ACTUARIAL ASSOCIATION OF EUROPE

Emerging Roles for Actuaries and Challenges for the Actuarial Profession

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The AAE and the Task Force Roles of Actuaries : prepare the professional context !

Actuarial Association of Europe

The Actuarial Association of Europe (AAE) was established in 1978, originally as the Groupe Consultatif Actuariel Européen, to represent actuarial associations in Europe.

Its purpose is to provide advice and opinions to the various organisations of the European Union – the Commission, the Council of Ministers, the European Parliament, EIOPA and their various committees – on actuarial issues in European legislation.

The AAE currently has 37 member associations in 36 European countries, representing over 25,000 actuaries.

Advice and comments provided by the AAE on behalf of the European actuarial profession are totally independent of industry interests.

AAE Membership

Conclusions:

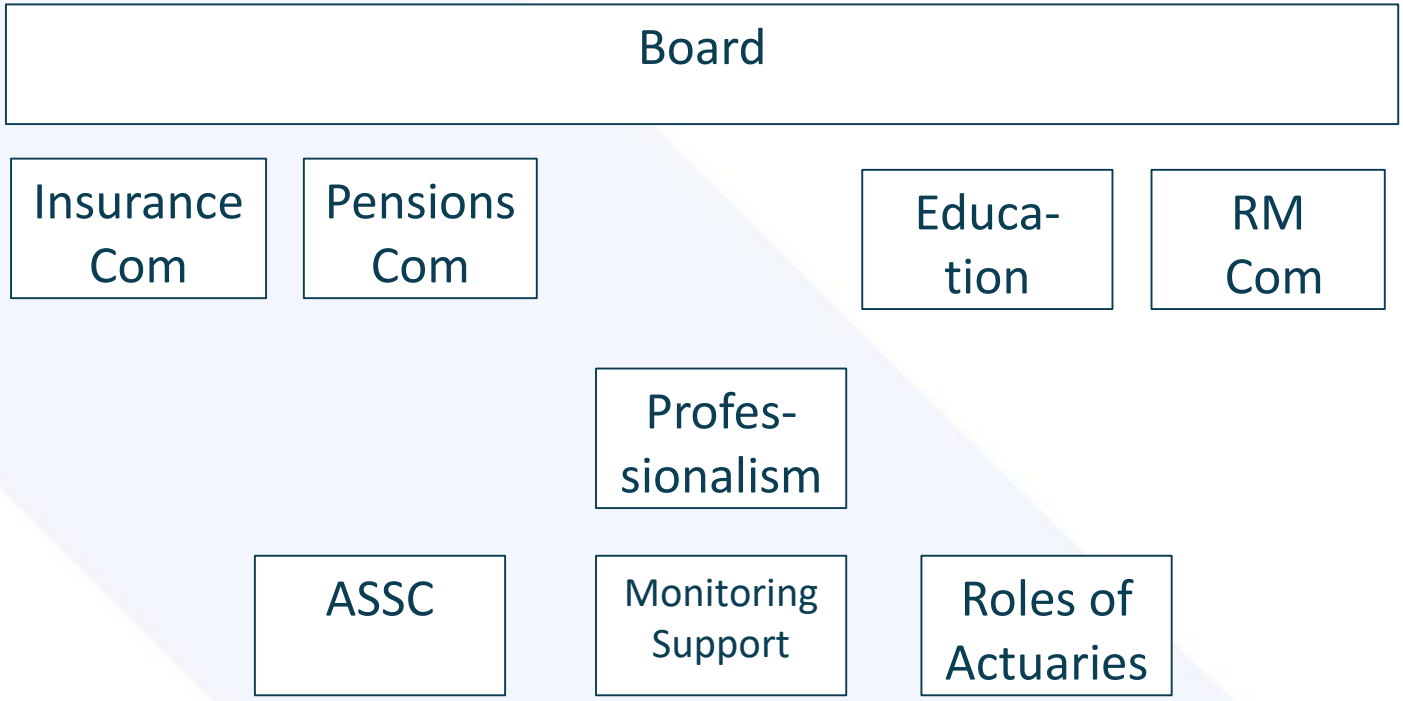
- There is a significant number of “actuaries” in Europe
  - 33,959 qualified members (about 25,000 are fully qualifying AAE conditions)
  - 53,761 members of the MA

- The level of required expertise is defined
  - About 30.000 achieved the syllabus standard
  - About 46.000 are subject to ongoing training

- University actuarial degree is most common. Exams organised by profession compulsory in 30% of MA, but most of members were subject to exams in their association (IFoA)

- All members are subject to a CoC and actuarial standards.

The AAE and the Task Force Roles of Actuaries

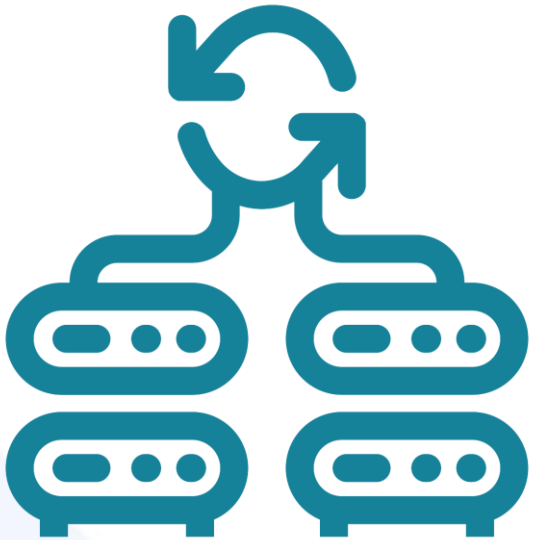


Task Force Roles of Actuaries

The Task Force Roles of Actuaries was launched in 2014

The first selected subjects :

- Actuarial Function under SII
- Risk Management in Insurance
- Risk Management in Pensions
- Professional Judgement



Achievements :

- Survey on AF under SII (95% are QA)
- Positioning of Actuaries in RM
- Transformation of Investment and Financial Risk Committee in a full Risk Management Committee

Since 2018

- 3 workstreams
  - Data Science/Artificial Intelligence
  - Professional Judgement
  - Legal and Political Recognition

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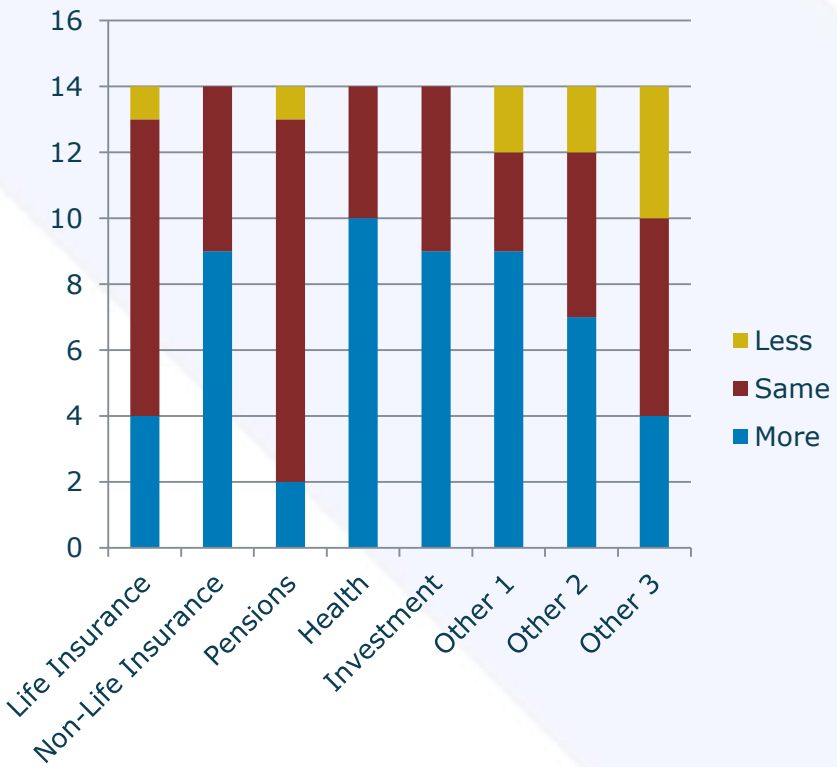
What do actuaries think about their roles in the future ?

Survey AAE August 2017

- What do actuaries think about roles per sector in the future ?



