

Leo Lehmann (CH)
Candidate Chairman of ITU-T SG 13



1. Academic background

- Dr. Ing. (Engineering) and Dipl. Inf. (Informatics) of the Friedrich-Alexander University Erlangen-Nürnberg/ Germany; Research assistant at the computer architecture department of the Friedrich-Alexander University Erlangen-Nürnberg/ Germany, working on parallel computing, computing networks and fault tolerance;
- Member of the technical program committees (TPC) of ITU Kaleidoscope 2008-2014, member of the TPC of the International Conference on Networking and Services (ICNS) 2006-2015. 2007-2009 TPC Chair of the work group NGN services at the International Academy, Research and Industry Association (IARIA); various recognized scientific and technical publications in the area of computer architecture and telecommunications;
- Winner of the best paper award (3rd price) of ITU Kaleidoscope 2011.

2. Experience

2.1 In Philips Communication Industries (1990-1995)

- R+D engineer for system integration & verification of Philips GSM systems, responsible for testing mobility management and call control protocols as well as performing compound tests of the base station subsystem (BSS);
- Senior specialist for functional BSS design for key product development within the Philips business unit CIS (Cellular Information Systems); Philips representative at ETSI standardization;
- Manager for the verification of basestation systems, responsible for protocol testing at the base station system interfaces as well as for process- and resource-management of the verification organization; Philips' technical representative and contact person for major customers, e.g. Deutsche Telekom, Mannesmann Mobilfunk (D2), PTT Switzerland.

2.2 In Ericsson (1995 – 2000)

- Senior Specialist for base station systems;
- Head of the base station system design and the project management group at Ericsson Eurolab, overall responsible of the R+D projects in the area of radio transmission and RR protocol implementation;
- Head of the base station system product development at Ericsson Eurolab, covering system design, hardware development, embedded software development and system verification. Integration of the development activities into the core units in Sweden and co-ordination with other design centers in Germany, Sweden and United Kingdom;
- Member of the base station development board.

2.3 In Orange Communications Switzerland (2000-2002)

- Chief-engineer in charge of the technical co-ordination of the radio and transmission network planning activities; responsible for analysis, specification, design, test and integration of new network components and software functionalities. Member of the international expert group for radio access and transmission within the Orange group;
- Head of national network engineering, in charge of planning, dimensioning and implementation of the GSM and UMTS network of Orange Switzerland; responsible for the definition and implementation of GSM/ UMTS access and transmission network requirements and strategies; additionally responsible for major projects such as optical fibre transmission backbone;
- Co-ordination of the Swiss Network Engineering activities within the Orange group.

2.4 In Federal Office of Communication (OFCOM) Switzerland (2002- now)

- Telecom Engineer and senior expert for mobile and fix/ mobile converged networks including cloud computing, software defined networking, softwarization, virtualization and security; responsible for the accomplishment of strategic technology studies in the area of future development of mobile and fix/mobile converged networks including 5G and green ICT;
- Subproject management of the technical preparation of the award and implementation of the licenses for Swiss mobile operators (2011-2012);
- Representation of OFCOM in ITU-T study groups SG16 (Multimedia Services and Systems) and SG19 (Mobile telecommunication networks) from 2003 – 2008, in SG13 (Future networks including cloud computing, mobile and next-generation networks) since 2008. Furthermore representation of OFCOM in 3GPP (TSG SA, TSG CT); former ETSI TISPAN Rapporteur for Emergency Location Protocols (ETSI TS 102 164).

2.5 ITU-T

- **Management functions:**

ITU-T SG16 (Multimedia Services and Systems):

- Rapporteur Q.29/16 Mobility for multimedia systems and services (2003-2008)
- Acting Rapporteur Q.21/16 multimedia architecture (2006-2007)
- SG16 Liaison Rapporteur for SG13 and SG19 (2005-2008);

Vice Chairman of ITU-T Focus Group on "Disaster Relief system, Network Resiliency and Recovery" (2012-2014);

ITU-T SG13 (Future networks including cloud computing, mobile and next generation networks):

- Study Group 13 vice chairman (since 2008);
- WP1/13 co-chairman (2008-2012);
- Acting Rapporteur Q.2/13 Network terminology (2008-2011);
- WP3/13 co-chairman (2012-2014);
- SG13 Liaison Rapporteur JCA AHF (since 2008) ;
- SG13 Liaison Rapporteur for Multimedia (since 2008);
- SG13 Liaison Rapporteur for ITU-T Standardization Committee for Vocabulary-SCV (since 2008);
- SG13 Liaison Rapporteur for Working Methods, including Electronic Working Methods (since 2013);
- SG13 Liaison Rapporteur for JCA-Res 178 (since 2015) ;
- Acting Convener of JCA Cloud in the absence of the convener (2014);
- Acting Chairman of ITU-T SG13 in the absence of the chairman (2014-April 2015);
- Chairman of ITU-T SG13 (since April 2015).

