

PUBLIC CONSULTATION ISSUED BY THE INFO-COMMUNICATIONS MEDIA DEVELOPMENT AUTHORITY

ON

PROPOSALS TO STRENGTHEN SAFEGUARDS FOR SMS MESSAGES TO SINGAPORE USERS: FULL SMS SENDER ID REGIME

15 August 2022

INTRODUCTION

- 1. As our lives become more dependent on digital technologies and operations, Short Message Service ("SMS") has become a telecommunication channel that scammers use to conduct malicious activities.
- 2. One way in which scammers aim to gain trust is to masquerade their SMS sent to Singapore mobile users using the same alphanumeric sender identification ("Sender ID") used by bona fide businesses and other entities (herein referred to as "Organisations"). The aim is to deceive Singapore mobile users to divulge sensitive information to the scammers, where the scammers can then access the mobile users' accounts, thereby resulting in financial loss to these mobile users.
- 3. One way to mitigate the spoofing of the Sender IDs is to establish a registration system for the use of such Sender IDs in Singapore.

SINGAPORE'S SMS SENDER ID REGISTRY

- 4. A pilot SMS Sender ID Regime was initiated in August 2021. With the surge in scam SMS, in March 2022, IMDA accelerated the setting up of the Singapore SMS Sender ID Registry ("SSIR") 1. The SSIR acts as a central body for the registration of Sender IDs to be used in Singapore. This is currently a voluntary system where Organisations who wish to protect their Sender IDs ("Protected Sender IDs") can register with the SSIR.
- 5. With SSIR, SMS that attempts to spoof the registered Sender IDs, will be blocked upfront, thus reducing the risk of scams. The SSIR has thus far been effective and successful in achieving the outcome by reducing spoofing of Protected Sender IDs.
- 6. However, the SSIR can only protect Organisations who choose to register and protect their Sender IDs with the SSIR, while those who have not done so, are not protected. As the SSIR is a voluntary system today, the public is still subject to spoofed SMS, using non-registered Sender IDs (e.g., from Organisations that choose not to register, or Sender IDs that do not belong to any Organisation).

POLICY CONSIDERATIONS

7. IMDA's policy aim is to further secure the SMS channel. This can be achieved by requiring all Organisations who use Sender IDs when they send SMS to Singapore mobile users to register and protect their Sender IDs. The registration process will need to be robust to ensure that only verified bona fide Organisations can be allowed to register with the SSIR and send SMS with the Protected Sender IDs. With these measures in place, spoofing of all Organisation names and products through the SMS channel can then be significantly reduced.

¹ The SSIR is operated by the Singapore Network Information Centre ("SGNIC"), a wholly owned subsidiary of IMDA. As of July 2022, there are over 120 Organisations and around 40 Aggregators have signed up with the SSIR. More details can be found on SGNIC's website: https://www.sgnic.sg/SMSRegistryeinvoicing/smsregistry.

8. Globally, IMDA notes that there are around 50 jurisdictions that require some form of Sender ID registration, such as UK, Spain, Indonesia, and the Philippines. However, most of these jurisdictions do not provide certainty that Sender IDs are protected from spoofing, due to factors such as the voluntary registration regime, post-hoc blocking process and limited enforceability, amongst others.

FULL SSIR REGIME FOR SINGAPORE

- 9. In view of the above policy considerations, IMDA proposes to make Sender ID registration a requirement for all Organisations that choose to use Sender IDs (i.e., the Full SSIR Regime). This means that only registered Sender IDs can be used, and all *non-registered Sender IDs will be blocked as a default*.
- 10. **For Organisations** that send SMS with Sender IDs to Singapore mobile users, they must register their Sender IDs with the SSIR, <u>and</u> only use SMS service providers or SMS aggregators ("**Aggregators**") who participate in the SSIR.
- 11. To be clear, the registration requirement applies to any alphanumeric Sender ID chosen by Organisations to appear as headers in their SMS. It will not apply to mobile phone users (including Organisations) sending SMS using mobile numbers registered with their telecommunication service providers.
- 12. **For Aggregators** who wish to handle SMS with Sender IDs, they must be licensed by IMDA and participate in the SSIR.

