational standard, and that there could be appropriate flexibility in such a framework to meet the local needs of associations whilst ensuring an adequately high standard. Those falling short of this standard could agree a development plan to achieve it; as is the current process for associations which do not meet the IAA's educational standard. Such development plans could be supported by other FMAs such as the IFoA.
<b>USA - AAA</b>	We believe the IAA should fully support FMAs which determine that it is in the best interest of the public to deem highly specialized actuaries, licensed or certified and providing services within a specific regulatory framework established by the government in their jurisdictions, as FQAs. It is most logical that the course of study to be required for these specialized actuaries be determined by the FMA or the regulatory body licensing or certifying them. Additional model syllabi that might be developed by external bodies, such as the IAA, will always be less appropriate and applicable.

<b>USA - ASPPA</b>	Maybe at the learning level, but only at a broad level.
<b>USA - CAS</b>	This question presumes that there would be two IAA syllabi – a “ Global Actuarial Syllabus” and a separate “IAA Education Syllabus”. The existence of two such syllabi creates the potential for two classes of membership within the FMA accreditation. The IAA should continue to be neutral in assessing how its member organizations implement the educational framework established by the IAA and should allow considerable flexibility in its consideration of member association educational frameworks. Such flexibility is necessary as member associations respond to the specific needs of their jurisdiction(s) and/or specializations, but would also encourage innovation in syllabus content and assessment methods. The IAA Education Syllabus should address the learning areas and topic that are common to all areas of actuarial practice, but should NOT include specific learning objectives within the topics. The member associations should have flexibility to expand on certain topics and de-emphasize other topics, based on the member association’s assessment of its jurisdictional needs. The role of the IAA should be to encourage best practices in the design and application of curricula across member associations, not to dictate minimum standards that all member associations are expected to adhere to. By active discussion and sharing of perspectives on the educational requirements, member associations will be encouraged to innovate and adapt to emerging actuarial and educational norms.
<b>USA – CCA</b>	The IAA should maintain one education syllabus for accreditation purposes. The accreditation process should be quite flexible in how this syllabus is applied. As question #3 implies, the current syllabus is for that of a generalist actuary. Many actuaries are not generalists. There are many actuaries who are highly trained and capable in specialized branches of actuarial work (but not trained in all aspects of actuarial work). These actuaries are sometimes members of broad organizations that include generalist actuaries and sometimes members of specialized actuarial organizations that may not include generalist actuaries. In either case, the organizations are primarily actuarial and both the IAA and the organizations will benefit if the accreditation process is flexible and these organizations are granted FMA status.
<b>USA - SOA</b>	As we understand it, the IAA Education Syllabus referenced in this question refers to the proposed simplified syllabus designed by the Syllabus Governance Task Force. This syllabus to our knowledge has not been vetted with the IAA Education Committee. We have answered this question on the basis of this understanding. The revised model syllabus previously endorsed by 30 FMAs has several improvements over the existing syllabus: 1) the syllabus provides detailed learning objectives rather than just topic areas, giving associations explicit guidance as to the breadth of coverage of each subject; 2) the depth of coverage is clearly indicated, using expected cognitive levels to indicate the extent of knowledge expected for each learning objective and 3) the syllabus adds new topic areas, reflecting modern actuarial practice. The suggested IAA Education Syllabus is so vastly over-simplified that all associations (even non-FMAs) will be able to meet it; and it provides an approach that enables associations to deviate significantly from the minimum syllabus. An example of this over-simplification will be included in a letter to be sent to the IAA with the full text of our comments. We are concerned that adoption of this approach will effectively eliminate the need to comply with an established minimum standard. This approach would not promote a strong singular definition of the profession’s field of knowledge. We view this as particularly detrimental to the future of the profession at a time when other industries and professions are encroaching upon the areas of specialty once reserved for actuaries.

**At what level should the requirements for accreditation be set? (and/or .. with what objective in terms of inclusivity and/or target membership)?**

**Comments:**

<b>Canada</b>	The CIA agrees with the level of the education syllabus as approved by the Education Committee. We would like to note that while the IAA syllabus defines the requirements for a fully qualified actuary, the CIA considers only Fellows of the CIA to be fully qualified, and the CIA syllabus for a fully qualified actuary goes well beyond that which was approved by the Education Committee.
<b>Caribbean</b>	We believe that the IAA should ensure that a core education syllabus is met for IAA FMAs
<b>Chinese Taipei</b>	Minimum
<b>Croatia</b>	We think that proposed levels in the Updated IAA Education Syllabus Updated from February 2016 are appropriate. "It is expected that at least 80% of the objectives in each Supporting Learning Area will be fully covered at the Bloom's level indicated. The objectives covered should be chosen so that the overall Bloom's level is close to the overall level of the full set of objectives for the Learning Area. Initially, some Full Member Associations may need to work towards this level; while they are doing so a minimum coverage of 70% of the objectives will be acceptable. It is expected that at least 90% of the objectives in each Core Learning Area will be fully covered at the Bloom's level indicated. The objectives covered should be chosen so that the overall Bloom's level is close to the overall level of the full set of objectives for the Learning Area. Initially, some Full Member Associations may need to work towards this level; while they are doing so a minimum coverage of 80% of the objectives will be acceptable."
<b>Estonia</b>	The minimum syllabus should indeed be "the minimum", however not lower or less than today.
<b>Finland</b>	The target for accreditation is to guarantee a good basic education that fits the needs the requirements of the local needs of actuaries. It can be considered that IAA accepts the association as a member association instead of a full member association.
<b>France</b>	Existing requirements are appropriate
<b>Germany</b>	To become a member of the IAA an association has to show that the education syllabus is fulfilled (similar to today's process).
<b>Hong Kong</b>	We need a standard that all major bodies can recognize as equivalent
<b>India</b>	Barring the specialisation stage. syllabus should be such that the quality of education of actuaries around the world has a minimum standard. Alternatively, if a common syllabus is not adopted by an FMA and they have their own syllabus, an additional review needs to be done in understanding the level of syllabus versus the common IAA syllabus.
<b>Italy</b>	The target membership should be fully compliant with the IAA Actuarial Syllabus. In case of partial compliance the FMA should submit an alignment plan to realize in x years. We would like to underline that the new Syllabus, as approved by the Education Committee provided already for margins of flexibility
<b>Japan - IAJ</b>	The specific characteristics of each region and market should be taken into consideration. I think that the requirements for accreditation should be the minimum level as an actuary who works globally.

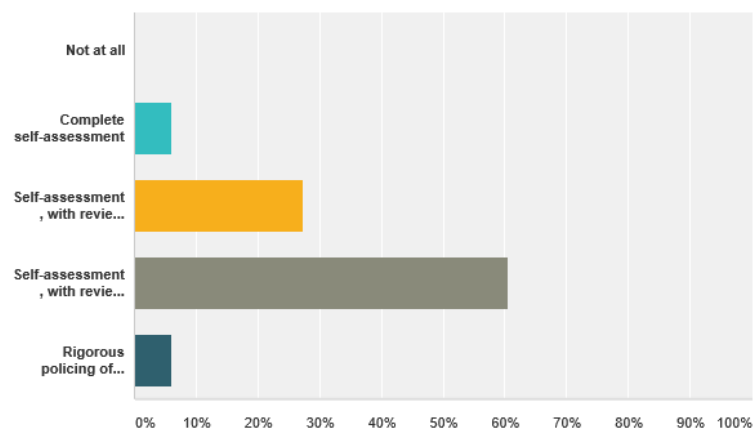
<b>Japan - JSCPA</b>	In November 2016, the draft of "IAA Education Syllabus" was presented in the meeting of the Education Committee, but the each FMA has not yet discussed about it. Not all FMAs appoint members of the Education Committee. Moreover, decision making at the education committee remains at the level of compression of draft to be submitted to the Executive Committee and the Council. Therefore, it is not appropriate to discuss this matter only in the Education Committee. Proposing drafts to each FMA and the process of collecting opinions from it are necessary.
<b>Netherlands</b>	Please refer to our answer to question nr. 7. However, it is up to the Accreditation Committee to propose a percentage 9.
<b>Norway</b>	For FMAs, a minimum level of 80% in supporting learning area and 90% in core learning area is a reasonable target. But during the implementation period, a 70% / 80% of compliance could be acceptable as long a plan is provided by the FMA of being fully compliant at the end of the period.
<b>Poland</b>	Basic common level for FMA accreditation with optional disclosure of higher requirements if adopted by FMA. The issue is I think not all actuaries will opt for most extensive syllabus as this may not be required by their employer. An additional achievement may be indicated by an appropriate abbrev. following the title of actuary.
<b>Portugal</b>	At an intermediate level, but keeping flexibility enough to promote inclusivity as much as possible.
<b>Serbia</b>	Undecided
<b>South Africa</b>	At a generic level of the new IAA syllabus approved by the Education Committee, allowing for a fair degree of flexibility. Most associations (including many smaller associations), have indicated that this was a fair level and that they could achieve it (certainly by 2020/21).
<b>Switzerland</b>	I do not understand the question.
<b>UK - ACA</b>	In the UK we would see the level as being equivalent to an Associate member of the IFoA
<b>UK - IFoA</b>	The IFoA is clear that the accreditation standard and global education standard for actuaries should be one and the same, and be set at the level equivalent to the IAA's originally proposed education syllabus. This would equate to the Associate level of most major actuarial associations; a credible global qualification. It is our view that this could be met by all FMAs and is therefore inclusive and would be an achievable aspirational target for those national actuarial associations seeking IAA full membership. The IFoA recognises that for some current FMAs there would be a need for an agreed transition period. This has already been recognised by a number of associations.
<b>USA - AAA</b>	We believe the better question to ask here is "At what level should the basic education requirements for membership be set?" The IAA is not an "accrediting" body as that term is used in the U.S. Typically that term is understood to refer to a body that is delegated authority to make decisions on the status, legitimacy, or appropriateness of an institution or program. Examples include groups that accredit colleges and universities, as well as many kinds of licensing bodies. The use of the word "Accreditation" in the title of the IAA "Accreditation Committee" may have created unnecessary confusion. This committee has historically reviewed applications for IAA membership and made recommendations to Council regarding which applications should be accepted. The Education Committee has reviewed applicants' basic education programs at the request of, and for the benefit of, the Accreditation Committee. The purpose, of course, has been to help Council make prudent decisions concerning applications for IAA membership. In other words, the purpose of this whole process is to help Council determine whether



