

# ITU/BDT Arab Regional Workshop on “Wireless Network Evolution”

*Muscat-Oman, 03-05 May 2004*

## **Workshop purpose and structure, related international activities**



*Ignat Stanev*



# Workshop purpose

The main objectives of the workshop are:

- ❖ to provide profound understanding of the wireless network principles,
- ❖ to have more insights into economic and commercial aspects of services and network evolution,
- ❖ to be based on practical approaches - of Tunisia and the best practices in the world.

# Workshop purpose (2)

The participants through practical case studies will assess and challenge the related network infrastructure and service delivery of economical issues.

The training will include a reference to some business planning tools operated in the region for planning the wireless networks.

# Workshop purpose (3)

The target groups are:

- ❖ Operational managers and professionals in Network planning and Telecommunication strategic development from the Administrations, Regulatory Authorities, Operators and Service Providers,
- ❖ Subject Matter Experts who are dealing with such issues or who will be prepared to handle these tasks in the future.

# Workshop structure

	<b>Main Topics</b>	<b>Comment</b>
1.	<b>Local and regional inputs – general questions</b>	
2.	<b>Network evolution concepts and architectures, next generation service challenges, related international activities</b>	Based on ITU documents
3.	<b>Wireless network evolution, including WI-FI</b>	
4.	<b>Wireless Solutions for Rural Connectivity</b>	
5.	<b>Case study on wireless broadband introduction, including market modeling, technology solutions and business evaluation</b>	Based on real data and implemented with professional tools; interaction with participants
6.	<b>Tunis Telecom Experience - Wireless Broadband Solutions for urban and rural areas</b>	Based on ongoing project from Tunis Telecom
7.	<b>Local and regional inputs – technical related matters</b>	

# Workshop agenda - Monday 03 May

Monday 03 May	TIME	SUBJECT
<b>Registration Opening</b>	08h30 – 09h30	Registration and Document Distribution
	09h30– 10h15	Opening Ceremony and a presentation on TRA
<b>Morning Session</b>	10h15 – 10h45	<b>Coffee Break</b>
	10h45 – 11h30	Workshop purpose and structure, related international activities, <b>Ignat STANEV</b>
	11h30– 12h15	IP-based Multimedia Services and Applications, <b>Samer QABLAWI (Siemens)</b>
	12h15 – 13h00	Congestion Control in Wireless Network Implementation, <b>Dr. Ahmed NOAMANI (Sultan Qaboos University)</b>
<b>Lunch</b>	13h00 – 14h30	
<b>Afternoon Session</b>	14h30 – 15h15	Network evolution concepts and architectures, next generation service challenges, <b>Ignat STANEV</b>
	15h15– 16h00	Wireless network evolution, including WI-FI; <b>Slaheddine MAAREF (Tunisie Telecom)</b>
	16h00 – 16h15	<b>Coffee Break</b>
	16h15 – 17h15	Tunisie Télécom Experience - Wireless Broadband Solutions for urban areas; Case study, - <b>Slaheddine MAAREF (Tunisie Telecom)</b>
	17h15 – 18h00	<b>Working Groups Discussion</b>

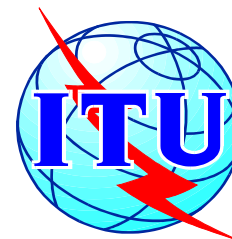
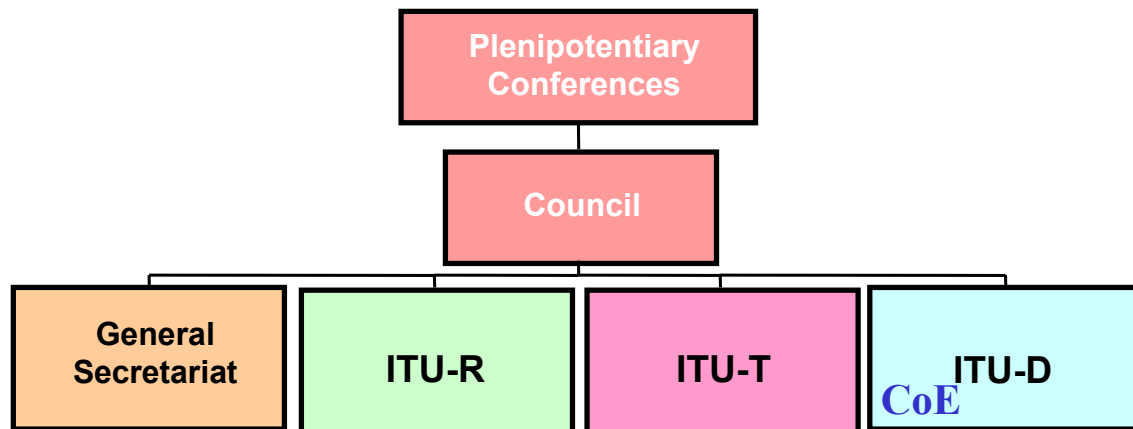
# Workshop agenda - Tuesday 04 May

