

# MONETISING SMS TRAFFIC WITH A ROBUST SMS FIREWALL SOLUTION

AIRTEL'S GLOBAL  
MESSAGING SUITE



Over the last few years, leading ISVs, content companies, e-commerce firms, and organisations from other varied industries ranging from automobiles, to transportation, to healthcare, have increasingly started using SMS as a platform to communicate with their customers.

This has resulted in an explosion in the adoption of SMS as a medium of choice for sending one-time passwords (OTPs), two-factor authentications (2FA), transaction alerts, promotional marketing messages, and delivery confirmations, to name a few. According to research firm Ovum, the number of A2P messages sent is expected to touch a staggering 2.2 trillion this year.

However, operators are losing a substantial chunk of the revenue from A2P messaging to entities which use grey routes to terminate the traffic. This grey routing can be in the form of entities or aggregators using SIM boxes to generate A2P messages in bulk and sending them to individual mobile subscribers as if they are P2P messages. Some even use the SS7 network by getting a global title and pretending to be a network operator to send A2P messages in the garb of P2P messages.

This not only means millions of dollars lost in termination fees, but also increases costs and takes up precious network capacity of mobile operators. Mobilesquared estimates the grey route A2P SMS traffic to have been worth \$3.3 billion in 2016 alone and projected upwards of \$82 billion between 2015-2020, with each individual mobile operator losing \$17 million per year, on an average. This is despite the increased deployment of firewalls and other security measures by the operators.

## CHALLENGES:

For an SMS firewall service to function effectively, operators need to have the capabilities to reconcile message count and billing. And the operators need to review their contract with partners that might allow free termination, else it will dilute the effort of the SMS firewall implementation. However, if implemented properly, these managed SMS firewalls can effectively safeguard the mobile network and give the operator much needed visibility and control over the volume and type of A2P SMS terminating in their network. They can also apply complex filtering rules to prevent spam, faking, spoofing, etc. as and when required, which safeguards their customers.

Besides, managed SMS firewalls can dig down into the actual body content and find recurring patterns and visualise these in an understandable way. Additionally, they can withstand all the other known SS7 vulnerabilities, which can potentially be exploited to commit fraud.



To address this, Airtel Global Business offers a robust SMS firewall solution which allows mobile operators to effectively manage, analyse, and monetise the message traffic. The solution provides innovation in the approach of achieving this unique ecosystem of alliances for SMS termination with major global carrier groups, which has enabled direct connections with over 100+ global operators' footprint, along with a reach of 1200+ destinations. This unique partnership model with carrier groups enables a robust and wide reach of delivery network. We have

leveraged on our triple assets of carrier partnerships, technology prowess, and the global TDM/IP network to put together a leading solution for direct, dedicated, and dependable connections to our SMS clients.

Airtel Message Hub acts as a gateway to enable the exchange of SMS between MNOs (Mobile Network Operators) and/or enterprises, as well as a Managed A2P SMS Firewall solution that empowers MNOs to effectively reduce SMS threats and frauds, and reclaim revenue leakage to grey routes. Airtel SMS Firewall solution provides a comprehensive set of filtering techniques designed to deliver a robust blocking policy in order to ensure revenue assurance and a better customer experience. Our solution enables the operator to monitor both inbound and outbound SMS traffic. It provides a blocking functionality based on various domains including content, calling/sender ID, calling and called global titles. It also provides a bulk/pattern detection functionality and fraud prevention mechanisms such as anti-spoofing, anti-faking, etc. The solution has blacklisting, whitelisting, active, and passive capabilities.

Besides its blocking and monitoring capabilities, the solution also has extensive analytical and statistical tools enabling the user to extract the required data and present such information in the format (reports, alarms, etc.).

Intuitive and easy-to-use, Airtel's control and administration panel – the Intelligent Management Suite (IMS) – gives access to all the SS7 traffic data from across the network in real-time, providing a complete overview to help identify fraud and SS7 vulnerabilities on the network.

With the IMS, one can configure all SMS and SS7 firewall modules from a single location. This enables the user to configure the required firewall settings to ensure maximum protection for subscribers, optimise network performance, and enhance A2P SMS revenue assurance.

At Airtel, with the experience of being both an operator and a global carrier, handling a huge customer base globally and managing partner base of global carriers, we are in the best position to understand and resolve another operator's challenges in ensuring a seamless experience for their mobile subscribers while protecting them from unwanted traffic.

# AIRTEL MESSAGE HUB

## The Airtel Advantage



Complex roaming agreements which also incorporate messaging are a major challenge for telecom operators today. It entails multiple payment schemes, coordination of routing policies, legal and regulatory requirements, and coordination of routing policies. SMS hubs enable telecom operators to increase the global connectivity without preparing any bilateral roaming agreements. The planning done by an operator to enhance the coverage of their SMS facility does not need to manage various bilateral agreements. The SMS hub can be used for tapping new markets and enabling interworking between the operators.

The expansion of products and services portfolio from an operator requires increased costs and concerns. The SMS hub eliminates the requirement of investing or scaling up of existing infrastructure while the operators connect to them. The requisites include leveraging the existing technology, software and hardware resources. This omits the requirement to invest in operator specific resources leading to saving on an operator's CAPEX.

For most of the telecom operators, managing the high volume of SMS traffic is a significant challenge. With the new-age SMS hub gateway, subscribers are free to send and receive messages locally as well as globally with the same ease. This is well-enabled by the platform's resilience and high quality, and can help telecom operators to enhance their revenue and realise the additional cost efficiencies. MNOs get protection from grey routing and securely monetise on A2P traffic termination, adding to their bottom line. Customers get insights and reporting on the daily usage, billing & QoS reports via GUI based enhanced online reporting tool.

# ABOUT AIRTEL BUSINESS

## #EmergingMarketsDecoded

A global telecommunications provider and 3rd largest mobile operator in the world, Airtel is engineered for speed and dedicated to delivering tailored solutions for your business. We provide state-of-the-art voice, data connectivity, cloud, and digital solutions unlocking the business value in emerging markets with complete agility, transparency, and execution excellence.

Airtel Global Business caters to carriers, telcos, OTTs, large multinationals, and content owners globally. More than 1200 leading global carriers as partners place their trust in us. Supporting these large companies takes strong global processes, seamless network, and teams qualified to serve across borders, languages and varied infrastructures with extensive presence in the emerging markets of Africa, Middle East and Asia.

Our success across geographies and diverse customers has been possible largely due to our strategically-located 10 large and 130 edge datacentres, 65 global PoPs, capacity in 30 international cables with 2,50,000 route Km of global network and 7+ Gbps satellite capacity – enabling our customers to connect across the world, including hard-to-reach areas providing our customers with connectivity, anywhere and everywhere in the world.



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