	<p>applicants truly are professional actuarial associations. Some in recent years may have taken the term “accreditation” to suggest that the committee has a different and far more regulatory role. This is reading too much into the name of the committee – such a regulatory role is inconsistent with the intent and expectation of those who reconstituted the IAA on a consensus basis in 1998. (We are fortunate to have amongst our leadership some of those early IAA leaders, particularly Cecil Bykerk, who long held the role of Chairperson of the Education Committee and confirms our understanding.) We believe that a more descriptive and less misleading name would be IAA “Membership Committee.” The IAA has historically been an inclusive organization, welcoming not just large sophisticated associations from jurisdictions where the profession is well-established and mature, but small associations from jurisdictions where the profession is young and developing. We believe that the IAA must continue to be inclusive and welcoming if it is to be successful in fostering the growth and development of the actuarial profession around the globe. Raising barriers to membership will only serve to hamper progress. We believe that the historical approach of bringing developing associations into the fold of the IAA and providing them with the support and assistance they need to raise the level of actuarial practice within their local jurisdictions is a much more effective strategy. Because of this, we believe the membership requirements should be set as they historically have been, at a general topical and high level with great flexibility given to member associations as to how the requirements are met, recognizing local needs. Not that many years ago, FMAs offering examinations on a global basis opposed an IAA initiative to develop its own curriculum independent of their offerings. The Academy supported their opposition to the IAA developing its own basic education program on the principle of subsidiarity – that the IAA should not do what its members already provide. Our concerns now are based on the same principle of subsidiarity. It is the Academy in the U.S., and other national standard setters in other jurisdictions, that establish the qualification standards for actuaries to practice in their respective jurisdictions – including the basic actuarial education requirements. Determining what education programs meet these qualification standards and, more importantly, meet the needs of the public in our jurisdiction, is one of the fundamental responsibilities of a national association. We do fully support the need for meaningful membership criteria. However, we believe the purpose of the review of the education syllabus by the IAA Education and Accreditation Committees has long been to ensure that FMAs are truly professional actuarial associations, and not trade associations, fraternal organizations, or social clubs. The essential purpose of membership standards is identification – not regulation. The IAA should continue to welcome all professional actuarial associations that are dedicated to improving actuarial practice in their jurisdictions. Of course, if the facts indicate that this is not the actual goal of the association – that they are something other than a true professional association – then they should not be accepted for IAA membership. (And if facts arise indicating clearly that a current member of the IAA is not a true professional association, seeking the advancement of the profession, they can and should be removed from membership.) When questions arise regarding how to evaluate applicants, the IAA should be influenced more by the concept of inclusivity than by exclusivity. We see the role of the IAA as being a resource to actuarial associations around the world, with the intent that the resources will raise actuarial practice. As a resource and as a means of improving practice, we support the IAA collecting and disseminating examples of high-quality educational syllabus topics, for use by member FMAs as they deem appropriate.</p>
<b>USA - ASPPA</b>	Very high level (learning levels). There should also be a very heavy weight for government accreditation.

<b>USA - CAS</b>	At the Associate level of membership, the IAA should be open and welcoming to any association who seeks membership. At this level, the IAA's consideration should focus on the reputational risk of admitting associations as members who behave contrary to the IAA mission and vision. Full Member Associations should be held to a higher standard, and should be expected to have a rigorous educational framework (both education and experience) sufficient to enable the public to trust the work of the association's fully qualified members. Full Member Associations should be expected to have a Code of Professional Conduct for their members, standards of actuarial practice, and a discipline process for members who do not comply with these professional norms.
<b>USA - CCA</b>	Accreditation requirements should be set relatively low. The IAA should be highly inclusive. The primary objective of the education process in accreditation should be to assure that the applying organization is truly an actuarial organization, not simply a trade or lobbying organization or organization seeking recognition that it cannot attain on its own.
<b>USA - SOA</b>	This question is actually covering three separate topics: accreditation requirements; IAA's objectives for inclusivity and target membership. This question is addressed in answers to question no. 10. The Society of Actuaries strongly believes that the revised syllabus adopted by the Education Committee in early 2016 should be the required standard for accreditation, and that this standard, with accompanying assistance, a realistic time table for revision, and appropriate flexibility, as is designed into the syllabus already, as to localized conditions, is the one and appropriate level for required accreditation, with regard to Education. To the SOA's knowledge, the IAA has not previously used the work of the Accreditation or Education Committee to meet objectives of inclusivity or target membership. Moreover, we do not recall ever seeing what the IAA's target goals are for these areas. The profile of the actuarial profession can be raised by promoting a single common educational standard. Further, the collaborative review process currently used by the Education Committee has been effective and appreciated in assisting new or small actuarial associations to make improvements to their educational pathways with the support and advice of the education expertise available vis-à-vis the Education Committee.

## To what extent should the IAA regulate adherence to its accreditation requirements at the time of accreditation?



Answer Choices	Responses
Not at all	0.00% 0
Complete self-assessment	6.06% 2
Self-assessment, with review of process	27.27% 9
Self-assessment, with review of process; full disclosure of own syllabus; and mapping to the IAA syllabus	60.61% 20
Rigorous policing of high conformity to IAA syllabus	6.06% 2
Total	33

Associations	
Complete Self-Assessment	Serbia; USA – ASPPA
Self-Assessment with review	Estonia; Hungary; Italy; Japan – IAJ; Portugal; South Korea; USA – AAA; USA - CAS; USA - CCA
Self-Assessment with review, syllabus and mapping	Canada; Caribbean; Chinese Taipei; Croatia; Finland; France; Germany; India; Japan – JSCPA; Latvia; Lebanon; Netherlands; Norway; Poland; South Africa; Spain – Instituto; Switzerland; UK – ACA; UK – IFoA; USA - SOA
Rigorous policing	Hong Kong; Macedonia

