

# ITU Regional Development Forum 2008

**“Bridging the ICT Standardization Gap  
in Developing Countries”  
Damascus, 20-22 July 2008**

## **Bridging the ICT Standardization Gap**

**TSB**

(Prepared by Dr Tim Kelly)



# Bridging the Standardization Gap

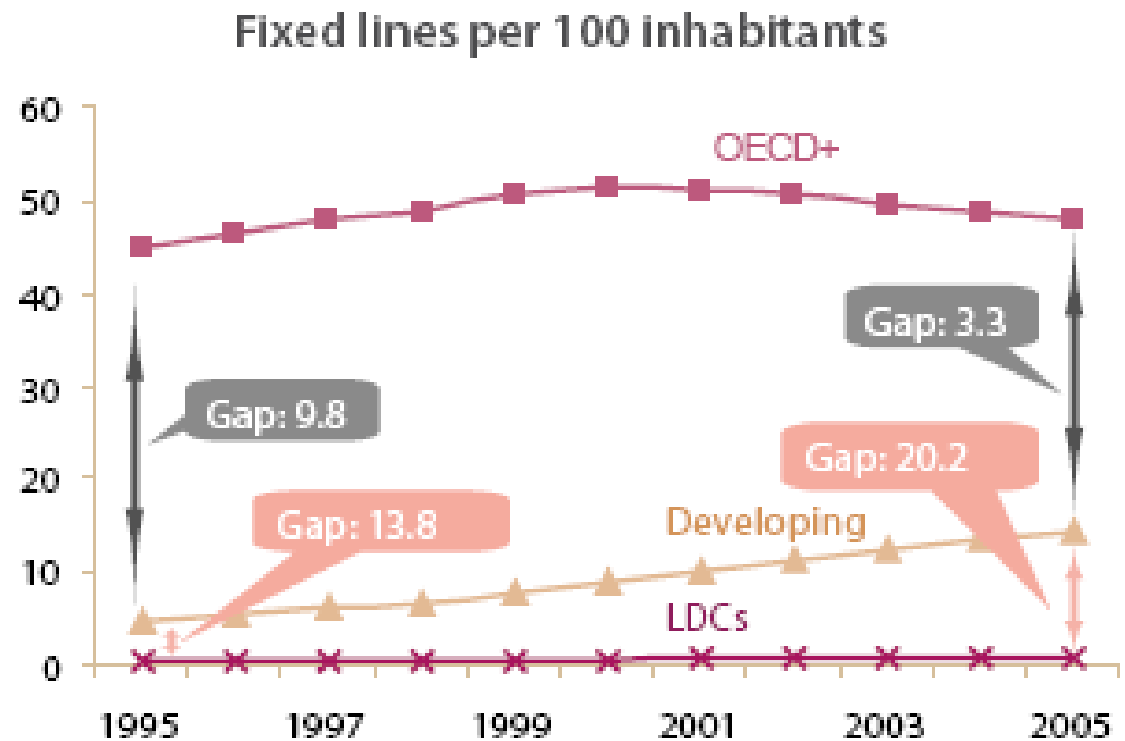
- **Context**
  - PP-06 Resolution 123; WTSA Resolution 44
- **Defining the Gap**
  - Digital Divide
  - Standardization “Ladder of Development”
- **Measuring the Gap**
  - Usage of Recommendations
  - Membership and participation statistics
  - Study Group officials
- **Next Steps**
  - Work of TSAG Correspondence Group
  - Actions to bridge the gap

# Framework for programme

- **PP Resolution 123 (Rev. Antalya, 2006)**
  - *Recognizing* “the continued shortage of human resources in the standardization field of developing countries, resulting in a low level of developing country participation in ITU-T and ITU-R meetings ...”
- **Resolution 44 (WTSA-04): Action Plan**
  - Strengthening standards-making capabilities
  - Assisting ITU-D in enhancing application of standards
  - Human resource building
  - Flagship groups for bridging the gap
  - Fundraising
- **Resolution 47 (WTDC-06)**
  - Enhancement of knowledge and effective application of ITU Recommendations in developing countries

# The digital divide: Shrinking for some ..

- For fixed lines, the gap in penetration between developed and developing countries has reduced from 10:1 to 3:1 since 1995



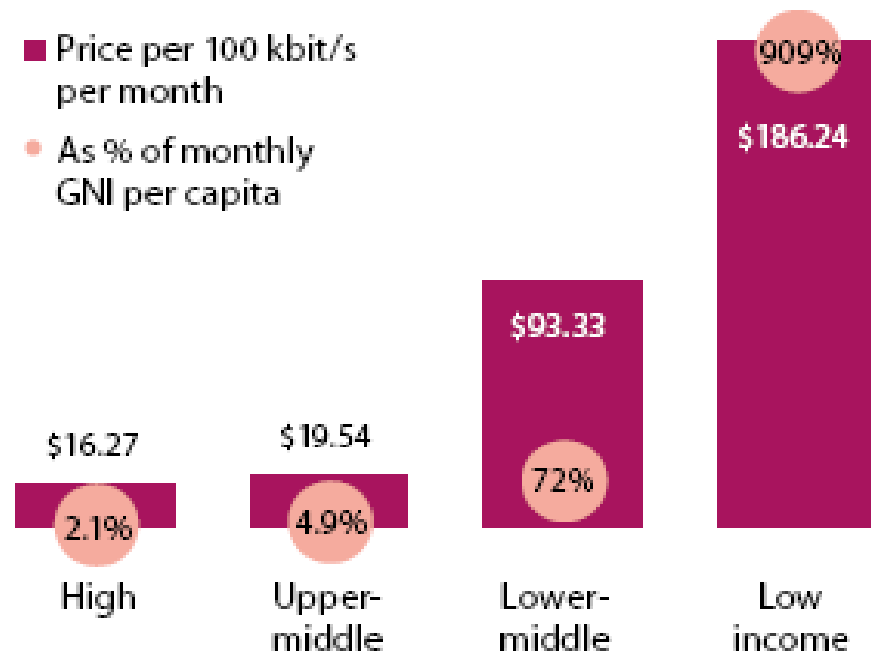
- For mobile phones, the gap has fallen from 33:1 to 3:1 and for Internet users from 80:1 to 6:1

Source: ITU/UNCTAD World Information Society Report 2007: Beyond WSIS

## ... but the gap is increasing for others

- The average price of broadband in Africa is ten times higher than in high income countries
- African prices are more than 2'000 times higher, per 100kbit/s per month, than in Japan and Korea (Rep.)
- Participating in standards-making can help in implementing services (“Learning by doing”)

Broadband prices and affordability, by income group, 2006 (in USD per month)



