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# Access to Insurance Initiative

A global programme for sound regulatory and supervisory frameworks

## A2ii-IAIS Consultation Call: 21 May 2015 “Actuarial Approaches to Inclusive Insurance”

**Expert:** Jules Gribble, IAIS Secretariat

**Country example:** Michael Kofi Andoh,  
National Insurance Commission (NIC) Ghana

Moderated by Hannah Grant, A2ii





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## Agenda

1. Some questions for you
2. Actuarial capacity
3. Consequences of limited actuarial resources
4. Proportionality
5. Role of experience
6. War stories
7. Supervisors managing actuaries
8. Possible approaches to resolution
9. Country example - Ghana
10. Questions & Discussion





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# 1. Some questions for you





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- From a regulatory and supervisory perspective:
  - What are the key differences between inclusive insurance and conventional insurance?
  - What are the key similarities between inclusive insurance and conventional insurance?
- What does 'proportionate' mean when discussing the regulation and supervision of insurance?
- Why are actuaries important in the regulation and supervision of insurance and inclusive insurance?
- What are the core defining characteristics of insurance?





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## 2. Actuarial capacity





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## Actuarial services

- Services
  - Product development, pricing, risk management, solvency
- Use of those services
  - Model, analyse and interpret impacts of financial risks to inform business management so they make better decisions
  - Wide ranging – Operational risk for example
  - Entrenched focus on policyholder interests
  - Monitor actual experience (outcomes) against expected (desired / planned outcomes) and put forward adjustments as required
  - Range of transferrable skills which can be applied in many areas
- Relevance and relative importance in Inclusive Insurance





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## Actuarial supply

- Approximately half as many fully qualified actuaries as needed
  - Remove major actuarial countries and situation is much worse
  - May be improving, but slowly at best

(Source Gribble, 'Actuarial Supply and Demand' IAA International Congress, 2006)
- Practical outcome
  - In most jurisdictions where inclusive insurance is needed and developing there are nowhere near enough actuaries and this is unlikely to change in the near future
  - So what is 'Plan B'?
- Support initiatives (and risk they entail)
  - CERA qualification, IFoA Certified Actuarial Analyst





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## 3. Consequences of limited actuarial resources





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## Need for actuarial services

- Reduce risk of poorly informed business decisions regarding insurance products, risk and financial management of businesses providing insurance coverage that may adversely impact policyholders
  - Reduce risk of provider failure
- Improve understanding of long term nature of insurance and direct consequences of that
  - Reserves for future claims
  - Reserves for adverse experience and long term business survival – especially for investment products offered to support retirement (eg inclusive pensions)





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## 4. Proportionality





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- Not explicitly defined in ICPs
- ICP introduction, paragraph 8:
  - ‘... supervisors ... tailor certain supervisory requirements and actions in accordance with the **nature, scale and complexity of individual insurers**.
  - ... supervisors should have the **flexibility to tailor supervisory requirements and actions** so that they are commensurate with
  - ... **risks posed by individual insurers**
  - ... [and] **potential risks posed by insurers to the insurance sector or the financial system ... .’**
- What does this all really mean in practice?





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## Cascading context

- Typical focus of proportionality is on reducing obligations due to simplified products, processes, perceived needs
  - Risk is oversimplification in search of ‘efficiency’ (or worse)
- Inclusive insurance remains insurance
  - Core insurance principles therefore continue to apply
- Fundamental to managing insurance is grouping of policyholders so insurance risk can be managed at a group (statistical) level, not at individual level
- Size (of group) matters
  - Minimum group size below which a product is not insurance
  - Product complexity may aggravate the situation





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## Special characteristics of inclusive insurance products

- What are the differences and similarities to conventional products
- Conventional products often do not directly transfer to inclusive insurance products
  - Design, delivery, management and security all matter
  - Need understand differences in order to address them
- Financial risks, as can be assessed by actuaries, arise at all links in the chain from purchase to claim.
  - Consider products directly and their (financial) consequences
  - Chains break at their weakest link – where is that weak link?