Tuesday 04 May	TIME	SUBJECT
<b>Morning Session</b>	09h00 – 09h45	Wireless Solutions for Rural Connectivity, <b>Slaheddine MAAREF (Tunisie Telecom)</b>
	09h45 – 10h30	Tunisie Télécom Experience - Local Mobility & Fixed GSM for Rural Areas; <u>Case study</u> , <b>Slaheddine MAAREF (Tunisie Telecom)</b>
	10h30 – 11h00	<b>Coffee Break</b>
	11h00 – 11h45	Wireless Broadband Mobility – <b>Mr. Shawn Taylor (Wi-LAN Canada in conjunction with OHI Telecommunications Co. LLC)</b>
	11h45 – 13h00	<u>Case study</u> on wireless broadband introduction and wireless solutions for rural connectivity: Market modeling, <b>Ignat STANEV</b>
<b>Lunch</b>	13h00 – 14h30	
<b>Afternoon Session</b>	14h30 – 16h00	<u>Case study</u> on wireless broadband introduction and wireless solutions for rural connectivity: Technology solutions and business evaluation, <b>Ignat STANEV</b>
	16h00 – 16h15	<b>Coffee Break</b>
	16h15 – 17h15	<u>Case study (Continuation)</u> on wireless broadband introduction and wireless solutions for rural connectivity: Technology solutions and business evaluation, <b>Ignat STANEV</b>
	17h15 – 18h00	<b>Working Groups Discussion</b>

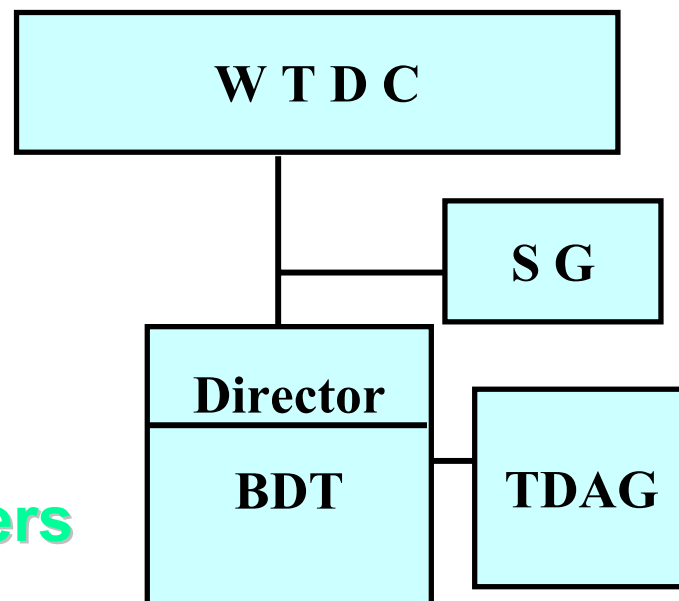
# Workshop agenda - Wednesday 05 May

Wednesday 05 May	TIME	SUBJECT
<b>Morning Session</b>	09h00 – 09h45	Broadband Access in GSM Networks, <b>(Ericsson)</b>
	09h45 – 10h30	Location Bsed Services, <b>Samer QABLAWI (Siemens)</b>
	10h30 – 11h00	<b>Coffee Break</b>
	11h00 – 11h45	Wireless Networks: Omani Community Perspectives <b>Dr. Ahmed NOAMANI (SQU - Oman)</b>
	11h45 – 12h30	WLAN @ Service of Mobile Networks; <b>Sahbi MAZLOT (CERT – Tunisia)</b>
<b>Closing Session</b>	12h30 – 13h30	<b>Open Discussion Working Groups Findings</b>
	15h30 – 14h00	<b>Evaluation and Closing</b>

