



## **TSB DIRECTOR CxO MEETING**

**23 October 2016 (pm), Hammamet, Tunisia**

### **COMMUNIQUÉ**

Strategies to accelerate the deployment of gigabit-speed broadband access networks and the new industry dynamics ushered in by the rise of over-the-top (OTT) services were the key topics discussed at a meeting of 24 high-level industry executives (CxOs), representing leading ICT companies, with the Arab and African regions especially well-represented, and the senior management of the ITU Telecommunication Standardization Sector (ITU-T).

Held at the outset of ITU's quadrennial World Telecommunication Standardization Assembly (WTSA-16) in Hammamet, Tunisia, the CxO meeting was opened by H.E. Mr. Habib Dababi, Secretary of State for Digital Economy, Republic of Tunisia, and hosted by Mr. Nizar Bouguila, Chairman and CEO, Tunisie Télécom.

The meeting provided the private sector with an opportunity to brief, advise and exchange views with ITU-T on emerging industry needs and associated standardization priorities.

#### **Over-the-top (OTT) services – opportunities and challenges for telecommunications operators**

In recent years, telecommunications operators have witnessed exponential growth in data traffic, and declining revenues for their voice and messaging services. This trend has impacted the financial stability of certain operators, sometimes with significant implications for the GDP of national economies. Participants in the CxO meeting noted that operators have seen the emergence of new opportunities and challenges as a result of the proliferation of services delivered over communications networks by third party providers, so-called OTT services. Participants recognized that to date – despite frequent discussion, in many venues – no adequate, sustainable approach has been found to address the interplay of OTT service providers and operators. They requested a fair level playing field and that OTT players need to be subject to the same regulations as those of the telecoms sector, when providing an equivalent service.

The CxO meeting called on ITU-T to study the economic impact of OTT services on operators, and to develop international standards and a holistic approach to address the OTT market environment. CxOs suggested that ITU study groups should act as international platforms to the issues at play, study viable business models and develop best practices, and build partnerships between operators and OTT service providers. Collaboration with other standards bodies and industry organizations was encouraged.

Participants in the meeting highlighted that users, operators and service providers – particularly in developing countries – would benefit from international standards, frameworks, best practices and guidelines addressing OTT services in the telecom environment. The view of the CxOs is that this guidance would help to place industry players in developing countries in a stronger position to compete internationally, as well as provide a wider choice of ICT products and services at a lower cost, with greater quality and ease of access.

Concerning information security and privacy in today's data-driven society, and in OTT services in particular, CxOs noted that conflicts can sometimes arise in the interests of users, network operators, service providers and governments. The meeting was of the view that all stakeholders would need to increase their collaboration to address security and privacy, sharing information on threats and data usage and establish appropriate risk-detection mechanisms and procedures to respond to data breaches. It was also pointed out that a shift from system-centric to data-centric security will be necessary to account for the new security challenges associated with new data-driven applications and services. Participants in the meeting encouraged ITU to play a more active role in this regard, highlighting that international standards and frameworks for security, privacy and trust in ICT infrastructure and services are key ingredients to achieving the desired outcomes.

### **G.fast and other broadband access technologies based on ITU standards**

Ambitious broadband targets set by governments worldwide, highly competitive ICT markets and the massive growth in data traffic, largely driven by video, are among the key factors motivating operators to provide Gigabit-capable broad access services.

The CxO meeting reviewed recent developments and deployments of broadband access networks, including those championed and standardized by ITU-T, such as G.fast, G.hn, VDSL2 and passive optical networks (e.g., NG-PON2).

The meeting also discussed fixed wireless access and solutions combining two or more heterogeneous networks (e.g., LTE and Wi-Fi) to achieve increases in bandwidth and reductions in network cost, especially to support the delivery of high-definition video services. The meeting invited ITU-T to consider the inclusion of such hybrid approaches in its portfolio of access network standards.

Participants noted that while there is no broadband access solution suitable for all deployment scenarios, a wide range of viable standardized options are available to address different market needs, whether defined in terms of bandwidth offered, the level of investment required, the geographical area to be covered, or time to market. The meeting's participants highlighted that cost efficiency remained a decisive factor in the choice of broadband access solutions, making it important to leverage existing infrastructure or use integrated, unified platforms where feasible.

Participants agreed that hybrid, technology-agnostic networks would constitute a stepping stone towards true fixed-mobile convergence, an important requirement for the development of 5G networks.

### **Augmented reality & virtual reality**

Augmented reality and online virtual reality form prime use cases for gigabit-speed connections and 5G networks. These applications offer an enhanced user experience, but these applications are very demanding of the network with respect to throughput and latency. A range of innovative technologies in transport, IP and access networking, media coding and cloud and edge computing are under development to fulfil these stringent requirements. The meeting recommended that ITU consider augmented and virtual reality as topics of great strategic importance, creating the necessary synergies between ITU study groups, and between relevant standards bodies in order to lay the foundations for standards and interoperability in this domain.

### **Moving forward**

Participants expressed their appreciation to ITU for providing this forum to exchange views on emerging ICT trends and the associated standardization priorities of the Arab and African Region and beyond. The ITU management agreed to bring this communiqué to the attention of the ITU membership, and to the newly formed rapporteur group on standardization strategy, operating under the Telecommunication Standardization Advisory Group (TSAG). The CxOs agreed to hold regular meetings in this format to review the progress, adjust and refine the recommendations for action.

Trace Media Telecom Review kindly offered to host the next meeting in Dubai, December, 2017.

The meeting acknowledged and thanked Tunisie Télécom for the hospitality and generosity extended in hosting this CxO meeting.

**The participating organizations were:**

**Alibaba Group**, China; **DASAN Network Solutions**, Korea; **Deutsche Telekom**, Germany; **Ericsson**, Region Mediterranean; **Expresso Telecom Group**, United Arab Emirates; **Fujitsu**, Japan; **CSU (Hayo)**, Senegal; **Huawei Technologies**, China; **JPL Informatique**, Switzerland; **KT Corporation**, Korea; **Lycamobile Tunisie**, Tunisia; **Mobilis**, Algeria; **National Institute of Information and Communications Technology**, Japan; **NEC Corporation**, Japan; **Nokia Corporation**, Finland; **Orange**, France; **Prisma**, Tunisia; **Rohde & Schwarz**, Germany; **Sotetel**, Tunisia; **Telkom Group**, South Africa; **Topnet**, Tunisia; **Trace Media Telecom Review**, United Arab Emirates; **Tunisie Télécom**, Tunisia; **ZTE Corporation**, China; **Ministry of Communication Technologies and Digital Economy**, Tunisia; **ITU**.