







Regulating Mobile Insurance: Status and Regulatory Challenges

Short Briefing Note

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Overview of study and upcoming IAIS Paper -

This document serves as a preliminary summary of a larger study commissioned by the Access to Insurance Initiative (A2ii) for 2017. The summary provides a review of supervisory approaches to mobile insurance (m-insurance) in various jurisdictions with the aim of providing inputs to the forthcoming IAIS¹-A2ii-CIMA² Conference on Mobile Insurance Workshop in Douala, Cameroon from 23rd- 24th February 2017. The study draws on various sources including online surveys, telephone interviews and desktop research. Online surveys were completed by insurance supervisors from 26 jurisdictions and follow-up in-depth telephone interviews were conducted with insurance supervisors from 9 jurisdictions between October 2016 and January 2017 (Brazil, CIMA, Ghana, Kenya, India, Indonesia, Philippines, South Africa and Tanzania). Furthermore, additional interviews were also conducted with key resource persons and stakeholders within the m-insurance sector.

This study will also feed into the work of the IAIS Drafting Group on Digital Technology in Inclusive Insurance on an applications paper on digital insurance. The paper focuses on m-insurance, but also addresses some other aspects of digital insurance and technology.

¹ The International Association of Insurance Supervisors (IAIS) is a voluntary membership organisation of insurance supervisors and regulators from more than 200 jurisdictions in nearly 140 countries. See www.iaisweb.org

² CIMA is the regional insurance regulatory body in West and Central Africa – made up of the following French-speaking countries Benin, Burkina Faso, Cameroon, Central African Republic, Congo, Côte d'Ivoire, Gabon, Guinea-Bissau, Guinea Equatorial, Mali, Niger, Senegal, Chad, Togo – whose objective is to work towards the establishment of a single insurance market.

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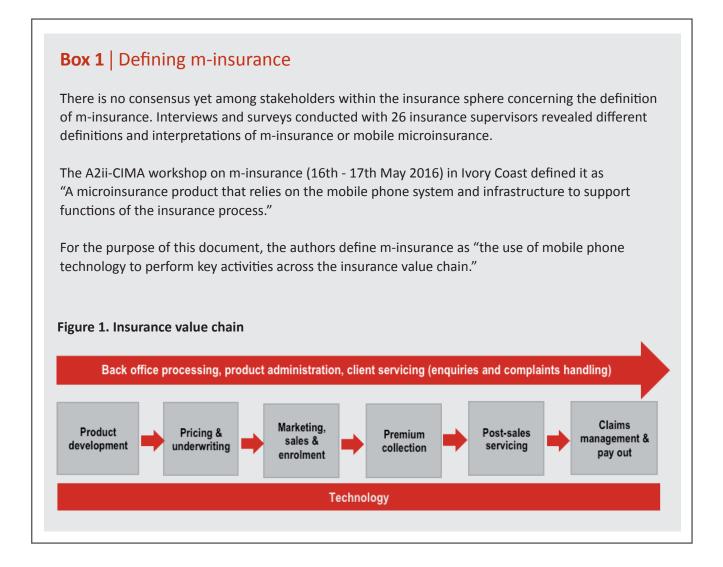
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List of Abbreviations

A2ii	Access to Insurance Initiative
AML	Anti-money Laundering
ARPU	Average Revenue per User
CGAP	Consultative Group to Assist the Poor
CIMA	Conférence Interafricaine des Marchés d'Assurances
	(Inter-African Conference on Insurance Markets)
E-money	Electronic money
E-payments	Electronic payments
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
GSM	Global System for Mobile Communications
GSMA	GSM Association
IAIS	International Association of Insurance Supervisors
ICP	Insurance Core Principle
IFC	International Finance Corporation
ILO	International Labour Organization
IT	Information Technology
M-insurance	Mobile insurance
MIN	Microinsurance Network
MMP	Mobile Money Provider
MNO	Mobile Network Operator
TSP	Technical Service Provider
SMS	Short Message Service
VAS	Value Added Service
VAT	Value Added Tax

1. State of m-insurance: key trends and challenges

Mobile insurance (m-insurance) has become an attractive business approach to providing simple insurance products. Mobile technology can be applied in many ways and by all stakeholders across the insurance value chain (see Box 1). It allows for instant client reach and significant scale, but at a fraction of the cost of traditional business models. The entrance of new types of industry players such as technical service providers (TSPs) has further shaped the evolution of this business model.



Provision of m-insurance is often facilitated by a more complex value chain that includes non-insurance players. Like other alternative distribution channels typical of inclusive insurance, the provision of m-insurance is characterised by a lengthier, more complex value chain composed of both conventional and non-conventional stakeholders. Non-conventional stakeholders include non-insurance players such as Mobile Network Operators³ (MNOs) and m-insurance dedicated Technology Service Providers (TSPs). The roles and activities of these stakeholders depend on the business model (See Box 2).

³ A mobile network operator is defined as "a company which has a government-issued licence to provide telecommunications services through mobile devices," (GSMA, 2016).

Box 2 | Types of m-insurance business models⁴

M-insurance stakeholders

M-insurance business models can involve both conventional insurance stakeholders (an insurer or underwriter, and insurance intermediaries) and non-conventional insurance stakeholders such as MNOs, Mobile Money Providers (MMPs) and TSPs.

- The **insurer** provides the underwriting function and is supervised by the insurance supervisor.
- The **MNO** and **MMP** provide access to the client base, mobile infrastructure, payment systems and brand presence. Generally, the MMPs are MNO subsidiaries and provide for the transaction platform for premiums and claims.
- The TSP provides a range of services such as technology platform, call centre and general process support in the insurance value chain ranging from sales, enrolment, policy administration to claims management.

Business models according to key driver

M-insurance stakeholders could hold various roles, depending on the type of business model.

- In the insurer-driven business model, the insurer takes the lead in the partnership by conducting
 product development and overseeing the overall business strategy. The MNO plays a passive role,
 where it provides MNO infrastructure and data, sometimes supported by the MMP. The role of the
 MNO or MMP is generally limited to marketing, facilitating airtime deduction, mobile money or
 cash payments.
- In the TSP-driven business model, the TSP takes the initiative, in that it initiates dialogue with the
 insurance supervisor, approaches the MNO and selects an insurer, identifies the target market and
 customer profile, develops the product, and leads the forming of the partnership. The TSP also
 typically 'fills the gaps' in providing expertise and support where needed (including development
 of the platform, back-office processing).
- In the MNO-driven business model, the MNO drives the initiative. The MNO generally with involvement of a TSP provides the insurer with its client base, enrols clients and provides the payment mechanisms. In all models, the MNO provides considerable brand strength in stimulating take-up of insurance in order to drive direct revenue and/or adjacent benefits such as increasing average revenue per user (ARPU), reducing churn and enhancing their brand⁵. In the loyalty approach, the MNO pays premiums on behalf of its customers who can enrol for basic cover free of charge.

⁴ A business model is defined as the method or means through which a company captures value from its business and can incorporate the full range of activities from across the value chain from product design, marketing and distribution, (IAIS, 2015a).