Source: ITU/UNCTAD World Information Society Report 2007: Beyond WSIS

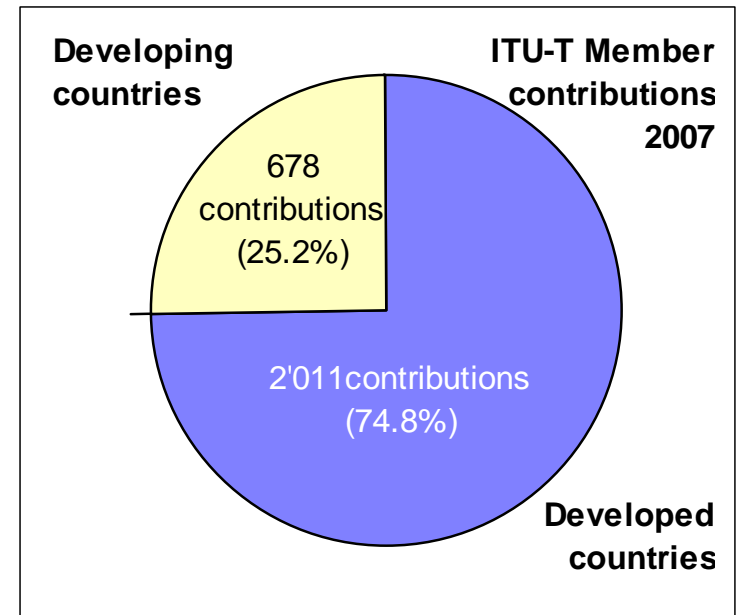
Committed to Connecting the World



International  
Telecommunication  
Union

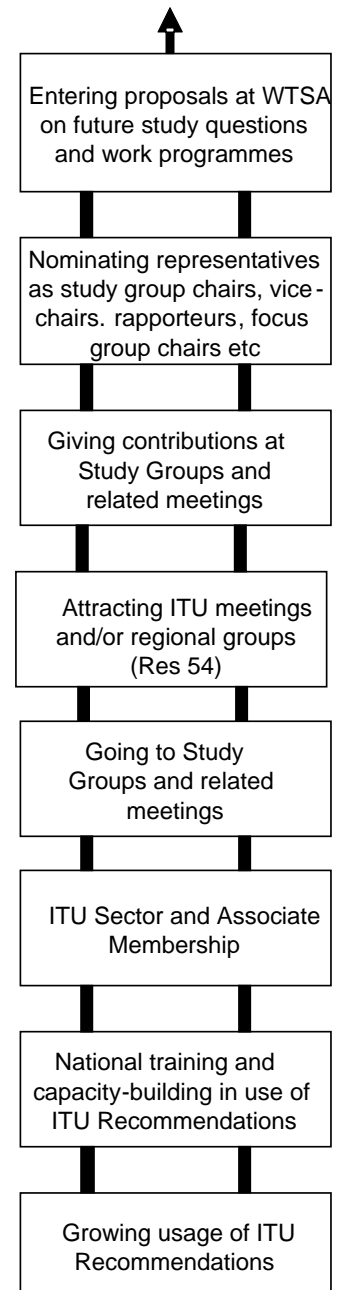
# So, what is the “standardization gap”?

- It might be defined as disparities in the ability of developing countries, relative to developed ones, to **access, implement, contribute to and influence international ICT standards**, specifically ITU Recommendations.
- The standardization development gap is itself both **a cause and a manifestation of the wider digital divide**
- It contributes to the ***persistence*** of the wider digital divide



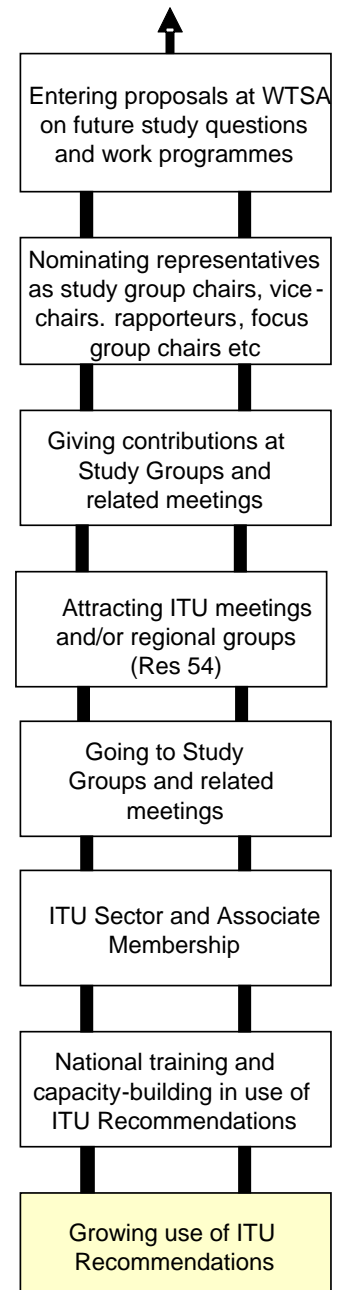
# The Standardization Development Ladder

- Bridging the standardization development gap requires a sequence of steps, depending on the level of:
  - economic development
  - local manufacturing capability
  - local R&D capability
  - previous engagement with ITU
- These steps can be conceptualised in terms of a “Ladder of Standardization Development”



# Standardization Development Ladder (1)

- On the lowest rung of the ladder is the **growing usage of ITU Recommendations** and website
- This can be measured in terms of sales or downloads of Recommendations
- Use of international standards in ICT procurement should help to reduce costs and promote inter-operability

