"Bridging the ICT standardization & development gap"

"Bridging the standardization gap (PP-06 Resolution 123)"

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The views expressed in this paper are those of the author and do not necessarily reflect the opinions of ITU or its membership. The author can contacted by e-mail at tim.kelly@itu.int.



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



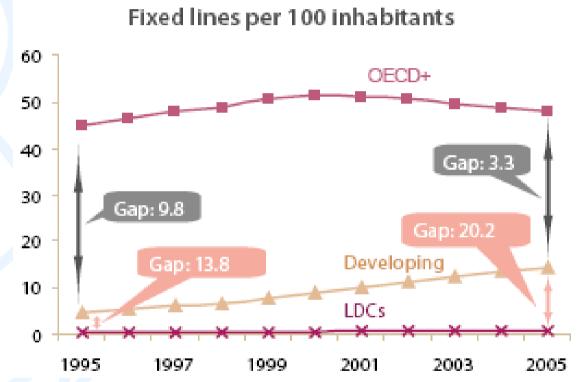
Framework for programme

- 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



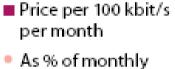
For mobile phones, the gap has fallen from 33:1 to 3:1 and for Internet users from 80:1 to 6:1

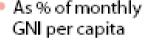


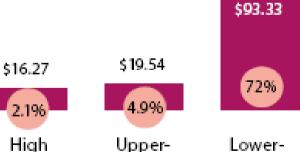
... but the gap is increasing for others

- 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.)

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







middle.

middle.



Low income

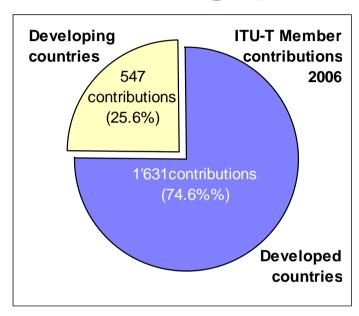
Participating in standards-making can help in implementing services ("Learning by doing")

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



So, what is the "standardization gap"?

disparities in the ability of developing countries, relative to developed ones, to access, implement, contribute to and influence international ICT standards, specifically ITU Recommendations.

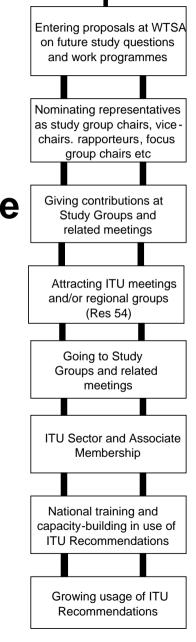


- The standardization development gap is itself both a cause and a manifestation of the wider digital divide
- It contributes to the *persistence* of the wider digital divide



The Standardization Development Ladder

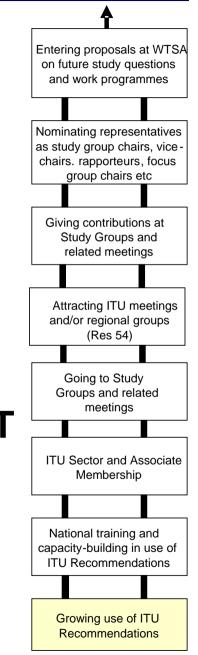
- Bridging the standardization development gap requires a sequence of steps, depending on the level of:
 - > economic development
 - > local manufacturing capability
 - > local R&D capability
 - previous engagement with ITU
- These steps can be conceptualised in terms of a "Ladder of Standardization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

	NO. Of	AS % Of	As % of
Economy	visits	developing	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%

♠

Entering proposals at WTSA on future study questions and work programmes

Nominating representatives as study group chairs, vicechairs. rapporteurs, focus group chairs etc

Giving contributions at Study Groups and related meetings

Attracting ITU meetings and/or regional groups (Res 54)

Going to Study Groups and related meetings

ITU Sector and Associate Membership

National training and capacity-building in use of ITU Recommendations

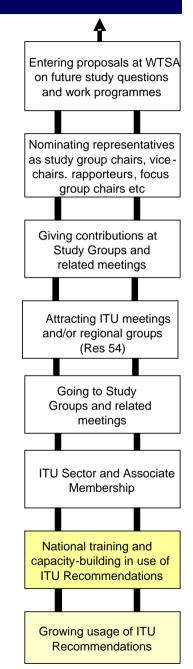
Growing usage of ITU Recommendations

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



Standardization Development Ladder (2)