<b>Canada</b>	For example, a mapping system similar to what the CIA uses with its University Accreditation Program could be useful for the IAA to adopt. Learning objectives and sections are weighted and universities must meet an overall coverage of 85 percent of the CIA syllabus for each section which corresponds to a preliminary examination. Since the coverage is automatically calculated when completed by the university, such a mapping system could achieve the goal of self-assessment and could modernize and simplify the IAA review process.
<b>South Africa</b>	We support a process whereby each FMA self-assesses at the detailed mapping of own syllabus against the IAA education syllabus level (where mapping is done to determine the minimum level for breadth of coverage, which we suggest to be 70%, and in accordance with an agreed taxonomy to measure depth of each topic in the syllabus, such as Bloom's) and submits a self-assessment report to the IAA, with full disclosure of the local syllabus and the mapping outcome. The IAA has the responsibility to review the self-assessment of the member FMA, at whatever detailed level it requires to satisfy itself that the process has sufficient integrity, but taking into account the need for flexibility to allow the member FMA the space to apply locally relevant adaptations where motivated.
<b>Italy</b>	We think that the FMA, in organizing the Self-assessment, compare its Syllabus with the IAA Syllabus. It is FMA responsibility to submit truthful results.
<b>France</b>	Self-assessment, with review POTENTIAL of process: YES; full disclosure of own syllabus: YES; and mapping to the IAA syllabus: YES
<b>Germany</b>	Current procedure done by the IAA Education Committee and IAA Accreditation Committee seems fine in general.
<b>Japan - IAJ</b>	Because there are also language barriers and the differences of the characteristics of each region and market, it would be difficult for the IAA to evaluate the accreditation requirements in detail.
<b>Japan - JSCPA</b>	Certain regulation by the IAA is necessary in order to avoid associations that do not have enough expertise to be FMAs.
<b>UK - IFoA</b>	It is the IFoA's view that the process for initial accreditation should involve self assessment by a prospective national association, with formal review by the IAA involving full disclosure of their syllabus and demonstrable mapping of their syllabus to that of the IAA. This is a credible and robust process that is widely used throughout the global education sector, by professional bodies, and is already in place in the international actuarial community in the form of mutual recognition of qualifications. This should be regulated by the IAA, and FMA's standards should be formally reviewed on a regular basis as a condition of membership.
<b>USA - AAA</b>	In the spirit of inclusiveness and respect for the potential FMA's internal knowledge of its own processes, self-assessment continues to be most appropriate. This is not a weakening of standards – rather, it is faithfulness to the big tent philosophy that has allowed the IAA to become a truly effective global organization. When the IAA was restructured in 1998, it was this spirit of inclusiveness that allowed the IAA to be recreated as an effective international forum for actuarial associations from around the world. Those who seek to have the IAA take on the characteristics of a regulator will find no support from those national associations like the Academy that have not – and indeed cannot – cede our own national responsibilities to another body. With a self-assessment, the subsequent review of the process by the IAA may be at varying levels, depending on the self-assessment materials provided to the IAA by the potential FMA. A well-prepared self-assessment would also include a description of the local environment, actuarial needs, and how the FMA applicant's educational and professionalism programs meet those needs and expectations.

<b>USA - CAS</b>	Review of the process will require discussion of the member association's own syllabus, and how that syllabus meets the needs of the environment within which it operates. The IAA should not require a mapping to its syllabus other than at the topic level; it should be recognized that the needs of the actuarial profession will differ from one jurisdiction to another and from one practice area to another.
<b>USA - SOA</b>	The choices as outlined in this question are difficult to parse, but if the meaning of the "Self-assessment, with review of process; full disclosure of own syllabus; and mapping to the IAA syllabus" are to be understood as a continuation of the current system, with appropriate flexibilities in evaluation of the mappings, then that is the extent to which the IAA should continue to review adherence to this FMA requirement. It is also noted that this was the option supported by the majority of Council members during the poll taken at the Cape Town IAA Council meeting. Finally, it is unfortunate that the IAA opted to use the word "regulate" in this question. This sets the wrong tone and will almost certainly result in flawed responses. Regulate is an inappropriate and inaccurate term, as the IAA has in the past only reviewed and provided feedback on requirements.

**How much flexibility of content should the IAA have in each situation (i.e. quality benchmarking, or accreditation requirements)?**

<b>Canada</b>	The IAA should establish a single minimum syllabus for accreditation while allowing some flexibility with respect to potential substitution of a portion of the learning objectives, and the ability to map one's syllabus coverage to less than 100 percent, while ensuring quality standards are met. As previously stated, the CIA agrees with the syllabus and the flexibility proposed by the Syllabus Review Task Force and approved by the Education Committee.
<b>Croatia</b>	For the purpose of the IAA accreditation requirement, we believe that there should be restricted level of flexibility if any. On the other hand, process of quality benchmarking should include some level of flexibility. In any case, level of flexibility should be appropriately included within result of an assessment.
<b>Estonia</b>	Countries are different, objectives of different organisations may be different, therefore some flexibility is needed. The flexibility should not endanger achieving the IAA vision, especially being recognised as a worldwide profession.
<b>Finland</b>	There should be some flexibility at least regarding local features and local regulation.
<b>France</b>	High degree of flexibility
<b>Germany</b>	Some flexibility does make sense. Core topics (i.e. models) should have less flexibility in coverage than other topics, such as economics for example.
<b>Hong Kong</b>	Very limited
<b>Hungary</b>	The Syllabus or any equivalent document should be on high level- In case of any deficiencies against the Syllabus IAA should advise the associations how to develop further and set deadlines for them.
<b>India</b>	1. IAA should be the final authority for deciding the level of flexibility of content by each FMA. The decision making process should be reasonably objective for FMA to understand and implement with little difficulty. 2. Both minimum level of common syllabus plus the way the education is parted should also be checked.

<b>Italy</b>	In our view, the measure of flexibility should be the same for the 2 uses. In any case it depends on the importance of the content. The T.F. could deep this issue.
<b>Japan - IAJ</b>	A certain degree of flexibility is necessary but the level depends on the content of the syllabus.
<b>Japan - JSCPA</b>	As mentioned before, as for quality benchmarking (Global Actuarial Syllabus), we disagree with the IAA establishing it. As for accreditation requirements (IAA Education Syllabus), we consider that the flexibility in contents needs not to be high, since the high flexibility in the contents can cause the risk of associations without enough expertise being FMAs.
<b>Macedonia</b>	Moderate flexibility
<b>Netherlands</b>	Given that the IAA is a global organization with more than 60 members, a certain flexibility is needed, as long as quality standards are recognized
<b>Poland</b>	Up to IAA council decision. Should be a step by step process - indication of issues, corrective plan, ..
<b>Portugal</b>	Flexibility enough to guarantee a minimum required level of knowledge and to promote inclusivity at the same time.
<b>South Africa</b>	Quality benchmarking There should be a fair degree of flexibility (we believe the degree proposed by the Task Force is quite reasonable, allowing down to 70% of topics in some instance). We do believe that it is important that coverage of a reasonable number of topics are covered at the higher cognitive levels and to the level set out in the syllabus (assuming the new IAA syllabus is used). Accreditation of FMA status: The same comments as for quality benchmarking would apply, as we do not see the need for a separate approach for either situation.
<b>Switzerland</b>	Flexibility as formulated in the Updated IAA Education Syllabus (February 2016).
<b>UK - ACA</b>	This should be at the discretion of an appropriate person, bearing in mind how any flexibility might be viewed by users of actuarial services.
<b>USA - CCA</b>	The IAA should not be involved in quality benchmarking. With respect to accreditation requirements, there should be reasonable flexibility. An organization may not meet every aspect of the education syllabus, but still be an actuarial organization. Both the IAA and the applying organization will benefit by including such an organization in the IAA.
<b>USA - AAA</b>	Extensive. Again, the goal is to be inclusive, encourage diversity, and encourage FMAs to be innovative. Actuarial practice is jurisdiction-specific. It varies around the world to reflect local laws, regulations, business practices, and markets. This is not a weakness, but rather a strength. As stated previously, it is arguably not possible to benchmark an FMA's syllabus against a standard syllabus to determine quality. The ultimate measure of the quality of an FMA's syllabus is how well it prepares the FMA's members to serve the public in that particular jurisdiction. What matters is the appropriateness and applicability of the syllabus to that FMA's particular circumstances and environment. The IAA process for reviewing an FMA's syllabus to determine whether it meets the membership requirements should maintain a large degree of flexibility. This is necessary for at least two reasons. First, to recognize the flexibility that applicants must have to tailor their education programs to local needs. Second, to allow experienced IAA reviewers to exercise their best judgment regarding whether an applicant for IAA membership is truly a professional actuarial organization.
<b>USA - ASPPA</b>	Very broad flexibility for the FMA - again, with a heavy weight on government accreditation. Focus the priorities on professionalism and ethics.

<b>UK - IFoA</b>	The IFoA believes that a single educational framework of the type originally proposed as the new IAA syllabus would have sufficient flexibility to deal with the majority of specific requirements for member associations. However, the IFoA recognises that the presence of such flexibility should be articulated more explicitly. The IFoA believes this should be done before the introduction of any new framework. The IFoA recognises there may be the need for short-term transition arrangements for some associations but believes these are achievable.
<b>USA - CAS</b>	The IAA should operate from a premise that FMAs are guided by the business and societal needs of the jurisdictions in which they operate, with the objective that the actuarial profession remain relevant and valued. With this perspective, the IAA should allow a great deal of flexibility among member associations, and should encourage member associations to learn from each other, in a spirit of collaboration and innovation.
<b>USA - SOA</b>	As with question 8, this question is actually covering multiple topics and should have been parsed out to gather responses on quality benchmarking and accreditation requirements. The terms used are undefined and unclear. The product of the IAA's Education Committee's original Task Force met its charge to both modernize and improve the syllabus, develop it with wide input and consultation by all key experts in education from around the globe. That syllabus covers all critical topics, has added new topics to modernize and improve coverage, provides guidance on the require depth of coverage, and provides sufficient flexibility to address individual member circumstances. Please see our final paragraph to question number 11, where we quote from the original governance proposal to demonstrate the percentage benchmarks which address these individual circumstances. It is useful to compare these educational standards, and regard them as consistent with the other standards which the IAA expects all member associations to establish and maintain: a minimum requirement that an association should maintain a code of conduct; a minimum requirement that an associations should establish and maintain a discipline system; and, a minimum requirement that an association should establish and maintain a standards development process.