⁵ A2ii, Report on the CIMA-A2ii Workshop "Regulating m-insurance", 16th -and 17th May 2016 (A2ii, 2016)

M-insurance products are evolving from the loyalty approach and simple benefits to paid products and diverse coverage. Initial m-insurance product offerings were simple life and accident covers. These became increasingly diverse, and now include personal accident, agriculture, and health among others, often as bundled risks. The first wave of m-insurance initiatives introduced loyalty models where premiums were paid by the MNOs, but in most instances clients could 'upgrade' the cover by paying an additional premium. As m-insurance markets worldwide mature, it has been found that clients are increasingly converting from loyalty models to paid products; in one large scheme in Ghana, 55% of clients migrated from a loyalty product to a paid product (CGAP, 2013). The majority of new m-insurance products require clients to pay the premium directly. In some markets or by some players, loyalty products are slowly being phased out; while in others, MNO very much still drive this model. As such, the business model deployment strategy differs across regions (e.g. the loyalty approach is still common in Asia).

There are signs of a potential shift from group policies towards individual or customised policies. Loyalty products are often provided to clients on a group basis with the MNO or TSP being the master policyholder. The underwriter (and other players in the value chain) does not typically engage with the client on an individual basis. In some markets and with the move towards paid models, providers are increasingly engaging with clients on an individual level and utilise data analytics to provide customised m-insurance products.

Airtime deduction are the most prominent form of payment but are sometimes not permitted by central bank regulations. There are two predominant forms of premium payment and collection available to m-insurance clients: mobile wallets and airtime deduction. Other payment forms like cash or bank deduction are also available. The GSMA ⁶found that 63% of premiums collected through MNOs are done through airtime deduction (GSMA, 2016). Interviews and survey responses also confirm the prominence of airtime deduction as a premium payment mechanism across various jurisdictions. One TSP found that airtime deduction has the highest conversion rate⁷ (25%) from loyalty to paid products, in comparison with mobile wallet (1%). Central bank regulations in some jurisdictions surveyed do not permit the use of airtime as a store of value and a payment instrument, which may potentially impede the growth of m-insurance in these markets (A2ii, 2016).

MNOs and TSPs are the key drivers of the m-insurance business. M-insurance has shown impressive growth, especially in Africa and Asia. The GSMA states that 31 million consumers have been enrolled as of 2015. TSPs, MNOs and MMPs⁸ are key drivers of m-insurance (GSMA, 2016)⁹. As conventional revenue streams dwindle, MNOs are offering clients additional value-added services (VAS) like insurance as a way of improving ARPU. MNO conglomerates like Axiata, Airtel¹⁰, Orange, MTN, Telenor, Tigo¹¹ and Vodafone¹² are active in the m-insurance space across the globe. TSPs in particular are taking the lead in m-insurance partnerships while assuming key functions across the insurance value chain. Some interviewees state that most successful m-insurance initiatives are largely TSP-driven with strategic buy-in and support from the MNO. Interestingly, one TSP and several MNOs are acquiring¹³ insurance licences in some countries. This development could significantly change the structure of the m-insurance value chain as it bypasses the need to partner with existing insurers.

⁶ The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 250 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. See www.gsma.com 7 Conversion rates are rate at which loyalty clients convert to paid models e.g. if the conversion rate is 25% it would mean 25% of clients on the loyalty offering have converted to a paid model

⁸ Many of the MMPs are a subsidiary of MNOs.

⁹ A recent study found that 63% of m-insurance services globally had been led by MNOs (GSMA, 2016)

¹⁰ Airtel has launched m-insurance products in Kenya, Malawi and Tanzania.

¹¹ Tigo is active in various countries including Ghana, Honduras, Paraguay Senegal and Tanzania.

¹² Vodafone is active through its various subsidiaries in South Africa (Vodacom) and Kenya (Safaricom).

¹³ BIMA (TSP) has acquired a microinsurance license in Cambodia and Vodacom (South African MNO) has acquired an insurance licence.

The TSP landscape is dominated by two players. MicroEnsure and BIMA are the two most dominant TSPs, and both are active in all world regions. MicroEnsure has approximately 49 million clients registered across 9 countries¹⁴ and BIMA has 24 million subscribers in 16 countries¹⁵; together they make up an approximate client base of over 70 million across Africa, Asia Pacific, Latin America and the Caribbean¹⁶. These two TSPs are the oldest in the market and have the widest geographic reach. Both have plans to expand their market reach and product offering. Other smaller TSPs focus their operations on particular countries and regions including Activa in Senegal/West Africa, Trustco in Namibia and Zimbabwe. Inclusivity Solutions is active in Uganda and Ivory Coast with plans to expand operations to other African countries. Stonestep is active in Myanmar, Thailand and the Philippines¹⁷.

2. Risks and issues in m-insurance business

While m-insurance shows potential of being both a commercially viable business and a way to dramatically increase access to insurance, it also raises several concerns for the insurance supervisor. The nature of the m-insurance business model creates a variety of new risks and challenges. Insurance supervisors are struggling to understand and appreciate the nature, scale and complexity of such risks to ensure the development of a sound, well-informed supervisory approach.

The majority of m-insurance risks identified by supervisors relate to conduct of business. The application of mobile phone technology comes with new risks and issues related to processes, products and partners and how they conduct business. Such risks can be grouped into two broad categories – prudential risks and conduct of business risks. This is consistent with how the IAIS has broadly conceptualised risk in its supervisory material¹⁸. The survey and interviews with supervisors revealed a clear emphasis on conduct of business risks.

Box 3 | Key risks identified by insurance supervisors

Insurance supervisors from 26 jurisdictions completed an online survey and were asked to state and rank by importance the key risks pertaining to m-insurance. 21 jurisdictions out of the total of 26 responded to this question.

Figure 2 below shows a summary of the key risks that were identified. Out of all the conduct of business risks identified, policyholder awareness, and data and technology risk were mentioned and ranked as the most pressing type of risk.

¹⁴ See http://microensure.com/locations/. MicroEnsure currently operates in 9 countries in 2 regions: Africa (Ghana, Kenya, Malawi, Nigeria and Tanzania) and Asia (Bangladesh, India, Pakistan and the Philippines).

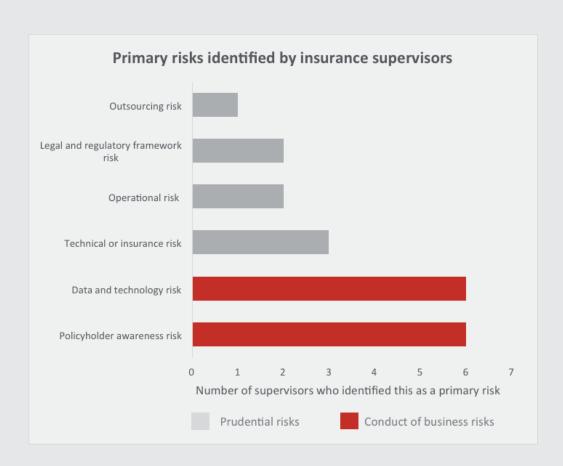
¹⁵ See BIMA website - http://www.bimamobile.com/ and http://www.bimamobile.com/about-bima/where-we-operate/ BIMA currently operates in 16 countries across 4 regions: Africa (Ghana, Senegal, Tanzania and Uganda); Asia (Bangladesh, Cambodia, Indonesia, Pakistan, Philippines, Sri Lanka); Asia Pacific (Fiji and Papua New Guinea); Latin America and The Caribbean (Brazil, Haiti, Honduras, Paraguay).