Participants see a growing role for actuaries especially in

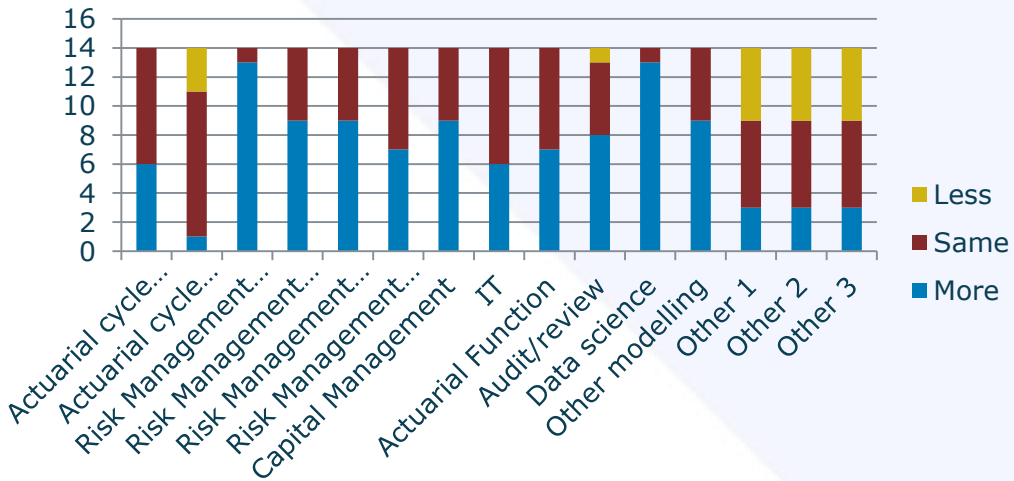
- Health
- Non-Life
- Investment.

Other sectors if mentioned are banks and accounting.

Survey AAE August 2017

- What are the trends ?

  - Short term : IFRS17, Data science (eminent in some markets), embedding of Solvency II and market environment
  - Mid-term: :Data Science/Management (indicated most frequently) , Artificial Intelligence (AI) (in some markets), others continue to concentrate on solvency and risk management opportunities.



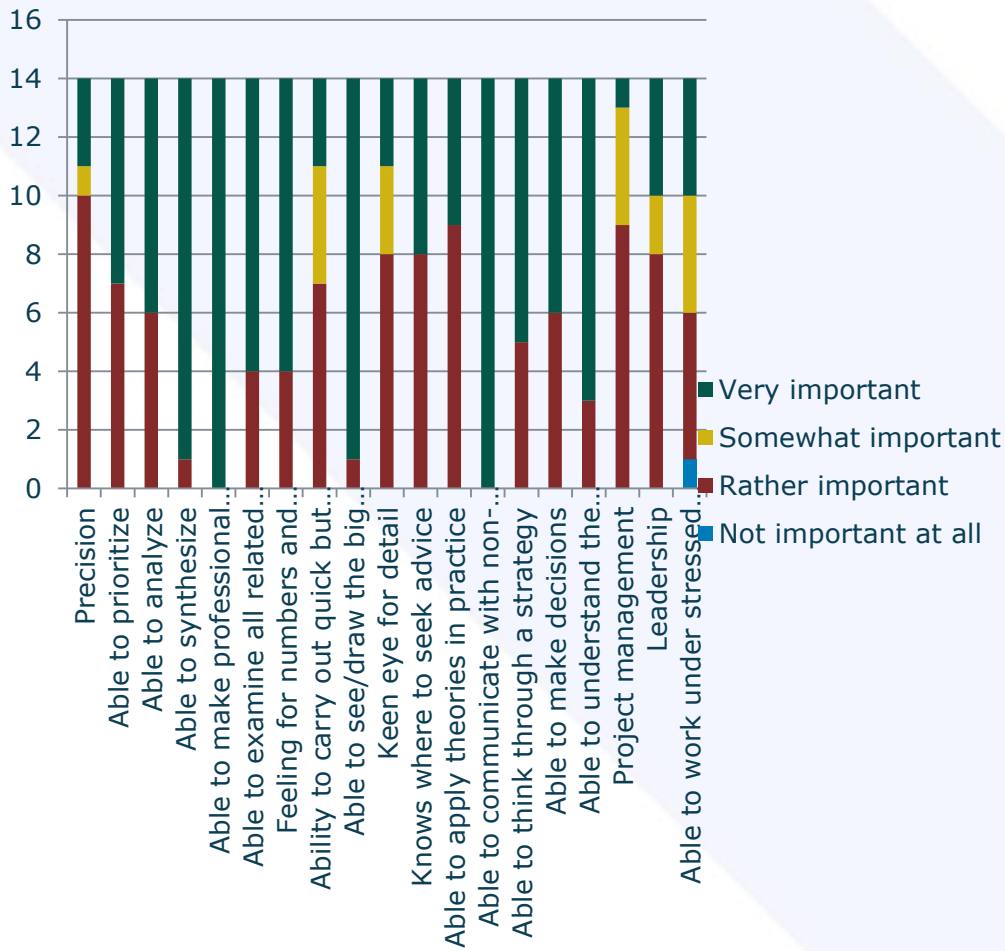
- Long term :

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.

Survey AAE August 2017

- What are the skills considered to be important for the future ?



- 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

Why are Roles of Actuaries changing ? The external environment is evolving really fast !

Regulatory environment

- Regulation is referring explicitly to actuarial competences

SII / IORP II :
Actuarial Function – Risk Management Function

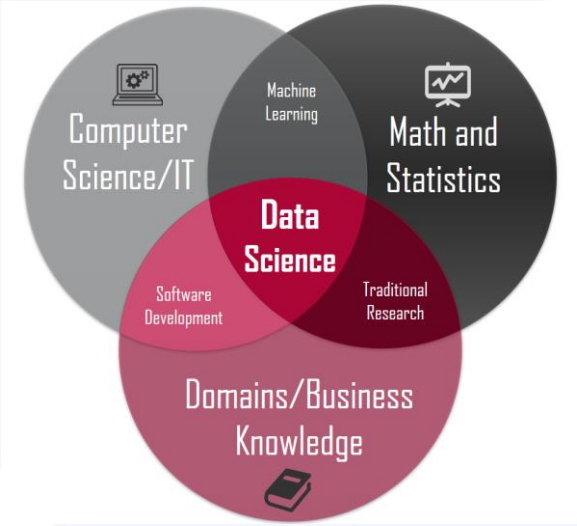
IFRS 17 for insurance contracts

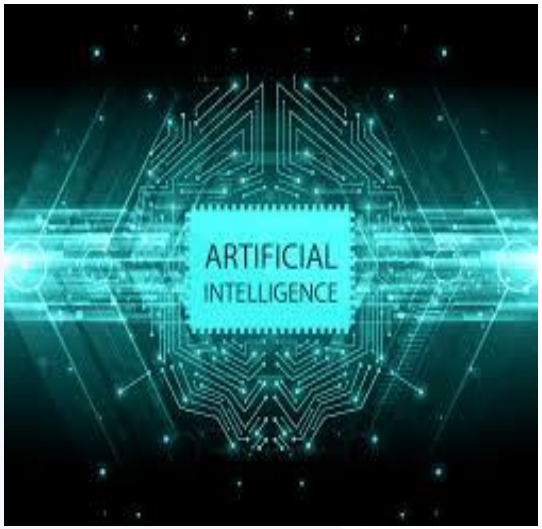
Employee Benefits Accounting

IAS 501 : actuarial expert

Technological environment

- Technological environment is evolving quickly





- IT technology and customer use open opportunities for Fintech and Insurtech
- Volume and accessibilty to data creates competitive advantage and need for scientific approach
- Auto generated models by embedded systems and algoritms

Actuaries constantly evolving over time

Actuarial work has been subject to changes since the beginning in the 17th century; but change has sped up:

1st kind
17th century
Life actuaries methods involve deterministic calculation

2nd kind
20th century
Non-life actuaries Probabilistic methods to assess risk

3rd kind
Bühlmann 1987
Investment side considered Stochastic processes in actuarial calculation

4th kind
Embrechts 2006
Risk management All asepcts of risk in insurance

5th kind
Chan & Devlin 2016
Big Data working Party
Big data, Analytics & Unstructured data

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Actuaries and Risk Management : about quantitative and qualitative !

Risk Management as a corner stone

- Observation post introduction of SII
  - **1 in 4 actuaries working in insurance** (estimate about 5,000 actuaries in Europe) are active in the field of risk management
  - **1 in 2 CRO** of substantial insurance companies is actuary
  - Profession needs to organize the appropriate framework

- CRO Forum AAE
  - The challenge for the actuarial profession to prepare for the role of CRO/Actuary is to find out how we can bring the actuary as close as possible to the “sheep with the five legs” knowing that **the necessary conditions (technical know-how) have been met but not the sufficient ones (business context, communication, understanding and open mind).**

