

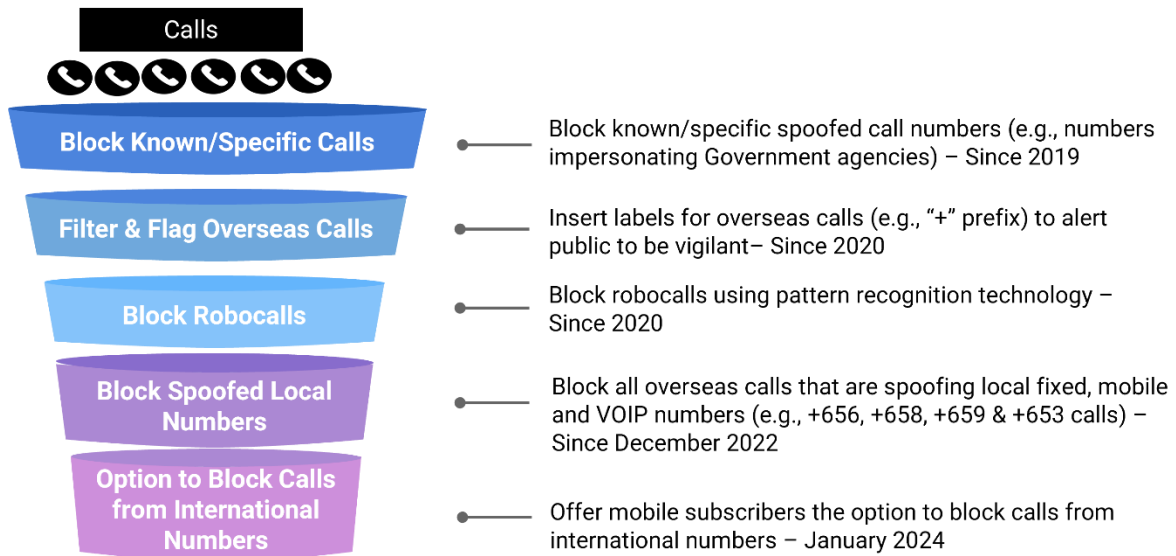
Annex B: IMDA and Telcos' Anti-Scam Measures

Background

1. IMDA's anti-scam measures are developed to disrupt scam operations across various communications channels via a multi-layered approach. IMDA has partnered with Telcos to implement anti-scam measures that strengthen safeguards for SMS and calls to Singapore users.

Multi-layered approach for scam calls

2. To combat scam calls, IMDA has partnered with Telcos to implement the following anti-scam measures to safeguard Singapore users:
 - **Verification of Domestic Callers:** Since 2017, Telcos have been conducting verification before setting up local calls, as a means of preventing domestically originating calls from being spoofed.
 - **Reactive Blocking of Specific Spoofed Numbers:** Since 2019, Telcos have been blocking commonly spoofed local trusted numbers such as emergency hotlines and Government agencies.
 - **Blocking of Robocalls:** Since 2020, Telcos have been blocking robocalls using pattern recognition technology.
 - **Pre-Emptive & Wholesale Blocking of International Spoofed Calls:** Since December 2022, Telcos have been blocking spoofed fixed line and mobile numbers i.e., international calls bearing the "+65 3", "+65 6", "+65 8", and "+65 9" prefix.



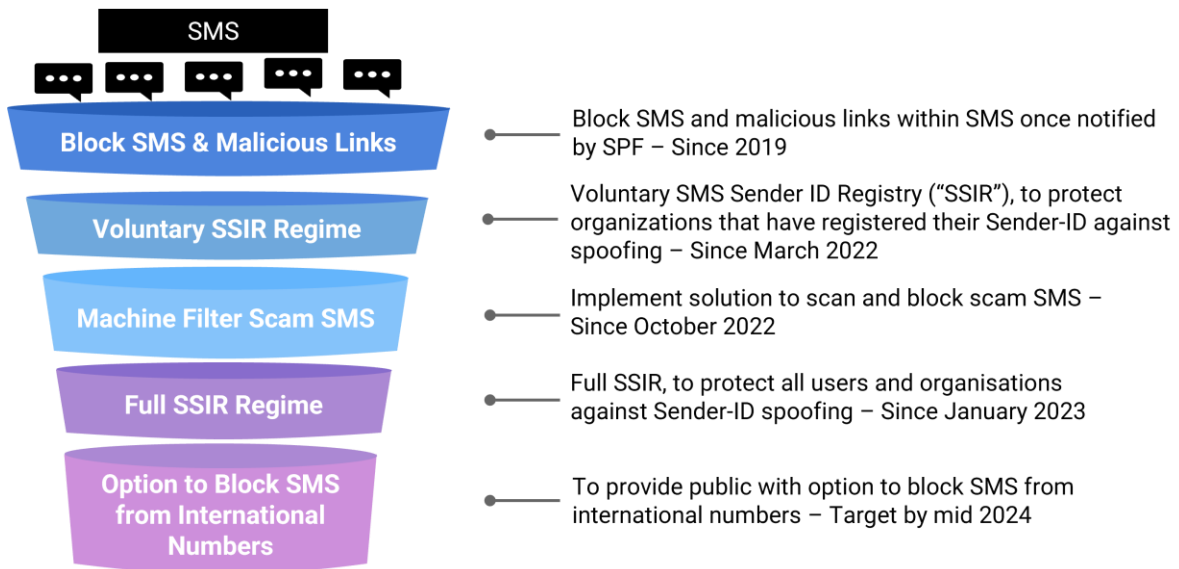
3. These past measures have proven effective in reducing scam calls.

- More than 300 million incoming calls from international numbers were blocked by IMDA's measures in the first nine months of 2023 (or more than 1 million calls per day), doubled compared to the same period in 2022.
- With existing measures, **one in every four incoming calls from international numbers are blocked** in the first nine months of 2023.
- Specifically, with the measures to address spoofing of local numbers using the +65 prefix, we saw a sharp decline in such attempts. Volume of calls with +65 prefix declined by 682 million within a year, a drop of 97%. Prior to implementation, there were around 700 million international calls with +65 prefix made to Singapore in the first nine months of 2022. Such call archetype has since fallen to 18 million calls in first nine months of 2023, of which 12 million of such +65 prefix calls were assessed to be spoof calls and blocked. This shows that measure is effective in deterring scammers from using spoofing of local numbers to conduct scams.

Multi-layered approach for scam SMS

4. To combat scam SMS, IMDA has partnered with Telcos to implement the following anti-scam measures:

- Blocking of known scam SMS and malicious links: Since 2019, Telcos have blocked SMS and malicious links within SMS once notified.
- In-network solution to filter scam SMS: Since 2022, Telcos have implemented in-network scanning solutions to identify and block scam SMS.
- Implementing full SMS Sender ID Registry (SSIR) regime: Since 2023, Sender ID registration is mandatory for all organisations that use Sender IDs, with un-registered Sender IDs labelled as “Likely-SCAM” to alert the public.



5. These measures have proven effective in reducing scam SMS.

- As of Dec 2023, there are close to 4,000 merchants who had registered with the SSIR up from 198 merchants in October 2022 when the full SSIR regime was first announced.
- The SSIR regime has been successful in reducing the number of SMS scam cases, with a decline of 70% in the three months since the implementation of mandatory SSIR on 31 Jan 2023.