



MOBILE : MOBILE MESSAGING EXCHANGE

ESTABLISHING A2P MOBILE MESSAGING ON YOUR TERMS

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THE BACKGROUND

Application-to-Person (A2P) messaging differs from the Person-to-Person (P2P) messaging category in a number of ways. Industry forecasts indicate a strong and sustained A2P messaging growth curve in terms of volume and revenue – with robust future growth potential. While OTT messaging alternatives are impacting on traditional P2P messaging usage and volume. Despite the opportunity, A2P messaging originators face multiple challenges and need to continually explore new ways to improve delivery cost, maximise margins, enhance message delivery quality and ensure maximum reach.

THE PROBLEM

The key to maximising value from A2P SMS origination lies in the ability to secure quality SMS delivery routes, together with extended global destination reach. And the messaging originator needs to have the option to terminate messages on as many mobile networks as required. It may not always be easy to ensure access to quality global routes while retaining commercial flexibility, but this dual objective is nevertheless important for commercial success.

An A2P messaging originator also needs predictable SMS delivery with the option of two-way SMS exchange across the same established links. With the A2P messaging environment maturing fast, quality and reach – rather than just reach itself – is the goal. While protection against traffic blocking or degraded delivery quality is also important.

A fragmented messaging originator environment requires managed inter-connection and control. Although mobile network operators (MNOs) recognise the commercial A2P SMS opportunity, end customer experience and network protection against spam and fraud are also important factors. And this is where a trusted intermediary can add assurance into the A2P messaging process. Limited mobile network reach and trust in commercial relationships with MNOs are significant challenges to overcome. Without an SMS firewall reassuring the message terminating operator, the trust issue can become acute. Messaging originators can also face long delays getting access to particular destinations, unless they already have an established direct commercial relationship with an MNO. Even after agreement is reached with an MNO to terminate traffic on its network, there can be technical issues to be resolved to connect to SS7 signalling.

These challenges shape the main priorities for an effective A2P messaging platform, namely:

- Supporting high-quality signalling message termination to multiple, global destination networks
- Predictability in terms of known destinations for messaging termination
- Single point of distribution for SMS traffic, to minimise administrative effort and cost

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THE ALTERNATIVES

There are various ways to send A2P SMS traffic, each of which has its own disadvantages:

- A Mobile Network Operator can establish their own proprietary SMS termination ecosystem, which of course requires investment and specialist expertise. This option involves setting up GSMA AA.19 agreements, SMS assurance processes and an SMS firewall. It also requires specialist expertise to establish and manage the partner ecosystem. Unfortunately this proprietary approach does nothing to improve trust with messaging originators or enhance their reach.
- As a messaging originator you can work to establish direct SMS termination agreements with multiple MNOs. However, this model is limited as it does nothing to resolve the challenges of establishing global destination reach or trust with MNO partners.
- You can work with open connectivity SMS hubs, which are normally employed for P2P messaging between MNOs. Using a P2P hub for A2P traffic poses many challenges. This model typically does not cover bilateral SMS agreements, where SMS bypass can take place. And SMS Hubs may not differentiate between or disclose the mix of P2P and A2P traffic to the terminating networks. Issues around the way that the hubs provide (or don't provide) effective SMS security and firewalling can also arise.

A SIMPLER, ONE-STOP SOLUTION

Tata Communications Mobile Messaging Exchange enables the creation of a dedicated A2P messaging hub type model, with access to global, quality messaging routes. It makes the most of Tata's own commercial relationships with MNOs and delivers A-Z network reach