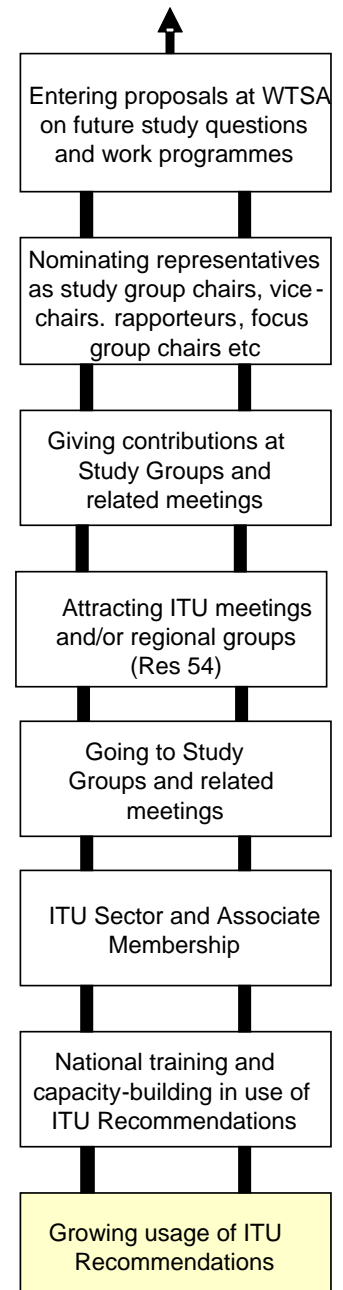




# Top ten developing and transition economies, by number of downloads

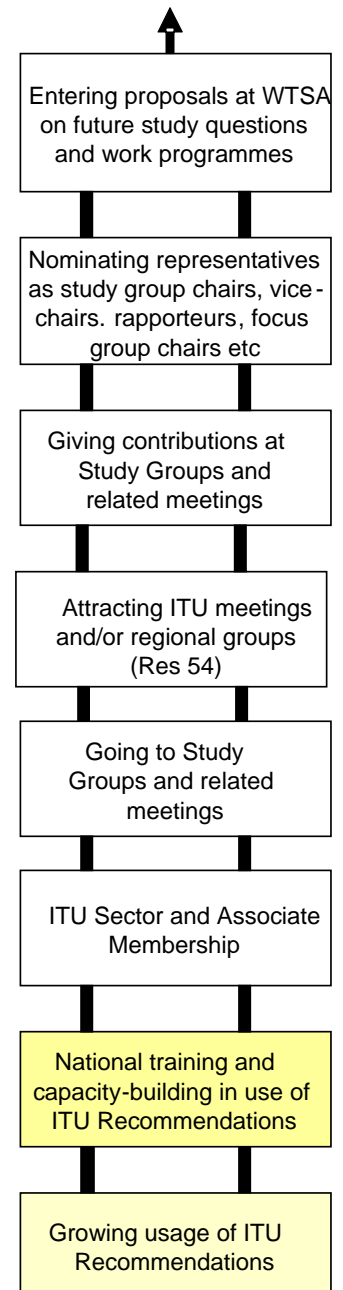
Economy	No. of visits	As % of developing	As % of total
China	39'990	25.9%	3.83%
India	15'065	9.8%	1.44%
Russian Fed.	6'554	4.2%	0.63%
Brazil	5'975	3.9%	0.57%
Vietnam	4'819	3.1%	0.46%
Saudi Arabia	4'805	3.1%	0.46%
Colombia	3'646	2.4%	0.35%
Indonesia	3'547	2.3%	0.34%
Iran	3'422	2.2%	0.33%
Uruguay	3'294	2.1%	0.32%

Free Downloads from ITU-T website, Jan-May 2007.  
Source: ITU-T Web Trends



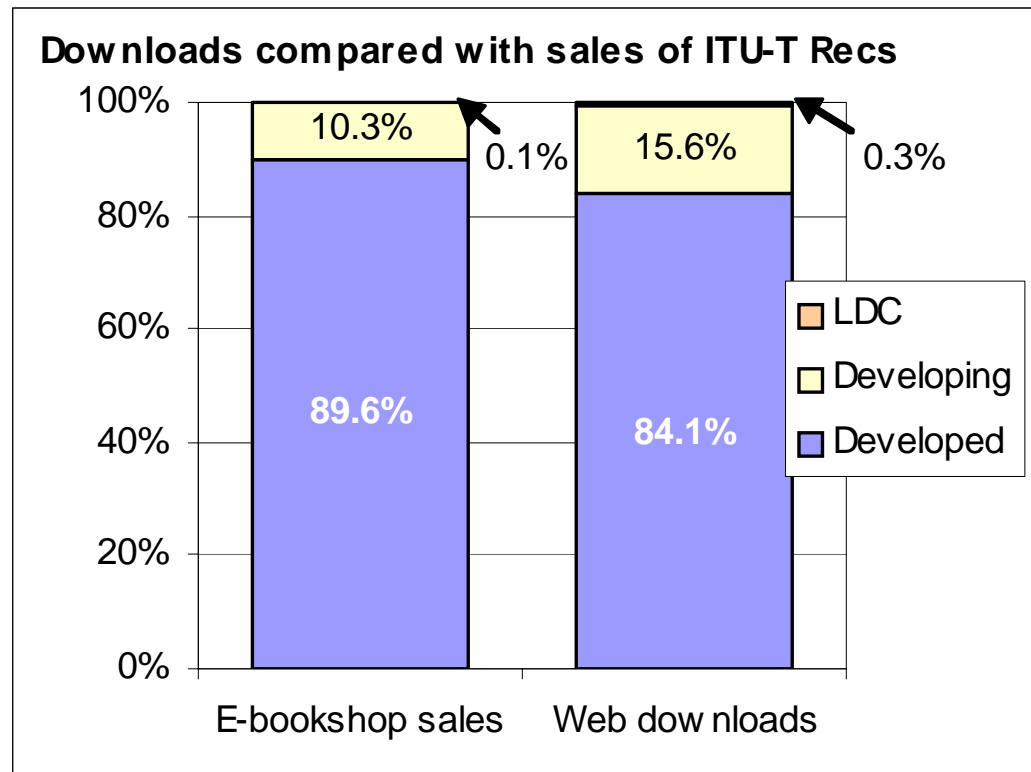
# Standardization Development Ladder (2)

- On the second rung of the ladder is the **national capacity-building in use of ITU Recommendations**, helping to build a national resource base of engineers able to implement Recommendations
- ITU can provide capacity-building and training programmes (eg centres of excellence)
- Standardization Gap Fund facilitates participation of developing country experts in standardization work



# Standardization Development Ladder (2)

- ITU-T's policy of making Recommendations free of charge online has led to increased usage from developing countries