¹⁶ See BIMA's website (http://www.bimamobile.com) and MicroEnsure's website (http://microensure.com).

¹⁷ See Stonestep's website http://www.stonestep.ch/

¹⁸ It should be noted that the IAIS does not standardise or prescribe classification of risks under each category. National supervisors are able to tailor these classifications at the level of their individual jurisdiction's supervisory requirements. ICP Standard 16.1: "The supervisor requires the insurer's enterprise risk management framework to provide for the identification and quantification of risk". Guidance 16.1.1 provides only non-binding guidance on the classifications of risks that should be included (IAIS, 2017). Also see IAIS Issues Paper on Conduct of Business Risk and its Management (IAIS, 2015b).





What makes m-insurance models risky?

- **Digital technology comes with limited physical interaction and tangibility.** Accessing insurance via a digital device, platform or interface means there is limited face-to-face interaction in a market where tangibility is a core part of the insurance value proposition.
- MNOs have strong bargaining power. The MNO industry tends to be oligopolistic, therefore limiting the options for insurers or TSPs in partnering with MNOs. MNOs own the client base (often very large) and key infrastructure, and are the face of the business to consumer. Additionally, they have vast financial resources and assets exceeding those of the insurer and other partners in the value chain. This accords MNOs with stronger bargaining power relative to that of insurers.
- The insurer has little control over the business model. Many m-insurance business models are driven by the MNO, their MMP, or by the TSP. In these cases, the insurer is a minor player with little say and control over the business strategy or conduct. Insurers are technically subject to supervision, but in practice may not be able to ensure that the business is conducted in a manner that meets supervisory expectations or requirements.

2.1 Prudential risks

Prudential risks¹⁹ **arise from the nature of m-insurance business model.** Prudential risks are risks related to the financial soundness of the insurer (IAIS, 2015b). Supervisors shared concerns that m-insurance is an accessible alternative distribution model, in which the product can be easily bought by anyone. Strong actuarial and insurance technical skills are hence required to accurately assess the risk profile of m-insurance customers and price the product. Importantly, the nature of the value chain means there could be instances where non-insurance players conduct insurance core functions such as product development, underwriting or product pricing, and they may not be adequately suited to do so. Table 1 below shows a summary of the prudential risks identified in the online survey and interviews.

Table 1. Overview of prudential risks related to m-insurance

Prudential risk	Description	Source of risk	Potential impact
Technical risk or Insurance risk (includes underwriting risk)	Various kinds of risk associated with technical or actuarial bases of calculation for premiums and technical provisions, as well as risks associated with operating expenses and excessive or uncoordinated growth.	 Lack of actuarial and underwriting expertise, whether within insurer or because key insurance functions are outsourced to TSPs and MNOs with no such expertise. Lack of control over risk profile of policyholders as anyone can buy policy via mobile phone. 	 Premium rates may be too low or too high. If premium paid by MNO or consumer is too high, client value also decreases. If premium rates are too low or non-viable product design, this leads to poor profitability and product performance. Claims frequency or claims amounts, or the expenses for administration and settlement are higher than expected. In the worst-case scenario, the company may no longer be able to fully meet claims obligations to the policyholder/insured.

¹⁹ Risks for solvency purposes "should include, at a minimum, underwriting risk, market risk, credit risk, operational risk, liquidity risk and may also include, for example, legal risk and risk to the reputation of the insurer" (IAIS, 2017).

²⁰ IFC Digital Financial Services and Risk Management Handbook, 2016 (IFC, 2016).

Prudential risk	Description	Source of risk	Potential impact
Operational	The risk arising from the inadequacy or failure of internal systems, personnel, procedures or controls leading to financial loss.	 Weakened business processes, internal controls, internal /external audits, reporting, segregation of duties, reconciliation of accounts²¹ due to complex value chain involving many entities. (Also see 'aggregator risk' in Table 2). Agents and sales persons of non-insurance aggregators may not be competent at insurance related processes. (Also see 'sales risk' in Table 2). Reliance of back-office operations on outsourced information technology (IT) infrastructure leading to risk of technological failure. (Also see 'data and technology risk' in Table 2). 	 Human failures such as agent fraud or misconduct e.g. misselling. IT-related failures such as Customer accounts do not show contributions Reconciliation with MMP or MNO not effective Payments made to an aggregator may be lost Loss of transaction data such as premiums received and claims paid Leak of confidential client data All these factors lead to knock-on effect that affect the financial performance of the insurer.
Legal or regulatory risk (or Com- pliance risk)	The risk arising from non-compliance due to change or uncertainty in law and regulations leading to financial loss.	 Lack of clarity concerning the applicable law or regulations due to multiple authorities and frameworks. Absence of law or regulations due to the novelty of the business model, channel or technology that is currently not recognized. 	 Unexpected breach of regulations and potentially leading to supervisory corrective measures or sanctions, which could range from being required to: change business practices or model e.g. sales and marketing, technological platform withdraw product line terminate partnership withMNO or TSP pay fines and penalties Could also cause long-term reputational damage to insurance sector.

Prudential risk	Description	Source of risk	Potential impact
Outsourcing risk	Risk arising from outsourcing i.e. an arrangement between an insurer and a service provider for the latter to perform a process, service or activity which would otherwise be performed by the insurer itself. Outsourcing risk is unique in that it could lead to any prudential or conduct of business risk depending on the nature of activity outsourced.	 Insurer has reduced oversight and control over functions that have been outsourced. Partnerships may fail especially where there are multiple parties involved i.e. MNO and TSP. External entities do not have a sufficient standard of financial soundness, competence or expertise. 	 If a core activity such as product development is outsourced, it could heighten technical risks. If back-office processing is outsourced to external IT infrastructure providers, it could heighten operational risk Third parties who fail to perform could also heighten compliance and reputational risk Outsourcing could also heighten conduct of business risk e.g. claims not being paid. See Section 2.2 for more details.

In summary, m-insurance's ability to achieve scale could amplify prudential risks. M-insurance's ability to achieve high volumes of scale very quickly is a double-edged sword. While it can significantly increase access to insurance, such strong and fast growth could lead to insurers writing a large proportion of its business via m-insurance. In the event that there are mass claims, this could lead to serious liquidity issues. Should there be high claims frequency and millions of individuals claim at once (even if claims amounts are small), this could put significant strain on the underwriter's capital. If this leads to the insurer having to abruptly terminate the scheme or, worse, exit from the market, it could cause a loss of consumer confidence in the insurance sector as a whole.

2.2 Conduct of business risks

The majority of risks identified in the survey and interviews relates to conduct of business. Conduct of business risk can be described as "the risk to customers, insurers, the insurance sector or the insurance market that arises from insurers and/or intermediaries conducting their business in a way that does not ensure fair treatment of customers" (IAIS, 2015b). The most pressing issues highlighted are as follows (see Table 2 below). It is worth noting that some risks may overlap:

- Customers are not aware of having coverage. This is due to the unique nature of digital/electronic
 contracting via mobile phone. At the enrolment stage, customers may not be aware that they have
 subscribed due to features such as auto-enrolment. Even if they take more conscious steps to enrol e.g. via
 a call centre, they may forget if they only receive a confirmation via SMS. When the policy expires, they may
 also forget to renew.
- **Customers do not understand the product.** Customers may not fully understand key product information such as terms of coverage or even the identity of the insurer due to the digital interface of m-insurance limiting the amount of information transmitted, juxtaposed with low levels of literacy.

