ACTUARIAL ASSOCIATION OF EUROPE

Insurance Committee, Vienna – 10 October 2019

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[Abraracourcix]

Digital Ethics

Insurance Committee 10 October, 2019

Takeaway from Valdis Dombrovskis' hearing in EP pn 7 October

“Europe needs a common approach on crypto assets, such as Libra. I intend to propose new legislation on this,” Dombrovskis said, also highlighting its risks to competition and cybersecurity. Facebook’s plans to launch Libra next year together with 27 other companies, including Mastercard and Visa, have spooked policymakers the world over. “We’ll need to regulate Libra to supervise it on EU level both from the point of financial stability and the protection of investors as well,” the Latvian said.

He suggested this could be done with a new “regulatory framework” for Libra’s intended type of virtual money — stablecoins, linked to conventional currencies — rather than just updating existing rules.

Call for expression of interest to join Consultative Expert Group on digital ethics in insurance

There are many opportunities arising from digitalisation, both for the insurance industry as well as for consumers. However, there are also risks that need to be further addressed in practice. Some of these risks are not new, but their significance is amplified in the context of BDA. This is particularly the case regarding ethical issues with the fairness of the use of data and regarding the accuracy and explainability of certain BDA tools such as AI or ML in insurance.

The complex nature of some of these new technological developments and their potential deep societal impact coupled with the specificities of the insurance sector justifies the creation of a multidisciplinary Consultative Expert Group that will help EIOPA develop smart policy proposals that promote responsible financial innovation for the benefit of the European consumer

Tasks

The principles of digital responsibility will address, from a fairness / ethical perspective, the use of new business models, technologies and data sources in insurance.

While the principles of digital responsibility may cover the different areas of the insurance value chain, specific focus shall be given to pricing and underwriting. Special consideration

shall also be given to the impact on certain groups of vulnerable consumers.

The Consultative Expert Group may also act as a sounding board in other related policy initiatives in InsurTech.

The Consultative Expert Group is expected to be an active, small forum, based on a high individual engagement of its members, and will entail a significant

Membership

Lutz Wilhelmy and Esko Kivisaari proposed by the AAE and accepted.

German and Irish associations made their own proposals and the persons were accepted.

Additionally quite a few others who expressed in the first meeting their actuarial background

Structure

I. Introduction

i. Role of insurance in the economy and society, impact of digitalisation across the insurance value chain, EU values, philosophy of law and responsibility

II. Principles of digital responsibility in insurance

i. Fairness* and non-discrimination: Article 17.1 IDD: "insurance distributors always act honestly, fairly and professionally in accordance with the best interests of their customers"

ii. Transparency and explainability: Article 20.1 IDD: "provide the customer with objective information about the insurance product in a comprehensible form to allow that customer to make an informed decision"

iii. Sound governance framework: Article 44.1 Solvency II: "Insurance and reinsurance undertakings shall have in place an effective risk-management system"

For each of the principles:

- What does it mean in an digital insurance context
- What are the issues / trade-offs / dilemmas
- How can they be addressed in a practical and proportionate manner

* Article 5 of the Unfair commercial practices Directive (2005/29/EC) specifies that unfair commercial practices are those that are contrary to the requirements of professional diligence and are likely to materially distort the economic behaviour with regard to the product of the average consumer or of the average member of the group when a commercial practice is directed to a particular group of consumers

Sustainability

Insurance Committee 10 October, 2019

Takeaway from Valdis Dombrovskis' hearing in EP on 7 October

Dombrovskis made clear that green finance will be a priority. The move is part of ambitious climate targets under Ursula von der Leyen’s Commission.
He stressed its importance in his opening statement, including plans for a Sustainable Europe Investment Plan to unlock €1 trillion of green investments over the next decade.
Support will come from the EU budget, more European Investment Bank lending dedicated to fighting climate change, and the Invest EU program to attract private money.
Green-bond standards, an EU Ecolabel and a taxonomy to define climate-friendly products were all name-checked as well.

Global financial sector pulls funding for coal projects once two weeks

Insurers, banks and other financial institutions across the world have announced 33 restrictions on funding for the coal sector since the start of 2018, new research has found.