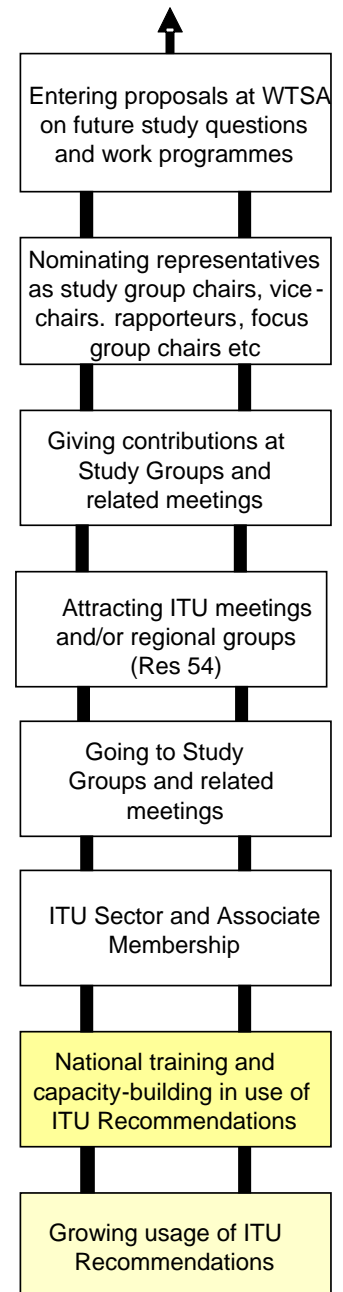


**2006**

4'815 sales to  
78 economies

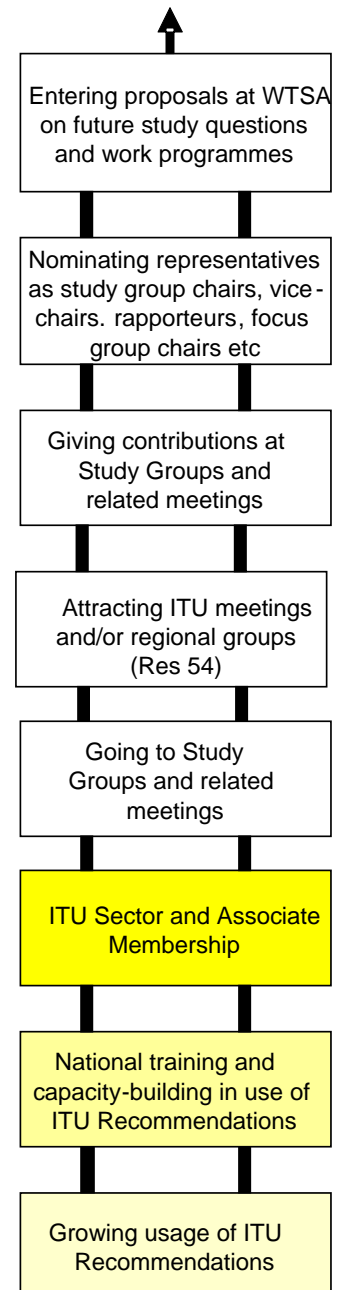
**2007, Jan-Aug**

>1.9m  
downloads from  
197 economies



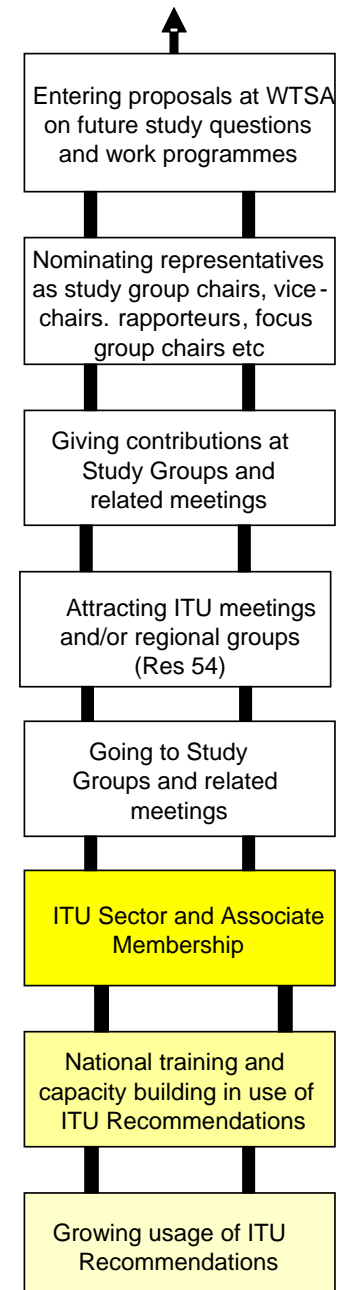
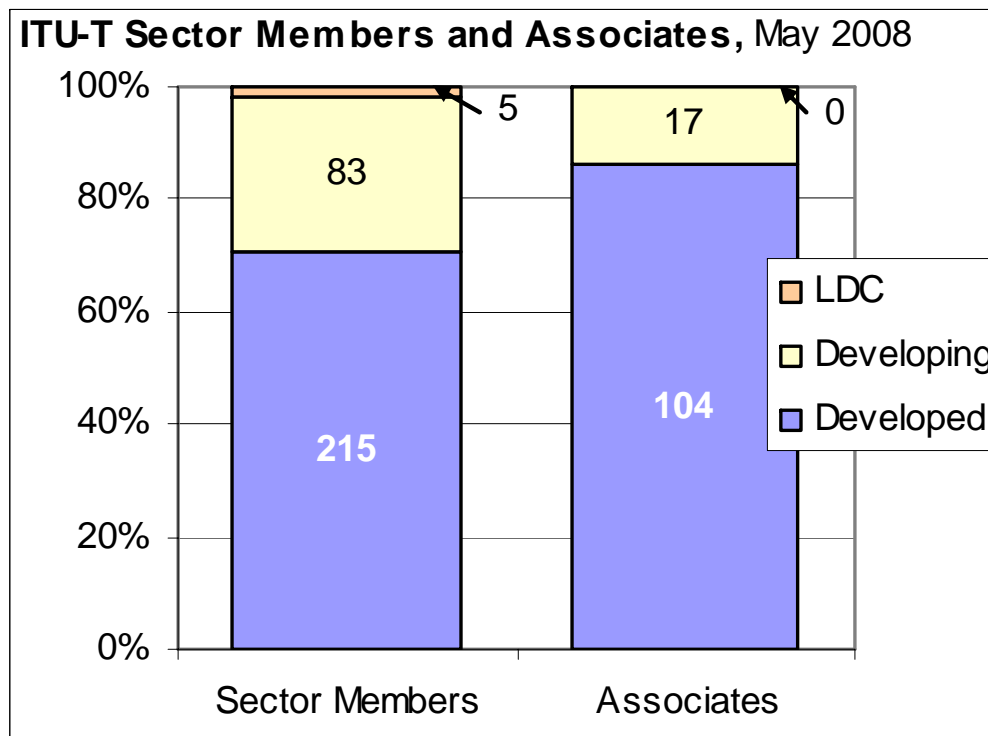
# Standardization Development Ladder (3)

- On the third rung of the ladder is **ITU Sector and Associate membership**
- Institutional membership in the global community helps promote globalization while off-setting its negative aspects
- Membership also gives access to meeting reports, contributions, temporary documents, working documents etc



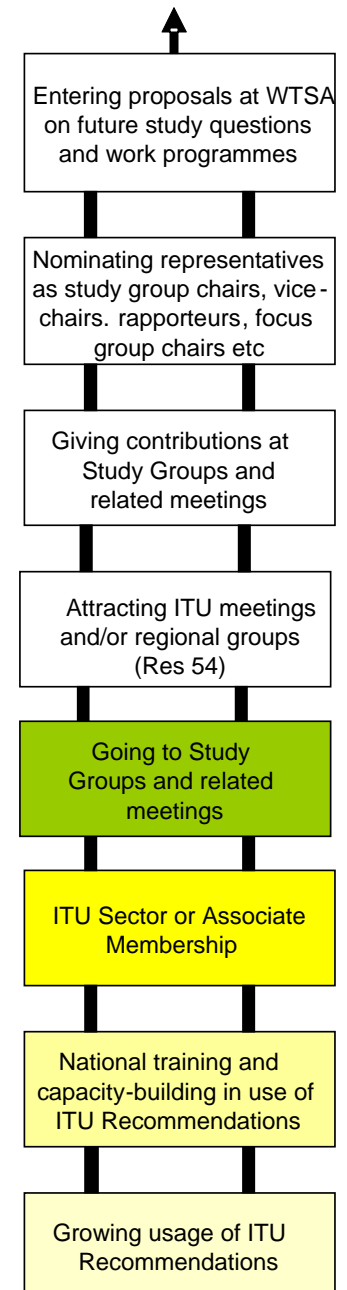
# Standardization Development Ladder (3)

- One third of ITU-T Sector Members are from developing countries but only one sixth of Associates