**In particular, to what extent are we comfortable in substituting parts of the syllabus for other topics that are more relevant to a particular association?**

<b>Canada</b>	If the IAA sets a minimum syllabus which must be covered to a certain degree (e.g., target 90 percent) by section of the syllabus, the CIA feels that this should allow sufficient flexibility. Using an example again from the CIA's University Accreditation Program, Canadian universities must meet 85 percent coverage of a particular section of the syllabus. That means they have the ability to cover different or additional topics which may add value overall to the education, but the core CIA minimum requirements are met.
<b>Croatia</b>	In line with previous comments, we believe that the IAA accreditation requirement should not be subject to substitution with other topics.
<b>Estonia</b>	We believe that up to 20% of the contents of the syllabus could be replaced by other topics, which, however, should be of actuarial nature and relevant to the profession.
<b>Finland</b>	This could be the right solution for many countries. We are concerned that there would be fully qualified actuaries who do not understand the actuarial profession from a practical point of view.
<b>France</b>	Very comfortable. The level and the potential of the members are more important than the extent of initial education
<b>Germany</b>	With regard to a minimum syllabus, core parts may not be substituted.

<b>Hong Kong</b>	Uncomfortable
<b>Hungary</b>	I cannot answer this in general. Everything depends on the situation, therefore the IAA should keep some flexibility level in the internal regulation (see my answer to the previous question).
<b>India</b>	1. To the extent it does not dilute the minimum requirement for FMA to conform to global actuarial syllabus, the FMAs may substitute parts of syllabus particularly at specialization stage with topics relevant to a particular FMA. 2. Local / relevant knowledge is just as important as are the general principles and techniques. Need to balance the two - both are important and neither can be sacrificed. 3. Syllabus which are relevant to say regulations of a particular country can be different for different FMAs, conceptual points should remain same.
<b>Italy</b>	In our opinion no one of the topics of the Syllabus should be substitute. The FMAs can propose a different weight to the topics for them more relevant.
<b>Japan - IAJ</b>	This degree also depends on the content of the syllabus. I think that the syllabus which would require a lot of substitution is not desirable.
<b>Japan - JSCPA</b>	It should not be allowed for each FMA to substitute the contents of IAA Education Syllabus for other contents.
<b>Netherlands</b>	We believe that a certain mandatory core should be agreed for quality assurance. Outside this core, tailoring to recognize regional market needs should be allowed, as long as a certain percentage is covered.
<b>Norway</b>	Some flexibility should be given to the member associations to add or substitutes parts of the syllabus and accommodate to their national or local regulations or practices. This may particularly apply on the fields of social security, retirement benefits and healthcare
<b>Poland</b>	This is a flexibility often indicating local market maturity an specific.
<b>Portugal</b>	All the topics in the IAA syllabus should be relevant to all associations.
<b>South Africa</b>	As noted above, we would be comfortable to allow some flexibility up to, say, 30% of each individual topic in the new IAA syllabus to substitute locally relevant topics as replacement for the IAA syllabus topic. We would not support a situation where flexibility would be stretched beyond the 30% of each of the topics as this would introduce too much dilution for the minimum benchmark standard to have any meaning.
<b>Switzerland</b>	Substitution may take place, but only within the flexibility of the the Updated IAA Education Syllabus (February 2016).
<b>UK - ACA</b>	any substitution should be with justification / explanation
<b>UK - IFoA</b>	The IFoA believes that presentation of the original proposed single syllabus may have created concern that there was a lack of flexibility and therefore a need for significant substitution of key elements. The IFoA believes that this syllabus has sufficient flexibility to deal with the majority of variation in requirements of member associations and that the flexibility of this framework should be expressed more explicitly.
<b>USA - AAA</b>	In terms of assessing educational requirements for membership, and in the spirit of inclusiveness, we are very comfortable with a potential FMA offering topics that are more relevant to its situation in lieu of parts of the adopted model syllabus that are less relevant. This flexibility to provide actuarial education that meets local needs is essential. As noted above, the desire and commitment to improve professional actuarial practice is at least as important (if not more so) as the degree to which a potential FMA meets a particular, specific syllabus. In this regard, the IAA syllabus should be considered more of a guideline, capable of being modified according to local needs.



	However, the extent of those modifications and the reasoning behind them should be part of the qualitative accreditation self-assessment.
<b>USA - ASPPA</b>	Very comfortable. We need to set up requirements that allow for flexibility and creativeness in expanding the role of actuaries.
<b>USA - CAS</b>	FMA's should have considerable flexibility in adapting the IAA Education Syllabus to meet the needs of their association. That may include substituting parts of the syllabus for other topics that are more relevant to a particular association and adjusting the depth and breadth of the topics that are included in the IAA Education Syllabus.
<b>USA - SOA</b>	This is a matter that has long been accommodated via the existing practice of appointment by the IAA Education Committee of a "working team" of actuarial education committee volunteers, who devote many hours to a careful review of the curriculum and credentialing requirements for any FMA applicant or for any FMA which substantially changes its FQA pathway. Existing practice is rooted in actuarial education expertise, and issues involving the depth and breadth of coverage of syllabus topics are reviewed and discussed with all due consideration given to the particularities of any given association's local context, legal and regulatory framework, and related conditions. Moreover, it should be noted that the original TF, after taking a further period of study and receiving input after upon completion of its syllabus design work, had also contemplated recommendation of an extended period of several years, during which full member associations could review their existing practices, consult with Education Committee experts, and take steps to revise their existing syllabuses. The original governance proposal drafted by the SRTF and reviewed by the Education Committee was never released to IAA membership for comments. We respectfully suggest that the process outlined in that document be revisited. That process is as follows: 1. Designates of the IAA Education Committee will review all FMA submissions to determine whether the FMA's education system should be recommended for approval. 2. Approval for coverage of the core learning areas will be granted if the FMA certifies, and the Education Committee agrees, that at least 90% of the learning objectives in each learning area have received a green rating or if at least 80% have received a green rating and the FMA has indicated that they are working on improving coverage for another 10% of the learning objectives. 3. Approval may be considered for any learning area that is designated as Supporting as set out above if the FMA certifies that at least 80% of the learning objectives for that learning area have received a green rating or if at least 70% have received a green rating and the FMA has indicated that they are working on improving coverage for another 10% of the learning objectives. 4. Approval may be granted for a learning area, even though some of the learning objectives in that learning area are delivered through a work based learning program.

## Please share any further comments

<p><b>Australia</b></p>	<p>The Actuaries Institute of Australia has elected not to complete the IAA education syllabus questionnaire as there were differing interpretations of the questions within our stakeholder group. Instead, the Actuaries Institute of Australia provides the following short response to outline our position on the syllabus:</p> <p>The vision of the IAA is “The IAA exists to encourage the development of a global actuarial profession that is acknowledged as technically competent.....”. It is therefore essential for our external stakeholders, particularly supranational organisations that a minimum standard of technical competence is achieved by the membership of our FMAs. To do otherwise would be inconsistent with our fundamental promise and brand. This vision needs to be consistently applied.</p> <p>There should be a minimum syllabus standard assessed by the IAA to recognise a Full Member Association. Ongoing re-assessment/re-accreditation, can then be achieved through self-assessment with a review process. The appropriate level of this syllabus assessment in the Australian context would be at the Australian Associate level (e.g. Fully Qualified Actuary).</p> <p>If the syllabus is set at a minimum/core/fundamental level then it is expected there would be little to no substitution/flexibility permitted. This syllabus however would need to meet the minimum requirements of a Fully Qualified Actuary. If the syllabus is set at a comprehensive/aspirational level then it is expected some substitution/flexibility would be permitted.</p>
<p><b>Canada</b></p>	<p>The wording of the questions in this survey were confusing and somewhat open to interpretation. The IAA should communicate as soon as possible regarding the implementation timeline. Are we responsible for meeting the implementation timelines originally proposed by the Education Committee (e.g., plan by 2017, syllabus effective date July 2019 with full implementation by 2021)?</p>
<p><b>Estonia</b></p>	<p>We should avoid creating situation in which some associations may get (dis)advantages due to their size, current education ,model or location. We should equally avoid creating compulsory syllabus which may become business vehicle for some organisations.</p>
<p><b>France</b></p>	<p>Bureaucracies have a natural tendency to produce regulations, controls and processes, and to think their experts know better than the people on the field. The content of knowledge between two actuaries in different industries in the same country varies hugely, and varies more considering two different countries. The content of the knowledge of a single actuary may vary widely over the 40 years of a professional career. Being to prescriptive in the education syllabus with a very large scope might prove counterproductive to answer the needs of the industry. Of course, a great job and a huge work has been spent to produce a global actuarial syllabus, and local associations who wish so will consider it, but this does not serve the purpose of the education syllabus as defined for accreditation purpose, and could attract IAA in an inadequate direction as regards it’s role.</p>
<p><b>Japan - JSCPA</b></p>	<p>This questionnaire relates not only to the revision of the syllabus, but also to the significance of the IAA itself. Therefore, this is considered to be important for each FMA. On the contrary, the deadline to reply is too short. The due process on revision of education syllabus is considered to be unclear. It is necessary to be clarified.</p>
<p><b>Netherlands</b></p>	<p>We regret to see that the discussions in the IAA about the new core syllabus the IAA is now more about membership issues and less about maintaining quality in the education. The professional landscape for actuaries is changing rapidly. The Syllabus Review Taskforce has developed a new core syllabus, which is now called the ‘Global Actuarial Syllabus’ that supports the changes of the actuarial profession, including the required competencies of the actuarial professionals in the future. This new core syllabus, which was accepted</p>

