



**International Telecommunication Union**

## **Key Drivers for ITU-T**

Reinhard Scholl

Deputy to the Director

ITU Telecommunication Standardization Bureau

[reinhard.scholl@itu.int](mailto:reinhard.scholl@itu.int)



# Outline

1. How ITU-T is working today
2. ITU-T's NGN Global Standards Initiative
3. NGN's expanding space



# 1. How ITU-T is working today



# Competition in ICT Standardization

- o Standardization has become a MARKET because of
  - Liberalization of telecom industry
  - Internet: anyone can set up a service
  - Success of mobile telephony
  - Rapid technological developments
  
- o Market laws rule: demand and supply
  - About 500 fora and standards organizations ...
  - ... compete & cooperate
  - Some will die, but new technologies will bring new fora
  
- o Market pressure forced, and continues to force, ITU-T to adapt to stay competitive



# Characteristics of ITU-T

- o Work (mostly) done in Study Groups (13 of them)
- o ITU-T Product: Recommendations (= “standards”)
  - Example: ADSL/VDSL
- o Unique partnership of private sector (Sector Members) & government (Member States)
  - Today, 95% of work is done by private sector
    - Strong participation from Asia, esp. China
  - Remaining 5% if regulatory impact
- o Truly global
- o Consensus decisions
- o Very flexible
- o Fast procedures, transparent procedures
- o Brand name
- o IPR (Intellectual Property Rights) Policy



## ITU-T is fast ...

- o to start work: 1 day / few weeks (from 2-4 yrs)
- o to develop work: from weeks to 2-3 yrs (from 2-3 yrs)
- o to approve work: 2 months (from 4 yrs)
  - “fast track approval procedure” for technical standards (=95% of work)
- o to publish work: couple of days after approval (from 2-4 yrs)
  - and ... (see next slide)



## Coming soon: free online access to ITU-T Recommendations

- ITU Council 06 (April) agreed to a trial starting January 2007 - Council Sept 2007 to make:
  - ITU-T Recommendations available (pdf-version of final edited text) online for free for the public
  - All ITU members to get free access to ITU-T Recs (winword, pdf; pre-published, final)
  - Universities/academia also to get free access like ITU members
  - Will have financial impact on ITU revenues



# ITU cooperates

- ITU-T has a wealth of instruments in place to cooperate with:
  - National and regional standards development organizations (SDO)
  - Forums and Consortia
- Formal procedure on how to exchange information described in ITU-T Rec. A.6 (SDOs) and A.4 (forums and consortia)
- How to include input from other organizations: ITU-T Rec. A.5
  - references or
  - text



# ITU-T's Focus Group Concept

- Create forum-like entities as an “arms-length” organization under ITU-T Study Group
- Goal:
  - Encourage participation of non-members / members of other organizations (fora)
- Focus group has lots of freedom to establish its own rules
  - can keep own brand name and at the same time benefit from ITU's branding
  - Non-ITU members can participate
- Recent examples:
  - NGN Focus Group
  - NGN Management Focus Group
  - OCAF Focus Group = Open Communications Architecture Forum
  - IPTV Focus Group



## 2. ITU-T's NGN Global Standards Initiative (NGN-GSI)



ITU-T

# NGN-GSI

- o Today, NGN is by far the largest initiative in the ITU-T
- o NGN is real - BT (British Telecom) has arguably the most ambitious network overhaul:
  - Bigger annual investment than is spent in UK's motorways and trunk roads
  - Reduce costs - expected to amount to US-\$1.8 billion per annum by 2008/09
- o ITU: 18 months of intensive activity (June 2004 - Nov 2005) in NGN Focus Group ...
- o ... then work handed over to Study Group 13 and other relevant study groups to continue the development of global NGN standards
- o January 2006: ITU-T NGN Global Standards Initiative (NGN-GSI) was established ([www.itu.int/ITU-T/ngn](http://www.itu.int/ITU-T/ngn))
  - Comprises most study groups
  - Includes also other organizations