Profile CRO Insurance Company

Experience in relevant Insurance markets:
Life, Pension, P&C, D&A, Health, etc

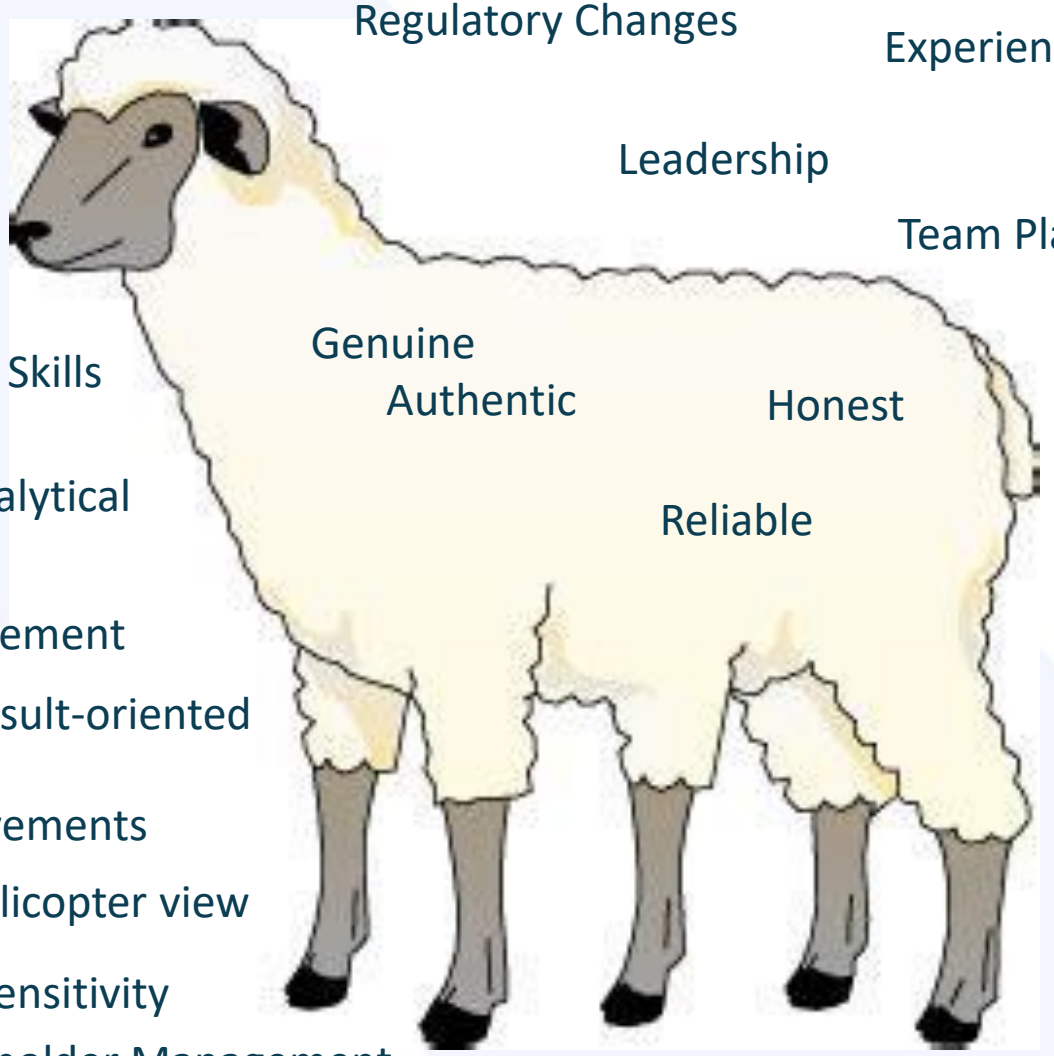
Regulatory Changes

Able to pull rank

Experience on all risk types:
Financial Market Risk
Operational Risk
Insurance Risk
Business Risk
Actuarial Risk
Compiance Risk
Model Risk
etc

Leadership

Team Player



Genuine
Authentic

Honest

Reliable

Negotiation Skills

International

Analytical

Strategic view

Crisis Management

Result-oriented

Geo-political movements

Helicopter view

Organizational Sensitivity

Stakeholder Management

Problem-solving attitude

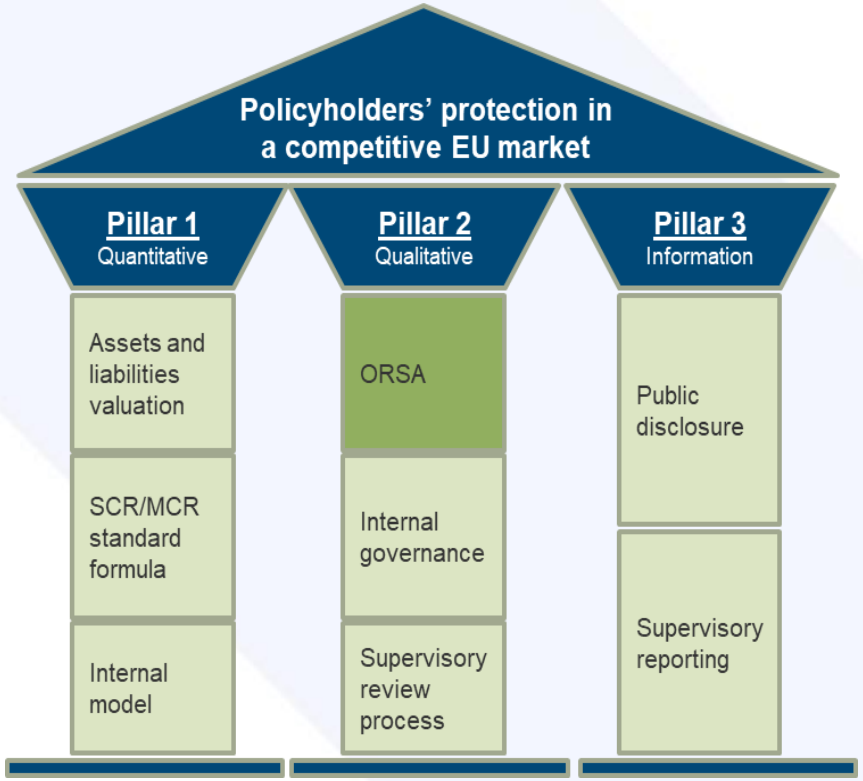
Financial Markets participants

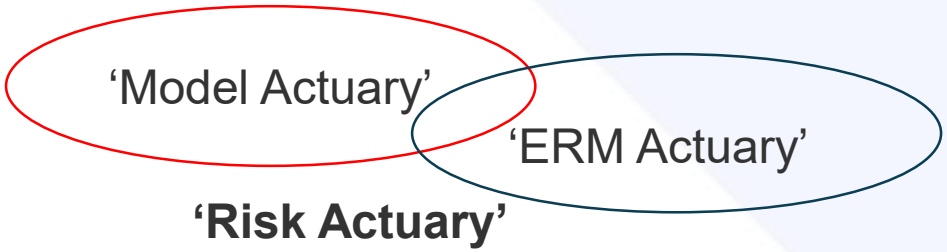
Audit/Accounting Processes

Asset Management

People & Team development

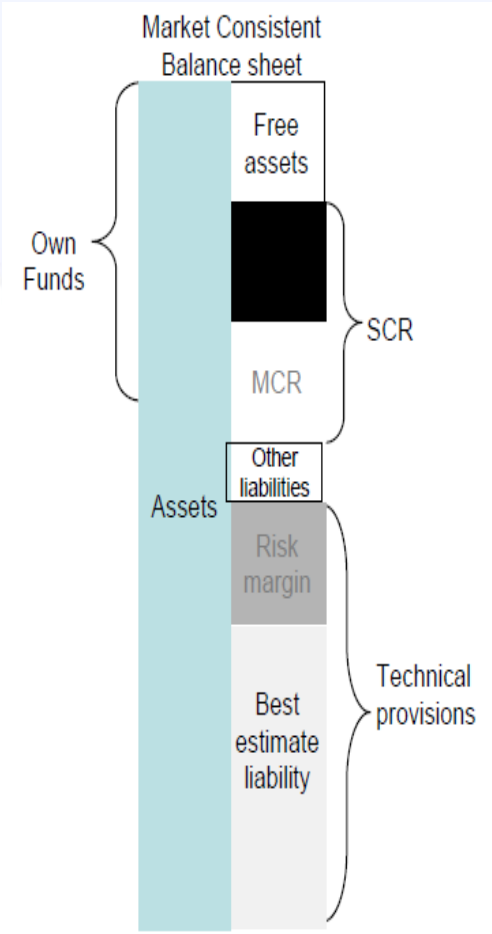
Solvency is good for you … actuaries





- 'Risk Actuary' has emerged giving shape to the actuary of the 4th kind
- Two roles can be distinguished:
  - Model(ing) Actuary
  - ERM Actuary

Model Actuary : Emphasis on quantitative skills



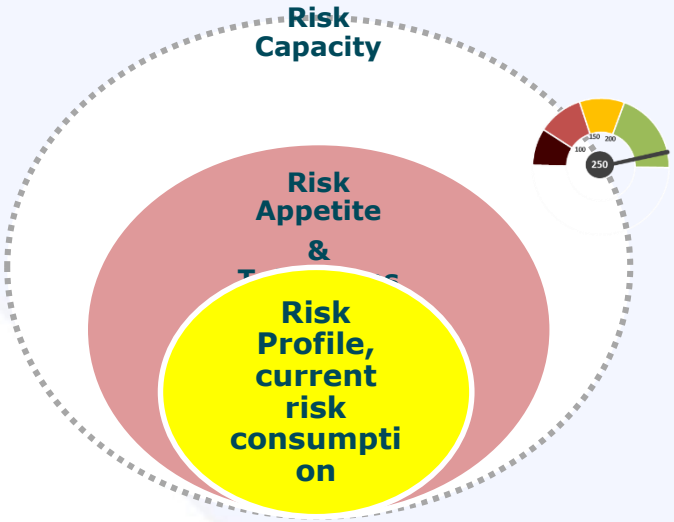
SCR framework knowledge:

- Market consistent balance sheet (fixed-stochastic projections, Monte-Carlo)
- SCR – MCR (Standard formula – Internal Model)
- …

But also:

- Accounting concepts (Solvency B/S versus IFRS B/S)
- Financial concepts (Risk-free, risk-neutral, real world, replicating portfolio,etc.)
- Model risk, model governance and validation, model documentation, data quality
- Programming and IT skills
- Expert judgment
- Drafting skills
- Communication skills

ERM Actuary : Emphasis on qualitative skills

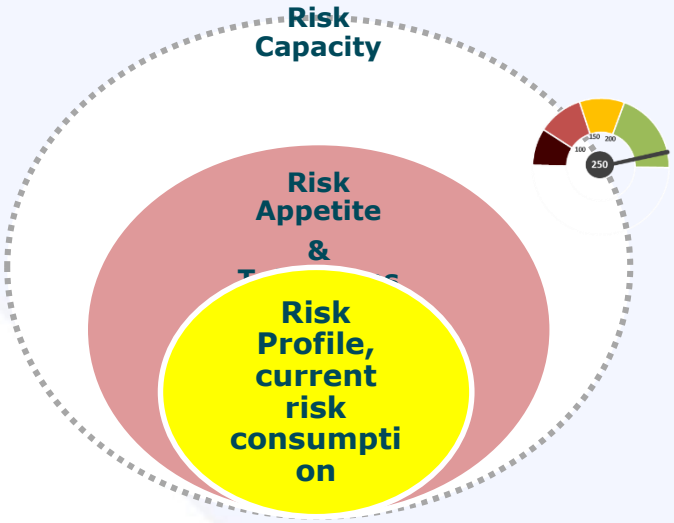


	Low 1	Medium 2	Significant 3	Severe 4
Almost certain 4	4	8	12	16
High 3	3	6	9	12
Medium 2	2	4	6	8
Low 1	1	2	3	4

ERM framework knowlegde

- Risk strategy
- Risk management system
- Risk policies
- Risk Appetite / Tolerance levels / Risk limits
- Key risk indicators
- Risk Dashboard
- Risk culture / awareness
- Business continuity
- ORSA
- RSR /SFCR, …

ERM Actuary : Emphasis on qualitative skills



Almost certain 4	4	8	12	16
High 3	3	6	9	12
Medium 2	2	4	6	8
Low 1	1	2	3	4
	Low 1	Medium 2	Significant 3	Severe 4

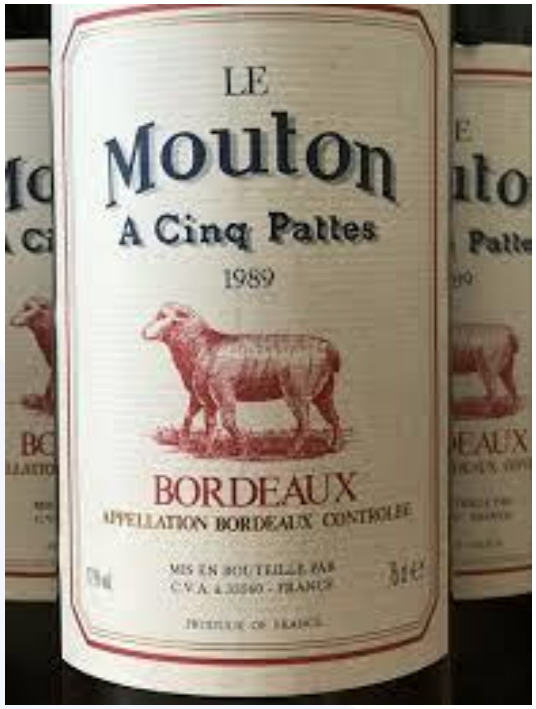
But also:

- Company strategy and performance targets
- Understanding management imapct of the solvency figures
- Link with Compliance, DPO, Internal Audit, Internal Control (fostering GRC approach)
- Business processes, subsidiaries and outsourcing
- Soft skills: challenging power, organising risk workshops, crisis management, etc…

Risk Actuary – CRO : The sheep with 5 feet exists

Ebony and ivory

- Model actuaries and ERM actuaries: to work together closely in view of having an integrated risk management in place
- A good 'Risk Actuary' / CRO is capable of marrying up both quantitative and qualitative skills.



By the say: the sheep with 5 feet exists …

Risk Management in IORP

- Today's opportunity in Risk Management in IORP II
  - DIRECTIVE (EU) 2016/2341 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 14 December 2016 on the activities and supervision of institutions for occupational retirement provision (IORPs)
- Actuarial Function and Risk Management Function in line with SII except for pillar 1
- Employee Benefits actuaries to exchange with Insurance actuaries to accelerate learning curve

Conclusion : The future of the Risk Actuary looks bright

Being involved in ERM is one of the biggest and still growing opportunities for actuaries. Emerging trends and evolutions will further contribute to its progress.

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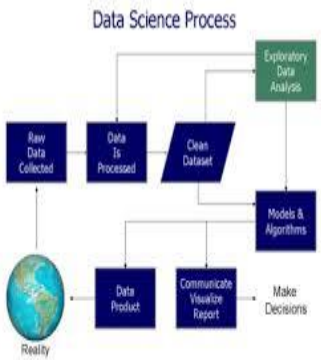
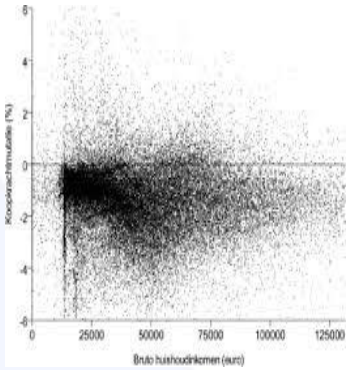
Actuaries and Data Science/Artificial Intelligence : threat or opportunity ?

Data science : definition

- Data science is a multi-disciplinary field that uses scientific methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data. Data science is the same concept as data mining and big data: "use the most powerful hardware, the most powerful programming systems, and the most efficient algorithms to solve problems".

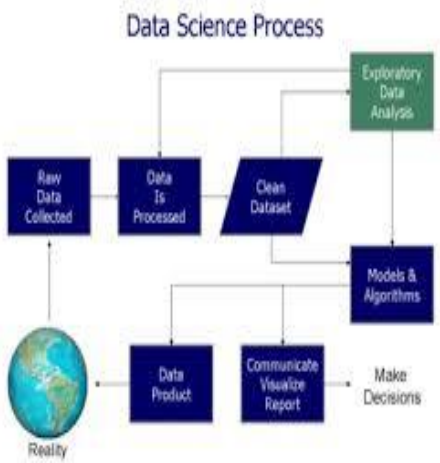


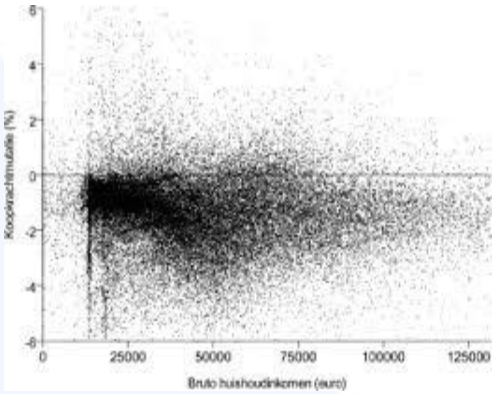
- Data science is a "concept to unify statistics, data analysis, machine learning and their related methods" in order to "understand and analyze actual phenomena" with data. It employs techniques and theories drawn from many fields within the context of mathematics, statistics, computer science, and information science.



Actuary activity Pre-Big Data : Choices to make

1. Gathering of data/information : company related : straightforward
2. 'Transformation' of Data for analysis : common practice : easy, if not unneeded (does not require much effort or time)
3. Performing 'standard'-type of analysis : common practice : easy (but sometimes complicated)
4. Employing 'expertise' due to lack of reference/model : common practice : 'added value' of Actuary



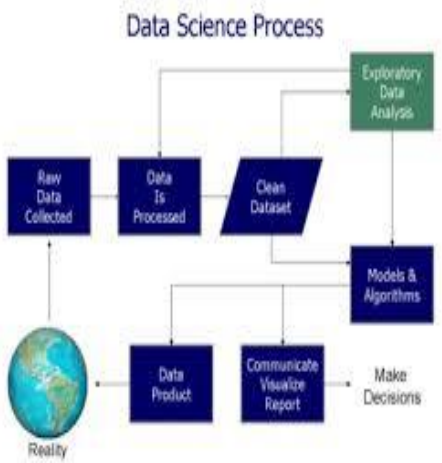


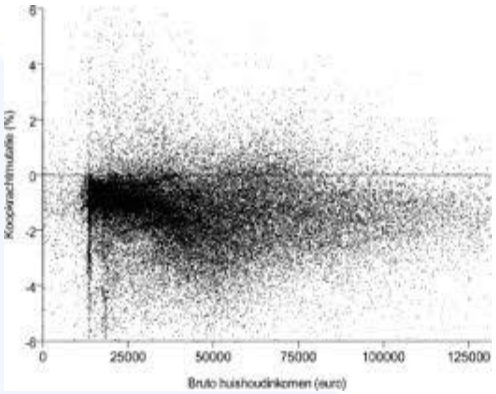
Actuary activity Post-Big Data : Choices to make

