

## **Survey Roles of the Actuaries**

August 2017

The Task Force Roles of the Actuaries enters into a new phase and is therefore formulating new challenges and objectives.

The objectives of the TF are:

- To encourage the committees to focus on the subjects seen as priority in their domain and to follow-up on the way actuaries can play a significant role
- To explore new domains requiring specific actuarial education and framework and encourage the technical committees to focus on the implementation in their domain
- To investigate the requirements of professional skills differentiating actuaries

Formulation the priorities of the Task Force has to take into account

- The role of the committees taking care of subject domains such as insurance, pensions and risk management and the further development of actuarial activities
- The need to prepare the framework for new activity domains such as data analytics/science and AI.
- The need to prepare the framework for actuarial assignment

Based on the input of 14 Member Associations from different sizes and markets, the Task Force concludes that the technical committees should devote more attention to help (further) developing practice areas that are considered opportunities in the future for the profession (such as non-life, health, risk management, investment), that new developments can be explored and the appropriate role of the AAE can be defined (such as data science and artificial intelligence), that the actuarial profession should advance the specific competences of actuaries (such as professional judgment and communication).

## Survey

To prepare an appropriate approach MAs have been asked their opinion in a survey launched in June based on 5 questions:

1. What are the roles actuaries will play in the future?
  - a. In function of the sector
  - b. In function of the activity
2. What are the short, mid and long term trends for the activities of actuaries?
3. How is your association anticipating on these roles and trends?
4. What does your association expect from the AAE?
5. What do you think as the least/most important skills actuaries should have in the future?

14 MAs have answered (Belgium, Cyprus, Czech Republic, Finland, France, Germany, Ireland, Italy, Norway, Portugal, Slovakia, Switzerland, The Netherlands, UK) representing associations from different sizes and fields of interest.

## Results of the survey

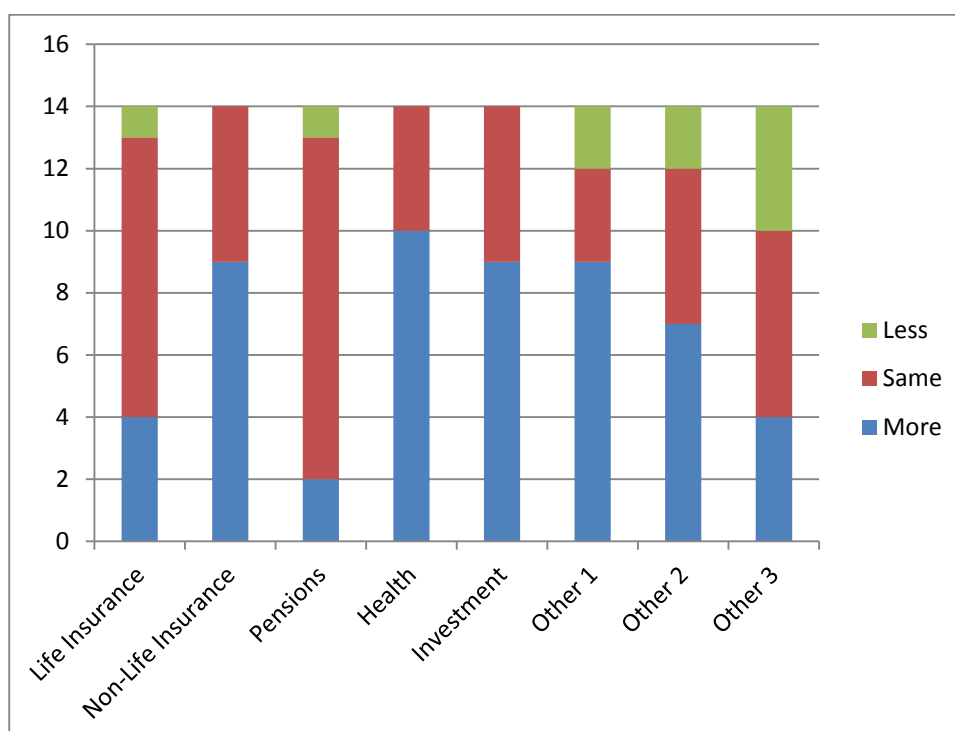
### *Future roles*

1. Per sector

Participants see a growing role for actuaries especially in

- Health
- Non-Life
- Investment.

Other sectors if mentioned are banks and accounting.