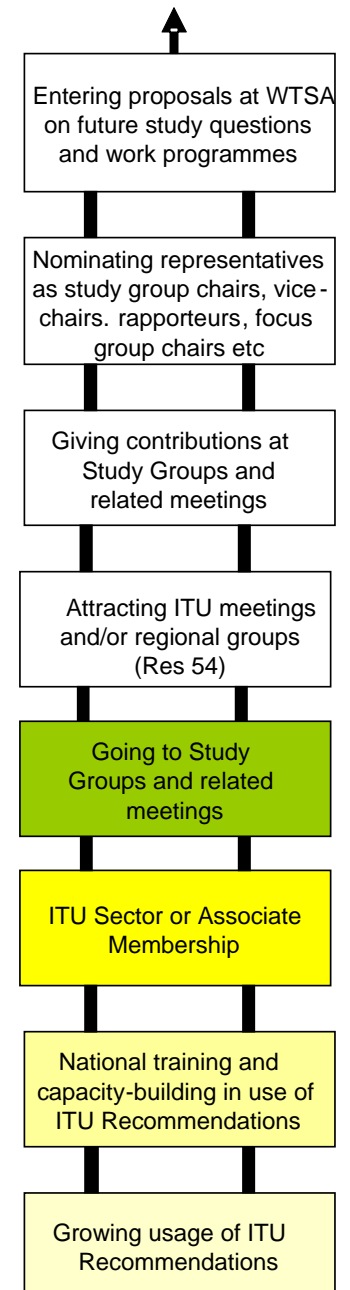
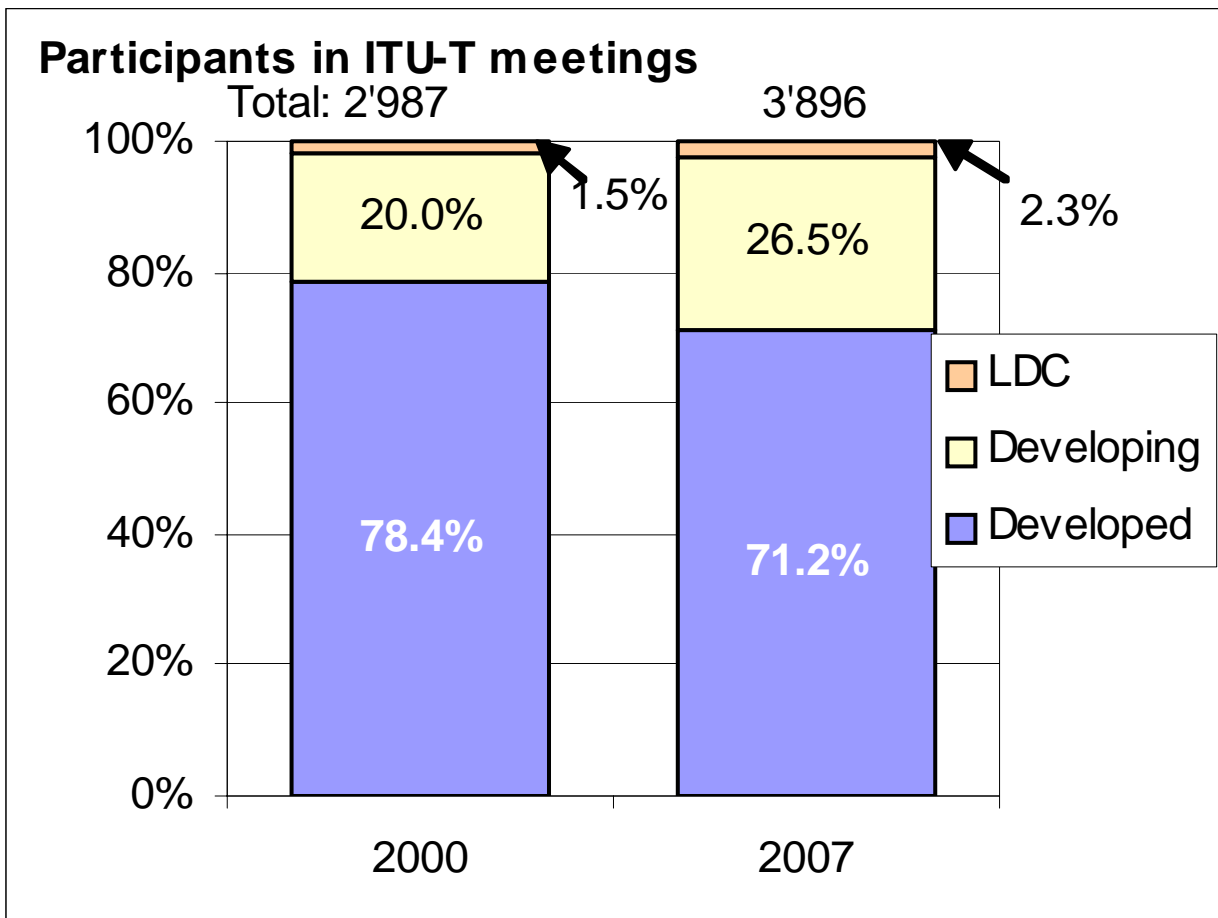
# Standardization Development Ladder (4)

- On the 4<sup>th</sup> rung of the ladder is **participation in Study Groups and Focus Groups**
- Participation promotes “learning by doing” and opens possibilities for networking
- Possibilities also exist for remote participation (e.g., through Internet Broadcast of Study Group meetings, correspondence groups, remote collaboration tools etc)



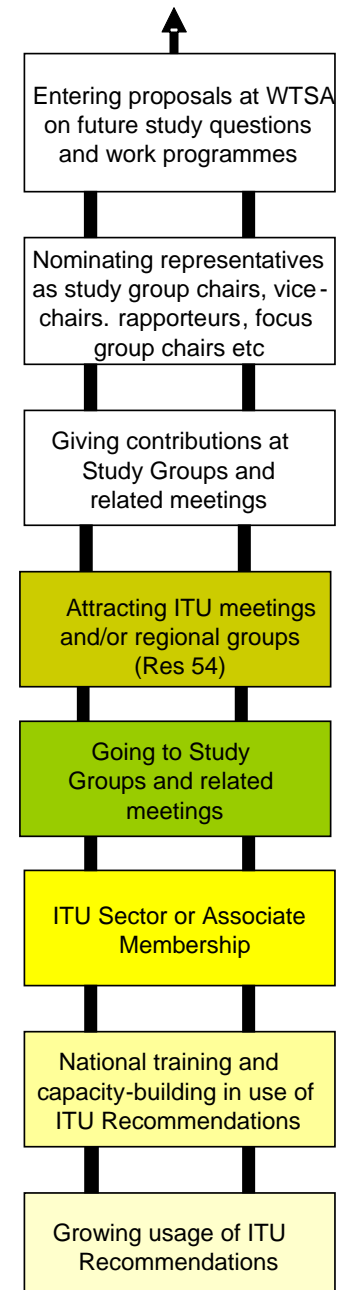
# Standardization Development Ladder (4)

- Increasing number of participants from developing countries



# Standardization Development Ladder (5)

- On the 5<sup>th</sup> rung, countries may seek to **attract ITU meetings**, or establish regional groups to foster participation
- Hosting events will create new opportunities for “learning by doing”, training and raising awareness
- An increasing number of joint ITU-T/ITU-D Study Groups, Focus Groups and workshops are now held in the regions





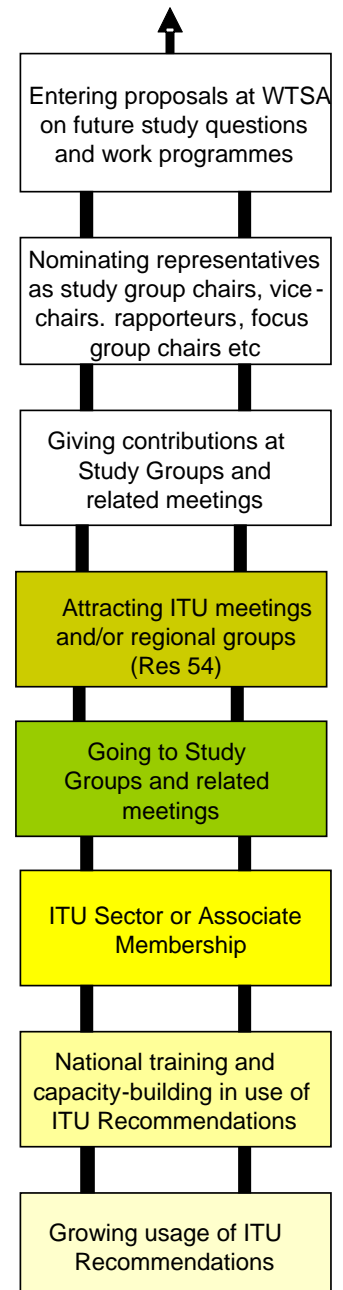
# Standardization Development Ladder (5)

