



>THIS IS **THE WAY**

IMS Standards and Solution Openness A Nortel Perspective

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>THIS IS **NORTEL**



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- > Introduction
- > IMS overview
- > Nortel's approach on IMS: Truly Open Solution
- > OAM for IMS Converged Network: Nortel's vision and goal
- > Where we need IMS OAM Standards to go
- > Nortel continually increase the investment in China
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Introduction

- > **IMS is key to unleashing the power of the converged network**
- > **Nortel is committed to providing the truly open IMS solution**
- > **Network Management is key to unleashing the power of IMS**
- > **IMS Standards need to evolve to help us get there**
- > **The China Market will play a key role on IMS converged network**
- > **Nortel continually increase the investment in China**



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IMS Overview: IMS Drivers

Today's Networks Are Not Efficient



“Our capabilities are limited by the structure of today's networks..”

- Administration duplication
- Inconsistent services access
- Requires multiple devices
- Exponential learning curve



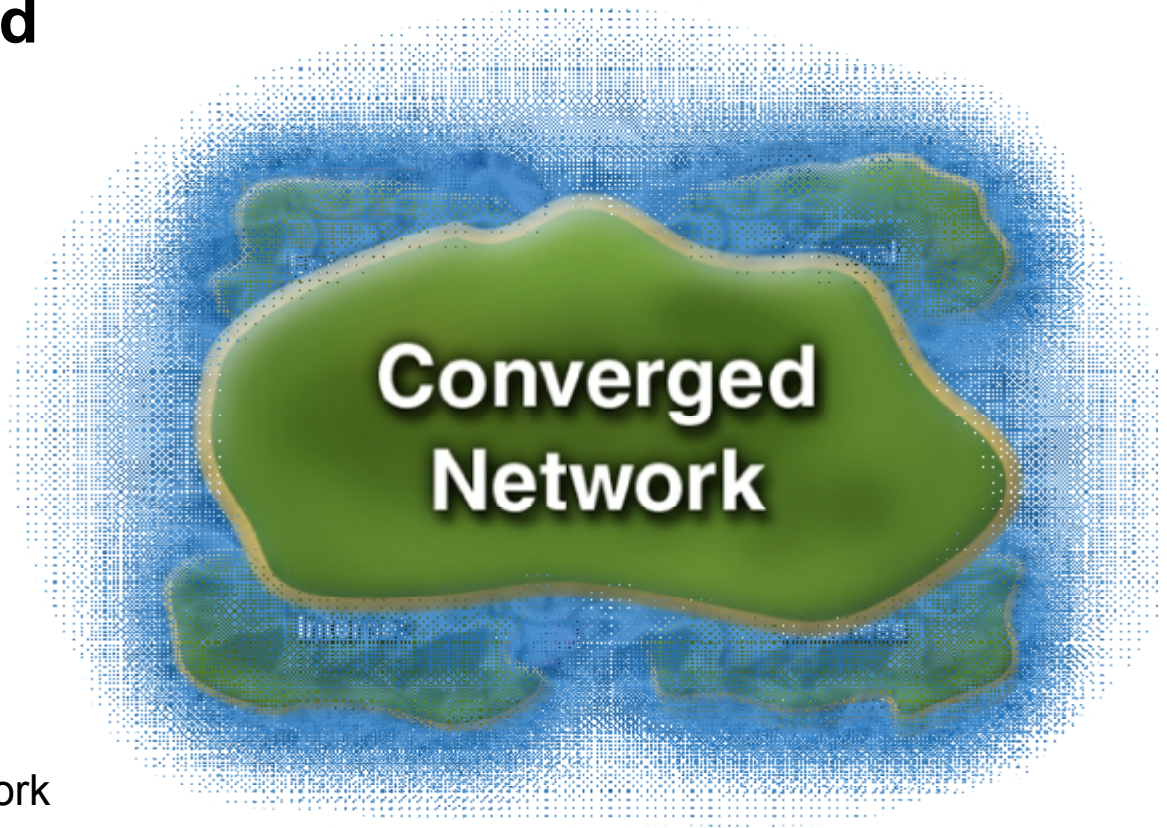
IMS Overview: IMS Drivers

We Can Rebuild Today's Network with IMS

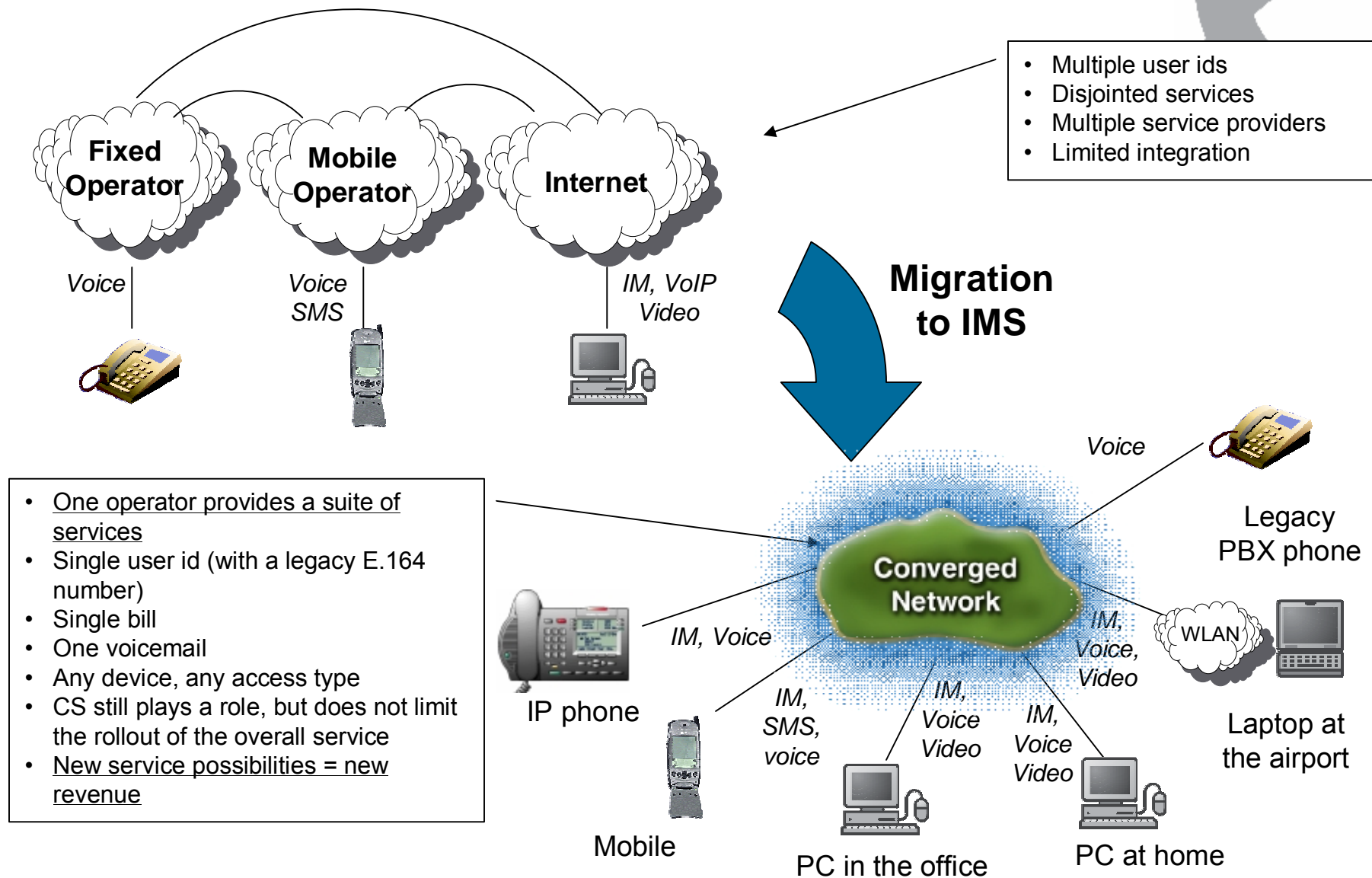


“IMS provides a common converged network infrastructure for seamless service delivery..”

- Single packet infrastructure for media and control
 - à Rich, multimedia services
 - à Simpler network
- Separation of control, apps and subscription
 - à Faster delivery of services
- Interfaces with the access network
 - à Access independence
 - à Advantage for “pipe” owners



IMS Overview: Transformation of services





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Why a Truly OPEN Solution?