	by the majority of the FMAs is about to be diluted for the purpose of membership. With this we believe that the IAA will miss an important momentum to make a real step forward in educating future actuaries. We may want to reconsider our (positive) vote, if the IES will become the standard for the new syllabus.
<b>Poland</b>	A global move to risk based solvency requirement will indicate educational req. for the years ahead.
<b>South Africa</b>	We believe that it useful to go back to the report of the Educating Future Actuaries group which prompted the syllabus review. There is an imperative for the profession to remain relevant and to lead in a continuously changing world. Hence, the syllabus change and the introduction of a more explicit (not necessarily tougher) syllabus. This has to be balanced with local needs and realities, but if the profession does not set some benchmark, it can become irrelevant.
<b>UK - ACA</b>	It is important - and was demonstrated at the Council meeting in Cape Town - that the IAA does set standards that define what an actuary is. Otherwise, the IAA risks becoming little more than an international networking association for actuaries.
<b>UK - IFoA</b>	The IFoA has reservations about the IAA consulting on a detailed education syllabus ahead of a wider strategic review of its potential to set a global standard for the professional formation of actuaries. The IFoA believes strongly that this issue needs to be addressed before the IAA can come to a settled position on its detailed education syllabus. It is the IFoA's view that the vote held at the Council meeting in Cape Town clearly indicated FMA's desire to refocus the IAA from its position as a membership organisation providing networking for national actuarial associations, to its ambition to be a leading professional organisation; which, through its FMAs, sets the global standards for areas such as the professional education of actuaries. The IFoA believes that following this vote there is now a mandate to explore such a transition and that FMAs should be formally consulted on their appetite for change. In our opinion key questions for such a consultation might include FMA's views on: 1. A global standard for the professional formation of actuaries 2. Transitional arrangements for FMAs and the IAA 3. Proactive international stakeholder engagement 4. Desired outputs from such engagement, and proposed target organisations 5. Globally-leading thought leadership 6. Networking of associations. It is the IFoA's view that if the IAA fails to take leadership in areas such as the professional formation of actuaries, there is a very real risk that other groupings of national associations could be established to fulfil this role; to the detriment of the global actuarial community. The formation of such alternative groupings would impact substantially on the credibility of the IAA and on the resources (financial and human resource) it has available to carry out its activities. The IFoA strongly recommends an immediate strategic review on a broader future for the IAA. The IFoA offers its support in working with our fellow FMAs to achieve the key global position that Council wishes for the IAA. Once agreement on this future is clear, the IFoA believes that it would then be the time to consult on an appropriate global standard for the education of actuaries.
<b>USA - ASPPA</b>	I think we need to be mindful of the potential conflicts of interest in having FMAs that provide education outside their own countries too involved in the syllabus setting as it pertains to accreditation and membership around the world.
<b>USA - CAS</b>	Throughout this survey, both the IAA syllabus and its governance of the syllabus are in question. The CAS believes that actuaries must understand the environment in which they operate in order to be effective. In addition to generalist actuarial education, the actuary's understanding of the environment generally comes through experience under the supervision of an actuary qualified in that area of practice and increasingly in the future through specialized actuarial education. A generalist education, while potentially relevant within the actuarial community does not, in itself qualify the professional to practice in any specific area of practice and

	<p>therefore should NOT be used as a benchmark in communicating with the external public regarding the knowledge and skills of the actuary. Use of the term "fully qualify actuary" within a generalist educational framework is misleading and inappropriate. The role of the IAA should be to encourage best practices among its member associations, NOT to dictate minimum standards that all member associations are expected to adhere to. In establishing standards for accreditation by the IAA, the IAA should not impose requirements for its member associations that would disadvantage smaller FMAs or FMAs that rely on university-based or derivative systems for their educational framework.</p>
<b>USA – CCA</b>	<p>The IAA should concentrate on developing guidelines and models for FMAs, not in setting rigorous standards or requirements. The IAA should be flexible in recognizing the divergent needs of organizations in diverse nations. The IAA should be inclusive, not exclusive.</p>
<b>USA - SOA</b>	<p>Attachment One compares one element of the current IAA Syllabus, the SRTF Proposed New Syllabus, and the SFTF Proposed Syllabus. It has been provided to the IAA in a PDF of all responses to this survey emailed to them, due to limitations of the Survey Monkey software.</p>

Attachment One: Syllabus Comparison Example

Current IAA Syllabus	SRTF Proposed New Syllabus	SGTF Proposed Syllabus aka "IAA Education Syllabus"
<p><b>STATISTICAL METHODS</b></p> <p><b>Aims:</b> To provide the skills and expertise in the use of statistical methods for the understanding of risk in a range of actuarial work.</p> <p><b>Topics:</b></p> <ul style="list-style-type: none"> <li>• Statistical models, such as regression and time series</li> <li>• Survival and multi-state models</li> <li>• Risk models (individual and collective)</li> <li>• Parametric and non-parametric analysis of data</li> <li>• Graduation principles and techniques</li> <li>• Estimation of frequency, severity and survival distributions</li> <li>• Credibility theory</li> <li>• Ruin theory</li> <li>• Concepts of stochastic processes</li> <li>• Simulation methods</li> </ul>	<p><b>1.2 STATISTICAL INFERENCE</b></p> <p>1.2.1 State and apply the central limit theorem. (B3)</p> <p>1.2.2 Explain the concepts of random sampling, statistical inference and sampling distribution, and state and use basic sampling distributions. (B3)</p> <p>1.2.3 Describe the main methods of estimation and the main properties of estimators, and apply them. (B3)</p> <p>1.2.4 Construct confidence intervals for unknown parameters. (C3)</p> <p>1.2.5 Test hypotheses. (C3)</p> <p>1.2.6 Estimate empirical survival and loss distributions, for example using:</p> <p>a) Kaplan-Meier estimator, including approximations for large data sets</p> <p>b) Nelson Aalen estimator</p> <p>c) Cox proportional hazards</p> <p>d) Kernel density estimators. (C3)</p> <p>1.2.7 Estimate transition intensities depending on age, exactly or using large sample approximations. (C3)</p> <p><b>1.3 REGRESSION</b></p> <p>1.3.1 Explain linear relationships between variables using correlation analysis and regression analysis. (B2)</p> <p>1.3.2 Explain the fundamental concepts of a generalized linear model (GLM), and</p>	<p><b>Statistics</b></p> <p><b>Aim:</b> To enable students to apply core statistical techniques to actuarial applications in insurance, pensions and emerging areas of actuarial practice.</p> <ul style="list-style-type: none"> <li>• Random variables</li> <li>• Statistical inference</li> <li>• Regression</li> <li>• Bayesian statistics and credibility theory</li> <li>• Stochastic processes and time series</li> <li>• Simulation</li> </ul>

	<p>describe how a GLM may be applied. (B3)</p> <p>1.3.3 Estimate parameters for these models and perform diagnostic tests including checking assumptions and evaluating model fit. (B5)</p> <p>1.4 BAYESIAN STATISTICS AND CREDIBILITY THEORY</p> <p>1.4.1 Explain the fundamental concepts of Bayesian statistics and apply them to parameter estimation, hypothesis testing, and model selection. (B3)</p> <p>1.4.2 Explain and apply Bayesian and empirical Bayesian credibility models. (B3)</p> <p>1.5 STOCHASTIC PROCESSES AND TIME SERIES</p> <p>1.5.1 Describe and apply the main concepts underlying stochastic processes. (B3)</p> <p>1.5.2 Describe and apply the main concepts underlying time series models. (B3)</p> <p>1.6 SIMULATION</p> <p>1.6.1 Explain the concepts of Monte Carlo simulation. (B2)</p> <p>1.6.2 Simulate both discrete and continuous random variables using the inversion method. (C3)</p> <p>1.6.3 Estimate the number of simulations needed to obtain an estimate with a given error and a given degree of confidence. (B3)</p> <p>1.6.4 Use a permutation test to determine the distribution of a test statistic. (C3)</p> <p>1.6.5 Use the bootstrap method to estimate properties (e.g. the mean squared error) of an estimator. (C3)</p>	
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Robert Beuerlein, MAAA, FSA  
*President*

Thomas F. Wildsmith IV, MAAA, FSA  
*Immediate Past President*

February 13, 2017

Dear Members of the IAA Executive Committee:

We appreciate the efforts of the Syllabus Governance Task Force (the Task Force) and the recent member survey on this subject. As the report of the Task Force made clear, the questions that have been raised concerning the potential use of the new syllabus go to the heart of the International Actuarial Association's (IAA) purpose and governance. Because of the importance of these issues, we are writing this letter on behalf of the American Academy of Actuaries (the Academy) to supplement our responses to the member survey. It is intended to clarify our views about the most appropriate role for the new syllabus in the governance of the IAA and its likely impact on Full Member Associations (FMAs).