- **Regional Development Forums and WTSA Preparatory meetings**

- **Brasilia, Brazil, May 2008**
- **Accra, Ghana, May 2008**
- **Tashkent, Uzbekistan, June 2008**
- **Damascus, Syria, July 2008**
- **Hanoi, Vietnam, September 2008**

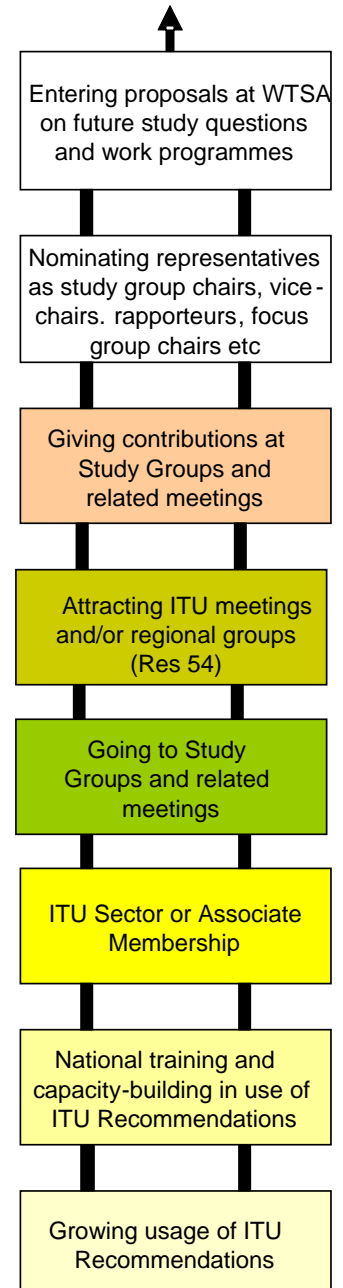
- **Other regional events**

- **Global Symposium for Regulators, Pattaya, 11-13 March**
- **Africa TELECOM, Cairo, 12-15 May**
- **Asia TELECOM, Bangkok, 2-5 September**



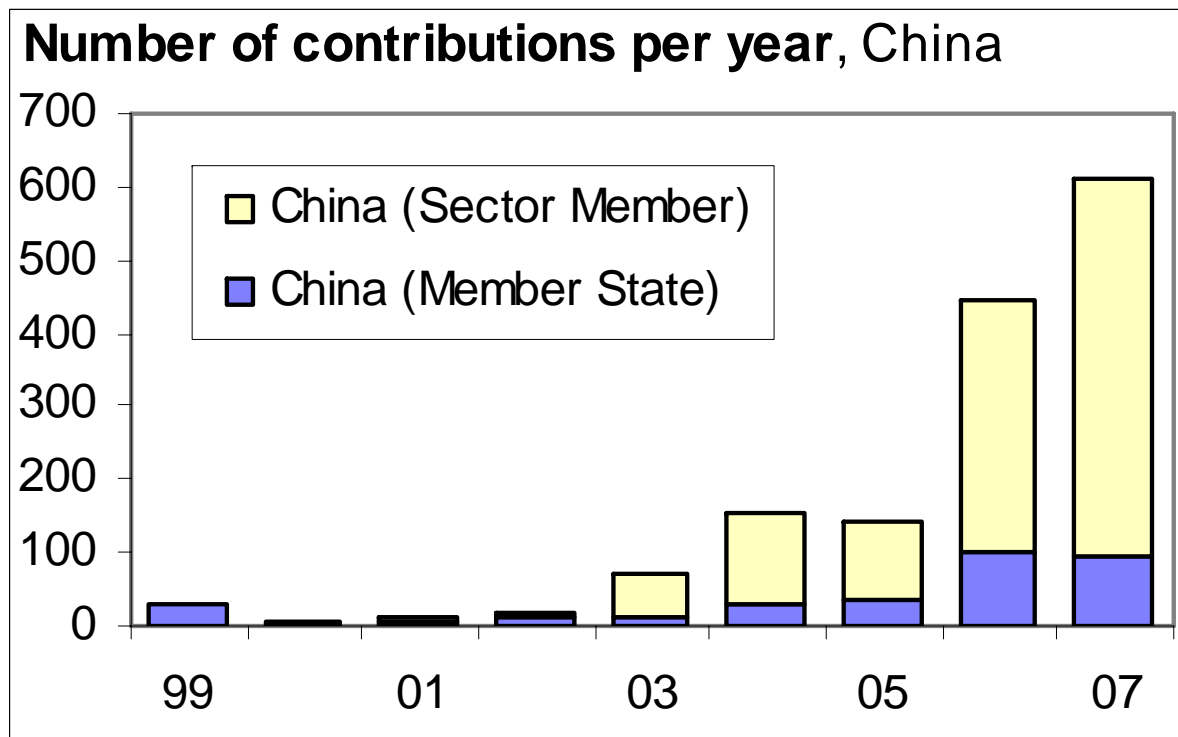
# Standardization Development Ladder (6)

- On the 6<sup>th</sup> rung of the ladder is **Giving “contributions”** (ie input documents) at ITU-T Study Groups, Focus Groups and related meetings
- By making inputs to the process, it is possible to shape future standards
- The whole standardization process is “contribution-driven”, as these form the basis for virtually all Recommendations

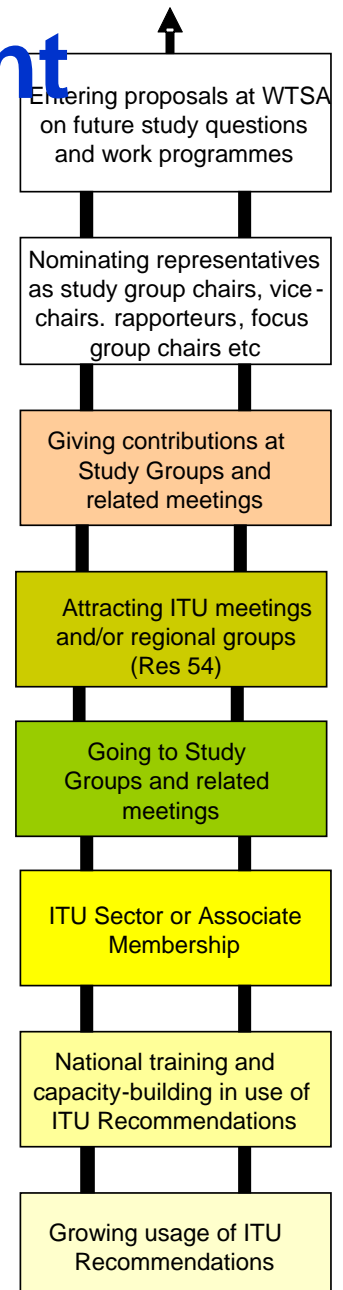


# Standardization Development Ladder (6)

- **Developing countries account for a rising percentage of inputs to Study Groups, as exemplified by China**