What Organisations need to do under the Full SSIR Regime

- 13. <u>Registration:</u> All Organisations who send SMS with Sender IDs must first present a valid identification, i.e., the local unique entity number ("UEN") as issued by relevant government agencies. The UEN provides a single verification source to ensure the authenticity of the registering Organisation. IMDA has considered that it is important to know that the Organisation is indeed in business in Singapore and has a valid identification. The UEN, which is commonly used in Singapore today, will serve that purpose.
- 14. IMDA notes that all businesses and local companies will already have their UEN assigned once they register with the Accounting and Corporate Regulatory Authority ("ACRA"), while some other local Organisations will also have been issued with UEN during their interactions with various government agencies. In this regard, IMDA notes that since the UEN was introduced in 2009, there are more than 563,000 business entities with ACRA that have been issued with UEN².
- 15. Foreign-based businesses may also obtain a UEN by registering with ACRA. IMDA understands that it is common practice for many foreign-based businesses to set up

² Based on ACRA's data, as of July 2022 https://www.acra.gov.sg/training-and-resources/facts-and-figures/business-registry-statistics.

local subsidiaries or foreign branch offices in Singapore by registering with ACRA to better serve their customers in Singapore – there are more than 2,000 local subsidiaries and foreign branch offices registered in Singapore to-date³. Briefly, a foreign business can either register as a local subsidiary or register as a foreign branch office, provide a local resident director (in the case of a local subsidiary), or a local representative (in the case of a foreign branch office), and a local office address. The registration process with ACRA is straightforward⁴. The fee for ACRA registration is a one-time charge of \$315 – a UEN will be issued free of charge following the registration process. Companies registered with ACRA will have to comply with the statutory and disclosure requirements of the Companies Act.

- 16. Other non-business Organisations (e.g., charity organisation, societies, religious bodies) that have not obtained a valid UEN can also register with the relevant agencies⁵ that will issue UEN to these specific types of organisations.
- 17. Organisations with the valid identification (i.e., the UEN) can then register with the SSIR, and protect the Sender IDs they wish to use when sending SMS to Singapore mobile users. To make the SSIR accessible to all types of businesses, the fees today are as follows: (a) one-time set up fee of \$500; and (b) \$1,000 a year for up to 10 Sender IDs that Organisations wish to protect⁶. These fees will remain unchanged under the Full SSIR Regime so that the SSIR continues to be available to all Organisations.
- 18. <u>Select Aggregators:</u> Organisations sending SMS with Sender IDs will need to choose Aggregators who are licensed by IMDA and registered with the SSIR to handle these SMS to be sent to Singapore mobile users.
- 19. As a start, Organisations can choose from 40 licensed Aggregators that have already signed up with the SSIR under today's voluntary regime (see **Annex A**)⁷, which includes key players in the market. IMDA expects the pool of Aggregators signing up with the SSIR to expand in the near term, giving Organisations even more options.

What Aggregators need to do under the Full SSIR Regime

20. Under the Full SSIR Regime, all Aggregators who handle SMS with Sender IDs must first be licensed by IMDA. IMDA notes that many international Aggregators have already been licensed in Singapore⁸, and are amongst the 40 Aggregators participating in the SSIR and serving the Singapore market (also see **Annex A**).

³ Examples include major ecommerce platforms (e.g., Amazon and Alibaba), tech companies (e.g., Apple and Google), media and entertainment companies (e.g., Tencent and Disney), major airlines (e.g., American Airlines and Lufthansa), and payment companies (e.g., Amex and UnionPay).

⁴ Details can be found on the ACRA website: https://acra.gov.sg/how-to-guides/registering-a-foreign-company

⁵ Details can be found on the UEN website: https://www.uen.gov.sg

⁶ Prices listed do not include the applicable Goods & Services Tax.

⁷ Information can also be found on the SGNIC website: https://www.sgnic.sg/docs/default-source/sms-registry/listpa.pdf?sfvrsn=3cbbae25 38

⁸ Interested parties may find out whether an Aggregator is licensed by IMDA under the Telecom Licensing System: https://eservice.imda.gov.sg/tls/listLicence.action

- 21. IMDA notes that there may be foreign-based Aggregators that are not licensed by IMDA and are handling SMS with unregistered Sender IDs sent to Singapore mobile users (e.g., sending on behalf of foreign-based Organisations) today. Going forward, these Aggregators must apply with IMDA for a Services-Based Operations (Class) licence to be able to continue to handle SMS with Sender IDs sent to Singapore mobile users. Any local company or foreign branch office registered with ACRA can apply with IMDA for a Services-Based Operations (Class) licence, and the registration fee is a one-time charge of \$200⁹.
- 22. The regulatory requirements will include, amongst others, verifying that the Organisations, the Aggregator is sending SMS with Sender ID to Singapore mobile users on behalf of, are bona fide. Aggregators will need to collect and verify the UEN of these Organisations as part of their Know Your Customer ("KYC") process, and ensure that the proper client onboarding process takes place.