We would like to begin by highlighting some areas where we believe there is widespread agreement among FMAs. First, the new syllabus is a significant and valuable technical achievement and represents an advance over current best practices in actuarial education. Second, as actuarial science and related fields advance, it is important that the new tools and techniques that are developed be incorporated into basic actuarial education. Third, the IAA has an important role to play in supporting and assisting FMAs in developing and improving their educational programs. This includes sharing best practices in both the topics covered and the ways in which education is delivered. Fourth, membership in the IAA should be limited to bona fide professional actuarial organizations dedicated to advancing the profession in their respective jurisdictions. (Trade associations, fraternal clubs, or other business or social organizations – while valuable in certain settings – have no role as IAA members.)

Basic actuarial education is a vital concern for all FMAs, including especially national associations such as the Academy. Even though we routinely rely on global education providers, we have the direct responsibility for establishing the qualification standards for actuaries practicing in the United States. This has practical consequences. For instance, a number of years ago the SOA took most nation-specific material off of their syllabus. The result was that actuaries completing their SOA examinations during that period did not have all of the basic education needed to be fully qualified to practice in the U.S. In response, the Academy created

educational opportunities to fill that gap and allow U.S. actuaries to become fully qualified. This included designing the curriculum, recruiting course faculty, and testing participants. (The SOA has since restored the nation-specific material to their syllabus, so that it now fully meets the basic education requirements of the U.S. Qualification Standards.)

Our point is that national associations such as the Academy have a direct interest and responsibility in basic actuarial education. Global educators – those associations offering examinations in multiple countries – and national associations have different roles. Each global educator decides the extent to which it will adapt its examination program to the needs of a specific country. The national association determines whether any particular education program meets the requirements to practice in that country, or whether supplemental education is needed.

### **Importance of Inclusivity**

The IAA has historically been an inclusive organization, welcoming not just large sophisticated associations from jurisdictions where the profession is well-established and mature, but small associations from jurisdictions where the profession is young and developing. We believe that the IAA must continue to be inclusive and welcoming if it is to be successful in fostering the growth and development of the actuarial profession around the globe. Raising barriers to membership will only serve to hamper progress. We believe that the historical approach of bringing developing associations into the fold of the IAA and providing them with the support and assistance they need to raise the level of actuarial practice within their local jurisdictions is a much more effective strategy.

We fully support the need for meaningful membership criteria. However, we believe the purpose of the membership standards is to ensure that FMAs are truly professional actuarial associations, and not trade associations, fraternal organizations, or social clubs. Their essential purpose is identification – not regulation. In other words, the key test for IAA membership shouldn't be whether an applicant is a *good enough* professional actuarial association – but rather whether it *really is* a professional actuarial association. The IAA should continue to welcome all professional actuarial associations that avow their desire to improve actuarial practice in their respective jurisdictions. Of course, if future facts indicate that this is not the actual goal of an association – that they are something other than a true professional association – then they can and should be removed from IAA membership. When questions arise regarding membership, the IAA Council should be influenced more by the concept of inclusivity and not exclusivity.

### **Importance of Subsidiarity**

We continue to believe that the principle of subsidiarity is not merely a technical nicety, but a necessary constitutional principle for the IAA to be successful as an inclusive global organization. The profession is too diverse – the world is too diverse – for the IAA to succeed as a “European Union” for the actuarial profession. The global diversity of the actuarial profession reflects the underlying diversity of legal, regulatory, economic, and educational systems among the nations in which actuaries practice.



Recognizing this diversity, and that membership in the IAA is entirely voluntary for FMAs, the principle of subsidiarity holds that the IAA must neither compete with its member associations nor interfere with their governance. This principle is a bulwark of the IAA’s purpose and mission. FMAs do not surrender local control within their jurisdictions to the IAA. While there are requirements for membership, those requirements simply establish the foundation necessary for identifying the hallmarks of a bona fide professional actuarial association. They are not intended – and should never be allowed – to undermine the principle of local governance.

## **Quality in Actuarial Education**

The basic education provided by the IAA’s members is *professional* education – it supports the credentialing by FMAs of actuaries who will be providing actuarial services to the public. Actuarial practice is jurisdiction-specific. It varies around the world to reflect local laws, regulations, business practices, and markets. This is not a weakness, but rather a strength. The goal of any FMA’s educational program is to prepare its members to serve the needs of the public – and that can only be evaluated with reference to the specific legal, regulatory, and economic environment in which they will be working.

This means that the “quality” of actuarial education is most meaningfully measured relative to the context of local needs. Specifically, how well does it prepare an actuary to serve the public in the local jurisdiction in which he or she will actually be practicing? Two FMAs may have significantly different syllabi – reflecting fundamental differences in their legal and regulatory systems – each of which is entirely appropriate. The legal and regulatory differences may simply be too great for a single syllabus to meet the needs of actuaries practicing in both jurisdictions. Attempting to capture these nuances for all FMAs in a single syllabus is simply not realistic. This is why local flexibility is essential, and why we also believe that multiple model syllabi may be useful.

We firmly believe that the IAA has a vital role to play in providing its FMAs with tools, advice, support, and assistance in strengthening and developing their education programs. But it’s a mistake to assume that a local orientation – and local governance – is inconsistent with educational excellence.

## **Need for Greater Clarity**

The discussion around the new syllabus has suffered from a lack of clarity. On a simple level, it still isn’t clear to us whether the focus of this single uniform syllabus is intended to be at the “Associate” level or the “Fellowship” level. Targeting this at the Associate level would allow for specialization at the Fellowship level, which would help. But we question whether providing essentially uniform training of all actuaries to this level, and only then specializing, still makes sense in today’s world. We believe the university model – with a limited number of core general education requirements and then a specific set of electives based on your major field of study – would better support the future needs of the profession.

More fundamentally, we do not believe that there is a clear consensus on the degree of standardization that is being sought, or on the purpose of that standardization. Much of the discussion of the new syllabus seems to presuppose a need to standardize what it means to be an actuary around the globe. Far greater emphasis has been given to uniformity than to ensuring that actuaries are prepared to practice in a specific specialty area or jurisdiction. The term “generalist” has been used without defining whether it refers to an actuary qualified to practice in multiple specialty areas, an actuary qualified to practice in multiple countries, or simply an actuary educated in a core set of traditional actuarial topics. The Academy believes that more consideration must be given to the concept of a generalist actuary before it is made the basis of actuarial education around the world.

If the goal is to educate actuaries to work in multiple practice areas, we must recognize that in some jurisdictions the profession is far too specialized for it to be practical for actuaries to practice as “generalists.” For example, in the United States, it is very rare for an actuary to be qualified to practice in more than one major practice area (i.e., life, health, pensions, or general insurance). We are unaware of any actuaries who are fully qualified in the U.S. to practice in all of these areas, as the term “generalist” would imply. The jurisdictions where the profession is most specialized also tend to be those with the greatest number of working actuaries.

Going further, we believe the concept of a global generalist actuary is too far removed from the actual practice of most actuaries today to provide useful near-term guidance for actuarial education. It is rare enough for an actuary to practice globally, specializing in a single field such as health, in multiple disparate jurisdictions. As a thought experiment, how many actuaries are there who are fully qualified to practice in three different practice areas (e.g., life, health, and pensions), and in jurisdictions on three continents (e.g., France, Canada, and China)? There may be some individual actuaries who are qualified to do this. We do not believe there are enough to make this the foundation or goal of actuarial education.

### **Moving the Profession Forward**

We all recognize the need for actuarial education to evolve over time to incorporate advances in mathematics, data sciences, economics and other fields relevant to actuarial practice. This evolution is already happening, and has been going on for a very long time. The exams we took were very different from the exams administered today – and tomorrow’s exams will be different from today’s exams. In shaping the education of the future, however, we need to consider more than technical advancements in the actuarial science. We need to also consider the shape of the profession, the environments in which actuaries practice, and the future evolution of the profession.