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## 5. Role of experience





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- The real and academic worlds are very different places
- Data is always incomplete and ‘dirty’
  - Need to be able to make informed judgements in a timely manner and have feedback loops entrenched to review outcomes and then manage by making consequential adjustments
  - May not be available
- Actuarial Control Cycle
  - A process/attitude that is generally applicable
  - Example: Financial Condition Reports (so familiar)





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## 6. War stories





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**This is where you come in!**

- To develop good guidance we need your experience and practical input and to learn from
  - Good and bad ...
  - Need robust and practical solutions (vs text books)
- Basic rule: Simple is good (especially for simple products).  
Principle of parsimony
  - May imply need for standardised rules, so can be ‘boiler plate’
- Simplicity of solution may belie underlying work
  - Sanity checks – simple checks for reasonableness of outcomes etc
- Issue: Who does underlying actuarial analysis





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## 7. Supervisors managing actuaries





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## Interacting with actuaries

- Sometimes seen as difficulty ... Why??
- Lack of understanding of requirements and responses
  - Risk of both over and under expectations
  - Applies to industry as well as supervisors
- Lack of familiarity
  - Industry as well as supervisors
  - Risk of both over and under use and/or expectations
- Inability to get appropriate actuarial resources into supervisory bodies, and then retain them
- It is a two way, mutual, process





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## 8. Possible approaches to resolution





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## Increasing the actuarial contribution

- Long term objectives and transition processes
  - Reality is it will be slow process, so transition steps critical
- Education – all key stakeholders need
  - Supervisors
  - Business
  - Actuarial profession
- Clarity of reasonable expectations ... and limitations
- What practical guidance and assistance is needed?
  - Now, soon, in an ideal world
  - ‘Business as Usual’ and stressed circumstances





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## References

- *'Addressing the Gap in Actuarial Services in Inclusive Insurance Markets'*, International Actuarial Association, Issues Paper, May 2014 (see [www.actuaries.org](http://www.actuaries.org) )
- *'Application Paper on Regulation and Supervision supporting Inclusive Insurance Markets'*, International Association of Insurance Supervisors, 2012 (see [www.iaisnet.org](http://www.iaisnet.org)).





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## 9. Country example – Ghana

Michael Kofi Andoh, National Insurance Commission (NIC) Ghana





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## What is ACDC ?

- Formed in 2012, in the context of bilateral cooperation between NIC and GIZ
- Objectives
  - Ensure adequate supply of suitably qualified actuarial staff to carry out technical actuarial functions in insurance firms.
  - Build capacity to comply with the ICPs
  - Fast track the development of actuarial capacity within Ghana provide the bulk of the actuarial resources needed.
- Composition: NIC, ASG, GIA, GIC, UNI representatives
- Actuarial capacity development strategy document approved by the NIC.





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# Actuarial Function Policy Framework

## Three levels of actuarial professional

- Appointed Actuary
  - Fellow of a recognized actuarial association
  - Part or full-time employee or external
- In-house Associate
  - Associate of a recognized actuarial association
  - Part or full-time employee
- In-house Affiliate
  - Actuarial Science or related major graduate
  - Full-time employee
  - Progressing towards associateship