1. Gathering of data/information : all types of sources : much more cumbersome for reason of:
   1. Volumes involved
   2. Various sources involved
   3. The very nature of data
   4. The ‘quality’ of data
   5. Time honoured robustness of data

   => UNSTRUCTURED DATA SET
2. ‘Transformation’ of Data for analysis, including a ‘structure’ : FUNDAMENTAL to Data Science : requires knowledge from both the Data Scientist & the Actuary

   => Basis to start highly impacts analysis results

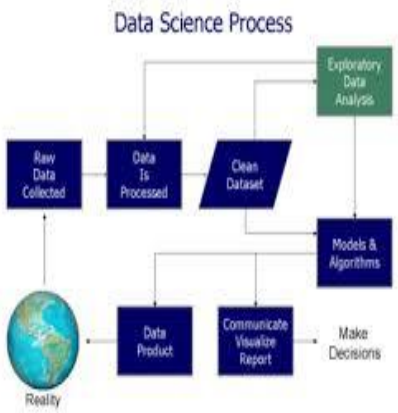




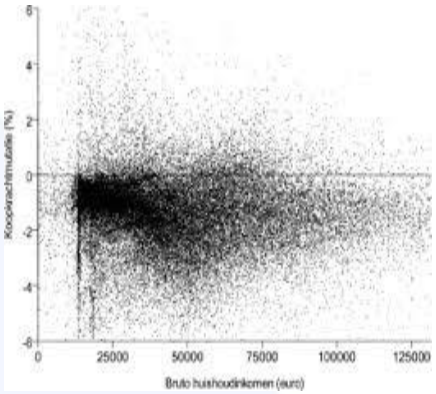
Actuary activity Post-Big Data : Choices to make

3. Performing analysis : must be conducted by the Actuary, potentially assisted by the Data Scientist: requires:
   1. ‘path description’ &
   2. ‘limit’ conditions to respect

   Is likely to lead to different outcomes when performed by different Actuaries, because of the ‘path’ chosen by the Actuary (the latter is a ‘choice’ problem)

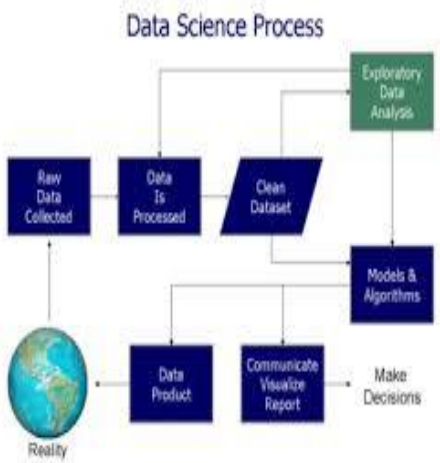


4. Employing ‘expertise’: the choices made warrant far less intervening power for the Actuary to arrive at an ‘acceptable’ result (does not put a strain n the added value for the Actuary though)

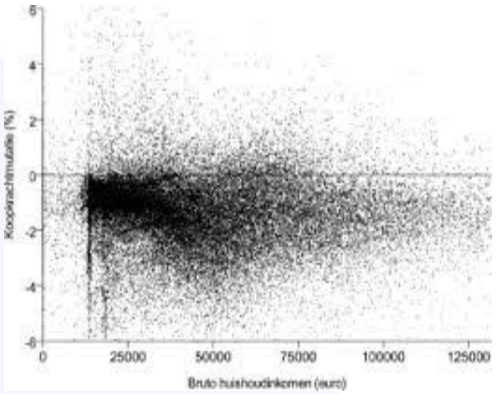


Data science and actuarial science go hand in hand

- **Data science is not a threat but an added value !**
- Jan Van de Spiegel, Task Force Roles of Actuaries AAE, Data Science and Actuaries



- Using data analytics introduces more **a fundamental approach** to the data quality component



- The actuarial approach is :
  - **Stochastic in nature** and thus to a degree unpredictable
  - Considering the **“uncertainty”** component

Artificial Intelligence : what is it ?

- The **High-Level Expert Group on Artificial Intelligence of the European Commission** defines AI :
  - *"AI refers to systems designed by humans that, given a complex goal, act in the physical or digital world by perceiving their environment, interpreting the collected structured or unstructured data, reasoning on the knowledge derived from this data and deciding the best action(s) to take (according to pre-defined parameters) to achieve the given goal.*
  - *AI systems can also be designed to learn to adapt their behavior by analyzing how the environment is affected by their previous actions"*

AI : a threat for actuaries ?

- **Will AI replace actuaries ?**
- **Marcus Looft, Germany : Wait, there's another option: machine learning can take actuaries to the next level!** because
  - Machine learning is a useful tool for actuaries, but computers will not be able to think up **worst case scenarios,** creatively ask new questions or **provide the professional judgement and innovation** needed without human intervention, is also not free of "errors" and **cannot validate itself** nor its solutions to be predictive in the future
  - AI systems allow actuaries to **free-up time**, to concentrate on solving previously unsolvable problems
  - Make sure to take the time to stay up to date with machine learning techniques, because without it, you run the risk of becoming an **actuarial dinosaur**!

Why actuaries are needed in DS and AI ?

- Lutz Wilhelmy, The European Actuary, June 2018

  - Who should assess and test the algorithms for biases and violation of **anti-discrimination rules**, if not the actuary?
  - Who should take responsibility that algorithmic decisions are ethically acceptable and that data privacy as well as **data protection** was complied with, if not the actuary?
  - Who should explain that the individual cost of the cover is its **fair price**, i.e. the reasonable, morally right, treating-all-equal price, if not the actuary?

Why actuaries are needed in DS and AI ?

- Lutz Wilhelmy, The European Actuary, June 2018

  - Who should **rebalance the new information asymmetries**, if not the actuary?
  - Who should explain to society and politicians that digitisation vastly increases the access to insurance for many, but makes certain covers **unaffordable** for some, if not the actuary?
  - Who can invent the societal financing schemes to **ensure access to insurance where really needed,** e.g. health insurance for the chronically ill, if not the actuary?

Regarding AI and digital ethics, European regulators are breaking ground exploring the area

- The High-Level Expert Group on Artificial Intelligence (AI HLEG) has as a general objective to support the implementation of the European Strategy on Artificial Intelligence.
- It delivered on the following:

- Ethics Guidelines on Artificial Intelligence: The Guidelines put forward a human-centric approach on AI and list 7 key requirements that AI systems should meet in order to be trustworthy. These requirements are currently undergoing a piloting process
- Policy and Investment Recommendations: 33 recommendations that can guide Trustworthy AI towards sustainability, growth and competitiveness, as well as inclusion – while empowering, benefiting and protecting human beings.
- This work is not insurance specific

Regarding AI and digital ethics, European regulators are breaking ground exploring the area

- EIOPA established a Consultative Expert Group on Digital Ethics in insurance (GDE) to assist the Authority in the development of digital responsibility principles.
- This comprises
- Digital responsibility principles that will address the use of new business models, technologies and data sources in insurance from the perspective of fairness and taking into account ethical considerations.
- Specific focus will be given to pricing and underwriting.
- The Consultative Expert Group also acts as a sounding board for EIOPA, for instance in promoting a sound governance framework around using Big Data Analytics tools such as Artificial Intelligence and Machine Learning.

Actuaries and the AAE particularly have a leading role in assisting to address ethical challenges in insurance

- The Expert Group on Digital Ethics is a quite diverse group comprising experts from academia, consumer protection groups, industry, and consulting.
- It has structured its tasks into three workstreams:

- WS1 on **Fairness and Non-Discrimination** assists in understanding the facets of Fairness and how legitimate differentiation distinguishes from discrimination.
- Chair: Lutz Wilhelmy, actuary, board member of the AAE

- WS2 on **Transparency and Explainability** assists in developing our understanding of explainability and how society can best leverage the advantage of digital development while preserving the legitimate request for transparency and explainability.
- Chair: Esko Kivisaari, actuary, immediate past chairperson and board member of the AAE

- WS3 on **Governance** assists in developing appropriate structures that should allow insurers to responsibly address existing and upcoming challenges.
- Chair: Pedro Écija Serrano, actuary from Spain working in Ireland

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Actuaries and IFRS17 : an actuarial standard created by non-actuaries !

Where do actuaries intervene in the B/S and P/L?