Generalist actuaries have no significant role in the profession in the United States. Our experience suggests that as the profession grows and matures in other jurisdictions, it will inevitably become more specialized. This pattern is not unique to actuaries. The medical profession, the sciences, and the legal profession have all become highly specialized.

Educating the next generation of actuaries as generalists – rather than recognizing the inevitable trend towards increased specialization – will lead the profession into the past rather than the future.

### **Need for High-Quality Model Syllabi**

We fully support the development of model syllabi that FMAs may adapt and implement as appropriate for their jurisdictions, just as we fully support the development of model ISAPs. However, just as with ISAPs, it must be recognized that a model syllabus is not binding on any individual actuary unless and until it is adopted by an FMA having jurisdiction over that actuary. This in no way lessens the importance of having good models.

The new syllabus represents an excellent model, including a comprehensive array of actuarial topics that can be used as a basis from which FMAs can develop their own individual syllabi. The Academy believes that, given the diversity and specialization of the profession, the development of additional model syllabi – such as a model syllabus for General Insurance – may well be appropriate.

### **Concluding Thoughts**

Ensuring FMAs have the flexibility to provide actuarial education that meets local needs is essential. No one has questioned the desire and commitment of the IAA’s members to improve professional actuarial practice in their jurisdictions. The IAA’s historical policy of inclusivity has been remarkably effective over the years. Given this, we see a profound danger to the IAA in any attempt to establish a performance benchmark for FMAs.

It is not the IAA’s role to grade FMAs – to determine that one FMA is better than another. Any “performance benchmark” will inevitably be interpreted to mean that some FMAs’ credentials are more legitimate than others. This is inherently divisive, and completely antithetical to the inclusiveness that the IAA has spent decades fostering.

We value our collaboration with the IAA, and would appreciate the opportunity to discuss these issues at the next Council meeting.

Sincerely,



Robert Beuerlein, President



Thomas F. Wildsmith IV, Immediate Past President



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Robert Beuerlein, MAAA, FSA  
*Président*

Thomas F. Wildsmith IV, MAAA, FSA  
*Président Sortant*

Traduction de la lettre du 13 février 2017

Chers membres du Comité exécutif de l'AAI,

Nous sommes reconnaissants au Groupe de travail chargé de la gouvernance du programme d'études (le Groupe de travail) pour ses efforts et pour l'enquête réalisée auprès des membres à ce sujet. Comme le rapport du Groupe de travail l'indique clairement, les questions soulevées sur l'utilisation potentielle du programme d'études vont au cœur de la raison d'être et de la gouvernance de l'Association actuarielle internationale (AAI). Du fait de l'importance de ces questions, nous vous écrivons cette lettre au nom de l'Académie américaine des actuaires (l'Académie) pour compléter nos réponses à l'enquête réalisée auprès des membres. Nous vous écrivons cette lettre pour clarifier notre point de vue sur le rôle le plus approprié du programme d'études au sein de la gouvernance de l'AAI ainsi que sur ses vraisemblables effets sur les Associations membres titulaires (AMT).

Nous voudrions commencer en mettant l'accent sur certains domaines dans lesquels nous estimons qu'il existe un large accord parmi les AMT. Premièrement, le nouveau programme d'études est une réussite technique importante et de grande valeur, et qui représente une avancée par rapport aux meilleures pratiques actuelles dans le domaine de l'éducation en actuariat. Deuxièmement, alors que la science actuarielle et ses domaines connexes progressent, il est important que les nouveaux outils et techniques développés soient intégrés à l'éducation de base en actuariat. Troisièmement, l'AAI a un rôle important à jouer dans l'aide et le soutien aux AMT dans le développement et l'amélioration de leurs programmes éducatifs. Ceci inclut le partage des meilleures pratiques dans les matières couvertes ainsi que dans les méthodes éducatives. Quatrièmement, le statut de membre de l'AAI devrait être réservé aux véritables organisations professionnelles actuarielles qui se dévouent au progrès de la profession dans leurs juridictions respectives. Les regroupements industriels ou autres organisations fraternelles, commerciales ou sociales, même s'ils ont de la valeur dans certains cadres, n'ont aucun rôle en tant que membres de l'AAI.

L'éducation de base en actuariat est une préoccupation fondamentale de toutes les AMT, surtout pour les associations nationales telles que l'Académie. Même si nous dépendons habituellement de fournisseurs mondiaux de services d'éducation, nous sommes directement responsables de l'établissement de normes de qualification pour les actuaires qui pratiquent aux Etats-Unis, ce qui a des conséquences pratiques. Par exemple, il y a quelques années, la SOA a retiré la majorité de la matière spécifique aux Etats-Unis de son programme d'études. Le résultat fut que les actuaires qui achevèrent leurs examens pendant cette période n'obtinrent pas toute l'éducation de base dont ils avaient besoin pour être entièrement qualifiés pour pratiquer aux Etats-Unis. En réponse, l'Académie créa un programme d'études pour prendre le relais et permettre aux actuaires américains de devenir pleinement qualifiés. Cette initiative comprit la conception d'un programme, le recrutement d'enseignants, et la soumission des participants à un examen. (La SOA a depuis réintégré la matière spécifique aux Etats-Unis à son programme d'études de telle sorte qu'il est maintenant entièrement conforme aux normes de qualification américaines en termes d'éducation de base.)

L'objet de notre propos est que les associations nationales telles que l'Académie ont un intérêt direct et une responsabilité pour l'éducation de base en actuariat. Les éducateurs mondiaux – ces associations qui offrent des examens dans plusieurs pays – et les associations nationales ont des rôles différents à jouer. Chaque éducateur mondial décide du degré auquel il adaptera son programme d'examens aux besoins d'un pays spécifique. L'association nationale décide si un programme précis remplit les conditions de pratique dans ce pays ou si de l'éducation supplémentaire est nécessaire.

### **Importance d'une approche inclusive**

Traditionnellement, l'AAI a été une organisation inclusive, accueillant non seulement des associations sophistiquées de pays où la profession est bien établie et parvenue à maturité, mais aussi de petites associations de pays où la profession est encore jeune et en développement. Nous estimons que l'AAI doit continuer de se montrer inclusive et accueillante pour réussir à entretenir la croissance et le développement de la profession à travers le monde. Eriger des barrières à l'entrée ne servira qu'à freiner la croissance. Nous estimons que l'approche historique consistant à intégrer à l'AAI des associations en développement et à leur fournir l'aide et le soutien dont elles ont besoin pour rehausser le niveau de la pratique actuarielle dans leurs pays est une stratégie bien plus efficace.

Nous soutenons pleinement des critères d'adhésion sérieux. Cependant, nous estimons que le but de critères d'adhésion est de s'assurer que les AMT sont réellement des associations actuarielles professionnelles, et non des regroupements industriels, des organisations fraternelles ou sociales. Leur objet principal est l'identification et non la réglementation. Autrement dit, la question déterminante pour devenir membre de l'AAI ne devrait pas être de savoir si l'organisation est *assez accomplie*, mais plutôt s'il s'agit *réellement* d'une association actuarielle professionnelle. L'AAI devrait continuer à accueillir toutes les associations actuarielles professionnelles qui déclarent leur désir d'améliorer la pratique actuarielle dans leurs juridictions respectives. Bien entendu, si des développements futurs indiquent que ce n'est pas l'objet réel d'une association – qu'elle est autre chose qu'une véritable association professionnelle – alors elle peut et devrait

être radiée de la liste des membres. Lorsque des questions relatives à l'état de membre sont soulevées, le Conseil de l'AAI devrait être plus influencé par l'inclusion que par l'exclusivité.

### **L'importance de la subsidiarité**

Nous continuons de croire que le principe de subsidiarité n'est pas qu'une subtilité technique, mais un principe constitutionnel nécessaire pour que l'AAI réussisse en tant qu'organisation mondiale inclusive. La profession est trop diversifiée – le monde est trop diversifié – pour que l'AAI puisse fonctionner comme une « Union européenne » de la profession actuarielle. La diversité mondiale de la profession actuarielle reflète la vraie diversité des systèmes juridiques, réglementaires, économiques et éducatifs parmi les pays dans lesquels les actuaires pratiquent.

En reconnaissance de cette diversité et du fait que le statut de membre de l'AAI est entièrement volontaire pour les AMT, le principe de subsidiarité établit que l'AAI ne peut faire concurrence à ses associations membres ni s'immiscer dans leur gouvernance. Ce principe est un contrefort de l'objet et de la mission de l'AAI. Les AMT n'abandonnent pas le contrôle des affaires locales propres à leurs juridictions à l'AAI. Même s'il existe des conditions nécessaires à l'adhésion, ces conditions établissent tout simplement un fondement pour identifier les caractéristiques d'une véritable association actuarielle professionnelle. Elles ne sont pas destinées à – et ne devraient jamais – éroder le principe de gouvernance locale.