- **Products may be abruptly withdrawn**. Partnership dynamics, such as a misalignment of incentives, may cause the partnership to fail, thus affect product life span. M-insurance also competes with other value-added services (VAS) offered by MNOs to their clients and thus may be abruptly withdrawn and replaced with a VAS that is more profitable.
- Mis-selling by agents or sales staff. M-insurance is often sold and distributed via the TSP or MNO staff or
 agent network who may not have the necessary insurance training and qualification to provide clients with
 suitable and important information. This is especially likely for MNOs sales staff given that insurance is not
 the core product of an MNO.
- **Insurer may not receive the premium.** Where the premium flow is intermediated by the TSP or the MNO, they may fail to hand over the premium in a timely manner, potentially leaving clients uncovered.

Table 2. Overview of conduct of business risks and issues

Conduct of Business risk	Description	Source of risk	Potential impact
Sales risk	Risk arising from the salesperson or sales channel misrepresenting or selling inappropriate products to the customer. Where an aggregator is involved, it arises from where an insurer accesses the customer base of a non-insurance third party to sell its products.	 The MNO or TSP salesperson is not adequately trained. Salesperson incentives are misaligned with the interests of the customer. Lack of oversight over the conduct of MNO or TSP salesperson. MNO communication channel is broadly targeted - product can be marketed at and quickly purchased by anyone as long as they are an MNO client. Insurer has no control over risk profile of the clients. 	 Misconduct such as fraud or mis-selling by agents or sales staff. Clients end up buying products they do not need nor know how to use.
Aggregator risk	Risk of reduced customer value and inappropriate products being sold to customers when an insurer accesses the aggregated customer base of a non-insurance third party to sell its products through that channel.	 Bargaining power imbalance between the MNO, insurer or TSP. MNO incentives are misaligned with the interests of the customer or insurer (to reduce customer churn rather than insurance-related client value or financial soundness of insurer). Legal relationship and responsibilities between insurer, aggregator and client may not be clear. 	 Disproportionate costs to client due to the remuneration structure i.e. high commissions or partner fees translating into higher premiums. Reduced client value as products do not fit client's needs or are too expensive. Lack of clear accountability over aspects affecting consumer treatment e.g. post-sale servicing.

Conduct of Business risk	Description	Source of risk	Potential impact
Policyholder awareness risk	Insured is not aware that the cover exists, does not understand the terms of cover or related processes and is therefore unable to inform beneficiary or make a claim should the risk event occur.	 The communication mode used (e.g. SMS, website, call centre) impedes adequate and timely disclosure - for example, policy contracts that are provided by publishing standard policy wording on a digital device or website have a low chance of being read and understood. High level of illiteracy in some m-insurance markets. 	 Crucial product information is not passed on and understood by customer. Insureds do not claim when risk event occurs. Claims are rejected because insured do not understand the conditions or process. Client unknowingly pays for an unwanted product or renewal. Policyholders may unintentionally lose cover.
Payment risk	Risk that the premium will not reach the insurer, that the premium will not be paid on the due date or that the cost of collecting the premium is disproportionate.	 Value chain comprising multiple entities (MNO, TSP, MMP) could delay payment of the collected premium to the insurer. Agents may defraud clients during the course of facilitating the transfer of payments, i.e. when advising on usage of mobile services. Costs of the payment platform are disproportionate to the premium level. Connectivity challenges or other technological glitches impact on the speed or reliability of payments (also if premiums are converted from airtime). 	 Cover does not take effect, leaving the customer unknowingly uncovered and exposed to risk. TSP or MNO may default on the premium.
Post-sale risk	Risk that customers face unreasonable post-sale barriers to maintain their cover, change products, make enquiries, submit claims, receive benefits or make complaints.	 Lack of clear accountability over post-sale servicing due to multiple entities (between TSP, MNO and insurer). Customer unfamiliar with how to use the technology or engage with mobile device (for insurance transaction). Clients do not have access to recourse channels. 	 Customers may not whom or know who to contact when making enquiries, and complaints or obtaining recourse. Policyholders do not claim when risk event occurs.

Conduct of Business risk	Description	Source of risk	Potential impact
Data and technology risk ²¹	Risk related to failures or disruptions to the mobile/ technology platform used to sell, distribute and administer the m-insurance product.	 Reliance on external technological and data infrastructure which could raise several issues: > Data systems is not secure especially if provided by unregulated entities > Quality of mobile technology or public infrastructure e.g. internet connectivity > Underwriter's operational systems do not provide correct, complete and up to date data on how the business is managed > Usage factors e.g. e-documents are less tangible and may be easier to lose especially for policyholders (or policyholder may also lose mobile phone). 	 Policyholder or business data may be lost or corrupted which may lead to difficulty in making claims. Cyber fraud can occur. Policyholder may not receive or know how to access policy documentation. Impediments from the technology itself e.g. if insurance contract is only available on the mobile device via a data plan, this may be an issue if the network is out of order or client does not have access to data.

3. Regulatory approaches and supervisory challenges

Most supervisors are aware of the increasing prominence of m-insurance, and a number are concerned about the arising risks from increased m-insurance activity in their markets. M-insurance is currently supervised under existing laws and regulations; however, some aspects may not be fully covered. Considerations to develop tailored regulatory approaches, whether via a dedicated framework or by integrating into existing legal and regulatory structures, are in early stages of development.

3.1 How existing regulations apply to m-insurance

None of the jurisdictions interviewed or surveyed had a dedicated m-insurance regulatory approach or supervisory framework. The approaches of most supervisors interviewed are to subject m-insurance to the relevant provisions under current legal and regulatory frameworks. Some acknowledge that m-insurance is currently allowed to operate by leveraging on regulatory loopholes. In some cases however, insurance supervisors are have been more actively facilitative (see section 3.2).

²¹ Adapted from Issues Paper Conduct of Business in Inclusive Insurance (IAIS, 2015a). The paper identifies six risks related to business model; the data and technology risk was added here.

Regulations have not yet been adequately adapted to the unique nature of m-insurance. While some supervisors have taken steps to facilitate the development of m-insurance business models, none of the regulatory approaches reviewed in this study can be said to be fully effective in addressing the unique risks arising from m-insurance. Several supervisors confirmed that their current regulatory frameworks need to be enhanced or updated to respond to m-insurance risks. The most pressing specific aspects mentioned are:

- **Supervision of non-insurance parties** The non-insurance parties (MNOs, MMPs and TSPs) in the insurance value chain pose risk to the insurance supervisor should the parties not be adequately supervised.
- **Product development and approval** M-insurance is a unique product requiring unique and specialised technical skills to ensure appropriate pricing and underwriting. Insurance supervisors often do not have these specialised technical skills.
- **Disclosure and policyholder awareness** Disclosure via mobile platforms and devices is limited. There is a need to ensure that clients are adequately informed.