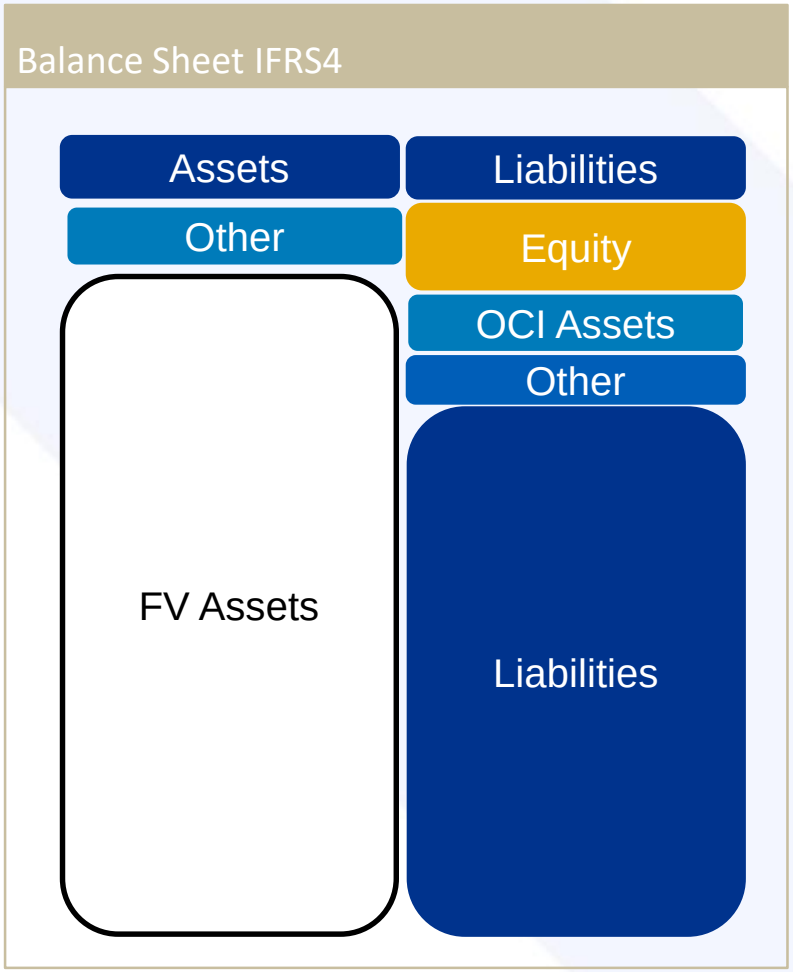
IFRS 4
Premiums
Investment income
Incurred claims
Change in insurance contract liabilities
Profit or Loss
Other Comprehensive Income
Total Comprehensive Income

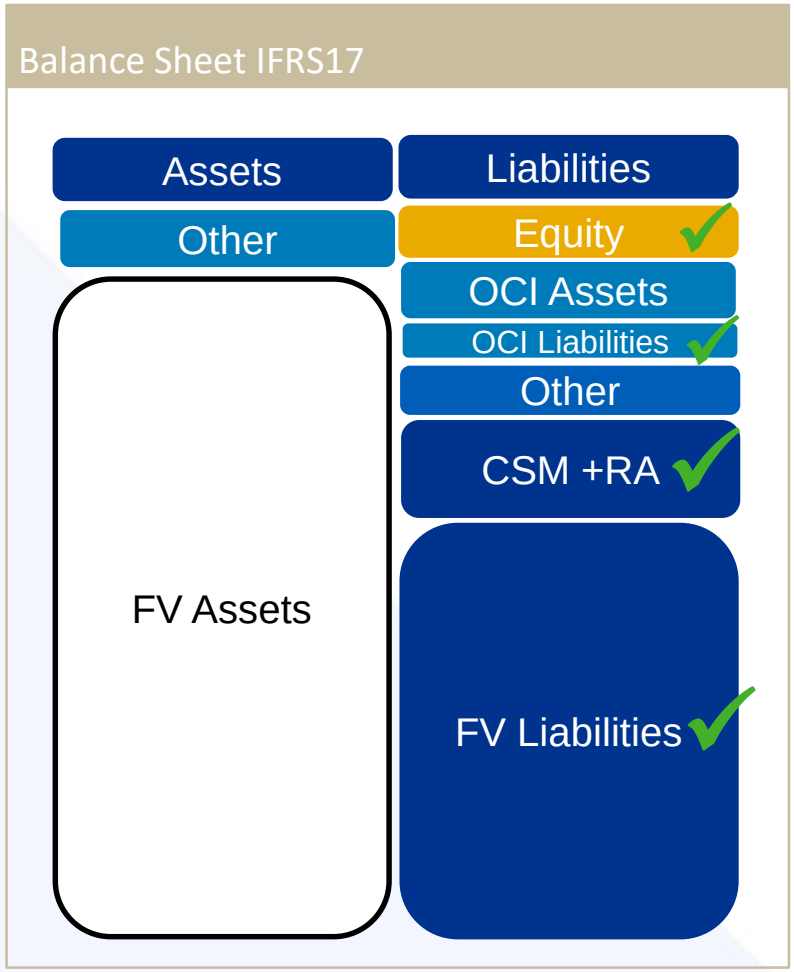
IFRS 17
Insurance revenue ✓
Insurance service expense ✓
Insurance service result
Investment income
Insurance finance expense ✓
Net finance result
Profit or Loss
Other Comprehensive Income ✓
Total Comprehensive Income

Release of CSM ✓
Release of Risk Adjustment ✓
Expected claims ✓
Expected expenses ✓
Excluding Investment component ✓

Actual claims incurred ✓
Actual expenses incurred
Loss component ✓
Excluding investment component ✓

Where do actuaries intervene in the B/S and P/L?





Where do actuaries intervene in the disclosures

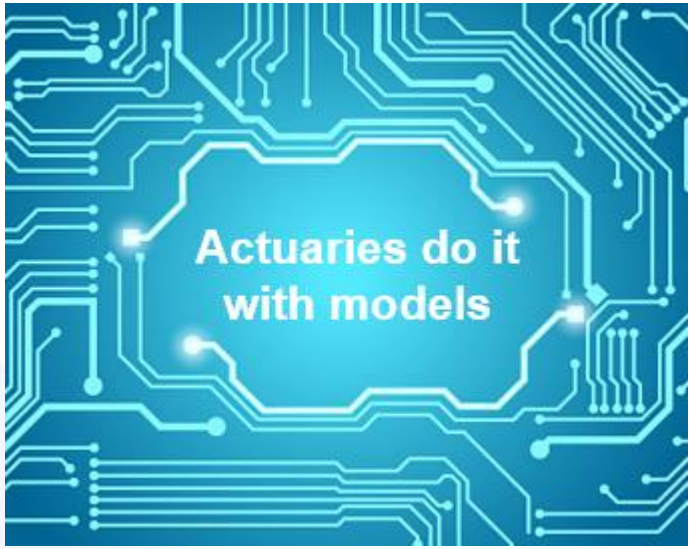
In millions of euro	2021				
			CSM (see (C))		
	Estimates of present value of future cash flows	Risk adjustment for non-financial risk	Contracts under modified retrospective approach	Other contracts	Total
Opening liabilities	58,795	132	8,730	2,947	70,604
Changes in the statement of profit or loss and OCI					
Changes that relate to current services					
CSM recognised for services provided	-	-	(1,093)	(344)	(1,437)
Change in risk adjustment for non-financial risk for risk expired	-	(12)	-	-	(12)
Experience adjustments	(15)	-	-	-	(15)
Changes that relate to future services					
Contracts initially recognised in the year	(793)	13	-	797	17
Changes in estimates that adjust the CSM	(156)	(6)	12	150	-
Changes in estimates that result in losses and reversal of losses on onerous contracts	(8)	(1)			
Changes that relate to past services					
Adjustments to liabilities for incurred claims	(7)	(1)			
Insurance service result	(979)	(7)			
Net finance expenses from insurance contracts	3,680	-			
Effect of movements in exchange rates	(241)	(1)			
Total changes in the statement of profit or loss and OCI	2,460	(8)			
Cash flows*	1,650	-			
Closing liabilities	62,[illegible]	124			

* Cash flows are analysed on pages 136 and 137.

In millions of euro	2021			
	Liabilities for remaining coverage			
	Excluding loss component	Loss component	Liabilities for incurred claims	Total
Opening liabilities	67,699	2,571	334	70,604
Changes in the s[illegible] or loss and OCI				
Insurance reve[illegible]				
Contracts un[illegible]trospective approach	(1,895)	-	-	(1,895)
Other con[illegible]	(596)	-	-	(596)
[illegible]	(2,491)	-	-	(2,491)
Insu[illegible]nses				
Inc[illegible]her insurance service expenses	-	(40)	371	331
A[illegible]rance acquisition cash flows	696	-	-	696
[illegible]al of losses on onerous contracts	-	8	-	8
[illegible]iabilities for incurred claims	-	-	(8)	(8)
[illegible]	696	(32)	363	1,027
[illegible] components	(7,374)	-	7,374	-
[illegible] service result	(9,169)	(32)	7,737	(1,464)
[illegible]ce expenses from insurance contracts	4,221	166	24	4,411
[illegible]f movements in exchange rates	(267)	(11)	(12)	(290)
[illegible] changes in the statement of profit or loss and OCI	(5,215)	123	7,749	2,657
Cash flows				
Premiums received	10,073	-	-	10,073
Claims and other insurance service expenses paid	-	-	(7,737)	(7,737)
Insurance acquisition cash flows	(686)	-	-	(686)
Total cash flows	9,387	-	(7,737)	1,650
Closing liabilities	71,871	2,694	346	74,911

…and requiring a lot of expert judgement

- Often very significant impact on best estimates
- And also with respect to Data quality: materiality of impact on figures?