28 FEB 2019 | CHRIS SEEKINGS

New and improved policies for climate change ©iStock

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Climate Changed

BlackRock Wields Its $6 Trillion Club to Combat Climate Risks

By Emily Chasan

8. joulukuuta 2017 klo 14.00 UTC+2

- Seeks reporting in line with FSB task-force recommendations
- Asks oil, transport, industrial companies to detail dangers

Growing number of global insurance firms divesting from fossil fuels

Report shows around £15bn of assets worldwide have been shifted away from coal companies in the past two years as concern over climate risk rises

http://www.theactuary.com/news/2019/02/financial-sector-pulls-funding-for-coal-projects-once-every-two-weeks/

Timetable of Regulatory Initiatives

Based on the Commission Action Plan of March 8, 2018

2018 Regulatory Initiatives:	2018 Preparations:	2019 Regulatory Proposals:
• Initiation of the taxonomy work • Investors' duties • Reporting • Marketing of investment products • Benchmarks	• EU Environmental Label • Banking and Insurance Prudential Rules (result: no changes)	• Green bond Prospectus • EU Environmental Label – work continues

Sustainability Taxonomy Timeline:

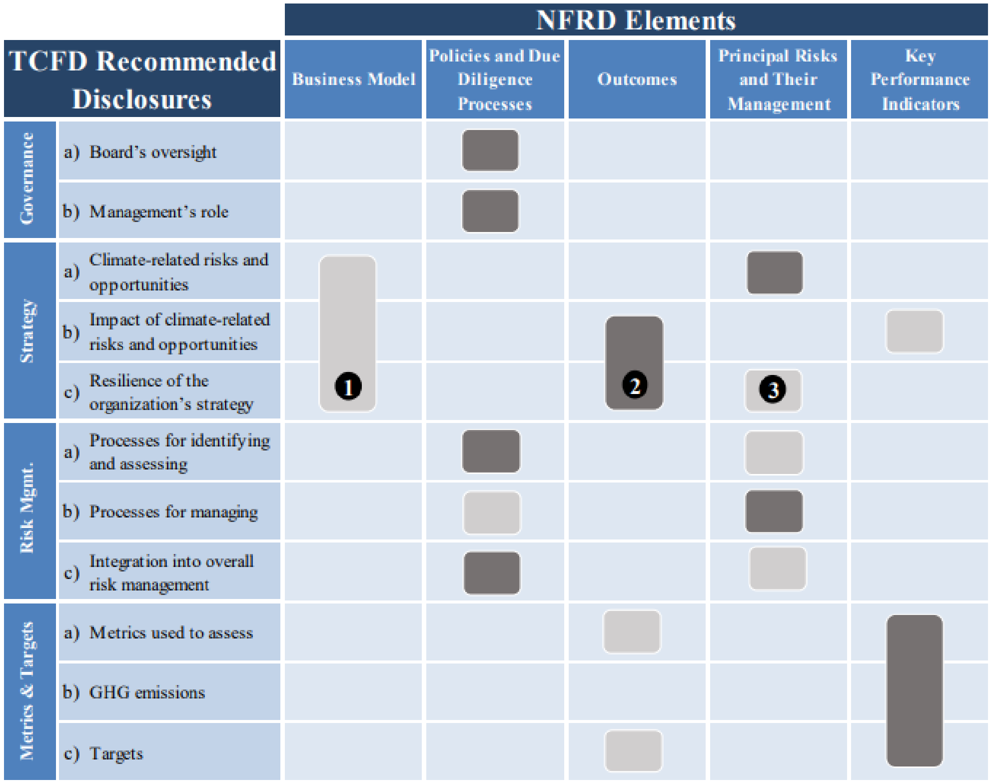
2019	2020	2021	2022
Mitigation of and adaptation to climate change – criteria ready in 12/2019 →	Implementation 7/2020		
		Recycling, waste management, pollution - criteria ready in 7/2021 – implementation in 12/2021	
			Sustainable use of water, seas, biodiversity and ecosystems – criteria ready in - 7/2022 - Implementation in 12/2022

Industries adressed in taxonomy work

Agriculture and forestry
Manufacturing
Energy Sector (electricity, gas,
air conditioning, heating)
Water and waste management
Transport
ICT
Construction

Kuva: Shutterstock

Figure 2 – Mapping of TCFD Recommended Disclosures and NFRD Requirements



Three NFRD Elements relate to TCFD Strategy c) on strategic resilience, taking climate-related scenarios into account

1. Companies may refer to scenarios as part of "business model" if they inform its strategy related to environment and climate
2. Companies may refer to scenarios as part of "outcomes" if they provide material information and inform management decisions
3. Companies may refer to scenarios as part of "risk management" if they are considered risk management tools that reflect climate-related risks and opportunities

New guidance on the application of the NFRD, summer 2019.