- > To give you the **CHOICE** of your IMS partners
- > To build your solution, piece after piece, in accordance with multi-vendor approach and **STANDARDS**
- > To guarantee **ROAMING** between different IMS networks

Nortel acts as the Architect of your Unique, Customized IMS Solution

Open Solution

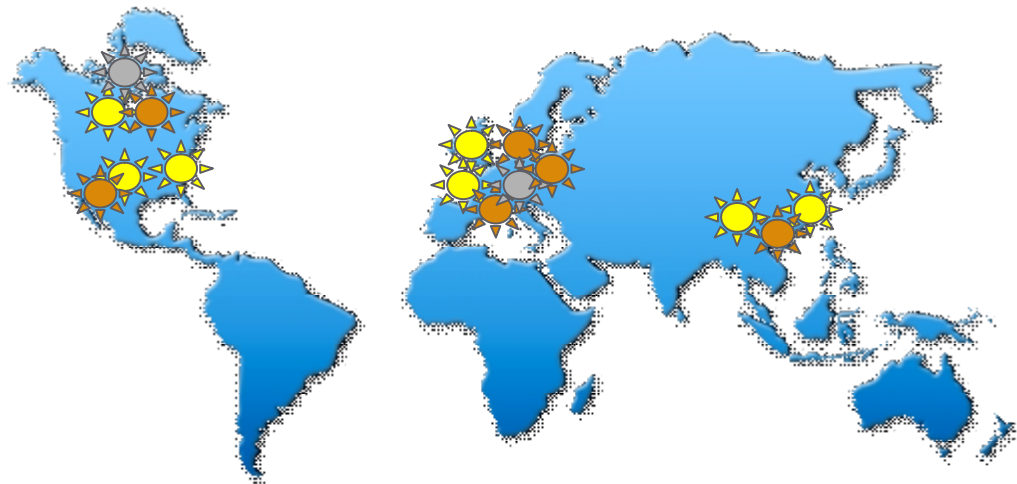
Nortel IMS Ecosystem



- Delivering programs and facilities confirming IMS interoperability and standards compliance
- Encourages the mass deployment of IMS compatible clients
- With strategic alliances which target emerging market opportunities

Nortel IMS Open Solution Sites

- ☀ 7 Interoperability Labs: including Beijing and GDNT
- ☀ 6 IMS Live Experience Centers
- ☀ 2 Joint Customer Innovation Centers



Dedicated Global IMS Open Solution Sites



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OAM even more critical to Converged Networks enabled by IMS



- > **IMS “virtualizes” the network**
 - Components that used to be parts of traditional “network elements” are being pried apart, and will be deployed as independent logical entities
- > **OAM is the glue required to allow network-based applications to exploit these logical pieces**
 - In the same way that Operating Systems allow computer-based applications to exploit the logical pieces of modern computers
- > **Converged Networks consists broadly of 2 independent sets of capabilities: service and transport**
 - IMS is expected to be the heart of the service capabilities
 - A set of IMS-supportive service (and application) management capabilities will be essential to the success of Converged Networks

Challenges in Managing Converged Networks enabled by IMS



- > Fulfilling diverse sets of OAM requirements across wireless (GSM/UMTS, CDMA), Wireline and Packet Cable (MSO) with a converged solution
- > Mix of Pre-IMS (such as legacy TDM/VoIP/R99/...) and IMS components
- > Changing market dynamics with more emphasis on Services and Applications Management
- > Correlating data such as billing records from several nodes in previously disparate networks and standards
- > Network evolution pace pushing the envelope for cost effective and rapid OAM integration
- > Converged Network Standards are currently immature
 - The standards for transport management are relatively well established and known
 - The standards for service management have a long way to go



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Where we need IMS OAM Standards to go



- > **Standardization of common approach for services fulfillment**
 - Standardize subscription management to simplify the process for subscribers
 - Define the method to rapidly activate the IP multimedia services for users
- > **Assurance of the IP multimedia services**
 - Define common service measurement to monitor and manage the QoS of IP multimedia services effectively
- > **Support of inter-networking between IMS and other networks**
 - Define the approach and information to support the management of truly converged networks
- > **Definition of Billing of the IP multimedia services**
 - Define common and flexible scenario for the billing of various IP multimedia services

Nortel's Commitment to IMS OAM Standard



- > Nortel actively involved in 3GPP SA5 and ITU-T SG4 to work with 3GPP2 and IETF for IMS OAM standards development and convergence over network resource model, performance management data and service management mechanism
- > 3GPP IMS (GSM/UMTS specific)
 - Enhancement and maintenance on network resource model
 - Create work task and contribute to IMS performance measurement and trace management
 - Develop subscription management to meet IMS operational requirement
- > IUT-T SG4 (NGN specific)
 - Enhancement and maintenance on transport network management
 - Target is to address service management issues brought by converged service platform and mechanism



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Nortel's commitment to China Market