M-insurance cuts across multiple laws, regulations and authorities that extend beyond the insurance or financial sector (see Box 4). The provision of m-insurance is typically subject to at least six other regulatory ambits under the purview of other and multiple authorities. It is often challenging to clearly understand what requirements exactly apply to m-insurance. This significantly impacts business considerations, as it creates a legal or regulatory risk and may hence deter insurers or other partners from entering the market or staying engaged. It also affects the ability of the insurance supervisor to adequately supervise m-insurance or develop a new regulatory approach because the supervisor may not have jurisdiction over key entities or activities. In some cases supervisors are not clear on the regulations that apply to m-insurance and may unknowingly set requirements that conflict with non-insurance regulations.

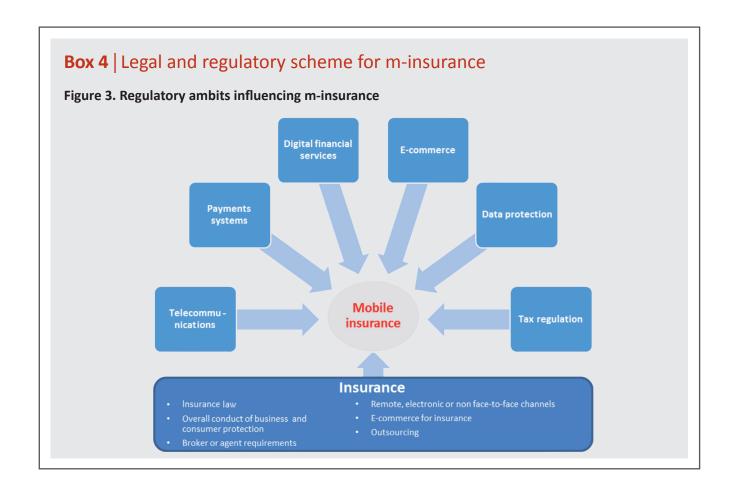


Table 3. M-insurance application of various regulations and issues to consider

Authority and regulatory ambit	Applies to	Issues to consider
Insurance supervisor	Insurers and/or	How the features of m-insurance fit under current insurance law and regulations. E.g.:
Insurance law / regulations	inter- mediaries	Whether m-insurance meets the definition of insurance under insurance law
		 Whether activities conducted by MNOs or TSPs would require them to be licensed as broker or agents under existing regulations, or any other intermediary
		Whether distribution via the mobile platform would con- stitute remote, electronic or non face-to-face channels
		 Whether the mode of partnership, nature of contract or activities done by the MNO or TSP instead of the insurer would be considered outsourcing
		How being subject to these respective regulations would affect business considerations vis-à-vis supervisory objectives, i.e.:
		 Whether the insurer, MNO or TSP can execute the intended ed business model while being compliant with regulations
		 Whether these resulting requirements are adequate in meeting supervisory objectives of financial soundness of the insurer and consumer protection
Telecommunica- tions authority	MNOs	Whether the insurance supervisor is able to influence or retain oversight over certain aspects of MNO activities. E.g.
Telecommunica-		 Address and ensure appropriate conduct of MNO
tions law / regulations		 Address transparency issues such as transparency over airtime deductions
		 Address data protection concerns such as policyholder data ownership
		Address consumer protection concerns such as mis-selling
		 Develop m-insurance market by enabling MNO to conduct activities such as selling insurance

Authority and regulatory ambit	Applies to	Issues to consider
Central Bank Payment systems law / regulations ²²	MMPs MNOs when engaged in payments	 Whether the insurance supervisor needs or is able to influence or retain oversight over payment transactions in the m-insurance business model: Airtime deduction: Central bank may allow or disallow air time deduction for insurance premiums. However, airtime deduction is a key element of many m-insurance business models. In one country airtime was disallowed because there were numerous consumer complaints. Payment via mobile money: Mobile money (or e-payment) regulation is also issued by the Central Bank, which enables payments via mobile wallets. Not all Central Banks currentl allow MMPs, like Orange Money, or Airtel Money. Some jurisdictions' e-payments or mobile money regulations are forthcoming. In the meantime, the MNOs serve as MMPs without being licensed as such with the Central Bank. In other countries, it is often the MMPs who act as the partner of the insurer. Central Bank regulations for mobile money were not identified as a main challenge by supervisors.
Ministry of Trade or Ministry of Commerce E-commerce law / regulations	All businesses (entire m-insurance value chain)	 Whether insurance supervisor has jurisdiction to supervise e-contracting (and related procedures) in m-insurance across the m-insurance value chain: There may be conflicts between general e-commerce law and insurance laws/regulations pertaining contracting. E.g. e-signatures may be permissible in general law (which may be applicable to MNOs and TSPs) but may not be permissible in insurance law/regulations. This may also creating regulatory uncertainty. Regulatory clarity concerning management of electronic transmission of data including documentation and client data e.g. minimum security protocols required pertaining protection of client data. Transaction limits placed on e-transactions e.g. if transaction limits may impede payment of claims (or ever payment of premiums)

²² This includes all the systems, mechanisms, institutions, agreements, procedures, rules and laws that come into play from the moment an end-user, using a payment instrument, issues an instruction to pay another person or a business, to the final interbank settlement of the transaction in the books of the central bank" (PASA, 2017).

Authority and regulatory ambit	Applies to	Issues to consider
Ministry of Finance Tax law / regulations	All businesses (entire m-insurance value chain)	 Applicable tax regime for mobile premium payment platforms (mobile wallets, airtime deduction etc.) and their impact on the m-insurance business model: The impact of value added taxes (VAT) on airtime on affordability and viability of m-insurance. E.g. adding 20% VAT on premiums make premiums significantly more expensive and raises the question of client value i.e. whether it is a justifiable trade-off against the convenience for customers. However, in the absence of other payment modalities, this may still be justifiable.
Data protection agency, or National identity authority Data protection law / regulations	All businesses (entire m-insurance value chain)	 Applicable data protection regime will determine how and if m-insurance client data is protected and whether all parties in the value chain must comply: Where there is an existing data protection regime applicable to all parties in the value chain and whether it is sufficient to protect the insurance consumer's data. Whether intersection between applicable insurance law/regulations and data protection law or regulation will suffice in ensuring adequate client and insurer data protection across all players and activities in the m-insurance value chain. Not all jurisdictions have data protection regulation or measures, and supervisors may have to formulate the necessary requirements under insurance law/ regulations

3.2 Overview of supervisory responses to m-insurance

Several supervisors have started undertaking steps to separately regulate m-insurance. Out of 26 supervisors included in the online survey:

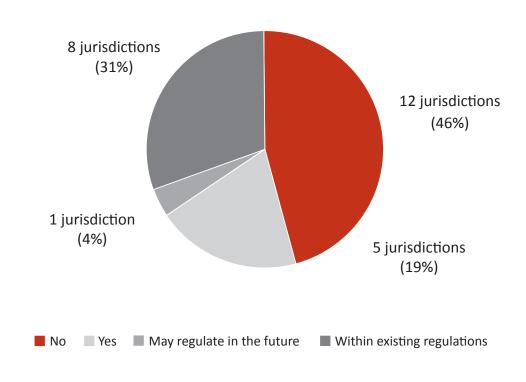
- 13 (or 50%) perceive a need to adjust the regulations that apply to some aspects of m-insurance business (see Figure 4).
- Out of these, 5 (or 19%) jurisdictions indicated that they are planning to develop separate regulations for m-insurance and 8 (or 31%) jurisdictions indicated they plan to integrate m-insurance into other regulatory and supervisory provisions.
- Out of the 13, 2 (or 8%) supervisors are even planning a combined approach, i.e. using a combination of regulations on m-insurance and digitally-supported insurance more generally.
- 1 supervisor may regulate m-insurance in future.
- Notably, among supervisors not considering that adjustments are necessary are those who did not spot any or significant m-insurance activity in their markets.