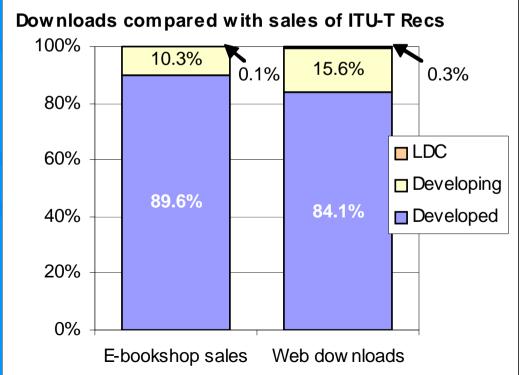
- On the second rung of the ladder is the national capacity-building in use of ITU Recommendations
- Capacity-building helps to build a national resource base of qualified engineers able to implement Recommendations
- ITU can provide capacity-building and training programmes





Standardization Development Ladder (2)

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

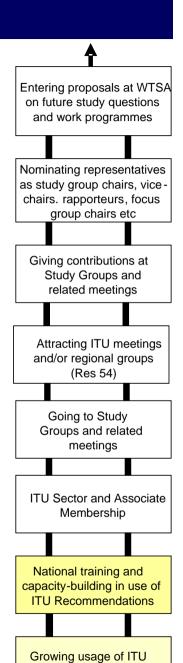


2006

4'815 sales to 78 economies

2007, Jan-Aug

>1.9m downloads from 197 economies



Recommendations

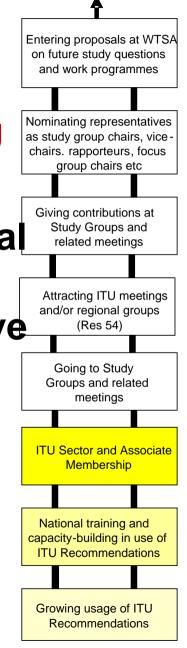


Standardization Development Ladder (3)

 On the third rung of the ladder is ITU Sector and Associate membership

Institutional membership in the global community helps promote globalisation while off-set its negative aspects

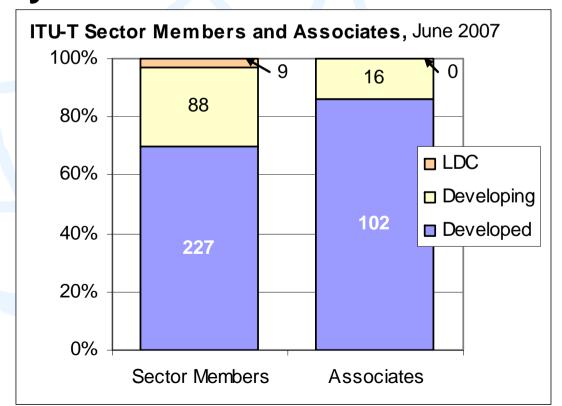
Membership also gives access to meeting reports, contributions, temporary documents, working documents etc

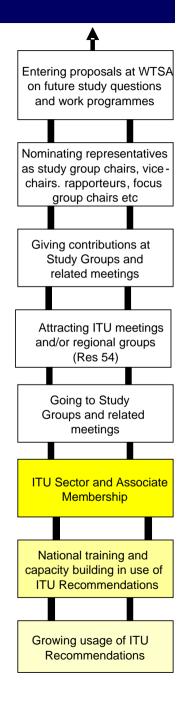




Standardization Development Ladder (3)

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

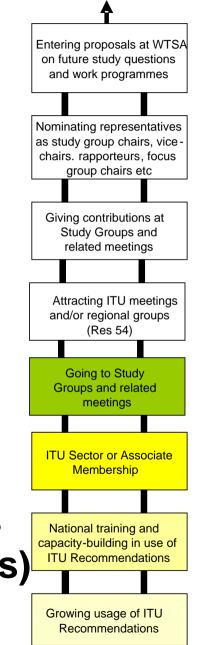






Standardization Development Ladder (4)

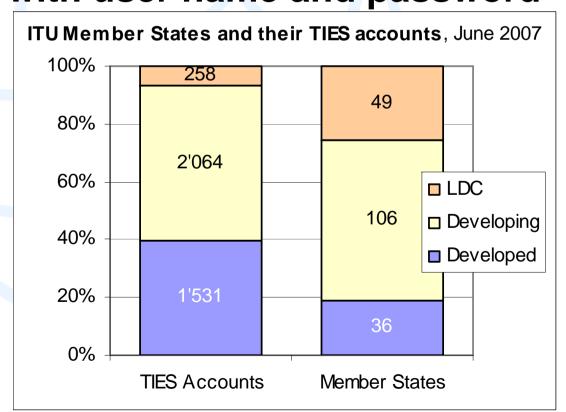
- On the 4th rung of the ladder is participation in Study Groups and Focus Groups
- Participation promotes "learning by doing" and opens possibilities for networking
- Possibilities also exist for remote participation (e.g., through Internet Broadcast of Study Group meetings and through correspondence groups)