<u>Implementation Timeline</u>

- 23. IMDA recognises that the above requirements under the proposed Full SSIR Regime will require transition by Organisations and Aggregators sending and managing SMS with Sender IDs to Singapore mobile users today. To allow sufficient time for Organisations and Aggregators to adjust, IMDA will provide a transition period starting in October 2022 before the Full SSIR Regime commences in December 2022.
- 24. <u>During this transition period</u>, Organisations and Aggregators can start to register with the SSIR and familiarise themselves with the processes under the SSIR. To be clear, during this transition period, the SSIR will still be a voluntary regime, and only Sender IDs registered with the SSIR will be protected. SMS with *unregistered* Sender IDs can still be sent to Singapore mobile users.
- 25. Aggregators can also use this time to start implementing the KYC process, including the collection and verification of UEN from Organisations.
- 26. <u>From December 2022</u>, IMDA aims to commence the Full SSIR Regime. This will mean that from December 2022, Organisations will *not* be able to send SMS with unregistered Sender IDs to Singapore mobile users, as they will be dropped by Aggregators handling the SMS. Similarly, Aggregators that are not participating in the SSIR can no longer handle SMS with Sender IDs meant for Singapore mobile users. Aggregators should therefore come onboard early.
- 27. IMDA will confirm the implementation timeline when we issue our decision on the proposed Full SSIR Regime, after reviewing all views and comments gathered from this public consultation.

⁹ Details can be found on IMDA's website: https://www.imda.gov.sg/regulations-and-licensing-listing/services-based-operations--sbo--licence

28. With the implementation of the Full SSIR Regime, it will allow Organisations behind the Sender IDs to be clearly identified. It provides better assurance that only bona-fide Organisations are using Sender IDs, thereby reducing the risk of SMS scams via spoofing of Sender IDs.

INVITATION TO COMMENT

- 29. IMDA would like to seek views and comments from Organisations, Aggregators and members of the public on the proposal for the Full SSIR Regime approach.
- 30. Respondents who submit their views or comments regarding the issues identified in this consultation document may organise their submission as follows: (a) cover page (including their personal/company particulars and contact information); (b) summary of major points; (c) statement of interest; (d) comments; and (e) conclusion. Supporting materials may be placed as an annex to the comments raised.
- 31. All views and comments should be submitted in soft copies (Microsoft Word and PDF Format), and should reach IMDA by 12 noon, 9 September 2022. All views and comments should be addressed to:

Ms Aileen Chia
Director-General (Telecoms and Post)
Deputy CE (Connectivity Development & Regulation)
Infocomm Media Development Authority
10 Pasir Panjang Road
#03-01 Mapletree Business City
Singapore 117438

AND

Please submit your soft copies, with the email header "Public Consultation on Full SSIR Regime", via email to Consultation@imda.gov.sg.

32. IMDA reserves the right to make public all or parts of any written submission and to disclose the identity of the source. Respondents may request confidential treatment for any part of the submission that the respondent believes to be proprietary, confidential or commercially sensitive. Any such information should be clearly marked and placed in a separate annex. If IMDA grants confidential treatment, it will consider, but will not publicly disclose, the information. If IMDA rejects the request for confidential treatment, it will return the information to the party that submitted it and will not consider this information as part of its review. As far as possible, parties should limit any request for confidential treatment of information submitted. IMDA will not accept any submission that requests confidential treatment for all, or a substantial part, of the submission.

List of Participating Aggregators under SSIR (as of 15 August 2022)

- 8X8 International Pte Ltd
- 2. Alibaba Cloud (Singapore) Pte Ltd
- 3. AMCS SG Private Limited (Amazon Media Communications Services)
- 4. Ann Consulting Pte Ltd
- 5. Asiatel (S) Pte Ltd
- 6. CM Telecom Singapore Pte Ltd
- 7. EC Web Pte Ltd
- 8. Etisalat Wholesale Asia Pacific Pte Ltd
- 9. Fort Digital Pte Ltd
- 10. GENIQ Pte Ltd
- 11. Hello Technology Pte Ltd
- 12. Hoiio Pte Ltd
- 13. IBASIS Singapore Pte Ltd
- 14. Infinite Convergence Solutions Inc
- 15. Infobip Mobile Services Pte Ltd
- 16. M1 Limited
- 17. Macro Kiosk Pte Ltd
- 18. Maven Lab Private Limited
- 19. Messagebird Pte Ltd
- 20. Mobilenet Technologies Pte Ltd
- 21. Momentum Inc Pte Ltd
- 22. NCS Pte Ltd
- 23. Netlynx Communications Pte Ltd
- 24. NEXMO Pte Ltd
- 25. NextGen Mobile Pte Ltd
- 26. Orange Gum Pte Ltd
- 27. Pacific Synergy Pte Ltd
- 28. SendQuick Pte Ltd
- 29. Simba Telecom Pte Ltd
- 30. Sinch Singapore Pte Ltd
- 31. Singtel Mobile Singapore Pte Ltd
- SMSDome Pte Ltd
- 33. StarHub Mobile Pte Ltd
- 34. Syniverse Technologies Network Solutions (Singapore) Pte Ltd
- 35. Talariax Pte Ltd
- 36. Tata Communications International Pte Ltd
- 37. Telesign Singapore Pte Ltd
- 38. Toku Pte Ltd
- 39. Twilio Singapore Pte Ltd
- 40. Whispir Pte Ltd