



**‘IPX will become  
the inter-operator  
intranet’**

# SUCCESS WILL COME WITH THE ABILITY TO ADAPT TO CHANGE

Stephan Schroeder, VP Mobile, Internet & Content  
Deutsche Telekom ICSS

Deutsche Telekom International Carrier Sales & Solutions (ICSS) is one of the world's leading wholesale powerhouses. Its deep reach into Western and Eastern Europe, coupled with its rapidly evolving digital service offering, make it a wholesaler to contend with. I had the chance to spend some time with Stephan Schroeder, VP Mobile, Internet & Content at Deutsche Telekom ICSS, to discuss evolving trends in the wholesale industry. We also discussed the role the DT unit will play in assisting operators to take advantage of the digital revolution to grow their business and offer innovative services.

## EVOLUTION OF BUSINESS MODELS

*What is your view of the telecom industry over the next few years and how do you see DT ICSS' role in this evolution?*

There is one concept that is gaining traction: We are pushing for a market where the data dump of traffic that comes from OTT players and content providers generates compensation. If an end-user pays to subscribe to an application, he expects a service that works with predictable and controlled quality, and without congestion. We are therefore aiming to establish an open and transparent industry standard in order to ensure interoperable IP transport offerings with quality assurance across network borders.

Obviously, we will not block anyone's traffic, but rather guarantee or secure quality in exchange for compensation. We will not prioritise bits, but rather commit to capacity. There is definitely a value in a commitment of uncongested capacity, as this enables end-user quality to be better managed.

On the voice side, I think the days of arbitrage and least cost routing are probably numbered.

The current arbitrage game will undoubtedly be replaced by the support of end-to-end quality control, feature support and multi-service rich communication. This is an evolution we have also initiated within Deutsche Telekom. With the introduction of VoLTE, which will be supported by an IMS structure, a switch-to-switch handover may not be mandatory in the future.

This will generate difficult times for pure wholesalers, as they would not be able to make money from arbitrage anymore. In addition, a lot of the tradeable traffic will disappear into bilateral and group-to-group relationships over IPX, which will affect an even faster contraction of the trading market. This will consequently change the marketplace as we know it, as many players will not be able or even want to take the necessary steps to meet this new demand. The ones that continue playing the cut-throat arbitrage game will probably not survive in the longer term, as the margins to be made from that business are getting lower and lower.

Another key driver impacting our industry will be the verticalization of the networks, integrating enterprises and OTTs more deeply to give them access to some of our critical core network functions. If you are able to open controlled channels into core network functions of a mobile or fixed network or ecosystem, you allow OTTs to play under-the-top rather than only over-the-top, and this has a great value. This would enable them to better steer their services and also to provide enhanced services using user location information, for example. This is a trend that we are addressing, but we will require industry harmonization for that to occur on a large scale.

In parallel, we will see the evolution of telecom operators from CAPEX extensive transmission network builders to solution integrators. This will be partly realized by integrating partner solutions into our basic service portfolios. Within DT ICSS, we do not try to re-invent what others excel at, but rather build on other companies' expertise by integrating their solutions into our offering and move away from commoditized wholesale services.

### THE NEXT IPX WAVE

*What in your opinion will be the next big thing in IPX after LTE roaming?*

It took probably 10 years for the market to accept that IPX will become the standard for most hub-and-spoke mechanisms. However, what we see now, especially with LTE picking up, is that IPX will become the intranet between operators to interwork all kinds of services, which automatically turns IPX into a hub function. I therefore believe that, going forward, most of the current hub functions will be integrated within IPX. But more importantly, I would consider IPX to be the IMS interworking fabric.

Looking beyond LTE roaming, we can therefore segregate the next IPX innovations into two categories: retail generated and wholesale generated. The first being the support of retail services internationally, such as VoLTE and RCS (IMS-based messaging, file sharing or video). These are all functions that will be extrapolated from the national network itself to interwork via IPX. In my opinion, all new innovations coming from the retail side from now on will be reflected internationally via IPX.

The second layer will come from standalone wholesale innovations, which are generated from the inherent capabilities of IPX networks. IPX providers can add value by enabling visibility on the wholesale layer, for instance with real time analytics of big data. Currently, this is achieved over SS7, but it is exposed to a wide global audience with a lot of privacy issues attached to it. Compared to SS7 we have a chance to keep IPX more secure and private and therefore enable a growing number of service management features. I think we will see several innovations coming from this side of the business over IPX in the next 12 to 18 months.

reaction and adaptation. It is also important to start defining our proposition based on the use cases and benefits we deliver, rather than on the assets we deploy. If we translate this to wholesale, we should not see ourselves as a fiber and wavelength company, but as a connectivity enabler. Subsequently, we need to focus on enabling interworking and connectivity between the different players in the industry.

For that reason, DT ICSS is committed to developing solutions related to the logical and control elements of interworking, for our external customers as much as for our own affiliates.

## TIME TO ADAPT

*What do you find the most challenging/exciting at the moment in your role as an industry leader and what is the best advice you wish to pass on to our readers to achieve success in business?*

Cornerstones of our industry are melting in the sun, such as termination revenue for voice services, so it is time to adapt to our new reality and constantly question our assumptions. Operators are going through growing pains, but if they are able to re-invent themselves, they could come out of this evolution rejuvenated and stronger. The OTT phenomenon may be very different 10 years from now, but we will continuously be challenged. Nevertheless, through this evolution, there will always be requirements for interworking services and connecting networks, something we excel at.

As a result, we have to become more agile to respond to these market changes and consequently have to change our speed of