- **Support of ITU-T Seminars and Workshops:**

- Presentation at the Joint ITU-T Workshop and IMTC Forum 2006 on "H.323, SIP: is H.325 next" San Diego/ California USA May 2006;
- Presentation at the ITU-T/ITU-D Seminar on "Standardization and Development of Next Generation Networks", Manama/ Bahrain April 2007;
- Presentation at the Regional Development Forum on "Bridging the ICT standardization gap in developing countries", Damascus/ Syria, 20 until 22 July 2008;
- Panelist on facilitation meeting "e-agriculture", WSIS Forum, Geneva/ Switzerland, 18 until 22 August 2009;

- Presentation at the WSC Academic Week 2010 on "Regulator's involvement in and skills for the ITU standardization", Geneva/ Switzerland, 5 until 9 July 2010;
 - Presentation at the ITU Regional Development Forum for Arab Region on "Accessibility considerations in ITU recommendations concerning NGN and future networks", Cairo/ Egypt, 13 until 15 December 2010;
 - Awarded paper and presentation at the ITU Kaleidoscope 2011 "The fully networked human?-Innovations for future networks and services" on "Accessibility support for persons with disabilities by total conversation service mobility management in Next Generation Networks", Cape Town/ South Africa, 12 until 14 December 2011;
 - Presentation at ITU Workshop "Developments regarding telecommunication network architectures and services" on "IP Multimedia System: general aspects and migration perspectives", Kampala/ Uganda, 2 April 2012;
 - Presentation at the Second Study Group 13 Regional Workshop for Africa "Future Networks: Cloud Computing, Energy Saving, Security and Virtualization" on "Future Networks: Cloud Computing, Energy Saving, Security and Virtualization", Tunis/ Tunisia, 28 April 2014;
 - Presentation on "Future Network energy saving aspects" at ITU Training on "Green ICT Standards", Geneva/ Switzerland, 11 July 2014;
 - Presentation at the Third Study Group 13 Regional Workshop for Africa "ITU-T Standardization challenges for Developing Countries Working for a Connected Africa" on "SG13 Activities and Achievements Related to Cloud Computing", Livingstone/ Zambia, 23 February 2015;
 - Moderator of ITU Telecom World 2015 session on "Paving the road to 5G era", Budapest/ Hungary, 12 October 2015;
 - Presentation at the Fourth Study Group 13 Regional Workshop for Africa "Future Networks for a better Africa: IMT-2020, Trust, Cloud Computing and Big Data" on "IMT-2020/ 5G, Much More than Pure Radio Aspects", Accra/ Ghana, 14 March 2016;
 - Presentation at the CONFIG Workshop "Reflection on Mobile Networks Architectures" on "IMT2020/ 5G Standardization activities in ITU-T", Lisbon/ Portugal, 6 September 2016.
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- Member of the organization committee of ITU-T Workshop on "Multimedia in NGN", Geneva Switzerland September 2007;
 - Member of the technical program committee of the ITU Kaleidoscope event 2008 – 2014;
 - Head of the organization committee of ITU-T Workshop on "Developments regarding telecommunication network architectures and services", Kampala/ Uganda, April 2012;
 - Member of the organization committee of joint ITU-T SG13 and ISO/JTC1/SC 6 Workshop on "future networks standardization", Geneva/ Switzerland, June 2012;
 - Head of the organization committee of the 1st Study Group 13 Regional Workshop for Africa on "Standardization on IMT, M2M, IoT, Cloud Computing and SDN", Algiers/ Algeria, 8 September 2013;
 - Head of the organization committee of the 2nd Study Group 13 Regional Workshop for Africa on "Future Networks: Cloud Computing, Energy Saving, Security and Virtualization", Tunis/ Tunisia, 28 September 2014;
 - Member of the organization committee of the ITU-T workshop on "on "Cloud Computing Standards - Today and the Future", Geneva/ Switzerland, 14 November 2014;
 - Head of the organization committee of the 3rd Study Group 13 Regional Workshop for Africa on "ITU-T Standardization Challenges for Developing

Countries Working for a Connected Africa", Livingstone/ Zambia 23-24 February 2015.

3. Professional skills

Broad experience and in-depth knowledge in the following fields:

- Management (personnel, finance) of large organization units;
- Management of big and complex projects in the telecommunication area, Telecommunications market and Telecommunications industries;
- Telecommunications technology including IMT2020/ 5G, softwarization and virtualization;
- Green ICT, Cloud Computing and Big Data;
- Fix/ Mobile Converged Networks access- and core- domains;
- Regulatory bodies;
- ITU-T: Organization, structure, working methods, relations between study groups, coordination and collaboration with other SDO's (ETSI, IETF, 3GPP) and with Open Source Communities.

Biel/Bienne, 19th of July, 2016