Some are still considering whether to effect regulatory changes. Some supervisors are still trying to understand the risks, particularly relating to partnerships and fair treatment of consumers, and are considering how and where exactly to effect adjustments to regulations. Some regulatory authorities are conducting additional research to better understand the risks associated with m-insurance.

All supervisors agree that m-insurance comes with heightened risks. Of the 26 insurance supervisors that participated in the survey 13 (50%) saw no immediate need to modify regulations. However, all 26 supervisors agreed in principle that m-insurance creates new risks and highlighted important risks in their responses, even supervisors who were previously not aware of m-insurance developments in their market. Some supervisors state they are open to further deliberation concerning the regulation and supervision of m-insurance should the need arise or in the case an m-insurance product provider engages with them. Some supervisors stated that existing laws and regulations that apply to intermediaries, microinsurance or e-commerce are adequate for m-insurance supervision. Generally, some markets still have no or lower levels of m-insurance activity and no TSPs are active yet in their markets.

Figure 4. Insurance supervisors' plans for regulatory and supervisory approaches to m-insurance

Have you taken, or are you considering taking steps to regulate / supervise mobile phone-based insurance?



3.3 Key issues to consider in regulating m-insurance

A regulatory approach to m-insurance should be proportionate to the nature and scale of the arising risks. M-insurance raises a host of prudential and conduct of business risks; however, the nature and scale of these risks differ depending on the magnitude of the m-insurance business relative to the insurer's other business or the insurance sector, the partnership model, the kind of products sold, the marketing strategy and the segment accessing these products, and also, the level of oversight the supervisor has over non-conventional partners. For example, in some jurisdictions, m-insurance products are low-premium products that are not typically accessed by the low-income or those who are less financially literate. In these cases, it may not be necessary to impose stringent disclosure measures that would typically be appropriate for inclusive markets.

Issue 1: Definition of m-insurance

A clear regulatory definition is required in order to enable a tailored regulatory approach for m-insurance. Supervisors intending to adopt a tailored approach for m-insurance products or mobile-supported business models need to provide a clear demarcation of such business, similar to how jurisdictions have needed to define microinsurance or mass insurance when they first developed a regulatory approach for such lines²³. As of January 2017, there was no single jurisdiction that has yet defined "m-insurance" or "mobile microinsurance". Both Ghana and CIMA are currently preparing to formally define "mobile microinsurance" within their regulatory frameworks (see Table 4 below). The IAIS is working towards such a definition within their upcoming Application Paper on the Use of Digital Technology in Inclusive Insurance.

The regulatory definition could include the entities involved, the technological platform used and/or their specific functions in the value chain. The use of mobile technology (hardware and software) is a common denominator among the different m-insurance business models. The m-insurance value chain (Figure 1) is always supported by mobile technology to some extent.

- Some jurisdictions see m-insurance as insurance provided via mobile technology, which in some
 jurisdictions is classified under the broader category of remote channels, e-channels, or non-face-to face
 channels. M-insurance is hence subject to all regulations that apply to such channels.
- Some supervisors demarcate "m-insurance business" according to the entity involved in providing it i.e. the partners in this business. In these cases, m-insurance are deemed to be insurance provided via a TSP as dedicated intermediary, a MMP or a MNO. The TSP or MNO, given its role in selling the product, are often licensed as an intermediary (see Issue 2 below).

Supervisors interviewed stress that there are various possible identifying characteristics for "m-insurance", therefore making it challenging to classify m-insurance based on only one element e.g. considering it as a channel.

Issue 2: Oversight of non-traditional or non-insurance entities

In m-insurance, non-insurance stakeholders often conduct important functions in the value chain. Even in the simplest of models, the MNO would typically conduct sales and marketing or provide the means for premium transactions. In the more complex models, the MNO or TSP may oversee distribution strategy, process claims and lead product development. Sometimes the entire value chain short of underwriting is outsourced and managed by a TSP. In complex models it is especially important to ensure that these entities and their activities, which are often outside the insurance supervisor's purview, are adequately supervised. For example, as the MNO owns the client data, the MNO may share it with the MMP or the TSP but not necessarily the insurer. In case a partnership ends, the insurer or the insurance supervisor may not be able to access policyholder data, generating all kinds of issues.

²³ See also: Lessons from a Decade of Microinsurance Regulation (A2ii, 2016).

How non-traditional stakeholders are supervised can be ascertained by examining their roles in the value chain. The more critical their functions are, or the higher the prudential or conduct of business risk arising from their activities, the more intense supervisory oversight should be. Supervisory oversight can be direct, where supervisors supervise the entities directly, or indirect, where supervisors require insurers to retain control or oversight over the entities. Direct supervision usually involves licensing or authorising the entities directly, typically as brokers or agents. If the MNO for example is registered as intermediary, the insurance supervisor gains jurisdiction over the MNO. Most TSPs are licensed as brokers. On the other hand, a common approach to indirect supervision is via outsourcing regulations, where insurers enter into service-level agreements with TSPs who act as service providers and insurers are required to retain a minimum degree of oversight and control over the activities of the TSPs. In some jurisdictions, registering the entities as agents is also a form of indirect supervision as the insurers, not the supervisor, are accountable for supervising agents and ensuring their compliance with regulations. Depending on the roles and entities involved, supervisors would likely need to coordinate or collaborate with the other supervisory authorities involved.

Issue 3: Consumer understanding and disclosure

Policy awareness and understanding of the m-insurance consumer is the most striking observation of m-insurance business models so far. This challenge is especially heightened compared to traditional insurance due to the nature of the m-insurance business model (see Box 1). The opportunities available in m-insurance to cut administration and transaction costs may lead insurers to adopt unhealthy practices such as reduced documentation and interaction between costumers and insurers.

Mobile technology-driven processes need to innovate in a way that still guarantees fair treatment of the consumer. For example, disclosure processes via mobile technology would understandably be different from printed sheets of paper. Supervisors need to question and explore whether the product is still being adequately communicated. Also, there may be a lack of transparency for the client on airtime deductions if the MNO does not make such statements accessible for their clients.

Issue 4: In what form to effect regulatory changes

As m-insurance cuts across multiple regulatory ambits, it can be a challenge to identify where and how to effect regulatory changes. Applicable regulations under both insurance and non-insurance legal or regulatory frameworks would need to be identified and assessed to ascertain how these regulations impact the various aspects of the m-insurance value chain and current m-insurance market, as well as whether they meet the objectives of the supervisor. If changes are necessary, a supervisor would then need to deploy the best suited form of regulatory or legal instrument to effect these changes, depending on the existing form of rules in place.