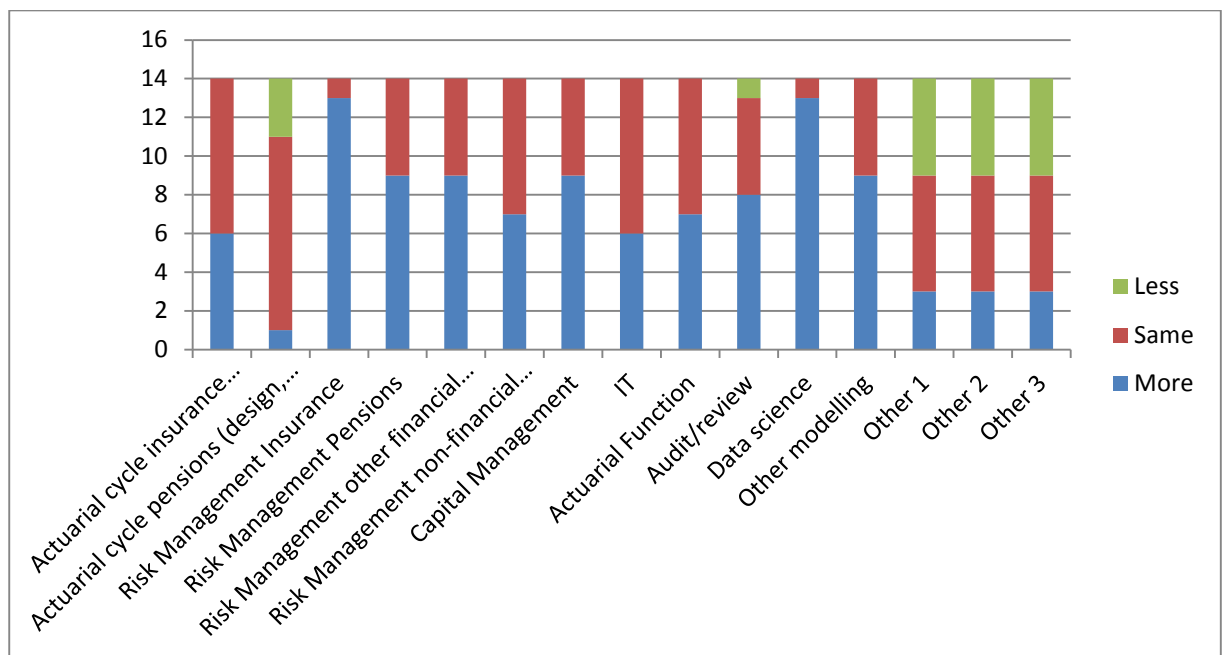


## 2. Per activity

The most important opportunities for actuaries are observed in

- Risk Management Insurance
- Data Science
- Risk Management Pensions
- Risk Management other financial services
- Capital Management
- Other modelling
- Audit Review

Energy and environment are eminent topics in Anglo-Saxon countries.



## Trends

### 1. Short term

In the short term IFRS17 has been mentioned most often. Data science is already eminent in some markets.

The embedding of Solvency II and market environment seem to have interest.

### 2. Mid-term

In the mid-term Data Science/Management is the topic indicated most frequently. Some markets are already seeing developments as artificial intelligence (AI) as a trend while others continue to concentrate on solvency and risk management opportunities.

### 3. Long term

AI, robotics, information technology and the influence on the actuarial activity is considered a trend and a threat.

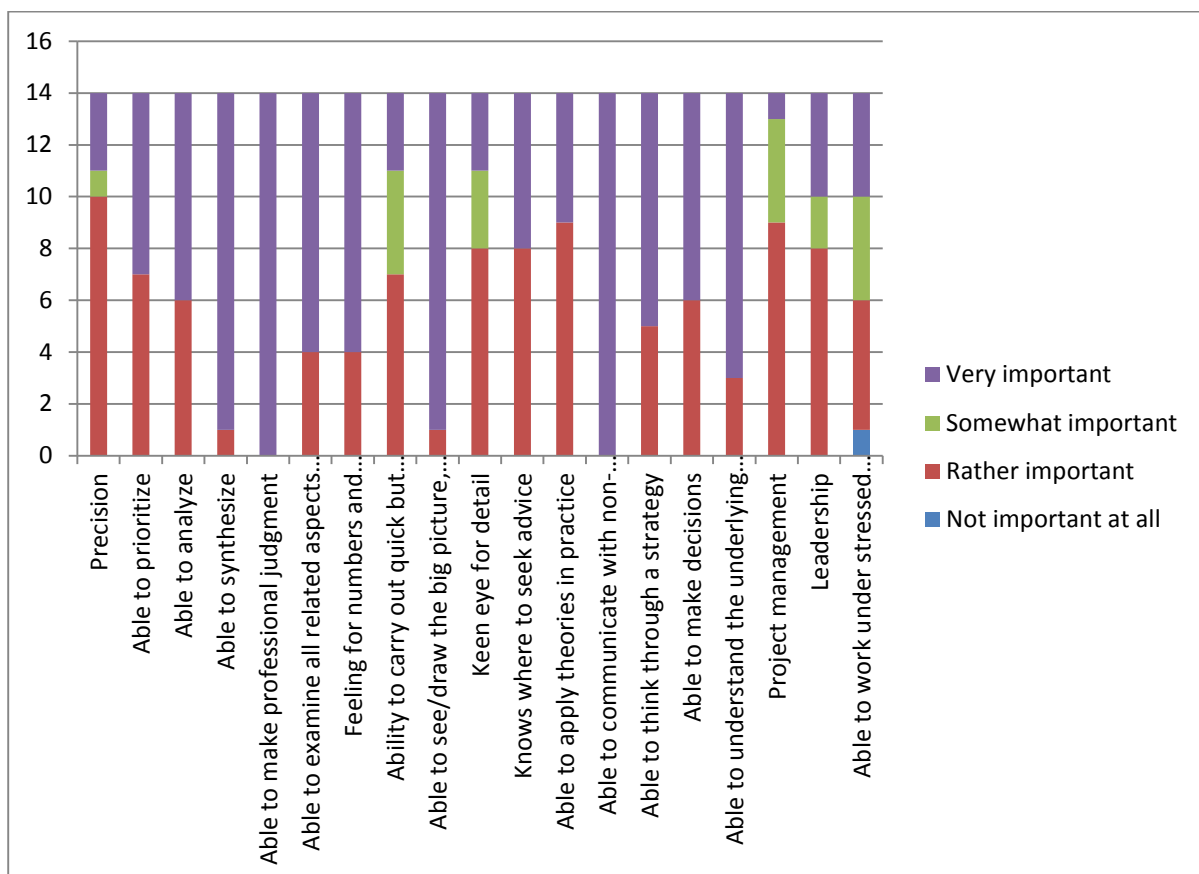
Risk Management is also seen as a trend for the profession in the long run. Resources, environment and sustainability including climate change and catastrophe risk were also mentioned as our long term focus.

