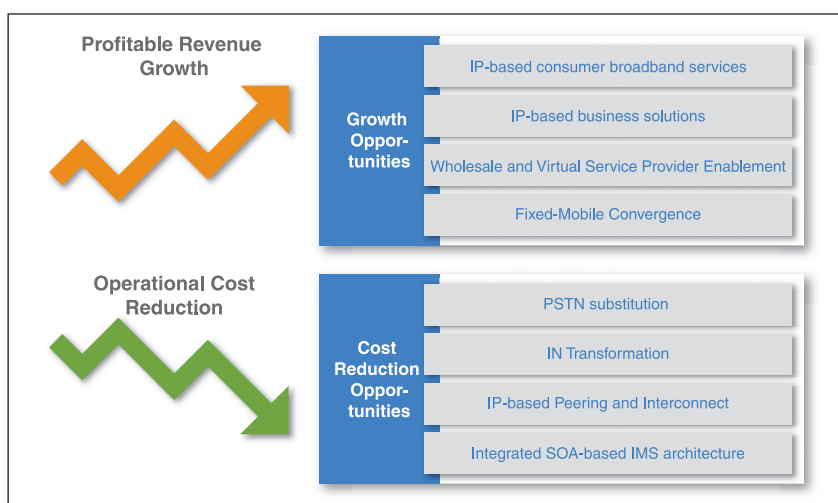


## IBM IMS-based NGN-Factory for network transformation



### Keep pace with the advances in technology

Faced with the imminent transformation of communications infrastructures in corporate networks it is essential to avoid bad investments – caused by the transformation of network technology among telecommunications providers. Every business decision in this environment begins with finding the right time as well as the most practical and at the same time the most future-proof technology.

### Meet the challenges with the IBM NGN-Factory

The IBM NGN-Factory developed by IBM Global Business Services implements the IMS control plane as part of a comprehensive control platform. Integral elements of this solution are:

1. the possibility of virtualizing all business customer relations,
2. SOA-based interfaces with the service planes and
3. comprehensive software for the control and monitoring of the access and transport layer.

As an example, services such as VoD, instant messaging or presence 'out of the box' can be integrated in the service creation platforms of business customers; therefore no costly implementation is required there. The IBM NGN-Factory can both replace the conventional telephone network, meeting regulatory conditions (PSTN/ ISDN emulation services, emergency services, Lawful Intercept), and also support the so-called fixed-mobile convergence (FMC) in this virtualized structure.

### Highlights

- **Support of convergence and substitution strategies for existing communications networks**
- **Best-of-Breed approach in conjunction with partner technology as open manufacturer solution**
- **Replacement of local exchanges (class 5 switch) and private branch exchanges (PBX)**
- **SIP-based peering with other NGN/network domains**
- **NGN-PBX solutions for business customers.**

### Innovation and cost leadership in telecommunications

Telecommunications providers nowadays face complex new challenges. Customer loyalty is fading and profit margins are falling. The operating costs for existing networks need to be reduced and new technologies need to be integrated as quickly and economically as possible. The services on offer need to be able to adapt flexibly to the changed market conditions. Customer satisfaction should be improved on a continuous basis.

With NGN (Next Generation Network) technology, telecommunications companies can seize new opportunities:

- *Cost leadership in the migration of existing customer solutions and products to NGN-technology*
- *Innovation leadership and increased sales through new, NGN-based, integrated products, equipment, services and processes.*

In addition to the IMS functions that can be used on the service plane and the possibility of integrating products from different manufacturers, the IBM NGN-Factory offers the technology necessary for a paradigm shift in the environment of NGN-based solutions. The attributes of such a shift are service-dependent defined quality as well as security and protection against misuse in a distinguished business segment. The basis for this is a solution open for multi-vendor strategies by using existing standards and even enhancing their possible uses by means of skilfull integration.

### **Support for flexible business models for telecommunications providers**

In addition to the IMS standards, the IBM NGN-Factory offers a whole range of upgrades that enable telecommunications providers to offer the same telephony features as those of PSTN/ISDN and therefore to replace this service without restrictions. Therefore also functions such as emergency calls and Lawful Intercept are implemented to comply with regulatory requirements.

Furthermore, the IBM NGN-Factory facilitates priority-controlled gateways (SIP peering) with partners for whom the best connections are automatically selected for outgoing traffic. For the protection of the user, their own topology remains hidden to external parties. The definition of 'virtual' providers (service providers and/or distribution channels) in the IBM NGN-Factory represents the basis for flexible business models, making the platform suitable for multiple mandators. The services and functional features can be individually configured for these virtual providers. This also includes user-related usage control with attribution to the provider. In addition to pure signalling (SIP), the media stream is also controlled. It is precisely in the context of a distinctive convergence strategy (one-stop shop) that the advantages of network-centric, secure, quality assured, device and access network independent personal communications take effect here.

In order to satisfy the operational aspects of a telecommunications company, the IBM NGN-Factory offers extensive management functionalities with high reliability and security – such as statistics, monitoring and a usage-based accounting facility.

### **Intelligent private branch exchange to reduce costs for companies**

The IBM NGN-Factory offers a range of interesting functionalities for use in medium-sized and large companies. Telephony features such as flexible call forwarding, ring-back and simultaneous ringing are supported, and additional services such as video telephony, instant messaging and presence are also available.

Whether it is used as a central telephone system, distributed or in conjunction with systems from other manufacturers, the IBM NGN-Factory provides cost-efficient communication over IP also on the Intranet. For external communication, the IBM NGN-Factory can be connected directly to a VoIP provider who provides the transition to the mobile and fixed networks.

As the IBM NGN-Factory is implemented on the basis of public Internet standards and is operated on standard IT systems, the investments remain protected in the long term. New functionalities can usually be developed by means of integration with existing applications and by simple software updating on the existing IT infrastructure.

### **IBM as the partner for your NGN-project**

We would be happy to advise you on the potential benefits of NGN-technology for your company in terms of cost, innovation and growth. We can inform you about how flexibly we can adapt cost-efficient standardized solution elements in line with your company's requirements. NGN-technology opens up interesting prospects for any business model and for any sector – whether it be financial services, automotive, energy or any other.

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