Consequently, regulatory changes could be effected either by riding on existing provisions or creating new ones under a separate regulatory framework. The supervisor would need to assess based on its own context as to which option is more practical and effective — in some cases it might need to be a combination of both especially if certain provisions, such as e-commerce requirements, are based on law and outside the supervisor's purview. In other cases, opportunities arise such as riding on digital financial services regulations underway. Ultimately it needs to be done in a manner that enables adequate oversight and provides sufficient clarity to the industry, while avoiding duplications and potential opportunities for regulatory arbitrage.

3.4 Current and upcoming supervisory approaches

A variety of existing regulations apply to regulation and supervision of m-insurance. The approach adopted by supervisors has often been reactive i.e. in response to products that have been introduced to the market or engagements with players in the value chain e.g. introductory conversations with TSPs or MNOs. Currently supervisors' approach have been to try and find the 'best-fit' solution under existing legal and regulatory structures, based on priorities or assessment of the situation. Table 4 below sets out the various measures found from the online survey and interviews (see Annex 2).

Table 4. Current and upcoming supervisory approaches to m-insurance found

Regulatory ambit	Treatment of m-insurance
Agent or broker regulations	 Some supervisors license TSPs and MNOs as brokers or corporate agents, providing the supervisor oversight over their activities. Some are formally registered as corporate agents but conduct the activities of brokers in practice. In some jurisdictions, call-centres soliciting insurance must be registered as agents.
Outsourcing regulations	 In some jurisdictions, entities in the value chain are registered according to the function and activity they perform – most activities conducted by third parties would be considered as outsourcing. However should any entity perform a function or functions that are defined by insurance regulations as those of an intermediary, entities would be required to register as an intermediary.
Microinsurance	 Some supervisors currently regulate m-insurance product features through the microinsurance regulations which stipulate the required product standards for any product prior to approval or launch. Some supervisors license and regulate TSPs as microinsurance intermediaries.
Approval of new products	 Some require a review of the m-insurance business model by including the service level agreement in product approval, or even approving it jointly with the telecommunications authority. In instances where products are approved as an exemption insurance supervisors are aware of the existence of the products and able to monitor developments.
E-commerce regulations	 One supervisor considers m-insurance under e-commerce regulations for insurers which apply to any kind of sale of insurance through the internet and/or supported by the mobile as a medium. In one jurisdiction, disclosure via a PDF from the master policyholder is permitted for group insurance policies.
Other measures	 Some collect some m-insurance data in an ad-hoc way during onsite inspections, while some require at point of product approval. One supervisor already requires TSPs to submit data. One engages with the telecommunications regulatory authority during the product approval process.

In summary, supervisors have indicated various plans and approaches to regulate m-insurance. The options identified from the survey that are being adopted can be categorised into three groups:

- 1. Supervisors who are working on a dedicated m-insurance regulation. If there are no suitable existing regulations to leverage on, creating a separate regulatory framework could be the better option. Some supervisors indicated plans to introduce such regulations (as m-insurance or mobile microinsurance). These would cover issues from licensing/regulating TSPs to supervisory reporting.
- 2. Those integrating m-insurance aspects in their existing or upcoming regulations. Integrating mobile technology and business model in existing legislation is always a simpler approach if such steps are possible. One supervisor plans to integrate m-insurance under e-channel regulations. Another has been preparing microinsurance regulations for a few years and considers these regulations adequate for covering m-insurance aspects.
- **3.** Combination of both of options 1 and 2. Two supervisors are developing mobile or microinsurance regulations alongside digital insurance or digital financial services regulations, into which m-insurance would be integrated.

3.5 Other complementary measures

A small number of jurisdictions are collecting m-insurance data as part of the supervisory approach. 6 jurisdictions (23%) are collecting delineated m-insurance data such as number of products registered, number of lives covered and number of providers engaged. Nevertheless, the means and depth the supervisors collect this data varies, some collect some data in an ad-hoc way during on-site inspections; some or during product approval. One jurisdiction already requires the TSPs (regulated as general agents) to submit data on a regular basis. Due to limited data on the performance of m-insurance, insurance supervisors are often only aware of issues ex-post and when problems arise e.g. partnership failures, sudden product cessations, mis-selling, complaints and/or market backlash. Most jurisdictions require reporting by channel or complaints received but this allows them very little observance of the m-insurance portfolio specifically. In most cases, insurance supervisors are reliant on insights from on-site inspections, which are conducted infrequently (e.g. every 2-3 years, or when problems arise).

Some supervisors are readying capacity of supervisory staff and systems. Supervisory staff often lack the technical understanding concerning mobile technology and the nature of non-insurance players in the value chain as supervisory staff's core skill set pertains to insurance and often does not include technology and e-transacting. One supervisor has indicated plans to introduce a dedicated department to digital financial services as part of an overall restructuring of the supervisor.

Some supervisors reported they are coordinating or collaborating with the other authorities involved. However, many supervisors interviewed were only considering or not yet implementing such practices. This is a challenge as some crucial risks need to be addressed but are under the purview of another supervisory authority. Furthermore, in designing a future regulatory approach to m-insurance, supervisors would have to inevitably assess or even effect changes to laws and regulations beyond insurance. This further reinforces the importance of interagency collaboration.

4. Conclusion

As the global m-insurance market continues to grow, so should insurance supervisors' concerns regarding the arising risks posed. Supervisors will find themselves confronted with the challenge of balancing the need to provide an enabling environment while protecting consumers. As each jurisdiction is unique and will require a customized regulatory and supervisory approach to m-insurance, supervisors will need to understand the risks facing their particular market and adopt the necessary measures best suited to their capacity and market requirements. Even supervisors who do not presently observe significant m-insurance activity could benefit by adopting a proactive approach in order to avoid future issues.

This summary document provided an overview of the risks pertaining m-insurance and the current supervisory approaches from the various jurisdictions that were interviewed and surveyed for the upcoming larger study. In concluding this study we address two main considerations:

- *Understanding the key risks and challenges pertaining to m-insurance* a summary of key risks and challenges pertaining m-insurance observed in this document.
- Practical measures that can be adopted by insurance supervisors a summary of practical measures that supervisors can adopt in addressing the risks.

4.1 Understanding the risks and challenges pertaining to m-insurance

Conduct of business risk is at the heart of supervisory concerns. While both prudential and conduct of business risks were identified, conduct of business risk (arising largely from the structure and composition of m-insurance value chain) has been cited by insurance supervisors as the most pressing risk by insurance supervisors. Under the theme of conduct of business risks, policyholder awareness is by far the most striking issue. This risk in particular warrants focus in future supervisory efforts in order to understand the issue in depth and work on solutions – one possible solution being to introduce financial education tailored to digitally-supported insurance.

The lack of data on m-insurance poses serious consumer protection and supervisory threats. Lack of m-insurance data pertaining business models deployed, products on the market, claims ratios among other data poses serious consumer protection threats as supervisors are unable to track and effectively supervise, and also regulate in a pre-emptive manner. Generally, the only source of m-insurance data available to insurance supervisory authorities is via on-site inspections which are often not conducted on a regular enough basis to effective track and supervise developments, especially as this business can rapidly generate huge business volumes. Performance data is especially critical in markets where m-insurance has achieved significant scale and thus poses significant risk in proportion to the current existing insurance market. In jurisdictions where m-insurance operates at significant scale, it could even be required from the onset, e.g. as a condition to product approval.