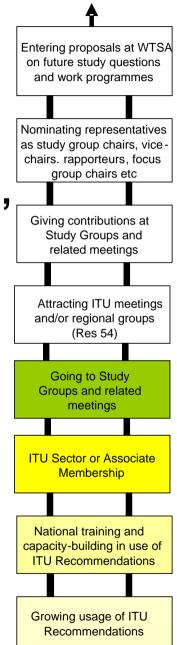




Standardization Development Ladder (4)

Remote participation via Telecom Information Exchange Service (TIES), with user name and password

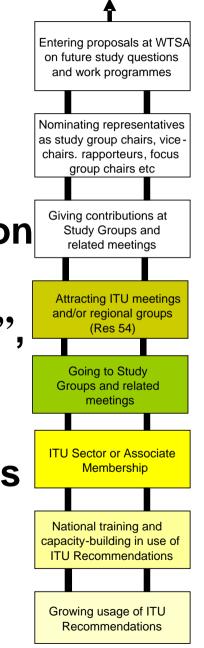






Standardization Development Ladder (5)

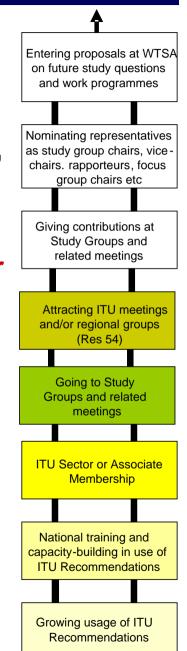
- On the 5th rung, countries may seek to attract ITU meetings, or establish regional groups to foster participation
- Hosting events will create new opportunities for "learning by doing", training and raising awareness
- An increasing number of joint ITU-T/ITU-D Study Groups, Focus Groups and workshops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





Standardization Development Ladder (5)

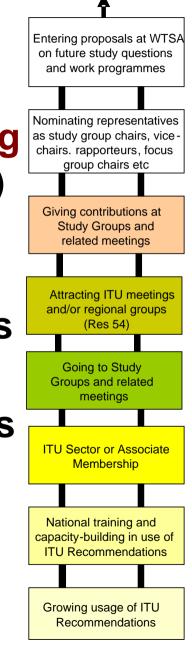
- Recent and forthcoming regional meetings, 2007
 - > Security workshop, Minsk, 4-6 Dec
 - Bridging standardization gap, Kigali, 2-4 October and Mendoza, 24 September
 - Cybersecurity and CIIP, Hanoi, 28-31 Aug
 - ➤ Electromagnetic protection, Beijing, 14-18 May
 - > African tariff group, Banjul, 9-10 May
 - SG2, Arab Regional Group, Sharm-el-Sheikh, 26 March
 - > NGN Planning, Bangkok, 16-17 March
 - > Americas tariff group, Havana, 20-23 Feb
 - NGN Global Standards, Beijing, 8-12 Jan





Standardization Development Ladder (6)

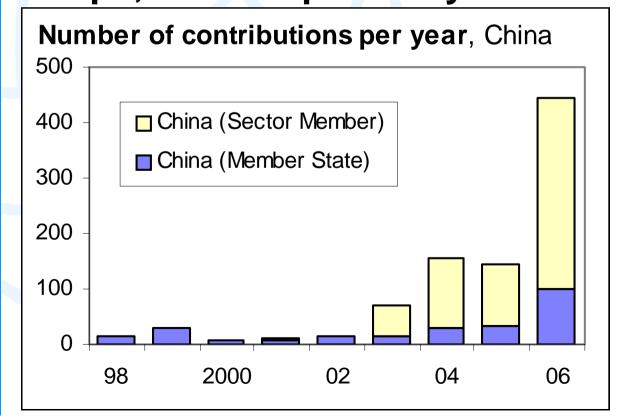
- On the 6th rung of the ladder is Giving "contributions" (ie input documents) at ITU-T Study Groups and related meetings
- By making inputs to the process, it is possible to shape future standards
- The whole standardization process is "contribution-driven", as these form the basis for virtually all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





Standardization Development Ladder (6)

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



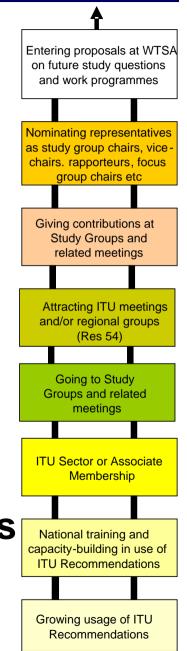
Source: ITU-T.