### **Qualité de l'éducation en actuariat**

L'éducation de base en actuariat fournie par les membres de l'AAI est une éducation *professionnelle* – elle soutient le processus de qualification fourni par les AMT aux actuaires qui fourniront des services actuariels au public. La pratique actuarielle est spécifique à chaque juridiction. Elle varie partout pour refléter les lois, réglementations, pratiques commerciales et marchés locaux. Ce n'est pas une faiblesse, mais plutôt une force. Le but de tout programme éducatif d'une AMT est de préparer ses membres à servir les besoins du public, et cela ne peut être évalué que par référence à l'environnement juridique, réglementaire, et économique dans lequel ils travailleront.

Ceci veut dire que la « qualité » de l'éducation en actuariat se mesure de la manière la plus significative possible dans le contexte de besoins locaux. Précisément, l'éducation prépare-t-elle correctement les actuaires à servir le public dans la juridiction dans laquelle ils travailleront ? Deux AMT peuvent avoir des programmes d'études très différents qui reflètent les différences fondamentales de leurs systèmes juridiques et réglementaires, chacun étant parfaitement approprié. Les différences juridiques et réglementaires peuvent être trop importantes pour qu'un unique programme d'études puisse répondre aux besoins d'actuaires travaillant dans les deux juridictions. Tenter de retranscrire ces nuances pour toutes les AMT dans un programme d'études unique n'est tout simplement pas réaliste. C'est pour cela que la flexibilité au niveau local est essentielle, et pourquoi nous estimons aussi que plusieurs programmes d'études modèles pourraient être utiles.

Nous croyons sincèrement que l'AAI a un rôle fondamental à jouer lorsqu'elle fournit à ses AMT les outils, avis, soutien, et aide pour renforcer et développer leurs programmes éducatifs, mais c'est faire erreur que de présumer qu'une orientation locale – et une gouvernance locale – sont incompatibles avec l'excellence dans le domaine de l'éducation.

### **Besoin de davantage de clarté**

La discussion du nouveau programme d'études a souffert d'un manque de clarté. A la base, il n'est pas clair pour nous si le point focal de ce programme d'études unique et uniforme est destiné être au niveau d'« associé » ou de « fellow ». Cibler le programme d'études sur le niveau d'associé permettrait une spécialisation au niveau de fellow, ce qui serait utile. Cela dit, nous nous posons la question de savoir si une formation essentiellement uniforme de tous les actuaires à ce niveau, pour ne leur permettre de se spécialiser qu'après, a encore du sens dans le monde d'aujourd'hui. Nous estimons que le modèle universitaire – avec un nombre limité d'exigences essentielles en termes d'éducation fondamentale et une série de cours à option dans le domaine d'études principal – serait mieux à même de remplir les futurs besoins de la profession.

De manière plus fondamentale, nous n'estimons pas qu'il existe un consensus clair sur le niveau d'uniformisation recherché, ou sur l'objectif de cette uniformisation. Une grande partie de la discussion sur le nouveau programme d'études semble présupposer un besoin d'uniformiser l'essence d'un actuaire de par le monde. Bien plus d'attention a été consacrée à l'uniformité qu'à s'assurer que les actuaires soient prêts à pratiquer dans un domaine ou une juridiction spécifiques. Le terme « généraliste » a été utilisé sans décider s'il désigne un actuaire qualifié pour pratiquer dans plusieurs domaines de spécialisation, un actuaire qualifié pour pratiquer dans plusieurs pays, ou tout simplement un actuaire qui a été formé dans une série de base de sujets actuariels traditionnels. L'Académie estime que la notion d'un actuaire généraliste doit faire l'objet de réflexion supplémentaire avant qu'elle ne serve de fondement à l'éducation en actuariat à travers le monde.

Si le but est de former les actuaires à travailler dans plusieurs domaines de pratique, nous nous devons de reconnaître que dans certaines juridictions, la profession est bien trop spécialisée pour qu'il ne soit pratique pour les actuaires de pratiquer en tant que « généralistes. » Par exemple, aux Etats-Unis, il est très rare qu'un actuaire ne soit qualifié à pratiquer dans plus d'un domaine de pratique (vie, santé, régimes de retraite, ou assurance générale). Nous ne connaissons aucun actuaire qui soit entièrement qualifié aux Etats-Unis pour pratiquer dans tous ces domaines, tel que le terme de « généraliste » pourrait le suggérer. Les juridictions dans lesquelles la profession est la plus spécialisée tendent aussi à être celles avec le plus grand nombre d'actuaires.

De surcroît, nous estimons que la notion d'un actuaire généraliste global est trop éloignée de la pratique réelle de la majorité des actuaires aujourd'hui pour servir de ligne directrice utile à court terme pour l'éducation en actuariat. Il est rare qu'un actuaire ne pratique à l'international, en se spécialisant dans un domaine unique tel que la santé, dans plusieurs juridictions distinctes. Si nous y réfléchissons, combien d'actuaires y a-t-il qui soient entièrement qualifiés à pratiquer dans trois domaines de pratique différents (e.g. vie, santé, et régimes de retraite) et dans des pays sur trois continents (e.g. en France, au Canada, et en Chine) ? Certains actuaires sont peut-être

qualifiés ainsi. Nous estimons qu'il n'y en pas assez pour servir de fondement ou d'objectif à l'éducation en actuariat.

### **Faire avancer la profession**

Nous reconnaissons tous le besoin qu'a l'éducation en actuariat d'évoluer au fil du temps pour intégrer les avancées en mathématiques, sciences des données, économie et autres domaines connexes à la pratique actuarielle. Cette évolution se produit déjà et continue depuis longtemps. Les examens que nous avons passés étaient très différents de ceux d'aujourd'hui et les examens de demain seront différents de ceux d'aujourd'hui. En concevant l'éducation de l'avenir, toutefois, nous devons prendre en compte plus de facteurs que les avancées techniques en science actuarielle. Nous devons aussi prendre en compte l'état de la profession, les environnements dans lesquels les actuaires pratiquent, et l'évolution future de la profession.

Les actuaires généralistes n'ont aucun rôle notable à jouer dans la profession aux Etats-Unis. Notre expérience indique que lorsque la profession progresse et mûrit dans d'autres juridictions, elle se spécialise forcément. Cette évolution n'est pas propre aux actuaires. La profession médicale, les sciences, et la profession juridique se sont toutes fortement spécialisées.

Former la prochaine génération d'actuaires en tant que généralistes – plutôt que reconnaître la tendance inéluctable vers une spécialisation accrue – mènera la profession vers le passé plutôt que l'avenir.

### **Besoin d'un programme d'études moderne et de haute qualité**

Nous soutenons pleinement le développement d'un programme d'études modèle que les AMT peuvent adapter et appliquer comme bon leur semble dans leurs juridictions, tout comme nous soutenons pleinement le développement de NIPA modèles. Cependant, et ce tout comme pour les NIPA, l'on se doit de reconnaître qu'un programme d'études modèle n'est pas obligatoire pour un actuaire individuel avant et à moins qu'une AMT ayant autorité sur cet actuaire ne l'adopte. Cela n'amoindrit en rien l'importance d'avoir de bons modèles.

Le nouveau programme d'études est un excellent modèle, dont la gamme de matières actuarielles peut servir de base aux AMT pour développer leurs programmes d'études individuels. L'Académie estime que, du fait de la diversité et de la spécialisation de la profession, le développement de programmes d'études modèles supplémentaires – tels qu'un programme d'études modèle en assurance générale – pourrait être opportun.

### **Réflexions finales**

Il est essentiel de s'assurer que les AMT aient la flexibilité nécessaire pour fournir une éducation en actuariat qui remplisse les besoins locaux. Personne n'a remis en question le désir ni l'engagement des membres de l'AAI d'améliorer la pratique actuarielle professionnelle dans leurs pays. La politique historique d'inclusion de l'AAI a été remarquablement efficace au cours



des années. De ce fait, nous estimons qu'il existe un danger considérable à tenter d'établir un seuil de performance pour les AMT.

Ce n'est pas le rôle de l'AAI que d'évaluer les AMT – de déterminer qu'une AMT est meilleure qu'une autre. Tout « seuil de performance » sera forcément interprété comme signifiant que certains titres d'AMT sont plus légitimes que d'autres. C'est un résultat qui, fondamentalement, divise, et qui va complètement à l'encontre du caractère inclusif que l'AAI a passé des décennies à promouvoir.

Nous apprécions notre collaboration avec l'AAI, et nous serions reconnaissants de pouvoir traiter ces questions à la prochaine réunion du Conseil.

Veillez agréer, Mesdames, Messieurs, l'expression de nos sentiments respectueux.



Robert Beuerlein, Président



Thomas F. Wildsmith IV, Président Sortant