# LTC Mini-Survey on SOA and IMS
# June 2007

## Introduction

Whenever a group of informed telecom people gets together these days, eventually one of two topics will creep into the conversation: IMS or SOA. Opinions on these two topics seem to vary widely, and are often forcibly expressed. So the team at LTC International Inc. thought that it would be interesting to gather some opinions on these hot topics in an informal survey of telecom industry experts. So, at the 2007 IQPC NGOSS Integration Summit in Boston and at TeleManagement World in Nice, France, LTC asked attendees to express their opinions on SOA and on IMS.

This LTC briefing document provides an overview of the results of this mini-survey.

In case anyone reading this is not a "telecom industry expert", some definitions of SOA and IMS are given at the end of this document.

[Note: This briefing updates our earlier report, which was based on IQPC responses only.]

## Results – SOA

The survey found a generally positive attitude to SOA, with almost all respondents identifying at least one benefit likely to flow from SOA. When asked to choose the area of most likely benefit, 60% of respondents thought that SOA will drive down the total cost of OSS/BSS ownership; 45% believed that SOA will enable significant improvements in OSS/BSS performance; and 31% said that SOA will create significant new revenue opportunities for service providers. (Respondents were allowed to choose more than one item.)


These responses suggest that SOA will benefit service providers, and indeed 67% of respondents said that service providers will derive real business benefit from SOA. At the same time a largish minority thought that business benefits would also reach OSS/BSS vendors (46%) and systems integrators (48%).

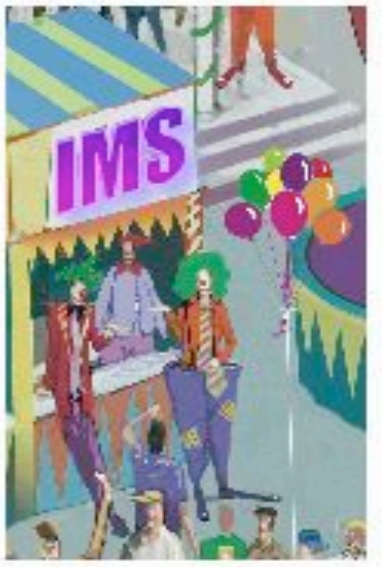
There was an interesting difference in the responses from service providers and the responses from others. In summary, non-service providers (OSS/vendors. SIs and others) were more likely to be optimistic about the benefits to service providers than service providers themselves were. For example, 38% of non-SPs thought that SOA would create new revenue opportunities for service providers, but only 18% of SPs thought that would be the case. And while 73% of non-SPs believe that service providers will derive

real business benefit from SOA, SPs themselves were less confident with only 58% of SPs suggesting that SPs would derive business benefit. Also 13% of service providers said that it was "too early to tell" where the real business benefits would emerge.

**Bottom line: Based on this mini-survey, people generally feel there is something in SOA for them. The big expectation is that service providers will benefit, mainly by reducing the total cost of ownership of their OSS/BSS environment.**

## Results – IMS

The respondents' opinion of IMS was also generally positive, though the picture is even less clear-cut than for SOA. Attitudes turned out to be a little more complex, with distinct variations between the SP group and the non-SP group.




Almost all respondents (95%) were able to identify at least one benefit from IMS. 63% suggest that IMS will create significant new revenue opportunities for service providers. However service providers were more bullish than others in this respect, with 76% of SPs expressing this view, but only 55% of non-SPs.

In other areas of benefit, there was more agreement between the two groups, and also more skepticism. Only 32% of respondents believed that IMS will reduce service provider costs; 19% that IMS will help service providers protect business models and markets; and a surprisingly low 12% said that IMS will help service providers reduce customer churn.

Despite the fairly strong vote in favor of the view that IMS will increase revenues for SPs, there was a less confident attitude to the the ability of IMS to generate "real business benefit". Only 55% said that large incumbent service providers would benefit, and an even smaller percentage (28%) suggested that smaller SPs and new entrants would benefit. Service providers were once again more optimistic than others. 66% of SPs thought that large SPs would benefit (against 48% non-SPs). 32% of SPs thought that small service providers would benefit (against 25% non-SPs).

No one suggested that OSS/BSS vendors or systems integrators might benefit from IMS. Some respondents, but only 27%, thought that network equipment vendors would benefit. This low vote is somewhat surprising, because if network equipment vendors don't make money out of IMS, why should they build the components?

**Bottom line: based on this mini-survey, the big expectation, especially from service providers themselves, is that IMS will help the large incumbent service providers create new revenue opportunities. There is no dominant feeling that SPs will derive**

**significant business benefit in other ways, and indeed no strong feeling that others, specifically the vendor community, will benefit.**

## Survey details

This mini-survey was based on a random sample of 98 telecom industry experts at the IQPC NGOSS Integration Summit held in Boston, Ma, USA in March 2007, and at TeleManagement World held in Nice, France, in May 2007. Of those sampled 39% were from service providers, the remainder represented mainly BSS/OSS vendors (33%) and systems integrators (18%). Equipment vendors and others amounted to 10%.