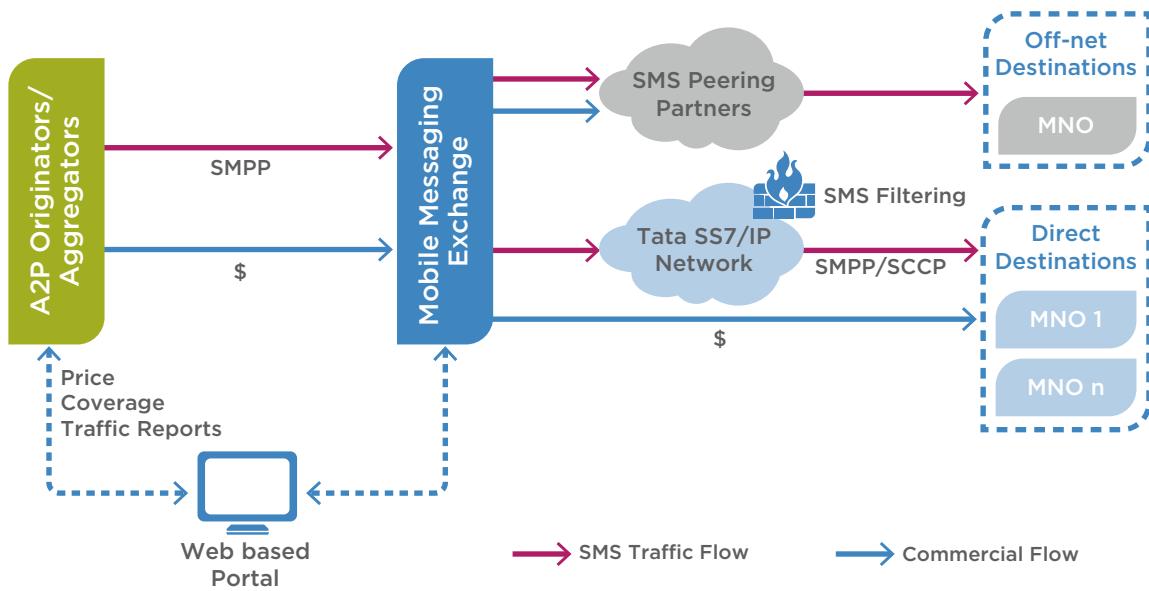


Figure 1: Tata Communications Mobile Messaging Exchange Traffic and Revenue flows.

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Mobile Messaging Exchange works very simply:

1. A messaging originator buys capacity to terminate SMS into mobile networks from Tata Communications.
2. Tata provides comprehensive rates for each network and rate change notifications with advance notice.
3. The messaging originator connects via the Mobile Messaging Exchange and sends A2P SMS to Tata Communications for agreed destination network termination.
4. Online reports detail all terminated and delivered SMS.
5. Tata Communications raises an invoice for the settlement based on the number of SMS sent and rates agreed – at the end of an agreed cycle.

Adopting Tata Communications' hub model for A2P messaging means working with a single party and trusted super aggregator. This makes it easier to secure access to global routes, along with more commercial flexibility through payment options that include per SMS charging, as well as pre-paid and post-paid models. A messaging originator can choose per destination pricing and send to as few, or as many destinations as required. And a three-day standard price change advance notice, as well as fixed duration price options, offer pricing stability if needed.

Tata Communications provides global destination reach and quality routing and termination, maximising its own MNO relationships (established over decades in some cases) as a trusted service provider. Their Mobile Messaging Exchange offers a transparent A2P SMS-only business model with no blending of P2P and A2P traffic. And they pay for A2P SMS termination at agreed rates and maintains relationships with on-net aggregators and OTT service providers through its global signalling network.

WHY TATA COMMUNICATIONS MOBILE MESSAGING EXCHANGE BREAKS NEW GROUND

Tata Communications has established direct signalling connectivity with more than 300 MNOs for conversion into direct termination agreements. It extends its global connectivity via peering agreements, ensuring all licensed MNOs are reachable. Well established relationships with hundreds of global MNOs mean reduced time to market that's attractive for every ambitious messaging business.

Tata Communications integrates a fully featured SMS firewall as part of its mobile messaging exchange platform. It's important trust element when terminating messages, ensuring spam and potentially fraudulent messages are filtered and removed.

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THE OPPORTUNITY

Imagine you're the partnership manager at imaginary A2P messaging aggregator A2B SMS, a multi service messaging and online marketing business. Your managing director has briefed you to quickly develop new international routes for SMS traffic termination, while keeping costs under control and ensuring SMS delivery quality.

While the MD has ambitions to grow the business quickly, the reality is that it will not be so easy to identify and get agreement with the right network operator partners.

By working with Tata Communications and using Mobile Messaging Exchange, A2B SMS can achieve a number of objectives swiftly and simultaneously:

- Deliver high-quality and predictable SMS termination with a large number of mobile network operators quickly
- Reach new geographical markets with lower OPEX and a predictable termination cost
- Achieve high-quality SMS termination through easy, SMPP standard integration. Because Tata Communications has an established commercial relationship with MNOs, this also ensures no blocking of Global Titles

There's even more good news. On-boarding and integration demands few additional resources - and can be completed in weeks rather than months.

CREATING A NEW WORLD OF COMMUNICATION™ THROUGH INNOVATION

Tata Communications is a leading global provider of New World Communications™ to multinational enterprises and service providers, including: voice, data, and mobility solutions; network services; managed security; content management; media and entertainment services; and cloud and data centre services. It has offices in 31 countries, 7,750+ employees working across five continents and 44 subsidiaries in 33 countries.

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