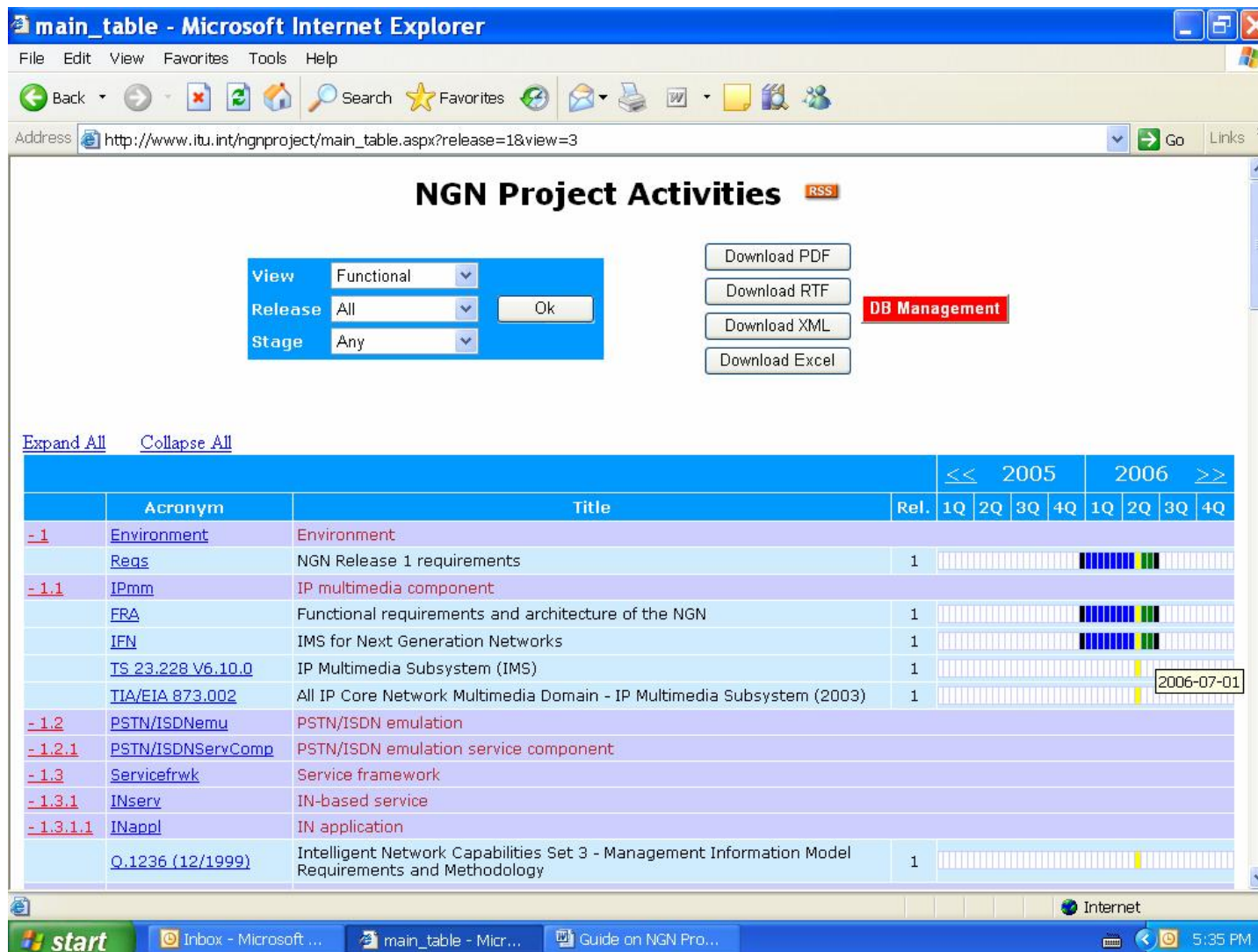


ITU-T

# NGN-GSI events

- Two recent NGN-GSI events:
  - 16-27 January 2006: several study groups
  - 22-27 April 2006 in Kobe, Japan
    - Over 200 contributions
    - Over 200 delegates from 79 companies and 19 countries submitted over 200 contributions
    - Over 30 draft recommendations progressed; 11 of these are candidates to launch approval procedure in meeting in July 2006 meeting
- Upcoming events:
  - July 2006, Geneva
  - October 2006, Geneva

# NGN Roadmap



**NGN Project Activities** RSS

View: Functional  
Release: All  
Stage: Any

Download PDF  
Download RTF  
Download XML  
Download Excel

DB Management

[Expand All](#)   [Collapse All](#)

