



## White Paper

### Carriers World Asia – 11-13 March 2008

International Carrier Sales & Solutions (ICSS)

[www.deutschetelekom.com/icss](http://www.deutschetelekom.com/icss)

## Moving away from the traditional carrier model for greater profitability

### From pure access provisioning to value-added multimedia applications

In today's rapidly changing international communications market, one thing is evident: the traditional carrier business model, which was based on pure access provisioning and traffic transport for a long time, can no longer be the answer to the diversifying demand of established and emerging wholesale buyers and their private or corporate clients.

The driving forces for change are well-known: they span from falling prices in voice and transport and fierce competition due to the market entry of new often virtual providers to the implementation of next generation technology in access and core networks and an increasing complexity of commercial relationships as value is shifting from transport toward content, applications, and multimedia.

Under these conditions in which IP is becoming the key enabler for all kinds of future-looking services, it is not astonishing that end customer behavior and usage patterns are changing, too. Social networking, mobility, and user-generated content are only some of the buzzwords to describe these changes.

Especially in far developed markets and rapidly developing economies such as the Asia-Pacific region, where broadband penetration is increasing at high rates, end-customer expectations go far beyond a single voice connection and Internet access: the use of a much wider range of applications from communications to entertainment, media, community services, and the purchasing of goods has become part of business and social life.

There is no doubt: the power is with the end customer, who expects high quality, speedy transmission, ease of use, and reliable, always-on services independent of access or device technology.

As the wholesale market is moving toward a retail-type structure in which the customer wants the best performance and the most satisfactory service, it is obvious that wholesale offerings have to fit into the new user-driven scenarios, too.

### Wholesale buyers need more than connectivity.

The telecommunications industry is merging with the content/media industry and thus leading to an extended supply chain where new virtual players such as content aggregators or MVNOs want to take their share of the value delivered to the private or corporate end customer.

Most providers' activities are therefore concentrated on the fixed and mobile broadband markets where next generation technology and flexible access speeds stimulate the use of new multimedia applications and convergent offerings.

In the Asian-Pacific region with its rapidly increasing economies, the developments in the fast broadband markets are at the forefront in every aspect. Higher margins are expected to come from interactive gaming, instant messaging, P2Psharing, IPTV, mobile TV, VoD, shared content, and multimedia bundlings, in most cases a mix of broadband, voice, and TV services and the user willingness to move to innovative applications is higher than in other regions of the world.

While established fixed voice carriers are eager to move their offering from PSTN voice to e-entertainment and broadband operators need to add more value to their basic Internet access, content providers want to bring their offering to the right partners/resellers and a larger end-customer base and mobile operators intend to extend their voice focused offering towards internet services, content-based applications, and personalized communication.

Each player has to review its positioning.

As the separation of transport and applications in an all-IP environment changes the perspectives for each single business, it is vital for wholesale providers to have a clear view and understanding of the different market segments and their specific developments, as well as the correspondent end-user expectations.

### **Enabling the future businesses of established and emerging wholesale buyers**

To keep up with the changing demand of the different market segments, wholesale carriers have to review their international strategy and positioning, too. They have to rethink their customer focus, infrastructure, and portfolio coverage, and increasingly need the capability to flexibilize and customize their offering to specific requirements.

ICSS, for example, expects the content, application, and multimedia, mobile, and broadband segments to increase their contributions to international wholesale significantly.

Apart from continuously serving its established carrier customers, the international wholesale division of Deutsche Telekom has therefore set a special customer focus on mobile operators, broadband operators, corporate services providers, and content and applications providers, including "virtual" wholesale buyers that don't have their own network.

These providers need high service flexibility and interconnection to high-quality international networks and platforms, allowing them to deliver QoS-based communications services to their end-customer base.

ICSS's competitiveness as a global wholesale provider therefore increasingly depends on its ability to provide the required performance level for each application (whether latency-sensitive voice, real-time online games, or bandwidth consuming video downloads), to deliver on-demand capacity, extended IP coverage for end-to-end solutions, and high-quality, innovative products and applications that bring additional value to its wholesale buyers and their various end customers.

### **Extended IP coverage and interconnection for end-to-end solutions**

Thanks to our international account management with cross-functional selling teams and our strong IP-knowledge base, we have the capability to address all these requirements individually. We do this by providing access to our refined high-quality international IP network and by offering scalable wide-area Ethernet connectivity, a technical IP presence close to our international customers access networks or even their end customers premises, extended IP VPN coverage through business partnerships such as the channel partner agreement with Vanco and a number of NNI interfaces to carrier customers in different regions, and value-added applications that drive or ease the use of multimedia offerings (such as soft-client voice solutions or online content payment methods)

In the Asian-Pacific region for example, the best possibility to leverage additional business opportunities and to get closer to the growing fixed or mobile broadband arena is – in ICSS's view – to develop solid business partnerships with strong regional or local carriers and to look into in-country broadband access developments in selected countries. ICSS is doing so by participating in innovative turnkey projects such as the development of next generation access infrastructures (e.g. FTTx, WiMax, etc.) with consultancy and project management know-how

### **Flexible IP services portfolio and customized offerings**

The extended high-quality IP infrastructure is one thing and the increased portfolio flexibility is another. Growth in international wholesale is expected to come from fixed and mobile managed services, content and multimedia enabling services.

ICSS is therefore continuously shifting the focus of its activities from basic voice and transport services to high-value VPN, value-added VoIP services, mobile data solutions, clearing, and aggregation services

In response to the increasing boom of multimedia and content-driven services, ICSS has been reshaping its product portfolio to take Web 2.0 developments into account and has started to introduce new services and features in the areas of VoIP, Internet access, private and public IP services, and content management (e.g. VoIP Reselling International, Bill-it-Easy, SMX). Responding to the phenomena of increasing demand for mobility for all kind of services, ICSS has developed a strong set of mobility solutions, including roaming and messaging exchange services from SMX, MMX, and GRX to WiFi Roaming. These services will all be migrated to our new IPX platform in 2008, which combines high flexibility with highest security in the IP backbone, offering end-to-end QoS, different classes of service and enabling interconnection between any fixed or mobile NG network.

We are thus in the process of stepping into new models like enabling services and intermediation while increasing our IP interconnection know-how to bridge the gap and provide innovative applications. This will also be the case in the context of the further progressing of our NGVI (Next Generation Voice International) project, which will allow us interconnection with all kinds of VoIP providers and the development of a variety of new IP-based wholesale services.

### **We see the market changes as an opportunity**

Market conditions will continue to change, however; the traditional wholesale business has definitely become a thing of the past. With more and more virtual providers in the retail markets, wholesale becomes even more crucial for retail and wholesale carriers that can leverage the needed economies of scale and guarantee the required performance levels for each application, e.g. through managed VPN services and end-to-end delivery, and for carriers that are in a good position, as the best effort model will no longer be sufficient. ICSS is very straightforward: it is reacting to these market changes and taking them as a challenge. It is prepared to shape the future through new, innovative platform-based services and processes to serve new players and new customer segments in the new wholesale generation.