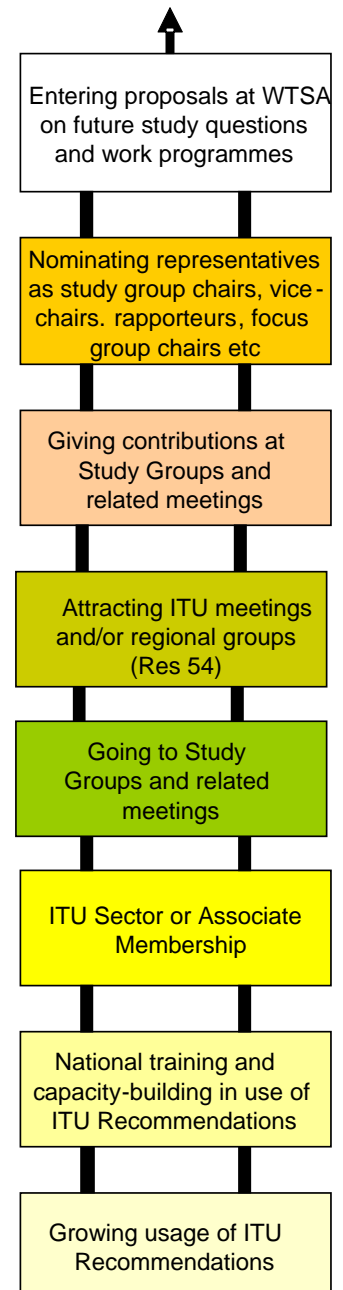


Source:  
ITU-T.



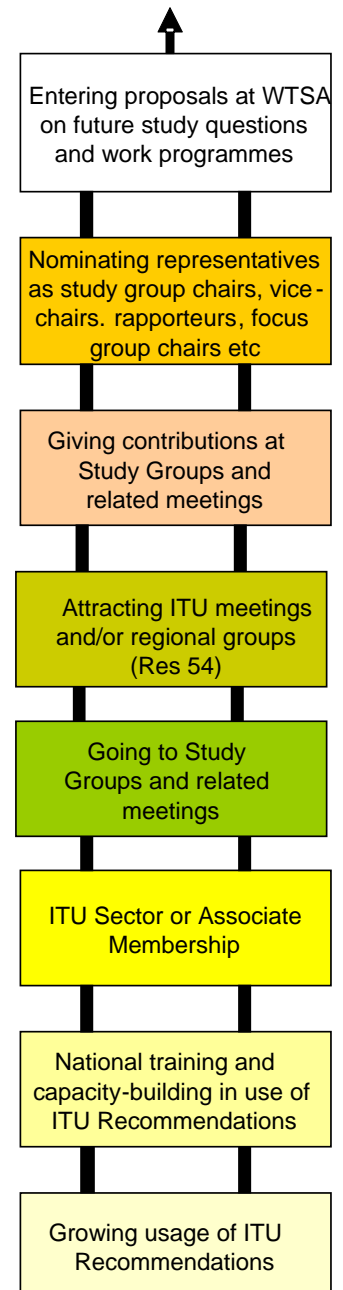
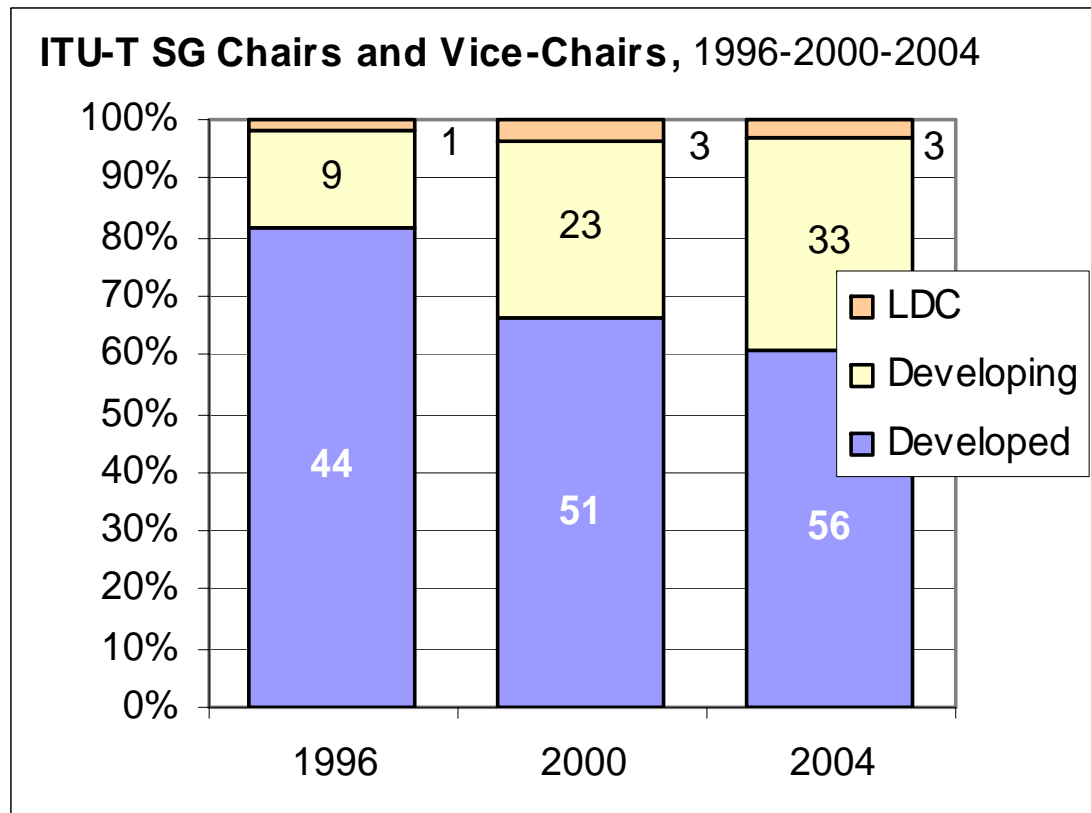
# Standardization Development Ladder (7)

- On the 7th rung of the ladder is **Nominating representatives**, eg to serve as Study Group chairs, vice chairs, rapporteurs etc
- These officials form part of the management team for each Study Group and help progress the work
- Nomination is a sign of respect for the contributions made by individuals over a number of years



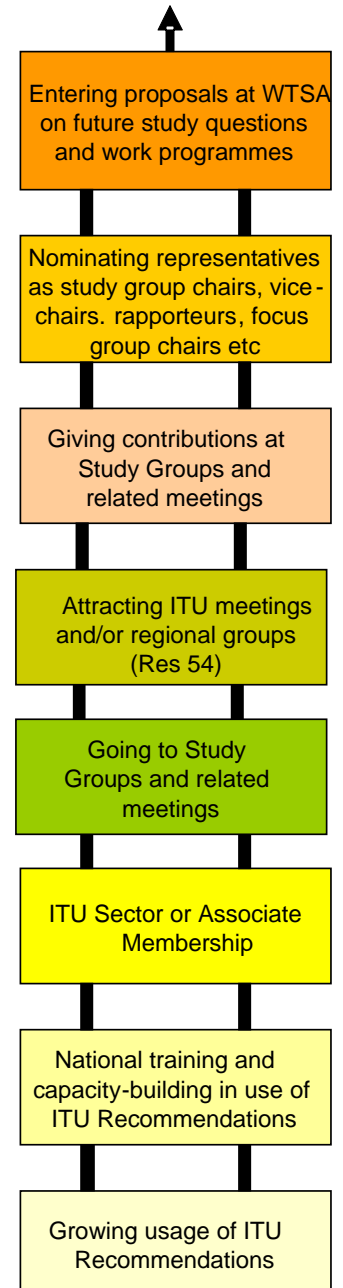
# Standardization Development Ladder (7)