			<<	2005				2006				>>			
	Acronym	Title	Rel.	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q				
-1	<a href="#">Environment</a>	Environment		[Progress bars]											
	<a href="#">Reqs</a>	NGN Release 1 requirements	1	[Progress bars]											
-1.1	<a href="#">IPmm</a>	IP multimedia component		[Progress bars]											
	<a href="#">FRA</a>	Functional requirements and architecture of the NGN	1	[Progress bars]											
	<a href="#">IFN</a>	IMS for Next Generation Networks	1	[Progress bars]											
	<a href="#">TS 23.228 V6.10.0</a>	IP Multimedia Subsystem (IMS)	1	[Progress bars]											
	<a href="#">TIA/EIA 873.002</a>	All IP Core Network Multimedia Domain - IP Multimedia Subsystem (2003)	1	[Progress bars]											
-1.2	<a href="#">PSTN/ISDNemu</a>	PSTN/ISDN emulation		[Progress bars]											
-1.2.1	<a href="#">PSTN/ISDNServComp</a>	PSTN/ISDN emulation service component		[Progress bars]											
-1.3	<a href="#">Servicefrwk</a>	Service framework		[Progress bars]											
-1.3.1	<a href="#">INserv</a>	IN-based service		[Progress bars]											
-1.3.1.1	<a href="#">INappl</a>	IN application		[Progress bars]											
	<a href="#">Q.1236 (12/1999)</a>	Intelligent Network Capabilities Set 3 - Management Information Model Requirements and Methodology	1	[Progress bars]											

2006-07-01

Functional view of the NGN Project Management Tool



### 3. NGN's expanding space

# New topics

- New topics having an impact on NGN include:
  - RFID (Radio Frequency Identification)
  - Home Networking
  - Grids
  - IPTV (IP-Television)
  
- The scope of the NGN programme will be expanded to include the necessary standards work

# RFID

- o ITU-T Correspondence Group on Networked RFID since March 05
- o Networked-RFID workshop in February 06
- o 16 contributions in 2006 so far to various study groups
- o Meeting of ITU-T Correspondence Group 23-24 May in Seoul, Korea
- o Goal: come up with a roadmap



ITU-T

# Home Networking

- Various study groups are working on the topic
- ITU-T workshop “Opportunities and Challenges in Home Networking” (Oct 2005)
- Workshop identified a number of issues requiring resolution:
  - Need for a network independent and service independent architecture
  - Quality of Service (QoS)
  - Need for spectrum allocation for Wi-Fi in the UHF television band (ITU-R)
  - Need to align HN terminology between the various bodies working on Home Networking
- Currently, an “ITU-T Joint Coordination Activity” (open to outside organizations) to prepare a roadmap for HN



ITU-T

# Grid

- Joint ITU-T/GGF (Global Grid Forum) workshop on “NGN and Grids”, Geneva, 23-24 October 2006
- Among goals
  - What can telcos learn from grids, what can the grid community learn from telcos?
  - Understand what additional features required by Grids should be considered in ITU-T’s NGN Release 2.
- Different scenarios for telcos:
  - specialize in network Service Level Agreements that are optimally suited to Grids
  - use Grids for their IT internal needs
  - offer Grids as a managed service to customers



ITU-T

# IPTV

- 4-5 April 06: TSB Director's Consultation Meeting
  - 42 documents submitted
  - 120 experts
  - webcast
- Mid-April: TSB Director creates Focus Group on IPTV
- Mission: “... to coordinate and promote the development of global IPTV standards taking into account the existing work of the ITU study groups as well as Standards Developing Organizations, Fora and Consortia.”
- 1<sup>st</sup> meeting of Focus Group IPTV: 10-14 July 06



ITU-T

# Goals of Focus Group IPTV

- Definition of IPTV
  - Identification of scenarios, drivers and relationships with other services and networks
  - Identify requirements and define framework architecture
- Review and gap analysis of existing standards and ongoing works
  - Identification of opportunities for ITU-T
  - Identification of activities that ITU-T would encourage other organizations to pursue
- Coordination of existing standardization activities
- Harmonization of the development of new standards
- Encourage interoperability with existing systems where possible