Supervisors should be concerned not only about business viability but also about client value of m-insurance products. The rapid growth, scale and high profitability ratios (sometimes tied with low claims ratios) of simple m-insurance products observed in various markets raises the question of the value to the client especially with airtime deductions that may not be transparent, and short-term policies with low coverages. Insights from interviews indicate there are m-insurance products on the market that have high profitability ratios and low claims ratios potentially meaning such business models are potentially taking advantage of clients (given the low claims ratios). This also reinforces concerns around disclosure through digital devices and interfaces.

The situation of the insurer being the weakest party in value chain requires serious consideration and perhaps adaptation of product approval and supervisory processes. Insurers are often the weakest party in

the value chain, coupled with the insurance supervisor's limited regulatory oversight of other players. This poses significant supervisory risk that requires attention and adaptation of supervisory approaches to ensure appropriate oversight and protection of the consumer.

4.2 Practical measures in addressing m-insurance risks

Supervisors need to invest in gaining a better understanding of the key features of m-insurance (value chain structure, players etc.) Insurance supervisors will need to invest in understanding the various business m-insurance models, partnership arrangements and stakeholders involved, particularly roles played by the non-insurance players in the value chain, and how these impact the technical or prudential and conduct of business risk aspects. Failure to do so will limit insurance supervisors' abilities to effectively supervise m-insurance and manage the risks therein. M-insurance products have the chance to become real sprinters or to fail dismally. The failure of an m-insurance product (especially after achieving significant scale) could pose significant risk to the market and potentially impact the growth of the insurance sector overall.

Supervisors should have a longer-term, evidenced-based vision of how m-insurance could and should develop, supported by improved data collection. Supervisors will need to have a long-term view concerning the development of m-insurance. This will require improved and additional data collection measures in order to sufficiently track and manage all developments pertaining m-insurance and ensure the longevity of such products and avoid sudden cessations. Data that could be collected includes:

- **Number of coverages** In order to understand risk and its magnitude to the general market (i.e. understand number of lives covered, or assets, that fall under m-insurance).
- **Number of products on the market** To understand the prominence of m-insurance products, understand what portion of insurance book dedicated towards m-insurance.
- Claims and renewal ratios Supervisors will need to invest in collecting data and understanding the
 client value of m-insurance. Supervisory instruments like mystery shopping, consumer surveys among
 others may help provide tangible information concerning client value as well as performance data based
 on key performance indicators, among those being claims and renewal rates.
- **Details of various partnerships, among other key sources of data** Understand the respective roles and functions of players in the value chain especially concerning core and critical insurance functions that require greater supervision.

Supervisory capacity building related to digital approaches including m-insurance is imperative for all departments. It is clear m-insurance (and other digital insurance models) is growing and expanding across various markets and as such insurance supervisors should prioritise capacity building related to digital approaches more generally. This technical know-how should not only be limited to particular departments (e.g. IT department) within the supervisory authority but it should be across all departments (actuarial, research, supervision among others).

Improving supervisory oversight of key activities in the value chain whether directly or indirectly. Insurance supervisors will need to have a complete 360 degree view of the m-insurance value chain to ensure all supervisory oversight gaps are measured and all parties are held accountable. Insurance supervisors may empower themselves (or insurers) through:

• Engaging with other authorities with oversight over non-insurance parties (Telecommunications authority, central bank etc.). Exchanging information with and cooperating with other authorities.

Holding all parties in the value chain accountable either through direct or indirect supervision.
 Indirectly through holding insurer accountable for all activities across the value chain or directly through licencing MNOs and TSPs as intermediaries. Direct supervision of non-insurance players in the value chain would also empower the insurer to collect additional and more granular data e.g. through conducting on-site inspections.

Better knowledge transfer mechanisms. Supervisors engaging in the regulation of m-insurance should engage in technical peer-exchanges early on to ensure a rapid learning curve. Such knowledge transfer mechanisms could prove beneficial especially where no regulatory precedent is available such as:

- Effective control measures of non-insurance parties in the value chain
- Effective treatment of peculiarities of TSPs and MNOs
- Cost effective monitoring of client value issues
- Supervisory tools at the intersection of various regulators

Annex 1: Issues and approaches along the inclusive insurance product life cycle

The inclusive insurance product life cycle discussed by the IAIS²⁴ provides a valuable assessment framework for m-insurance challenges in each of its six aspects that also involves various stakeholders. Please note that this table is a work in progress with further revisions to be included in the larger study.

Table 5: Issues and approaches along the product life cycle

Aspect	Issues encountered	Regulatory approach	Practical application
Product develop- ment	 TSPs driving product development of the product; some even including actuarial analysis; however, it's the insurer who submits the product for approval and is liable for it Lack of product standards that would help to assure product quality in terms of simplicity, affordability, transparency, Product sustainability due to weak pricing, lack of actuarial data Client value often weak in short-term and low-value coverages (e.g. for hospitalisation) 	Product approval includes checking on the use of the mobile Product standards for microinsurance insurance products valid for mobile (micro) insurance	 Some jurisdictions approve products One jurisdiction utilises product standards for microinsurance
Distribu- tion	 Sales agents or staff of non-financial distributers not sufficiently trained MNO agents or sales staff deal with customers but is not knowledgeable Frequent agent turn-over makes training expensive/difficult Call centre lack quality information 	 Only very simple products can be sold via these channels and their sales persons Supervisor approves commercialization agreement Minimum requirements for training of sales persons Require certificate for group policies Checks and controls related to call centres 	 One jurisdiction requires the approval (tri-partite) of the commercialisation agreement One jurisdiction approves service level agreement One jurisdiction requires insurers to submit call centre script, checked on a random basis One jurisdiction has the right to check on call centre that are broker-managed

²⁴ IAIS Issues Paper on Conduct of Business in Inclusive Insurance, November 2015 (IAIS, 2015a).

Aspect	Issues encountered	Regulatory approach	Practical application
Disclosure of informa- tion	 Customer not aware that he is covered Customer does now know how to use the product, what she needs to t do In internet-based or smart-phone-based disclosure accessibility of information can be weak Client does not know who is the insurer Group policyholders may not issue a certificate to members 	Require product simplicity of product characteristics	 One jurisdiction: microinsurance regulation requires simple products and provides for simplified product parameters Clients must be notified 6 months in advance if insurer changes.
Customer acceptance	 Automatic enrolment of client base but activation of policy is required in the case of loyalty insurance Client may not remember he has signed up in the case of electronic signature Client can in principle receive policy documentation via mobile and internet, but face connectivity problems 	Cooling off- periods	 Clients can receive policy documentation via mobile and internet, but connectivity problems Customer can receive certificate under group policy as PDF
Premium collection	 Airtime deduction may not be allowed Where airtime charges are allowed, VAT may be charged Mobile wallet charges are not broadly used, many are registered as users but dormant 		 Airtime as an acceptable form of payment in certain jurisdictions Airtime not accepted as a form of payment in certain jurisdictions
Complaints handling	 Contact information for complaints may not be accessible in electronic policies (SMS-based in the case of loyalty products) Electronic policy is in the form of a PDF but customer cannot download or has no access to a printer Servicing is not effective as MNO agent is not knowledgeable or has no time or incentive Long queues in MNO offices Customer is sent from MNO to insurer and vice versa 		

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