

ALL STAR NETWORK ACCESS WORKSHOP

ITU Headquarters, Geneva, Switzerland, 2-4 June 2004

ITU-T Study Group 15, the leader in standardizing DSL and optical access technologies, is organizing a workshop to bring together the main players and standards development organizations (SDOs) in network access technology. All interested parties are welcome. To augment the workshop, ITU will stage an exhibition and poster session allowing the industry to showcase its products.

This workshop is free and also open to non-members

Workshop objectives:

The All Star Network Access Workshop will give a clear picture of current technology trends with a focus on implementation and services. The programme will address the evolution of wireless, optical, and copper-based technologies, as well as regulatory issues and standardization efforts. It will present case studies, analyse whether standardization has been effective in fulfilling market needs and identify potential new standardization topics and areas of cooperation.

The workshop comprises sessions covering:

- Optical fibre technologies: technologies for broadband passive optical networks (B-PON) and gigabit passive optical networks (G-PON), metropolitan optical rings
- Ethernet and metro Ethernet
- Copper technologies: DSL
- Cable technologies
- Wireless technologies: radio systems, wireless local area network (WLAN), fixed wireless access (FWA), mobile access, satellite technologies and point-to-point lasers

Day 1 Wednesday 2 June 2004 09:00-17:30

Opening address, keynotes and tutorials

Day 2 Thursday 3 June 2004 09:00-18:00

Session 1: Network access (service aspects and requirements)

This session will provide an overview of present and future multimedia services driven by fixed-mobile-broadcast convergence. The session will identify the impact of these trends on service architecture and access network architecture and interfaces; it will define relevant service issues relating to the technical standardization roadmap for the access network.

Session 2: Business case for network access

Broadband services can only be delivered to end users via some form of access network. Options for network access include twisted-pair, coaxial, fibre optic and wireless. This session will address the various economic and business aspects involved in the provisioning of broadband services for each of these access media.

Session 3: Network access (architectures and convergence)

This session will cover the various access network architectures which are being deployed to support high-speed Internet access and which are evolving to support emerging advanced services. Advanced services include broadcast and on-demand audio/video, streaming applications, peer-to-peer applications, networked games and wireless hot spots. These advanced services mean specific architectural choices, depending on the requirements of service providers and regulators in areas such as:

- Underlying access technologies and compatibility with existing infrastructure
- Access network topology: current limitations and future enhancements
- User authentication/security/billing
- Scalability
- Service offering from one or multiple providers
- Openness to competitive operators and application providers

Session 4: Implementation plans and experiences

This session will cover the various implementation plans and experiences of access operators in each region. Optical, digital subscriber line (DSL), wireless and CATV access networks as well as network evolution will be discussed. Optical access systems to be examined in the session will include point-to-point-based media converter access systems and point-to-multipoint-based passive optical network (PON) access systems including broadband passive optical networks (B-PON), gigabit passive optical networks (G-PON) and IEEE gigabit ethernet passive optical networks (GE-PON). DSL access systems to be discussed will include asymmetric DSL (ADSL) and very high speed DSL (VDSL). Discussion on implementation will focus on topics including access network deployment by carriers such as incumbent local exchange carriers (ILEC) and multiple system operators (MSO) to provide full services and/or broadband access service. Large scale integration (LSI) components and their interoperability with multi-vendor access systems will also be examined.

Day 3

Friday 4 June 2004

09:00-17:30

Session 5: Status and evolution of network access technologies

This session will address future technologies.

Session 6: Status and evolution of network access standards

This session will review key areas within IEEE, ITU-R and ITU-T relating to the development of access network standards. A status report for each technology will be given as well as the expected schedule for standards currently under development. Standards covered will include:

- Ethernet in the first mile (EFM)
- 10 gigabit Ethernet fibre networks
- Wireless local area networks (WLAN) (IEEE 802.11a/b/g)
- Wireless personal area network (PAN) (IEEE 802.15)
- Broadband wireless (IEEE 802.16)
- IMT-2000
- Cable TV
- DSL
- Optical access including B-PON and G-PON

Session 7: Regulatory issues, status and resolution

This session will examine the differences between Europe and America regarding the regulation of network access: for example, in Canada and USA operators are less bound by regulation than in Europe where there are often licensing issues to be taken into account. Self-regulation will also be discussed. The way in which different countries (or regions) address access network regulation and the conflict surrounding this will be examined, along with radio-frequency (RF) spectrum allocation/licensing to WLAN, broadcasting, satellite and mobile/fixed systems. Harmonization of public WLAN access to public electronic communication networks and services, the regulatory framework of service convergence, liberalization, deregulation and licence-exempt RF allocation are also topics to be covered in this session.

Session 8: Panel: How to enhance cooperation in standards development

Online registration: itu.int/ITU-T/worksem/asna/registration

ITU-T Workshops and Seminars: itu.int/ITU-T/worksem