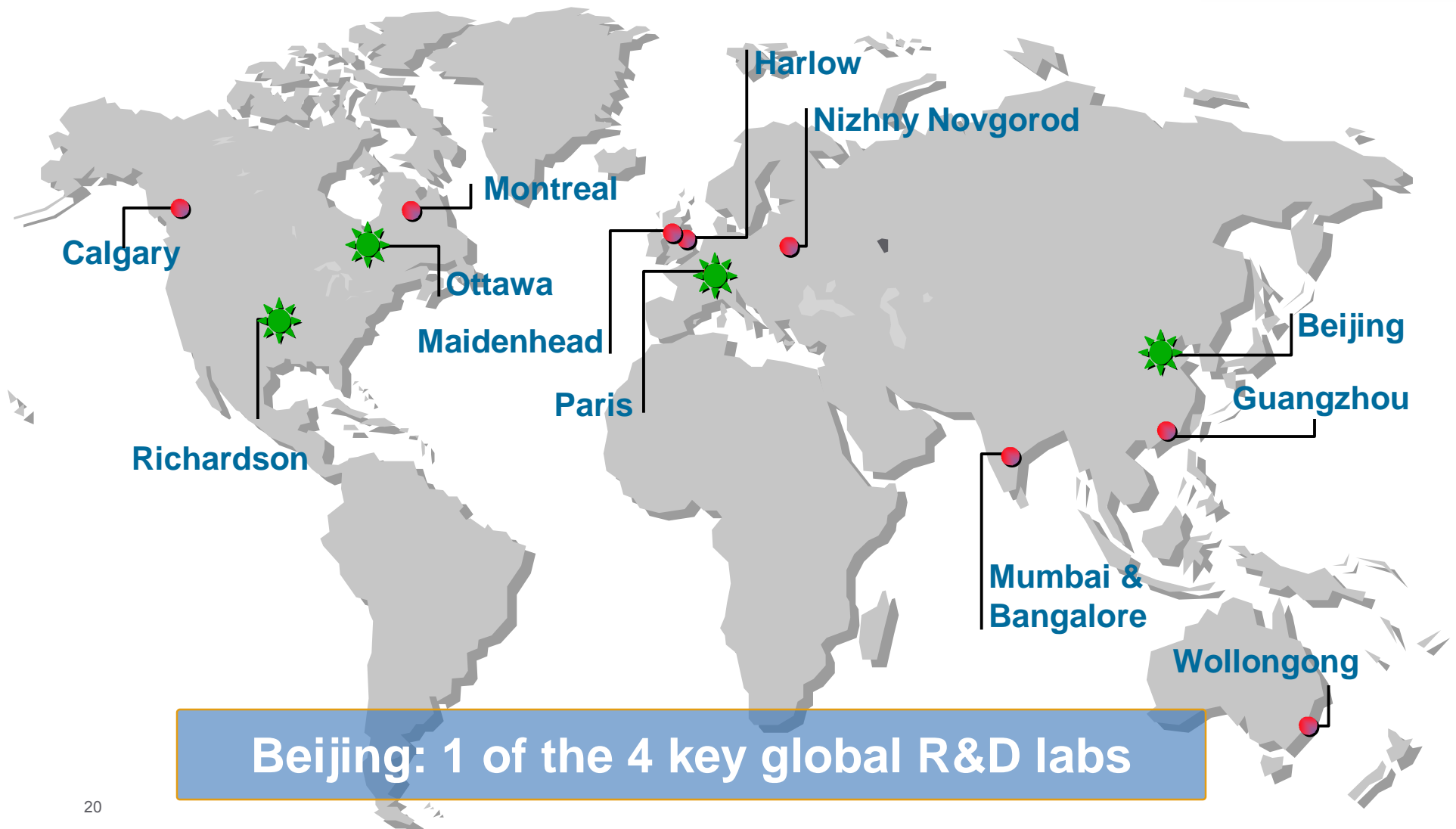
- > Nortel continually increase the investment in Beijing R&D Core Lab and GDNT Lab
- > Beijing is a key part of Nortel R&D lab strategy
- > World class OAM design and test capabilities
- > Team focused on product and customer success

Nortel BJ R&D OAM Team Mandate

To be a center of excellence for cross domain network management solutions, wireless solutions verification and to develop expertise in support of PRC customers



Nortel Major R&D Presence



Nortel BJ R&D Lab: A Key part of Nortel Global R&D



- > A Nortel Strategic lab focusing on**
 - **Global portfolio development**
 - **Supporting Nortel business and customers in Great China and Asia Pacific**
- > As a center of excellence in**
 - **OAM Solutions for GSM, UMTS, CDMA, Converged Network (including NGN and IMS systems)**
 - **Carrier Solution Verification**
 - **Broadband Access**
 - **Data and Enterprise solutions**
 - **End-to-End Wireless systems testing with support for customer IOT and trials**

Nortel BJ New Campus: Opening in July 2006



Q & A