Entering proposals at WTSA on future study questions and work programmes Nominating representatives as study group chairs, vice chairs, rapporteurs, focus group chairs etc Giving contributions at Study Groups and related meetings Attracting ITU meetings and/or regional groups (Res 54) Going to Study Groups and related meetings ITU Sector or Associate Membership National training and capacity-building in use of ITU Recommendations Growing usage of ITU Recommendations



Standardization Development Ladder (7)

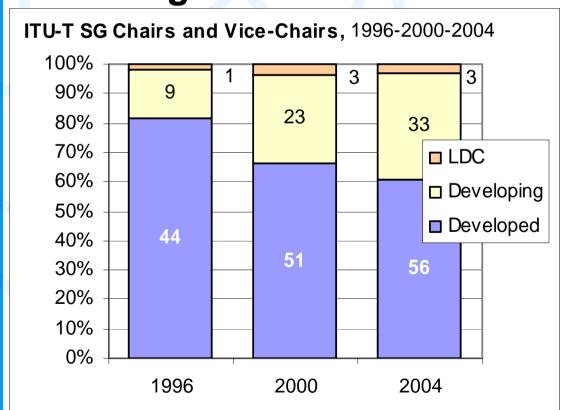
- On the 7th rung of the ladder is Nominating representatives, eg to serve as Study Group chairs, vice chairs, rapporteurs etc
- These officials form part of the management team for each Study Group and help progress the work
- Nomination is a sign of respect for the contributions made by individuals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

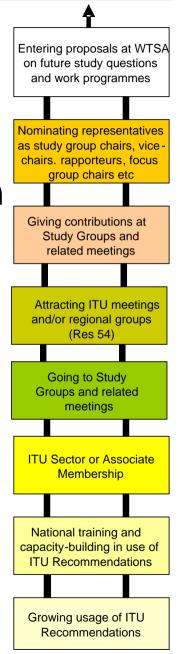




Standardization Development Ladder (7)

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

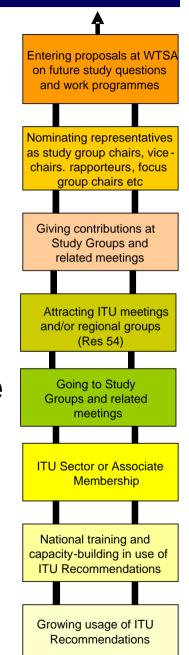






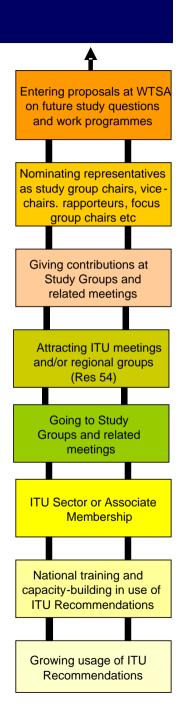
Standardization Development Ladder (8)

- 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 from
 21-30 October 2008, preceded by a
 Global Standards Symposium (GSS)

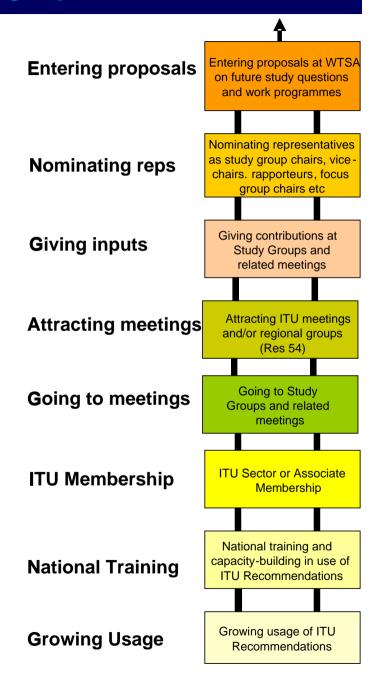




So, what can be done to bridge the standardization development gap?









Thank you.

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http://www.itu.int/ITU-T



Glossary of terms used

CIIP Critical Information Infrastructure Protection

CHF Swiss Francs

CS/CV ITU Constitution and Convention

GNI Gross National Income

GSS Global Standards Symposium

ICT Information and Communication Technologies

ITU International Telecommunication Union

ITU-D ITU Development Sector

ITU-R ITU Radiocommunication Sector

ITU-T ITU Telecommunication Standardization Sector

Kbit/s Kilobits per second

LDC Least Developed Country
NGN Next Generation Networks

OECD Organisation for Economic Cooperation and Development

PP-06 ITU Plenipotentiary Conference 2006

'R&D Research and Development

TIES Telecom Information Exchange System

TSAG Telecommunication Standardization Advisory Group

SG Study Group

UNCTAD United National Conference on Trade and Development

USD United States Dollars

WCIT World Conference on International Telecommunications

WSIS World Summit on the Information Society

WTDC World Telecommunication Development Conference

WTPF World Telecommunication Policy Forum

WTSA World Telecommunication Standardization Assembly