The results represent a snapshot of opinions expressed by the sampled delegates at that time, and do not necessarily provide a fully representative indication of opinions in the wider telecom community today. To increase the sample size and breadth of representation, LTC plans to repeat the survey at other venues and on the LTC web site.

Key findings from the survey are tabulated below. All numbers are percentages of the relevant number of respondents. Percentages add to more than 100, because respondents could choose multiple options.

| In my opinion, SOA (Services Oriented Architecture) … | All | SPs | Non SPs |
|---|---|---|---|
| … will enable significant improvements in telecom OSS/BSS performance. | 45% | 47% | 43% |
| … will drive down the total cost of OSS/BSS ownership. | 60% | 63% | 58% |
| … will create significant new revenue opportunities for service providers. | 31% | 18% | 38% |
| … will deliver none of the above. | 8% | 16% | 3% |

| In my opinion, SOA will deliver real business benefits for… | All | SPs | Non SPs |
|---|---|---|---|
| …Telecom service providers | 67% | 58% | 73% |
| …BSS/OSS system developers/vendors | 46% | 45% | 47% |
| …Systems integrators | 48% | 45% | 50% |
| …Others | 2% | 5% | 0% |
| …None of these | 2% | 5% | 0% |
| …Too early to tell. | 9% | 13% | 7% |

| In my opinion, IMS (IP Multimedia Subsystem) … | All | SPs | Non SPs |
|---|---|---|---|
| … will create significant new revenue opportunities for service providers. | 63% | 76% | 55% |
| … will reduce service provider costs. | 32% | 34% | 30% |
| … will help service providers protect business models and markets. | 19% | 16% | 22% |
| … will help service providers reduce churn. | 12% | 13% | 12% |
| … will deliver none of the above. | 5% | 3% | 7% |

| In my opinion, IMS will deliver real business benefits for… | All | SPs | Non SPs |
|---|---|---|---|
| …Large incumbent telecom service providers | 55% | 66% | 48% |
| …Smaller service providers and new entrants | 28% | 32% | 25% |
| …Network equipment vendors | 27% | 24% | 28% |
| …Others | 0% | 0% | 0% |
| …None of these | 5% | 0% | 8% |
| …Too early to tell. | 17% | 26% | 12% |

## Definition - SOA

SOA is "Service-Oriented Architecture". SOA is not a telecom-specific concept. While most people in the IT industry seem to have a pretty good idea what they mean by SOA, there is not one universally agreed definition. Of the many definitions out there, one we like is from Malte Poppensieker, slightly amended by Joe McKendrick (http://blogs.zdnet.com/service-oriented/?p=490):

"In Service-Oriented Architecture autonomous, loosely-coupled and coarse-grained services with well-defined interfaces provide business functionality and can be discovered and accessed through a supportive infrastructure. This allows internal and external system integration as well as the flexible reuse of application logic through the composition of services to support an end-to-end business process."

One of the simplest definitions comes from http://service-architecture.com: "A service-oriented architecture is essentially a collection of services. These services communicate with each other. The communication can involve either simple data passing or it could involve two or more services coordinating some activity … A service is a function that is well-defined, self-contained, and does not depend on the context or state of other services."

For a number of links to other definitions of SOA, go to the Wikipedia page (http://en.wikipedia.org/wiki/Service-oriented_architecture).

## Definition - IMS

IMS is "IP Multimedia Subsystem". IMS is a network architecture that evolved from work initially carried out by 3GPP in the wireless domain, and has evolved with the participation of other bodies, notably TISPAN and IETF (e.g. the sip and sigtran working groups) into a functional architecture for next generation networks; detailed specifications of IMS components and functions can be found on their web sites. Other useful links to specs are available from tech-invite.

IMS has been described variously as an architecture, an emerging set of standards, a bundle of technologies, or as a plan for revenue assurance. In some respects, it is all of these.


A straightforward non-technical description of IMS is provided on the web site of Data Connection Ltd: "The IP-Multimedia Subsystem (IMS) defines the functional architecture for a managed IP-based network. It aims to provide a means for carriers to create an open, standards-based network that delivers integrated multimedia services to increase revenue, while also reducing network CapEx and OpEx… IMS was originally designed for third-generation mobile phones, but it has already been extended to handle access from WiFi networks, and is continuing to be extended into an access-independent platform for service delivery, including broadband fixed-line access. It promises to provide seamless roaming between mobile, public WiFi and private networks for a wide range of services and devices."