# International Telecommunications Union



- First international intergovernmental organization (1865)
- UN specialized agency in telecommunications (1947)
- 189 Member States
- more than 650 Sector Members



# ITU-D : Centers of Excellence



- **The Worldwide Center of Excellence (CoE) Network consists of regional mechanisms aimed at strengthening the capacity within each region in order to develop high-level know-how**

- **During the past couple of years some 3000 people have been trained and have benefited from the continuous support of BDT Partners including Manufacturers, Operators, Regulators, Governments and Academia**



# Centers of Excellence

ITU HQ - Geneva  
Co-ordinator of the CoE  
Network

- Americas Region
- Arab Region
- English Speaking Africa Countries
- French Speaking Africa Countries
- Asia and Pacific Region
- English-speaking Branch of the CoE for EUR + CIS
- Russian-speaking countries of the CoE for EUR + CIS

Arab Region

CoE Network ARAB node - Microsoft Internet Explorer

Address: <http://www.itu.int/ITU-D/hrd/coe/arb/>

International Telecommunication Union

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CoE Network ARAB node

Welcome to CoE Arab

**Events**

- The **5th Steering Committee meeting of the CoE ARB**, was held in **AMMAN, JORDAN** From 13 to 15 January 04

**Activities 2004**

- CoE/ARB Action Plan 2004

**Main Documents**

- [Outputs of CoE Training activities 2002 - 2004](#)
- 4th steering Committee Committee [Final Report](#)

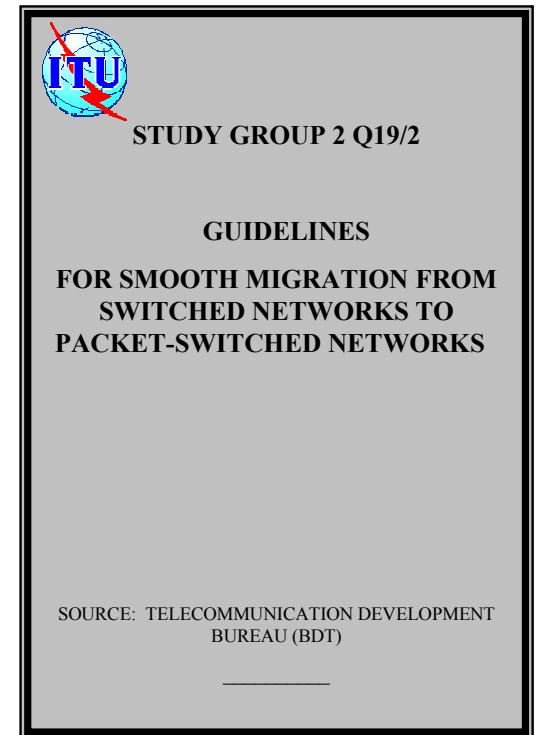
Contact Point

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# ITU-D Activities Related to Network Evolution

- **Manuals/Guidelines produced through ITU activities, e.g. Study Groups**
- **Assistance to the countries through Regional Seminars, Projects, etc.**

