



IAIS

INTERNATIONAL ASSOCIATION OF
INSURANCE SUPERVISORS

PUBLIC

PUBLIC BRIEFING SESSION

Issues Paper on the Use of Big Data Analytics in Insurance

Market Conduct Working Group
31 March 2020, Teleconference



PUBLIC

OVERVIEW OF PUBLIC BRIEFING SESSION

Agenda

1. Background, Objectives and Scope of Paper
2. Key Messages from Paper
3. Outcome of the Public Consultation
4. Questions

BACKGROUND, OBJECTIVES AND SCOPE OF PAPER

Background

- Developed by the **Market Conduct Working Group**
- Builds on IAIS *Issues Paper on Increasing Digitalisation in Insurance and its Potential Impact on Consumer Outcomes* adopted in November 2018
- Public consultation on draft paper took place from 2 September to 17 October 2019
- Executive Committee **adopted** final paper on **26 February 2020**

Objectives of Paper

- To consider the **use of personal and other data** by insurers as a result of digitalisation and to identify the **benefits and risks for consumers** associated with such use
- To makes certain observations about the **potential implications for supervisors** as a result of such use in light of Insurance Core Principles (ICPs) 18 on Intermediaries and 19 on Conduct of Business

Note: *Issues Papers provide **background information** on particular topics, describe current practices, actual examples or case studies pertaining to a particular topic and/or identify related regulatory and supervisory issues and challenges. Issues Papers are **primarily descriptive** and not meant to create expectations on how supervisors should implement supervisory material. Issues Papers often form part of the **preparatory work** for developing standards and may contain **recommendations for future work** by the IAIS.*

Scope of Paper

- Looks at the **increasing use of algorithms and advanced data analytics** by insurers to make decisions based on patterns, trends and linkages and the **greater availability to insurers of traditional and non-traditional data sources**, collectively referred to as “big data analytics” (BDA)
- Focus is on the **potential applications of BDA** across the insurance product lifecycle and **not on describing the actual technologies** available to insurers
- Covers **product design, marketing, sales and distribution, pricing and underwriting, and claims handling**
- Supervisory considerations touch on **affordability and availability of cover, governance and oversight of algorithms, third party risk management, and issues relating to privacy, data protection and ownership of data**
- Focus is **not on use of data for supervisory purposes**

KEY MESSAGES FROM PAPER

Key Messages

- Confirms **importance of data** in insurance:
 - Data has always played an essential role across the insurance product lifecycle
 - Increasing advancements in data analytics create more opportunities for the sector to better harness the power of data
- Recognises **tremendous benefits of digitalisation and BDA** for both insurers and customers:
 - More personalised and affordable insurance products
 - Increased choices and service efficiencies for customers
 - More accurate risk selection, underwriting and pricing
 - Improved risk mitigation and loss reduction practices and behaviours
 - More efficient claims handling
 - Improved fraud detection

Key Messages (cont.)

- Highlights certain **new risks and amplifications of existing risks** requiring **heightened vigilance** from supervisors and insurers:
 - Poor levels of transparency and accountability for customer outcomes resulting from algorithm and AI-based decision making
 - Potential for inherent biases and unintended unfair or disparate outcomes in AI and ML processes
 - Affordability and exclusion challenges due to overly granular risk selection and pricing models
 - Privacy and data protection concerns, including questions about the fair and ethical use of certain types of customer data in certain contexts

Key Messages (cont.)

- Calls for a **balanced and multi-stakeholder** supervisory approach:
 - Insurance supervisors have a significant role to play in facilitating innovation and market development for the benefit of the sector as a whole
 - Must be balanced with primary responsibility to protect policyholders
 - Many of the supervisory challenges cut across various sectors and impact multiple jurisdictions
 - Ongoing dialogue and collaboration across multiple stakeholder groups will be critical in helping supervisors to respond effectively to the identified issues

OUTCOME OF THE PUBLIC CONSULTATION

Outcome of public consultation

- Public consultation period: **2 September – 17 October 2019**
- **253 comments** received from **12 stakeholders**
- Revised paper **adopted** by Executive Committee on **26 February 2020** available here:

<https://www.iaisweb.org/page/supervisory-material/issues-papers//file/89244/issues-paper-on-use-of-big-data-analytics-in-insurance>

- Detailed **public consultation comments and their resolutions** available here:

<https://www.iaisweb.org/page/consultations/closed-consultations/2019/draft-issues-paper-on-use-of-bda-in-insurance//file/89249/resolution-of-comments-on-the-issues-paper-on-use-of-big-data-analytics-in-insurance>

List of commentators

- American Council of Life Insurers (ACLI)
- American Property Casualty Insurance Association (APCIA)
- Center for Economic Justice (CEJ)
- General Insurance Association of Japan (GIAJ)
- Global Federation of Insurance Associations (GFIA)
- Institute of International Finance (IIF)
- Life Insurance Association of Japan (LIAJ)
- National Association of Insurance Commissioners (NAIC)
- National Association of Mutual Insurance Companies (NAMIC)
- World Federation of Insurance Intermediaries (WFII)
- 2 x Anonymous commentators

Main themes from comments and resolution

- Large number of **proposed editorial and textual revisions to improve balance** between description of risks and benefits
 - Reflected in various textual and structural changes throughout the paper, where appropriate and in line with the overall approach of paper
- Deeper consideration of **privacy and data protection** issues
 - Agree that the use of BDA raises important consumer privacy and data protection issues that are relevant to insurance supervisors
 - Also recognises this is a broader cross-sectoral issue which will require greater engagement and collaboration with market participants, consumer advocates, data protection agencies and other relevant standard setting bodies
 - Additional text and references to emphasise the importance of these issues have been included in section 4.4
 - Developments will continue to be monitored closely and flagged for potential follow up work in future

Main themes from comments and resolution (cont.)

- Highlight potential impact (positive and adverse) on **market competition**
 - Agree that this is important and has been mentioned briefly to the extent relevant to the scope of the paper
 - Text has been revised to a limited extent and additional references (Annex 2) included in the paper to better highlight this issue and improve balance, where appropriate
- Consider impact of new **FinTech entrants, BigTech players, cloud providers and changing market structures**
 - Agree that these issues raise important questions about the appropriateness of current regulatory and supervisory frameworks, which relate to the digitalisation of insurance and the financial sector more broadly
 - Flagged for further consideration and prioritisation through the appropriate IAIS structures in future
 - Additional references to cross-cutting work done on these topics included in Annex 2 of the paper

Main themes from comments and resolution (cont.)

- Deeper exploration of issues relating to **biased decision making and guidance for ethical use of AI and ML** in insurance
 - This has been flagged as an important topic for the IAIS and is a recurring theme for members and stakeholders
 - Text has been revised and additional references to existing supervisory guidance have been included across the paper to emphasise the importance of these issues
 - The level of detail required to fully explore the complexities, implications and potential responses to questions relating to the fair and ethical use of AI and ML falls outside the scope of the paper
 - The topic will be prioritised for more detailed follow up work through the appropriate IAIS structures in future

QUESTIONS?
