

M1'S RESPONSE TO IMDA'S CONSULTATION ON EMBEDDED SIM TECHNOLOGY



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Introduction

1. M1 is Singapore's most vibrant and dynamic communications company, providing mobile and fixed services to over 2 million customers. With a continual focus on network quality, customer service, value and innovation, M1 links anyone and anything; anytime, anywhere.

M1's view on the Regulatory Environment

2. The provision of info-communication services in Singapore is regulated under the Telecommunications Act. The Info-communications Media Development Authority ("IMDA") is the regulatory authority and has powers to establish standards, codes and regulations to be observed by operators of info-communication systems and services and to regulate the conduct of licensees.

3. M1 supports the development of a proportionate and stable regulatory environment as it will catalyse a sustainable and growing info-communications industry where long term planning and decisions can be undertaken.

4. M1 welcomes the opportunity to submit our comments to IMDA on the public consultation on Embedded SIM ("eSIM") Technology. We are supportive of IMDA's initiative to work with the industry on the opportunities and development of eSIM technology.

5. However, as eSIM technology is still in its nascent stage, we believe that IMDA should avoid imposing heavy regulatory burden on the industry while working with the industry in the development of eSIM technology.

6. M1's specific comments on the public consultation are set out in the following sections.



SECTION 2 – NO SIM-LOCK POLICY

Question 1: IMDA would like to seek views and comments on the policy principle of extending the No SIM-lock policy to eSIM devices.

Question 2: IMDA would like to seek views and comments on the application of the No SIM-lock policy on Consumer devices (e.g., mobile phones, tablets and wearables (such as smart watches and fitness trackers)) where they are eSIM enabled.

1. M1 agrees that the No SIM-lock policy should be extended to Consumer devices where they are eSIM enabled. As with the current practice, consumers should be allowed to exercise their choice of mobile operator for their eSIM devices.

Question 3: For M2M devices, IMDA would like to seek views and comments on placing the onus on mobile operators to facilitate switching of mobile operator profiles where consumer and enterprise end users request to switch mobile operators.

2. M1 supports IMDA's proposal to allow the industry some flexibility in applying the No SIM-lock policy for enterprise users, as the provisioning of M2M services may be based on negotiated terms with their mobile operators. However, such terms should not unreasonably prevent the enterprise users from switching to another mobile operator when the need arises.

3. Where enterprise users request to switch between mobile operators for their M2M devices, we agree that the mobile operator providing connectivity to the eSIMs should facilitate the switching of mobile operator profiles. However, to facilitate switching, we understand that it will be necessary to establish processes to govern the transfer of database profiles associated with the enterprise users between the mobile operators' eSIM provisioning platforms.

SECTION 3 – ESIM TECHNOLOGY

Adopting GSMA Specifications

Question 4: IMDA would like to seek views and comments on the adoption of GSMA specifications for eSIM devices that are to be sold and used in Singapore to facilitate the deployment of OTA Remote Provisioning functionality.

4. M1 supports the adoption of GSMA specifications for eSIM devices that are to be sold and used in Singapore.

Security

Question 5: IMDA would like to seek views and comments on whether IMDA should require the mobile operators to adopt the GSMA SAS and ISO 27001 standards and secure the compliance of Relevant Providers in the eSIM OTA Remote Provisioning supply chain with the above-mentioned standards in the provisioning of eSIMs.



Question 6: Are there security gaps that GSMA SAS and ISO 27001 do not address, and if so, how should these gaps be plugged to facilitate trust and security in the provisioning of eSIMs, particularly in safeguarding the OTA profile management process.

5. M1 is of the view that Relevant Providers in the eSIM OTA Remote Provisioning supply chain should adopt the GSMA SAS to ensure interoperability and adherence to security requirements. The adoption of other standards, such as the ISO 27001, should be on a voluntary basis as it would depend on business and operational requirements of the Relevant Providers.

6. As the security threat landscape is always evolving, M1 understands that GSMA will continue to work with its members and security companies to review the security requirements for eSIM technology. We will also like to caution against imposing overly stringent requirements upfront, as this could undermine the development of eSIM provisioning ecosystem in Singapore.

SECTION 4 – ESIM BUSINESS AND OPERATING MODELS

Question 7: IMDA would like to seek views and comments on which eSIM provisioning model is best suited for mobile operator's needs, and why.

7. The preferred eSIM provisioning model will depend on each mobile operator's own technical and commercial considerations. Therefore, IMDA should not dictate the eSIM provisioning model which mobile operators must adopt.

Question 11: What would be the benefits and concerns for mobile operators to engage one trusted third party to provide services in support of OTA Remote Provisioning in Singapore, similar to the existing number porting arrangement?

8. M1 is of the view that it may be premature to consider the engagement of one trusted third party to provide services in support of OTA Remote Provisioning in Singapore, as the role of this trusted third party and the benefit(s) of such an arrangement is not clear at this stage. Today, a centralised third party is engaged to co-ordinate and facilitate efficient mobile number porting between the mobile operators. As we move towards eSIM technology, it will be necessary to review the role of the centralised third party and number porting processes to ensure that they remain relevant in an eSIM environment.

SECTION 5 – LICENSING AND REGULATION OF ESIM DEVICES AND SERVICES

Consumer Protection Measures

Question 13: To the extent where they are relevant, do you agree that the codes of practice, guidelines and consumer protection measures established by IMDA for the provision of mobile services should remain applicable to the operators who offer telecommunication services for the use of eSIM-enabled Consumer devices?



9. M1 is of the view that the general principles on consumer protection measures established by IMDA should remain relevant.

10. However, as eSIM technology is still in its nascent stages and can potentially be used in a wide range of Consumer devices, regulatory requirements will need to be continually reviewed to ensure that they are in line with the developments in eSIM technology and ecosystem. In addition, IMDA may also consider conducting awareness campaigns to educate consumers on the potential benefits and implications of eSIM technology.