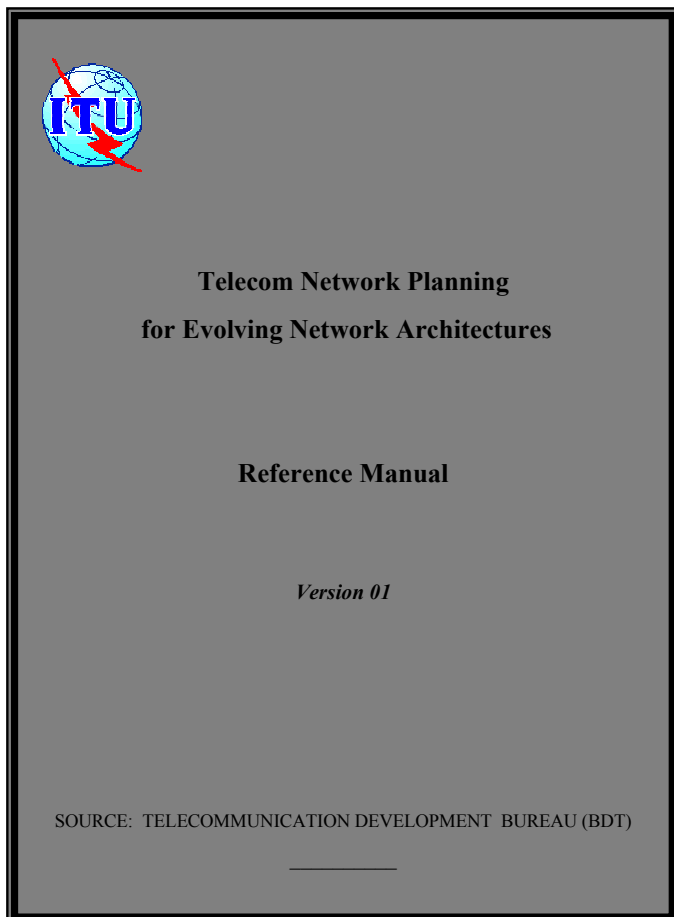
**ITU/ITC seminar on the evolution to NGN and fixed-mobile convergence  
Moscow, 27-30 April 2004**



# ITU-D Manual on Network Planning

<http://www.itu.int/ITU-D/tech/network-infrastructure/index.html>

- [ITU Vision on Network Planning](#)
- *Version 01, 2003*
- *Version 02, 2004 (new)*



**2003 - Version 01**

**2004 - Version 02 - open for contributions**

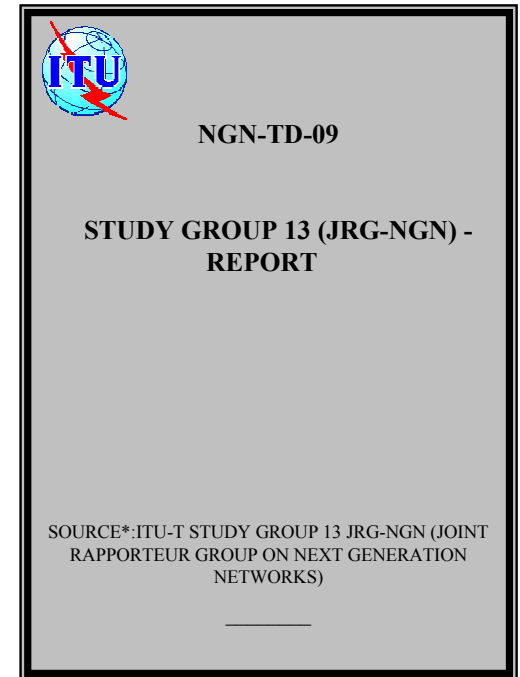
## Work Plan

EXPECTED OUTPUT		RESPONS	TIME FRAME IN 2004							Com
Chapters	Task		J	J	A	S	O	N	D	
all	Enforcing of V.1		X	X	X	X	X			
new	Extension with new topics		X	X	X	X	X			
all	Compiling and		X	X	X	X	X			
	Revisioning					X	X	X		
	Informal meetings									
								X		
	Issuing of Version 02									X

Finalising of the work

# ITU-T Activities Related to Network Evolution

- Proposed new Y.2000 Series of Recommendations for Next Generation Networks




**Workshop on "Next Generation Networks: What, When and How ?"**  
**"Encompassing Services, Transport Convergence, mobility issues  
and more..."**

**Geneva, 9-10 July 2003**

# ITU-T Activities Related to Network Evolution

## ITU-T NGN Project



ITU-T

### ITU-T and NGN

Main study groups addressing NGN:

- SG 11
  - Network Signalling and Control functional architectures in emerging NGN environments
  - Signalling and control requirements and protocols to support user attachment in NGN environments
- SG 13
  - Functional requirements, services and architectures
- SSG
  - Vision for IMT-2000
  - Mobility Management
  - Convergence of Fixed and Mobile
- SG16 has developed MM Services specifications directly applicable to NGN with the H.323 system, H.248 gateway control protocol, QoS, Security, Services & Applications
- N.B: all SGs have an “NGN” aspect to their work

