IMS Deployment Update: Promise & Challenges

EXECUTIVE SUMMARY

From 2002 to 2006, IP Multimedia Subsystem (IMS) emerged from being a relatively peripheral standards activity at the 3rd Generation Partnership Project (3GPP) to being the core proposition for the delivery of new and converged IP services to both wireline and wireless telco customers. Then came the hard part(s): delivering compliant equipment; making the business case for specific IMS services; ensuring interoperability across network and vendor boundaries; handling the high signaling and message loads in IMS sessions; fitting IMS services into existing networks; opening IMS applications servers to third-party developers; and filling in the many standards gaps in areas such as service creation and orchestration, device clients, and business support systems (BSS) and operations support systems (OSS).

The early optimism about IMS’s impact on next-generation telecom services has quickly been replaced by outright skepticism in recent months. Not only is IMS running behind the schedule that telcos had optimistically set for themselves back in 2005, but there has also been rapid, and in some cases unexpected, developments in the mainstream Internet that threaten the very concept of IMS. For example, over-the-top (OTT) video services that include the kind of elements that are envisaged for IMS-oriented IPTV are putting pressure on telcos to come up with quick fixes – and no IMS or IMS-like service is yet adding value to IPTV. More fundamentally, the major benefit telcos expect from IMS – a better environment for the creation and deployment of applications – could be undermined by rapid development of more open and easier-to-use Web 2.0 software tools, which in principle allow existing telco services to be “mashed up” with elements derived from Website and application developers.

While noting their disappointment about the shortcomings in IMS to date, many voices inside the large telcos argue that there is no obvious alternative to IMS. Its basic objective – to create a controlled environment for the deployment of IP services that increase the value of the telco bundle – remains desirable. And while most telcos are taking a strong interest in Web-oriented developments as both a threat and an opportunity, no one yet believes the Web 2.0 environment is sufficiently robust to be used by mainstream telcos for revenue-generating, real-time services.

Concerns surrounding IMS go to the heart of the biggest issues facing telcos over the next five years. What is their role in the value chain? What are their unique strengths? What services should they supply to end users themselves? And how far does IMS help? Conflict and disagreement about the answers to these questions exists even within individual telcos, which in itself is delaying progress.

IMS Deployment Update: Promise & Challenges analyzes the progress made to date by network operators in deploying IMS technologies, focusing on the key factors that continue to drive IMS spending by carriers and the obstacles that remain for IMS to fulfill its initial promise as the
key enabler of next-gen integrated telecom services. The report also presents and analyzes results of an exclusive, worldwide survey of service provider professionals regarding network operator attitudes toward and spending plans for IMS technologies and products. Nearly 200 carrier professionals participated in the *Heavy Reading* survey, providing deep insight into their companies' plans to migrate to IMS.

**IMS Deployment Update: Promise & Challenges** profiles and analyzes IMS deployments by nearly two dozen network operators worldwide, including such major carriers as AT&T, Deutsche Telekom, France Telecom, and Verizon Communications. The report also includes an update and analysis of IMS deployments and contract wins claimed by leading vendors in the IMS sector.

Through a detailed analysis of telcos' stated plans for IMS, an interview program with key vendors, and a large-scale online and one-on-one survey program, this report builds a detailed view of service provider deployment of and plans for IMS, including:

- Key catalysts and barriers for deployment
- Favored applications for IMS
- Current deployment of IMS – equipment, scale, and key vendors

At the highest level, many telcos see IMS as the default architecture for the development of many next-gen IP applications, because there is no obvious alternative. For example, in a recent presentation, Deutsche Telekom said it had been "struggling to find a position in the Web 2.0 world," and that "we don't see any other way to go but IMS." Telekom likes IMS because it is an industry-wide standard that retains traditional telco values while opening up the IP applications world.

Telekom's view is widely held by other network operators, based on *Heavy Reading*'s research. The vast majority of service provider professionals surveyed by *Heavy Reading* characterized IMS as either essential or important to their respective companies' next-gen service plans, with the promise of new applications at the top of the list of the perceived benefits of migrating to IMS.

**Excerpt 1: Catalysts for IMS Deployment**

<table>
<thead>
<tr>
<th>Catalyst</th>
<th>Percentage of Respondents (N=179)</th>
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</thead>
<tbody>
<tr>
<td>Provide new applications that increase ARPU</td>
<td>90</td>
</tr>
<tr>
<td>Enable faster deployment of new services</td>
<td>80</td>
</tr>
<tr>
<td>Access independence</td>
<td>70</td>
</tr>
<tr>
<td>Reduce opex</td>
<td>60</td>
</tr>
<tr>
<td>Provide multimedia, feature-blending services</td>
<td>50</td>
</tr>
<tr>
<td>Lower cost of deploying applications</td>
<td>40</td>
</tr>
<tr>
<td>Serve new customer segments and markets</td>
<td>30</td>
</tr>
<tr>
<td>Prevent customer churn</td>
<td>20</td>
</tr>
<tr>
<td>Enable more flexible procurement</td>
<td>10</td>
</tr>
<tr>
<td>Reduce dependence on traditional vendors</td>
<td>0</td>
</tr>
<tr>
<td>Replace outdated infrastructure</td>
<td>0</td>
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</tbody>
</table>

*Source: Heavy Reading*
Excerpt 2: How Important Is IMS?

![Bar chart showing the importance of IMS in the context of IMS deployment.]

Source: Heavy Reading

**Report Scope & Structure**

*IMS Deployment Update: Promise & Challenges* is structured as follows:

**Section I** is an introduction to the report, with complete report key findings.

**Section II** examines the drivers for IMS deployment, laying out the primary catalysts and the key roles envisaged for new applications.

**Section III** explores the factors that are holding back IMS deployment, including barriers such as the unproven IMS business case and the lack of handset clients and interconnect agreements.

**Section IV** considers how far IMS deployment has come to date, including profiles of more than two dozen service provider IMS implementations and implementation plans.

**Section V** analyzes IMS deployment from the point of view of vendors, including profiles of what 11 major IMS equipment vendors have achieved to date.

*IMS Deployment Update: Promise & Challenges* is essential reading for a wide range of industry participants, including the following:

- **IMS technology suppliers:** How will the ongoing shifts in operator attitudes toward and plans for IMS deployment affect your business? What is the most likely timeframe for large-scale commercial rollouts of IMS, and which types of services and applications will be targeted first? Which carriers are making the firmest commitments to IMS, and how do their needs and requirements map to your IMS offerings?

- **Network operators:** How do your plans for IMS deployment compare with those of other carriers? Is your IMS transition strategy in sync with other real-world deployments, or is your organization running ahead or behind the IMS curve? Which technology suppliers are in the best position to meet your IMS requirements?

- **Investors:** What is the real opportunity for IMS technology suppliers in the next-gen services arena? Are pessimistic projections about IMS deployment creating an market opportunity to invest in IMS developers? Which carriers are moving forward to build the infrastructure necessary to compete with traditional and nontraditional service providers?

*IMS Deployment Update: Promise & Challenges* is published in PDF format.