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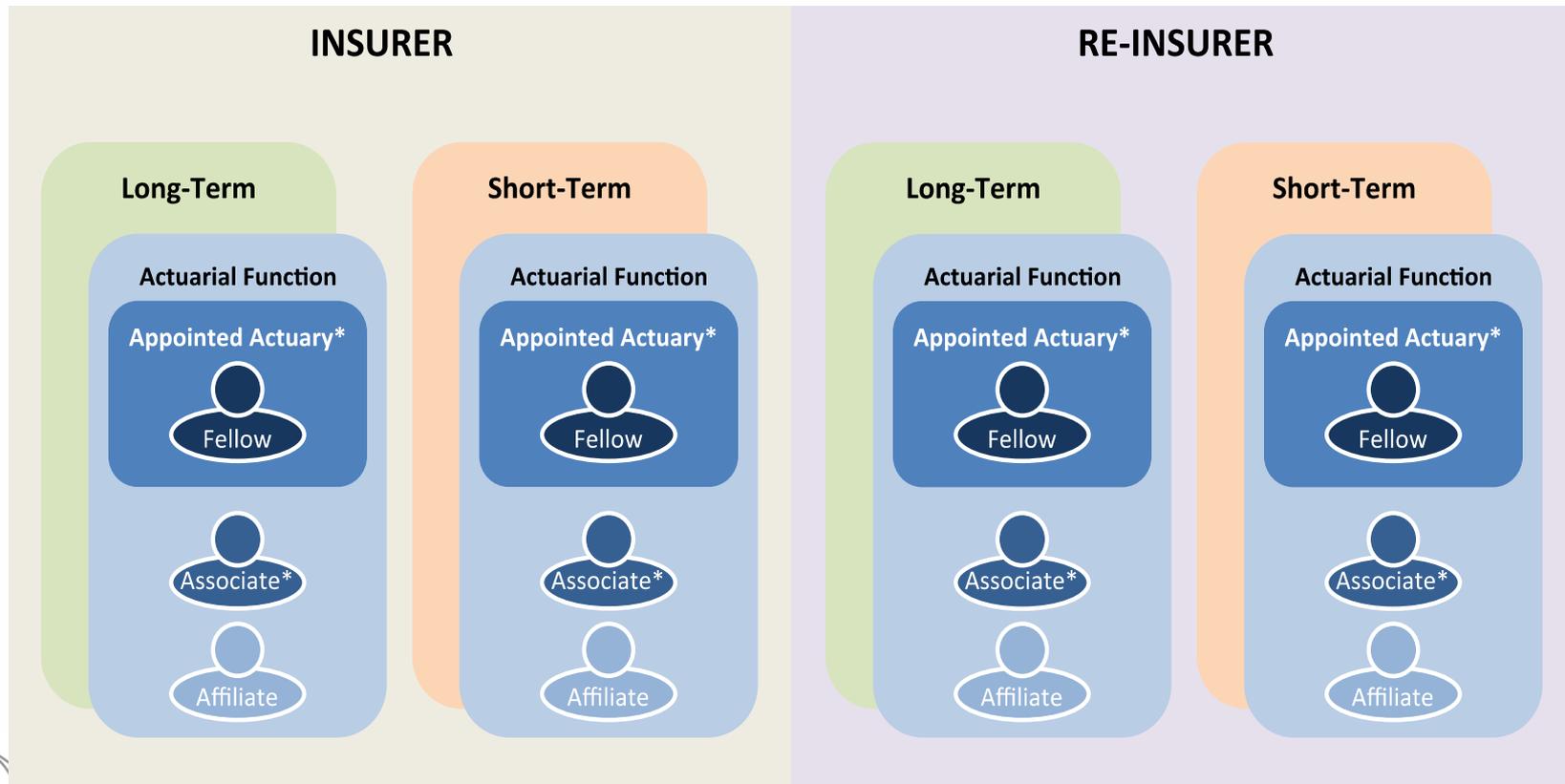


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## Actuarial Vision 2020

### VISION 2020





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## Important milestones

- Actuarial Capacity Development Strategy
- UK and US Actuarial Study Tours
- Ghana Insurance Industry Database (GIID); Prototype Motor database with Applied Industrial Logic
- Microinsurance Actuarial Life Pricing Toolkit with UK Government Actuary's Department
- Certified Actuarial Analyst Programme in Ghana with GIC – IFoA
- SOA Actuarial Professional Exams Tutorial Programme with ASG– SOA and Actuaries without Boundaries (AWB)
- Microinsurance Health Pricing Toolkit with GIA/GIC – Milliman and ILO
- Governance and Risk-Management Framework





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## Recommendations

1. Involve all relevant stakeholders
2. Conduct a landscape study and capacity gap analysis
3. Well planned study tours
4. Document your strategy and solicit for comments/inputs
5. Build capacity for implementation
6. Carefully balance regulatory requirements with value proposition





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## 10. Questions and discussion