(Leading) roles for the actuaries in IFRS 17

- Interpretations, choices, gap analysis, data and system requirements…
- Impact assessments
- Implementation
- Preparation of the accounts

Formal responsibility for the actuaries in IFRS 17

- Given:
  - This leading role => a more formal (enacted) responsibility for closing the accounts
  - Complexity and importance => similar governance as for Solvency II
- The AAE recommends incorporating two requirements inspired by the Solvency II regulation as part of the European adoption of the IFRS 17 reporting standard:
  - Obligations on the actuary in the company
  - Obligations on the actuary at the auditor

Actuaries and IFRS17 : opportunity to strengthen position !

- The implementation of IFRS17 implies **sufficient experience** with actuarial valuation techniques and therefore the proper organization of the lines of defense.
- **Kristoffer Bork**, IFRS17 – Another Challenge (to insurers, Auditors and Actuaries), TEA April 2019 already pointed out that
  - actuaries will play a leading role in the implementation of IFRS 17,
  - actuaries should have a more formal (enacted) responsibility
- The AAE believes that such **reporting and sign-off** would
  - enhance the credibility of the audit opinion
  - contribute to the public good as well as providing support for the work of the supervisor.
  - it would also increase quality and consistency in the reporting and thereby mitigate some of the concerns raised by European regulators

Obligations on the actuary…

…in the company:

Internal report to the management covering at least:

- The applied methodology
- The assumptions used
- The data used
- The identification of the judgments applied
- the results including their sensitivities

…at the auditor:

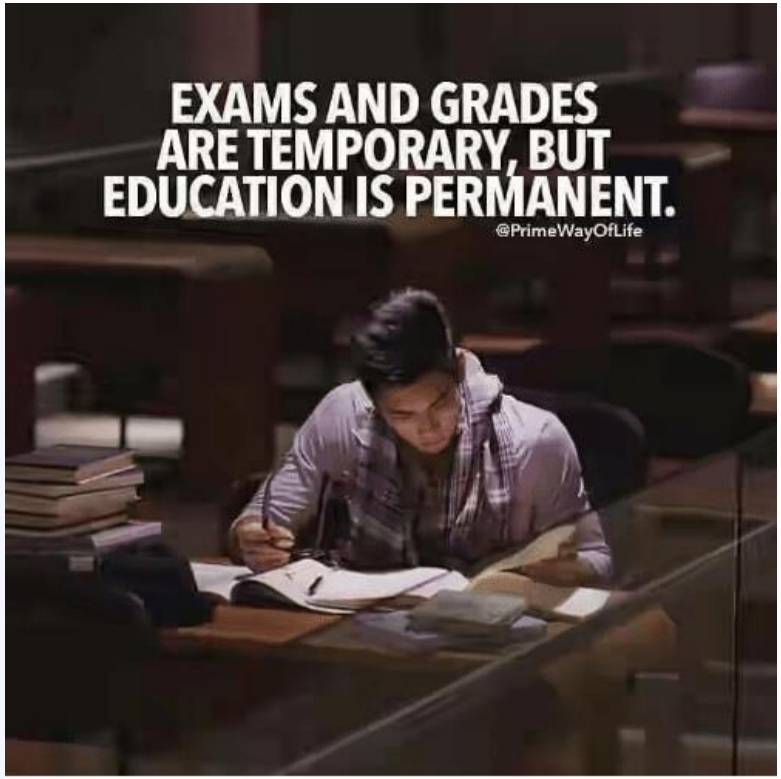
Mandatory report:

- Reflecting the nature and complexity of the actuarial contribution to the audit work and the auditor's requirements
- Covering at least the areas mentioned on the left hand side.

… at the public ?

Fit & Proper requirements !

- Similar to Solvency II
- Actuarial professional bodies and associations are committed to preparing their members to play a leading role in IFRS 17 through the provision of standards, educational materials and training events.



Is the actuarial profession ready to take on sign-off responsabilities of accounts ?

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Challenges for the Actuarial Profession

How to position the profession in function of emerging roles ?

- Risk Management requires other than technical skills
- Data Science is an added value if part of the process
- Artificial Intelligence is a threat if not integrated
- IFRS17 offers huge opportunities if ready to take responsibility

- New technologies and maths are not exclusive for actuaries
- Experts are entering the action field of actuaries

- The professional framework is a strong quality of the actuarial profession but is it sufficient ?

How to position the profession in function of emerging roles ?

- Strengthen **professional framework** of the actuarial environment is key and is a continuous process
  - Education standard (core syllabus) is revised and adapted to new roles
  - Code of Conduct is revised and reflects expectations of stakeholders
  - Standards of Actuarial Practice are introduced together wit Educational Actuarial Notes
  - Continuous Personal Development is a corner stone

- Emerging roles urge us to focus also on
  - **Professional Judgement** of actuaries as a differentiator compared to other experts
  - **Legal and political recognition** as a basis for an unquestionable position of the actuary

Professional Judgement : differentiates actuary from other experts !

Professional Judgement enhances position

- **Notes on the application of professional judgement by actuaries,** Task Force Roles of Actuaries AAE, Siegbert Baldauf, Xavier Gomez, Anna Perez Ayuso
  - **Definition**: *Professional judgement is the judgement of the actuary, based on actuarial (or other relevant) training and experience, bound by the Standards and Code of Conduct of the profession.*
  - Professional judgement of an actuary is based not only on expert knowledge but also on standards of professionalism and on the Code of Conduct of the profession
  - Compliance with these standards increases the value of the professional judgement provided by an actuary compared to an expert without this requirement
  - The professional standards demand besides this expert knowledge ethical behaviour and accountability

Professional judgement

The AAE prepared **Notes on the application of professional judgement by actuaries**

Objective:

- Identifying the distinguishing features of actuarial professional judgement.
- Providing a short **self-assessment questionnaire** to check the consistency of professional judgement applied by the actuary with principles laid down in the Code of Conduct

Definition:

An actuary is an individual fully qualified member of one of the full member associations of the AAE.

Such actuaries are bound by the professionalism standards of their organisation compliant with those of the AAE.

Professional judgement

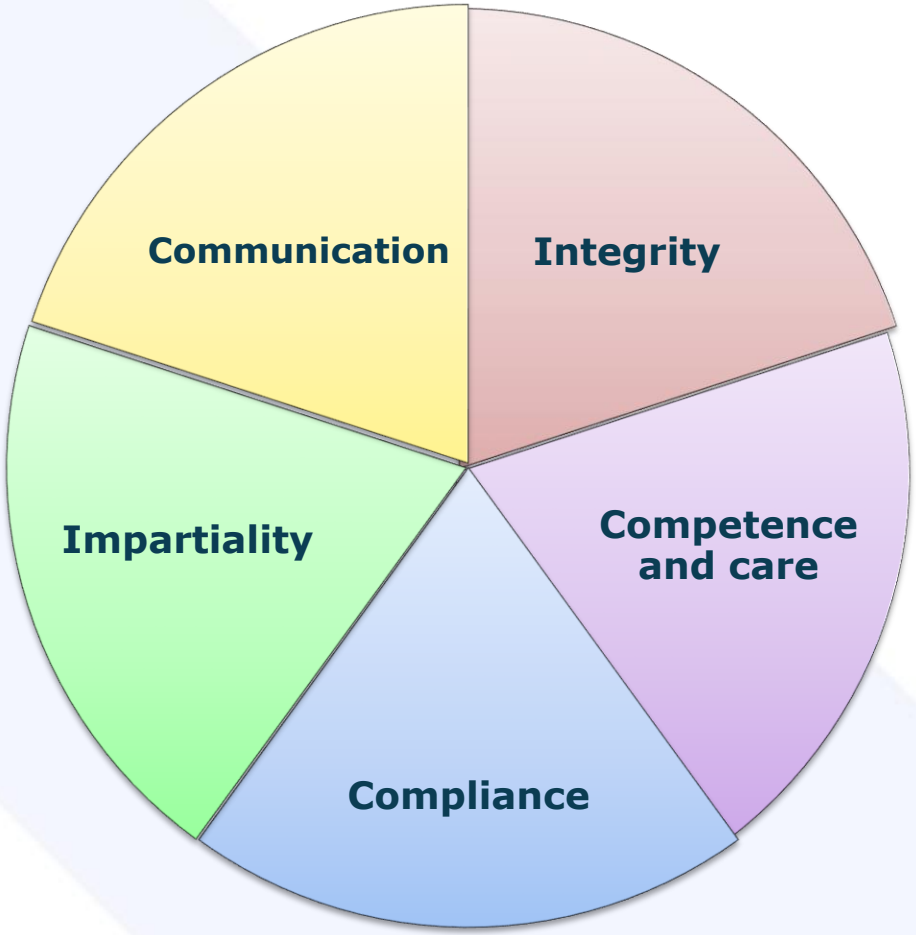
Definition:

Professional judgement is the judgement of the actuary, based on actuarial (or other relevant) training and experience, bound by the Standards and Code of Conduct of the profession.

