

Session 6 – Telecommunications in support of E-Health Conclusions & Recommendations

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Presentations in Session 6

Telecommunications in support of E-health

- **H.323 MM-Systems for Telemedicine**
P.E.Jones, Rapporteur for Q2/16 ITU-T SG16
- **Fiber Optics and xDSL last mile technologies applicable to E-Health**
P.Rosa, Counselor ITU-T SG15
- **Connecting the Health Community: the next Dimension for Patient Centered Care**
J.Zimmermann, Siemens Medical Solutions/USA

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**Highlights from Presentation 1:
H.323 MM-Systems for Telemedicine
P.E.Jones, Rapporteur for Q2/16 ITU-T SG16**

- H.323 was built from the ground-up as a multimedia conferencing protocol
- H.323 gained huge acceptance for VoIP and international recognised standard for multimedia communication over packet based networks (H.323 carries 90%+ of VoIP traffic today)
- H.323 is a system standards integrating audio, video and data functionalities
- Specific E-Health requirements will need to be analysed

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**Highlights from Presentation 2:
Fiber Optics and xDSL last mile technologies applicable to E-Health
P.Rosa, Counselor ITU-T SG15**

- Fiber optic and xDSL access systems standards are in the mandate of ITU-T/SG15 as lead SG for Access Network Transport (ANT) and Optical Technology
- xDSL Standards allow today the transport of up to 26 Mbit/s from the local exchange to the user on the existing copper wire. The family of standards includes ADSL, VDSL, SHDSL, HDSL
- Fiber optic access systems standardized in SG15 are based on the Passive Optical Network concept (PON) using passive optical components and mono/bi-directional WDM techniques
- Optical Systems for PON access networks are specified in the G.983.x/ G.984.x series of Recs (symmetric or asymmetric, 155, 622 and 2488 Mbit/s)

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**Highlights from presentation 3:
Connecting the Health Community:
the next Dimension for Patient Centered Care
J.Zimmermann, Siemens Medical Solutions/USA**

- Role of industry to support and add value to the E-Health customers and their communities
- Presentation of the IHE Vision for Growth as a model with four dimensions: workflows inside department, common consistent data, vertically integration of department, community
- Definition of a rational business framework and analysis of the workflows based on the patient, physician and payers expectations
- Focus on areas like privacy/confidentiality, architecture, standards/vocabulary, safety/quality, ...
- Providing measurable benefits to patients and physicians creates the best chance for lasting success
- Choose the sequence of innovation introduction carefully, select for adoption

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Recommendations

- Improve the coordination and cooperation among ITU, IEC, ISO, other SDOs and other involved parties (e.g.DICOM) in order to ensure the interoperability of MM-Systems and benefits from the economic advantages of global recognised standards
- Adopt a business process oriented approach and set up priorities
- In the design for E-Health application, specific characteristics and suitability of the different technologies like copper, optics, satellite, mobile, WLAN, Bluetooth, etc.. have to be considered.
- Special attention should be given to the specific need of developing countries
- Promote the implementation of wireless and/or fix network infrastructure in developing countries

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Follow-up actions

Action Item	Lead	Other players	Priority
Capabilities of MM-Systems to support E-health applications (Service definitions and description, architecture, coding, LDAP, security, ...)	SG16 (ITU-T)	ITU-T, ITU-D, ITU-R, ISO, IEC, CEN,.....	High
Promote E-Health applications and the deployment of suitable access technologies in developing countries (e.g. international pilot projects,...)	SG 2 (ITU-D) BDT	ITU-T, ITU-R, UN-Agencies Industry, Telcos, ...	High
Analysis of the need for standards based on the main business processes	ICG, MoU	All players	Middle

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