netnumber's response to "What type of SMS sender ID registry should be introduced in Australia?"

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NetNumber, Inc. (**netnumber**), the operator of the North American SMS services registry, hereby provides comments in response to the Consultation paper issued by the Department of Infrastructure, Transport, Regional Development, Communications and the Arts of the Australian Government called "Fighting SMS Scams – What type of SMS sender ID registry should be introduced in Australia?".

Background

netnumber offers a broad set of solutions that solve complex ecosystem challenges and reduce both costs and operational complexity for our customers. netnumber's solutions are designed to cost-effectively support day to day operations – providing the data that drives routing, rating, billing, authentication, and fraud prevention initiatives.

netnumber has been operating the central SMS services registry for the telecommunications ecosystem in North America for 15 years. Our solution called the netnumber Services Registry (**nnSR**) enables numerous established, as well as new, innovative use cases, amongst which are the provisioning and distribution of SMS sender IDs and associated Application-to-Person (**A2P**) campaign metadata. The North American messaging industry relies on the nnSR as the authoritative source of information for authenticating SMS sender IDs. Just recently, the United States Federal Communications Commission determined that sender ID spoofing is not a problem for SMS and MMS in the USA[1]. Different technology is used in the US compared to other international markets. netnumber governs the nnSR as a neutral 3rd party being independent from traffic carrying service providers. As of the date of these comments, the nnSR has grown to become one of the world's largest telecom registries with hundreds of millions of entries and tens of millions of updates per month.

Support of Mandatory Registration

The key capability of a mandatory sender ID registry is establishing and securing trust in the SMS channel through the reliable ban of unauthorized sender IDs and exclusion of unverified sources. It does this by centralizing the collection and organization of detailed information unambiguously linking sender IDs with businesses and service providers. The ensured trust in SMS will discourage businesses from turning to alternative channels to enable their use cases, which is preferable given such alternative channels may have an adverse effect on then-current service providers. Further, a mandatory registry will protect all sender IDs and minimize the risk of false blocking.

Voluntary registration will leave end users in doubt about the authenticity of a sender ID, which diminishes the value of a registry to such an extent that brands and networks may second guess their investment into registration processes and infrastructure. Communications and network providers that do not have direct relationships with brands volunteering to register, may regard the cost of integrating with a voluntary registry as unfair and a competitive disadvantage. In addition, it is likely that businesses may experience inconsistent SMS service quality in the absence of a complete central data set, due to the complexities involved in establishing coherent blocking behavior across all mobile networks and communications platforms. A degraded quality of service would negatively impact the A2P revenues for all traffic carrying parties, as well as the return on investment for A2P campaigns of brands.

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[1] *See FCC filing Dec 18, 2023:*
 https://docs.fcc.gov/public/attachments/FCC-23-107A1.pdf - paragraph 54

To further assess the significantly higher positive impact of mandatory registration vs. voluntary registration, the Department of Infrastructure, Transport, Regional Development, Communications and the Arts may wish to consider the results in those markets with mandatory registration (e.g., United States, Singapore) and compare them with the results in markets with voluntary registration (e.g., United Kingdom). As mentioned above, the FCC has acknowledged that spoofing is not a problem in the US messaging ecosystem. For Singapore, the Consultation states that research released in November 2023 found that 87% of Singapore consumers said the SSIR has made it easier to identify the legitimacy of the SMS they receive. 63% also noted that the SSIR has resulted in receiving less spam or scam messages. In the UK on another hand, Ofcom research from 2022[2] states that 78% of surveyed phone users have experienced suspicious calls / messages. 65% of surveyed phone users have received suspicious text messages, e.g., purporting to be from a courier company/Royal Mail about a parcel.

Transition Arrangements

The targeted solution should not discriminate against smaller businesses and organizations through exclusion from the registration process. Every business should have the opportunity to register their sender ID, especially if they are already in use. The use of alpha numeric sender IDs for A2P should be encouraged instead of introducing regulation that may not improve the end user experiences, but that may reduce messaging volumes and revenues. It will therefore be necessary to provide brands the option to register through agents like their communications service providers, call centers, or others. Registering sender IDs "on-behalf-of" is already a best practice in many countries today.

The introduction of a mandatory registry will trigger a peak amount of new registration requests. The support of existing vetting agents can mitigate the associated risks of prolonged authentication and consequential transition times. The transition time can be minimized through the support of multiple methods to authenticate the users of the registry, e.g., through a vetting marketplace.

Furthermore, experience suggests that multiple businesses may want to register the same or similar sender IDs, so an efficient conflict resolution mechanism should be part of the solution. Timely communication between the involved parties is crucial to minimize negative business impact.

Futureproofing

It is reasonable to anticipate that existing scam efforts will drift to Short Codes and mobile numbers after the successful introduction of a central alpha numeric sender ID registry. Therefore, we recommend that the registry should be capable to support any permissible sender ID from conception, to facilitate swift adoption and extension of the registration. This will also pave the way for A2P SMS on landline and toll-free numbers which increases the potential volume of sender IDs for businesses and organizations.

To further strengthen the trust in the SMS channel, it is advisable to also support the registration of SMS content, e.g., templates or URLs. This will provide additional layers of protection against fraudulent activity such as account take overs.

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[2] _https://www.ofcom.org.uk/__data/assets/pdf_file/0029/247493/ofcom-cli-and-scams-research-august-2022-slides.pdf_

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For the long-term success of the Sender ID Registry, it is essential to have a service that supports:

- Effective, real-time registration of sender IDs: Brands want to enable their messaging programs quickly, smoothly and with the maximum amount of automation. While a sender ID registration portal is useful for users with low number of sender IDs and little activity, we believe an API-based sender ID registration process is essential to support the larger messaging users.
- Conflict resolution: It is inevitable that multiple parties will claim ownership of the same sender IDs. When this happens, the mechanism to resolve the conflict will likely depend on the type of sender ID. For example, alphanumeric sender IDs might be assigned on a first-come, first-served basis, or perhaps based on brand name. The Sender ID Registry should be able to facilitate the communication between two parties claiming ownership of the same sender ID and offer service logic and tools to approve / reject a registration request in a conflict scenario. Conflict resolution should have both GUI (portal) and API elements to support a multitude of implementation scenarios.
- Real-time distribution to the ecosystem: Assuming the Sender ID Registry captures the sender IDs, the business, and the service providers' information effectively, it is equally important to distribute this data to the ecosystem to facilitate routing and filtering. We believe that real-time data distribution, ideally via an API mechanism, is key to ensure industry buy-in, efficient implementation, and successful blocking of illegitimate sender IDs.

The netnumber Services Registry already performs the functionality described above for the North American messaging ecosystem. The feedback that netnumber consistently receives, is that the nnSR and its use for registration of A2P messaging sender IDs in North America is the reason why spoofing is virtually impossible.

In addition to this response, netnumber would like to offer its support for the ongoing pilot by ACMA by sharing its experience and technical capabilities free of charge.

We encourage the Australian Government and ACMA to assess the benefits of using the netnumber Services Registry as a ready-made solution for implementation of Australia's future SMS Sender ID registry. The nnSR comes with existing interfaces for provisioners, messaging providers and carriers, and the corresponding service logic to support provisioning business rules and data access policies. By leveraging the nnSR, the Australian Government and ACMA will significantly reduce the implementation cost and time to market.