- The number of Study Group officials from developing economies has been increasing to reach around 40%

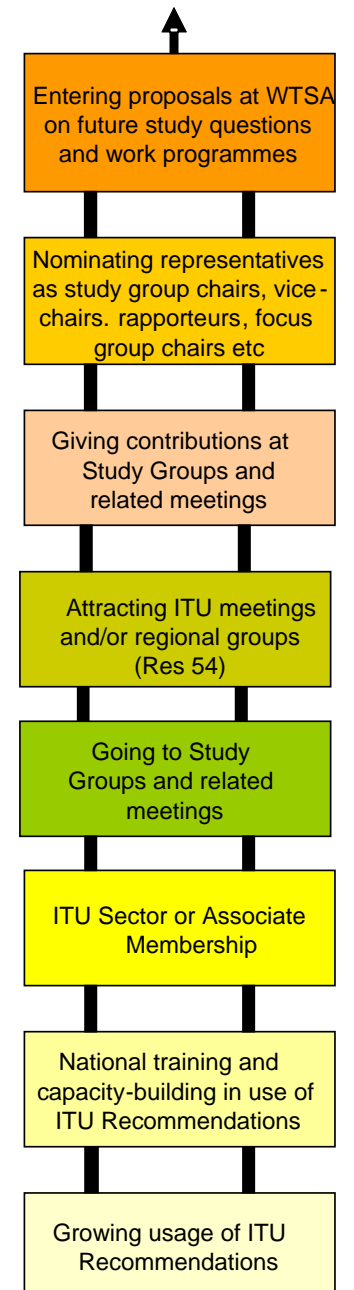


# Standardization Development Ladder (8)

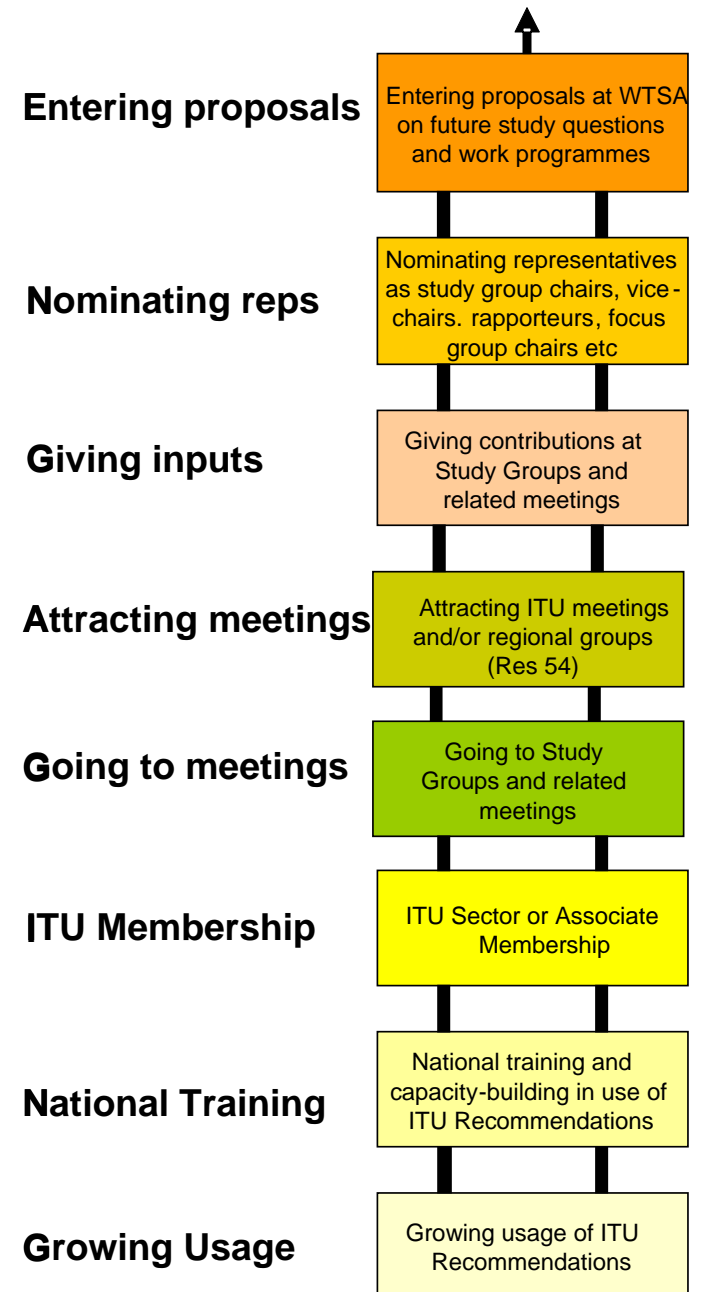
- On the final rung of the ladder is **Entering Proposals**, in TSAG and WTSA, eg on future study questions and work programmes
- ITU-T's work is structured around study questions which determine the work of the Study Groups
- World Telecom Standardization Assembly (WTSA) will be held in Johannesburg from 21-30 October 2008, preceded by a Global Standards Symposium (GSS)



**So, what can be done  
to bridge the  
standardization  
development gap?**



It's all about  
**ENGAGING** with  
entering the  
ITU and its  
Standardization  
Development by  
getting more  
involved





# Thank you.

**TSAG Correspondence Group:**

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**<http://www.itu.int/ITU-T/gap>**

# Glossary of terms used

<b>CHF</b>	<b>Swiss Francs</b>
<b>CS/CV</b>	<b>ITU Constitution and Convention</b>
<b>GNI</b>	<b>Gross National Income</b>
<b>GSS</b>	<b>Global Standards Symposium</b>
<b>ICT</b>	<b>Information and Communication Technologies</b>
<b>ITU</b>	<b>International Telecommunication Union</b>
<b>ITU-D</b>	<b>ITU Development Sector</b>
<b>ITU-R</b>	<b>ITU Radiocommunication Sector</b>
<b>ITU-T</b>	<b>ITU Telecommunication Standardization Sector</b>
<b>Kbit/s</b>	<b>Kilobits per second</b>
<b>LDC</b>	<b>Least Developed Country</b>
<b>NGN</b>	<b>Next Generation Networks</b>
<b>OECD</b>	<b>Organisation for Economic Cooperation and Development</b>
<b>PP-06</b>	<b>ITU Plenipotentiary Conference 2006</b>
<b>R&amp;D</b>	<b>Research and Development</b>
<b>TIES</b>	<b>Telecom Information Exchange System</b>
<b>TSAG</b>	<b>Telecommunication Standardization Advisory Group</b>
<b>SG</b>	<b>Study Group</b>
<b>UNCTAD</b>	<b>United National Conference on Trade and Development</b>
<b>USD</b>	<b>United States Dollars</b>
<b>WCIT</b>	<b>World Conference on International Telecommunications</b>
<b>WSIS</b>	<b>World Summit on the Information Society</b>
<b>WTDC</b>	<b>World Telecommunication Development Conference</b>
<b>WTPF</b>	<b>World Telecommunication Policy Forum</b>
<b>WTSA</b>	<b>World Telecommunication Standardization Assembly</b>