Undertakings expected to report how climate change taken into account in

- Governance
- Strategy
- Risk Management
- Objectives

Warming by 2100	<2 °C		3 °C	5 °C
Physical impacts	1.5 °C	2 °C		
Sea-Level Rise (cm)	0.3-0.6 m	0.4-0.8 m	0.4-0.9 m	0.5-1.7 m
Coastal assets to defend ($tn)	$10.2tn	$11.7tn	$14.6tn	$27.5tn
Chance of ice-free Arctic summer	1 in 30	1 in 6	4 in 6 (63%)	6 in 6 (100%)
Tropical cyclones: Fewer (#cat 1-5)	-1%	-6%	-16%	Unknown
Tropical cyclones: Stronger (# cat 4-5)	+24%*	+16%	+28%	+55%
Tropical cyclones: Wetter (total rain)	+6%	+12%	+18%	+35%
Frequency of extreme rainfall	+17%	+36%	+70%	+150%
Increase in wildfire extent	x1.4	x1.6	x2.0	x2.6
People facing extreme heatwaves	x22	x27	x80	x300
Land area hospitable to malaria	+12%	+18%	+29%	+46%
Economic impacts				
Global GDP impact (2018: $80tn)	-10%	-13%	-23%	-45%
Stranded assets	Transition: fossil fuel assets (supply, power, transport, industry)		Mixed: some fossil fuel assets mothballed, some physical stranding	Physical: uninhabitable zones, agriculture, water-intense industry, lost tourism etc
Food supply	Changing diets, some yield loss in tropics		24% yield loss	60% yield loss, 60% demand increase
Insurance opportunities	New low-carbon assets and infrastructure investment (e.g. CCS)		Increasing demand to manage growing risks	Minimal: recession, tensions, high and unpredictable risks

The data used in this infographic is sourced from IPCC data and other sources as listed in the Bibliography (incl Raftery et al, Schlosser et al, Jevrejeva et al, Knuston et al, Turco et al, Huang et al, Pretis et al, and Burke, Hsiang & Miguel)

Lähde: CRO Forum

Future of reporting:

Undertakings must in the future publish concrete reporting on the consequences of climate change to their business activities

Along 'financial' risks undertakings are expected to disclose more on environmental and societal risks and on how to quantify them

From qualitative to quantitative reporting

Some may recall from my ICA talk in Berlin 2018:

"I see **the actuary of the fifth kind** as a data driven and model guided, critical and socially responsible financial decision maker in an ever changing world (*) governed by uncertainty!" (PE, ICA Berlin, 2018)

(*) "Intelligence is the ability to adapt to change"

Stephen Hawking (1942 – 2018)

Paul Embrechts in ECA 2019, Lisbon

Opinion on Sustainability within Solvency II (EIOPA-BoS-19/241 30 September 2019)

Valuation of Assets

4.1 The general valuation principles of Solvency II are neutral to different types of risks, including sustainability risks which materialise through existing risk categories.

4.2 Solvency II assumes that market prices reflect all relevant risks. In order for market prices to better reflect the sustainability risks and factors, further improvements in the availability and quality of information relevant to their valuation is needed.

EIOPA Opinion…

Valuation of Liabilities:

4.7 Undertakings should use best available science to perform sensitivity or scenario analysis to ensure adequacy of the best estimate, taking into account climate change-related risks in line with Article 29 of the Delegated Regulation.

4.11 In conclusion, undertakings should apply, where appropriate, the following good practices:

- Ensure historical loss data is up-to-date;
- Consider possible events not captured by undertaking’s historical loss dataset;
- Develop and use forward-looking catastrophe modelling;
- Apply stress-testing or scenario-analysis.

EIOPA Opinion…

Investment Practices:

4.14 …EIOPA supports further transparency on sustainability ratings as well as on how ESG factors are currently considered in credit rating issuance. The promotion of consistent good practices from rating providers should contribute to the understanding of ESG ratings as well as the quality and consistency of the scoring and their use by undertakings in their investment strategy and decisions.

Underwriting practices:

4.18 The practice of developing products and services which reduce sustainability risks and have a positive impact on ESG issues, encourages better risk management.

EIOPA Opinion…

Capital Requirements:

4.23 EIOPA is of the opinion that within a risk-based framework like Solvency II any change to capital requirements must be based on a proven risk differential compared to the status quo.

Challenges in integrating sustainable finance considerations in Pillar 1 requirements and suggested way forward:

4.41 EIOPA acknowledges that the medium to long-term impacts of climate change cannot fully be captured in the Solvency II requirements …over a one-year time horizon.

4.42 However, EIOPA does not consider that this time horizon should be changed, but rather complementary tools such as scenario analysis and stress testing would

Happy scenarios
to everybody!

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