## Skills

Skills considered to be of high importance in the future are:

- Able to make a professional judgement
- Able to communicate with non-actuaries
- Able synthesize
- Able to see the big picture see interconnectivities and dependencies
- Able to understand the underlying business models and the relevant markets
- Able to examine all related aspects of a problem
- Feeling for number and qualitative elements

Analytical skills are considered to be more important than behavioural skills.



## Anticipation of MA

The participating MAs are anticipating on the observed trends in which data science and risk management are dominant. Some MAs have already introduced requirements in education and professional development.

The consideration on the future roles is ongoing and reflected in the organisation of the profession.

## *Role of AAE*

The AAE is expected to play a role in bringing the collective views of the MAs together and engaging with EU institutions and stakeholders. The general strategic objectives are the benchmark. It continues to be the platform of opinion sharing, insights, best practice and collaborations.

CERA is taken as an example for eventual similar initiatives in other fields such as data science.

## **Priorities**

MAs expect the AAE to play a role to play in the development of opportunities for actuaries.

The TFRoA identifies therefore the following priorities for further development of these roles:

- More attention has to be paid to non-life, health and investment and communication skills
- Further focus is needed on Risk Management and the role of actuaries in this area
- Data science/analytics is an emerging domain with different stages of development amongst the MAs
- The profession needs to anticipate on the impact of Artificial Intelligence and Technology on the role of the actuary
- Focus on the framework that allows for a high quality professional judgement which is differentiating actuaries from other professions
- Facilitate to strengthen the communication skills of actuaries especially with non-actuaries

## **Suggested actions**

The TFRoA therefore encourages the technical committees to take even more into account the evolution of the profession:

- Encourage the Insurance Committee to insist even more on Non-Life subjects and help the IAA on its further work on IFRS17
- To create a joint working group Insurance – Social Security section of the Pensions Committee to consider the role of actuaries in the field Health
- To continue to focus on investment and assets in all activity domains
- To encourage the Education Committee to consider the place of communication skills in the basic education and CPD of actuaries
- To encourage the future Risk Management Committee to strengthen the exchange and research in the field of broader risk management
- To give support to the future Risk Management Committee to assure that the role of the actuary in insurance and pensions is articulated

The TFRoA therefore also proposes to orient its activity:

- To define the scientific and methodological framework for actuaries and explore the need for a European platform
- Give support to Insurance Committee on Big Data and EIOPA consultations
- To assess the possible impact of AI and Technology on actuarial modelling and the role of actuaries
- To define the content and requirements in the context of a high quality professional judgement
- To facilitate the debate within the AAE on the question if the AAE should pay attention to the roles of actuaries in the field of climate changes and energy resources.

It should be kept in mind that the AAE needs to concentrate its resources on issues and initiatives of European flavour and influence and help the IAA's activities falling into the comparable global issues.

### **Organisation of the TFRoA**

The TFRoA needs to focus in the first place on domains such as data science, artificial intelligence in the future.

Taking into account the opinion of the MAs as well as the possible impact of technology on the role of the actuary, a specific focus on the professional judgement of the actuary is of high strategic importance and can be included in a specific work stream.

It will therefore be important to find the appropriate competences, structures and resources and give the lead to experts in those subjects.

TFRoA

August 2017