Code of Professional Conduct published by Actuarial Association of Europe in the year 2017 becoming effective on 1 January 2021

Code of Professional Conduct: Principles

Code of Professional Conduct published by the AAE in **2017** becoming effective for Full Member Associations of the AAE on **1 January 2021**.



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Legal and political recognition : a condition for becoming unquestionable ?

Promote legal and political recognition of the profession

- The recognition of the profession and the associations can be considered in two ways being the **legal recognition** and the **'de facto' or political recognition.** Both ways can be combined and reinforce each other.
- The **European Directive 2005/36/EC** on the recognition of professional qualifications and **Directive 2013/36/EC** amending it create legal recognition in the European Union.
- **The recognition covers three aspects :**

1° The construction of the **association** of actuaries

2° The recognition of the **profession**

3° The recognition of the **title**

The external recognition is influenced by the **internal framework**

Legal recognition framework.

The European **Directive 2005/36/EC** on the recognition of professional qualifications, and **Directive 2013/36/EC** amending it, create legal recognition in the European Union.

Legal recognition requirements according those Directives:

- Common platform at European level
- Respect criteria such as:
  - minimum and additional training,
  - adapted period under supervised practice,
  - aptitude test,
  - prescribed minimum level of professional practice

Legal recognition requirements according to **Directive 2009/38/EC** (Solvency II) art 48 and **Directive 2016/2341**(IORP II) for the Actuarial Function are knowledge, relevant experience with applicable professional and other standards

European Context.

(i) Directive 2005/36/EC and Directive 2013/55/EU **consolidated a system of mutual recognition** of professional qualifications which was initially based on 15 Directives.

(ii) **EU has a database** which contains lists of regulated professions in the Member States, EEA countries and Switzerland covered by both Directives.

(iii) **A regulated profession** is a professional activity access to which is subject by virtue of legislative, regulatory or administrative provisions to the possession of specific professional qualifications and whose purpose is to grant a **reserve of activity**.

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European Context.

(iv) According to that Database, **Actuary is a regulated profession with reserve of activity** in at least seven European Countries (Spain, UK, Italy, Sweden, Denmark, Poland and Slovakia). This's around **70% of the actuaries** in Europe.

(v) Solvency II Directive requires **actuaries** to provided Information for supervisory purposes and to exchange information with other authorities. **Therefore, actuaries have an explicit mandate which means a reserve of activity in this Directive.**

(vi) Due to the development of Solvency II regulation at local level, in the last years, reserve of activity **has increased** in EU countries with new functions as, for instance, '***the appointed Actuary***' or '***the responsible Actuary***' in UK, Ireland, Portugal or Spain, or others reserve of activities in Germany

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European Context.

(vii) **Local legislations** determine the legal framework

(viii) As a result, this means that, within the EU framework, the legal status of the Actuary, **in itself, necessarily needs to be contemplated (although it's already considered) as a Regulated Profession and a title with the right to Reserves of Activity.**

(ix) The current **Mutual Recognition Agreement (MRA)** of the AAE, in force since January 1, 2011, aims to facilitate the achievement of the objectives of the **Directive 2005/36/EC, amended by the Directive 2013/55/EU.**

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Directive 2009/38/EC (Solvency II).

Article 48.2. Actuarial function:

The actuarial function shall be carried out by ***persons*** who have ***knowledge*** of actuarial and financial mathematics, ***commensurate*** with the nature, scale and complexity of the risks inherent in the business of the insurance or reinsurance undertaking, and who are able to demonstrate their ***relevant experience*** with ***applicable professional and other standards***.

Article 35 **Information to be provided for supervisory purposes**

2. Member States shall ensure that the supervisory authorities have the following powers:

(c) to require information from external experts, *such as auditors and actuaries*.

Article 68 **Exchange of information with other authorities.**

Articles 64 to 67 shall not preclude Member States from authorising exchanges of information between the supervisory authorities and any of the following:

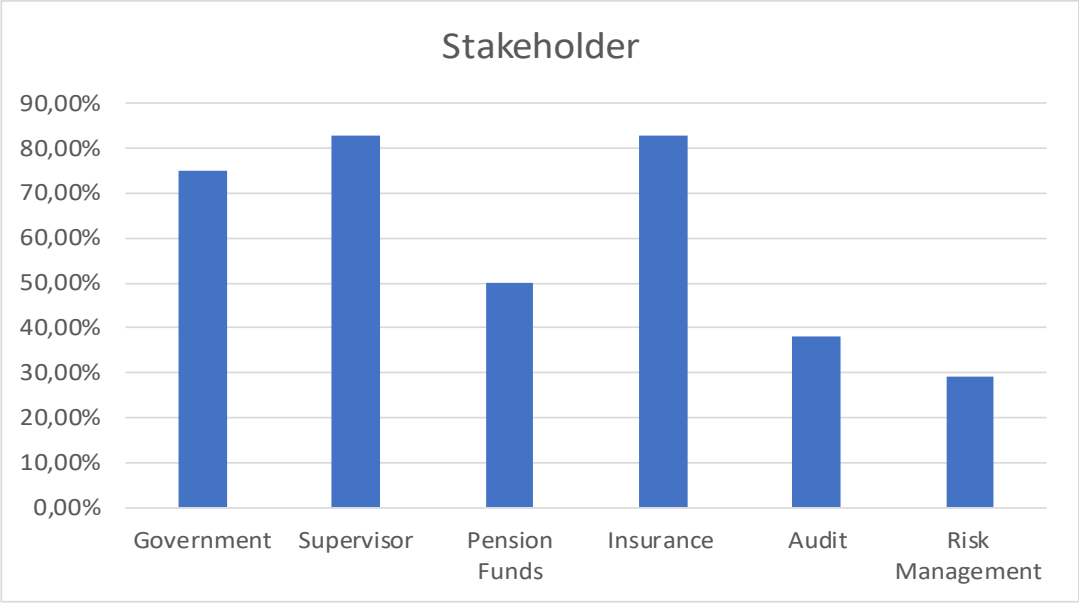
(c) ***independent actuaries*** of insurance undertakings or reinsurance undertakings carrying out legal supervision of those undertakings and the bodies responsible for overseeing such ***actuaries.***

Recognition in legislation (Survey)

- In 55% of the countries (11), the status of actuary is required for fit and proper conditions to fulfil a role defined in legislation, but membership is only required in 20% of the countries (in 4 of the 11 countries)
- In half of the countries there are specific procedures to be recognized for specific roles (UK, Ireland, Poland, Norway, Bulgaria, Italy, Portugal, Lithuania, Sweden and Czech Republic)

- If there would be one conclusion (from a few answers in the survey) is that most of the associations ask for recognition by law of both reserve of activities and membership.

Association as a stakeholder



- Being stakeholder for pension funds depends on the position of pension funds in the country
- Associations not being recognized as a stakeholder are often the same

Association as a stakeholder

Conclusion

- The Actuarial Associations are recognized as stakeholder in most countries by public authorities and industrial bodies
- The stakeholdership with other professions such as audit and risk management is not well developed
- Half of Associations would like to strengthen stakeholdership

Final Questions

- ***Is there a need for a streamlined legal status of the Member Associations of Actuaries ?***

- ***Is legal recognition of the profession a strategic objective ?***
  - In Europe we need the recognition of the actuarial profession, and to achieve it we need a strong action from AAE towards EIOPA
  - One of the AAE objectives is:
    - help to ensure that regulated actuarial work is performed by those properly qualified to undertake it and subject to relevant professional and technical actuarial standards

Final Questions

- ***Is de facto recognition of the profession a strategic objective ?***
  - Approach of stakeholders can be different
  - Coordinate European/International and local actions

- ***Is the recognition of the title a strategic objective ?***

Recommandations

- The **European dimension** that introduces an explicit or implicit legal recognition can not be denied and **needs the appropriate follow up** by the profession
- Local associations are invited to **contact the authorities in charge** of the application of Directives of 2005 and 2013
- The **mutual understanding** of the European and local context helps to consider the subject and needs to be strengthen
- The actuarial profession goes through a constant evolution requiring an **increasing professionalization** : recognition and especially legal recognition can be a catalysator
- The legal recognition can help **all** actuaries : those who take up public roles and those who take up actuarial roles in the context of their employer

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Next steps for the Actuarial Profession : how to prepare for the emerging roles ?

Next steps

- Risk Management requires to focus more on non-technical skills
  - The CERA program meets the knowledge requirements but not the soft skills for actuaries in the field of Risk Management

- Pensions Actuaries can use lessons learned from insurance actuaries and make sure that actuaries are the preferred choice for the RMF in IORP

- Organize the profession so that colleagues with interest in RM and Data Science do feel at home in the actuarial environment

- Get grip on Artificial Intelligence and the impact on the actuarial activity

Next steps

- Support the actuaries involved in the digital ethical debate
- Prepare the actuaries to take sign-off responsibilities under IFRS17
- Introduce EAN on Professional Judgement
- Facilitate the debate on the need for (Legal) recognition with a balanced work stream

QUESTIONS
ANSWERS

THANK YOU
FOR
YOUR
ATTENTION

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