



## ***Is it Time to Unbundle SMS?***

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Mobile Network Operators (MNOs) might not like the idea, but as the industry transitions to 3G - and as regulators continue to scrutinize competition in mobile markets - the idea of unbundling short message services (SMS) so that subscribers can opt to route their SMS traffic away from their network operator and via an alternative provider, becomes compelling.

A mobile subscriber may be satisfied with the voice and data services they receive from their existing mobile network, but may wish to take advantage of cheaper SMS services from an alternative provider. Should the market be regulated to allow it?

Certainly such an idea is attractive for the growing band of Mobile Virtual Network Operators (MVNOs), mobile service resellers and independent message aggregators. Being able to run their own services (or contract out to a provider of choice) would enable these players greater control over pricing and allow them to introduce services and service bundles that are not viable under current arrangements. Large corporates too might benefit by running and controlling their own SMS services and making large savings.

Even the MNOs themselves might benefit in the longer run. While unbundling SMS will doubtless cause revenue losses as users churn off to take advantage of the lower prices available from competitive SMS operators, those new operators just might extend the life of the format by entrenching SMS into new mobile applications.

One thing is clear: unbundling SMS would be comparatively easy.

In a mobile-to-mobile exchange of SMSs, the sending subscriber's mobile network operator conveys the SMS from the subscriber's phone to a Short Message Service Centre (SMSC). In regulatory terms this is the Mobile Origination (MO) stage and is followed by a Mobile Terminated (MT) SMS stage where the message is delivered to the destination phone on the same or another mobile network.

The SMSC used by a subscriber's mobile telephone is determined by the SMSC address programmed into the subscriber's Subscriber Identity Mobile (SIM). This is usually preset by the subscriber's mobile network operator to point at one of its own SMSCs, but it can easily be addressed to any other SMSC provided the system is sited on an interconnected network and is 'permitted' by the target SMSC.

Billing is also straightforward. MNOs typically bill their subscribers for sending an SMS, regardless of the delivery outcome of that message. The billing record is generated by the Mobile Switching Centre (MSC) as the Mobile Originated SMS travels across the network to the SMSC and a billing event occurs regardless of which SMSC the SMS goes to.

However, the mobile operator can obviously be selective and bill SMSs differently according to which SMSC is used – an SMS sent to the SMSC of another network, for instance, might generate a wholesale SMS billing record to be billed to that SMSC's MNO instead of a retail billing record charged to the subscriber.

Currently mobile network operators tend to prevent their own SMSCs from being used by the subscribers of other mobile networks since they wouldn't receive revenue for providing the service and they claim that such restrictions effectively prevent billing fraud. However, some mobile networks do allow MO SMS to be received by their SMSCs from mobile subscribers of other networks - in reality, since billing is performed by the operator's MSC, all SMSs are billed by the mobile network of the mobile subscriber.

Despite this some mobile networks have been using the fraud argument to implement barring. For instance, after 11 years of allowing its customers to use third party SMSCs, last Summer Vodafone UK implemented a bar on the practice: a move perhaps not unconnected with the announcement <sup>1</sup>by a UK SMS aggregator of its intention to compete in the “Mobile-to-Mobile SMS” market.

So unbundling is feasible – but is it desirable and is there a chance that it may eventually be implemented?

Unbundling and other pro-competitive measures, such as carrier pre-selection and local loop unbundling, are regulatory options to create competition where it's lacking and have so far been used to free up wireline monopolies.

Mobile telephony is clearly a different case - in most advanced markets there are multiple network operators and an increasing number of ‘virtual’ network operators to create diversity and price competition. So given that the market is ostensibly highly competitive do users need pro-competitive regulation to help them get a better deal?

In fact, diversity of suppliers is no guarantor of a properly competitive market - factors like technical complexity, opaqueness around service pricing and general consumer inertia can act as a brake on meaningful price competition in any market - and mobile telephony is no exception.

While it's true that if customers aren't happy with one operator they can move to another, in the real world this level of choice doesn't necessarily translate into the textbook competition that produces benefits for customers. In fact mobile network operators have been remarkably successful at maintaining pricing levels despite competition, not least in mobile-to-mobile SMS pricing. At around 10p per message retail and 3p per message at wholesale rates,

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<sup>1</sup> HSL Announce Entry into Mobile-to-Mobile SMS Market to Compete with UK Mobile Network Operators (<http://www.hsksms.com/documents/HSL.MO.SMS.ANNOUNCE.20060426.html>; October 2006)

SMS messaging returns huge margins for MNOs given that the real costs per message are vanishingly small - half a penny per SMS message is probably being generous. As a result SMS, which can account for up to a third of a mobile operator's revenue, probably won't be given up without a struggle.

In practice the provision of mobile-to-mobile SMS by an alternative (3<sup>rd</sup> party) provider would be similar to Carrier Pre-Selection (CPS) in fixed line telecommunications. In order for an alternative provider to handle a subscriber's SMS the subscriber should have an agreement with the alternative provider for SMS in addition to their own mobile network subscription. This agreement would allow the alternative provider to bill the subscriber for the SMS the subscriber sends through the provider's SMSC. Instead of billing the subscriber for SMSs, the subscriber's network operator would bill the alternative provider at regulated wholesale rates (including a reasonable margin above the actual cost of SMS conveyance) for every SMS sent by the subscriber.

Unbundling SMS from the rest of the services provided as part of a mobile subscription should allow alternative providers into the market and create competition in mobile-to-mobile SMS on mobile networks, but as experience has shown in the fixed telephony market, there is plenty of scope available to the incumbent players to put up a fierce rear-guard action around terms and conditions.

For unbundled SMS to succeed it may well be necessary for mobile networks to be required to provide non-SMS equivalents of their existing tariffs. Such tariffs would allow a user to benefit from receiving their sending SMS service from another provider and for those providers to be able to effectively compete with the mobile networks. Without such tariffs alternative providers would be unable to compete, or compete at a very limited level, against subscriptions that bundle inclusive SMS messages.

Whatever the prospects for unbundling, MNOs will in any case face a variety of pressures around SMS.

In a world of ever-diminishing bandwidth and other network costs it will be increasingly difficult for MNOs to justify to both customers and regulators high pricing for SMSs, especially as they are themselves currently developing and marketing high bandwidth services such as multimedia messaging and video downloading which must operate at vastly lower bandwidth pricing levels to be attractive to users.

Then there is the transition to 3G where what are now thought of as services will start blending into increasingly sophisticated applications designed to run across 3G's high-bandwidth data pipes. Not only will users be tempted by alternative applications, such as mobile instant messaging, but smart phones will make it viable for disruptive SMS operators to distribute client software to take SMS origination off the SMS network completely.

While SMS will continue to be an important element of 3G service in its initial stages, unbundling SMS might ensure that it stays in the mix for the longer term.

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