# International Teletraffic Congress

- The *International Teletraffic Congress* (ITC) was born out of the need to engineer the telephone networks properly
- The first ITC was held in 1955 in Copenhagen, Denmark

The ITC continues to gather modern teletraffic experts from research organizations, universities, manufacturing companies, network operators, service providers and international technical organizations, guaranteeing a well-balanced contribution from theory and application

## International Teletraffic Congress

[i-TeleTraffic.org](http://i-TeleTraffic.org)



The ITC website is best viewed with [Microsoft Internet Explorer 5.5](#)

# ITU-D and ITC cooperation



- **ITU/ITC Workshops during ITC Congresses since ITC 13 in Copenhagen**
- **Regional ITU/ITC Seminars, e.g Bamako, Mali in 1998 and Damascus, Syria in 1999**
- **Agreement of cooperation between ITU-D and ITC signed on 24 January 2001**

# ITC - Workshops

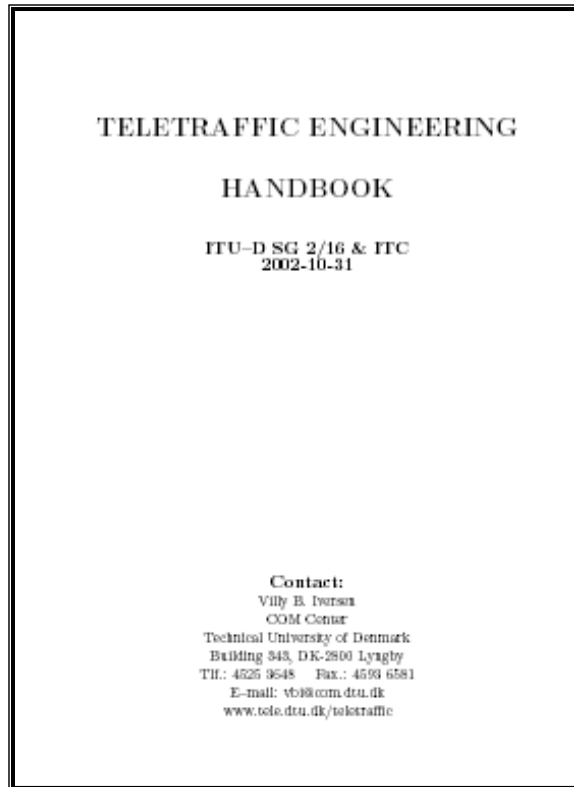
- Since ITC 13 in 1991 Workshops dedicated to the developing countries have been held during the congresses
- separate ITC Workshops have been held between congresses

**WORKSHOP at ITC 18  
(2003) in Berlin**

**WORKSHOP at ITC 19  
(2005) in Beijing**

- 2002 Port Moresby Papua New Guinea
- 2000 Hangzhou China
- 1999 Damascus Syria
- 1998 Bamako Mali
- 1998 Saint-Petersburg Russia
- 1997 XI'an Chian
- 1995 Bangkok Thailand
- 1995 Pretoria South Africa
- 1995 Saint-Petersburg Russia
- 1993 Bangalore India
- 1993 Brasilia Brazil
- 1993 Saint-Petersburg Russia
- 1992 Beijing China
- 1991 Cracow Poland
- 1989 Moscow USSR
- 1988 Beijing China
- 1988 Sofia Bulgaria

# ITC - TTE Handbook



- **Teletraffic Engineering Handbook  
produced in cooperation with ITU-D SG2**

**TELETRAFFIC ENGINEERING HANDBOOK**  
ITC in cooperation with ITU-D SG2

MODELLING FOUNDATIONS (drafts)

- [Basic mathematics](#)
- [Draft Handbook - pdf-file \(ther may be font-problems printing\)](#)
- [Draft Handbook - postscript](#)

Please send any comments and proposals to:

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Updated December 12, 2003

**Internet link:**

*<http://www.tele.dtu.dk/teletraffic/>*



**Let's join our efforts for a successful  
Telecommunication and ICT Development**

***THANK YOU !***

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