**ITU-D Regional Development Forum
for the Arab Region:
"NGN and Broadband, Opportunities and Challenges"**

Bridging The Standardization Gap (BSG)

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Outline

- **About ITU-T**

- Defining the standardization gap

- Measuring and evaluating the gap

- ITU-T activities to bridge the gap

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About ITU-T

- Establishes worldwide standards → Connect the world

- Work (mostly) done in Study Groups (10 of them)

- Membership Benefits
  - Participate in the standards development and approval process
  - Beat the competition
  - Unique partnership of private sector (Sector Members) & government (Member States)
  - International Reach → faster entry to market
  - Standards making the fast way (AAP vs TAP)

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ITU-T's strategic goals

- To develop interoperable, non-discriminatory international standards (ITU-T Recommendations) in a multi-stakeholders public/private environment

- To assist in bridging the standardization gap between developed and developing countries

- To extend and facilitate international cooperation among international, regional and national standardization bodies, forums and consortia

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Activities in ITU-T

- Study Groups
  - ➢ Operational Aspects (Numbering, Addressing)
  - ➢ Economic and policy issues
  - ➢ Environment and Climate change
  - ➢ Broadband Cable and TV
  - ➢ Transport and Access
  - ➢ Security
  - ➢ Performance, Quality of Service
  - ➢ Protocols and Test Specifications
  - ➢ Future Networks
  - ➢ Multimedia
- Bridging the standardization gap
- Accessibility
- Conformity and Interoperability
- Technology Watch
- Kaleidoscope and Academia

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Standardisation and Standards

- Standardisation → Key building block for building a globally connected society

- Importance of standards

  - Foster innovation

  - Competition

  - Enable interoperability

- ***"Global standards create a positive user experience. They help to satisfy consumers' expectations that technology products will work together easily. "*** – Justin Rattner, Intel

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The Standardization Gap

- It is defined as disparities in the ability of developing countries, relative to developed ones, to access, implement, contribute to and influence international ICT standards.

- The standardization development gap is itself both a cause and a manifestation of the wider digital divide

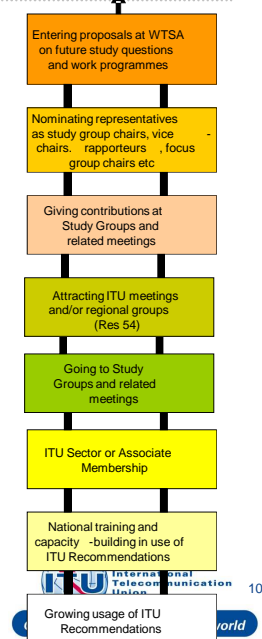- It contributes to the *persistence* of the wider digital divide.

Framework for BSG

- PP-10 Resolution 123

  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-08): Action Plan
  - Strengthening standards-making capabilities
  - Assisting ITU-D in enhancing application of standards
  - Human resource building
  - Flagship groups for bridging the gap
  - BSG Fund

- Resolution 47 (WTDC-10)

  Enhancement of knowledge and effective application of ITU Recommendations in developing countries, increase capacity building opportunities for interoperability

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How can countries bridge the gap?

- 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 conceptualized in terms of a "Ladder of Standardization Development"

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

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How can countries bridge the gap?

- 8 - Entering proposals at WTSA on future study questions and work programmes

- 7 - Nominating representatives as SG chairs, vicechairs, Rapporteurs, focus group chairs, etc

- 6 - Giving contributions at SGs and related meetings

- 5 - Attracting ITU meetings and/or regional groups

- 4 - Going to SGs and related meetings

- 3 - ITU Sector Membership and Associate status

- 2 - National training and capacity-building in use of ITU Recommendations

- 1 - Growing usage of ITU-T Recommendations

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ITU-T Research : Measuring and Reducing the Gap

- Assess the standards development capability of developing countries

- Supported by a grant from Korea Communications Commission.

- Survey questionnaire sent to all developing countries

- Case Studies done for nine countries – China, Czech Rep., Lebanon, Mali, Mongolia, Papua New Guinea, Tanzania, Thailand, Zambia

- Preliminary Report published in December 2009.

  http://www.itu.int/en/ITU-T/gap/Pages/default.aspx

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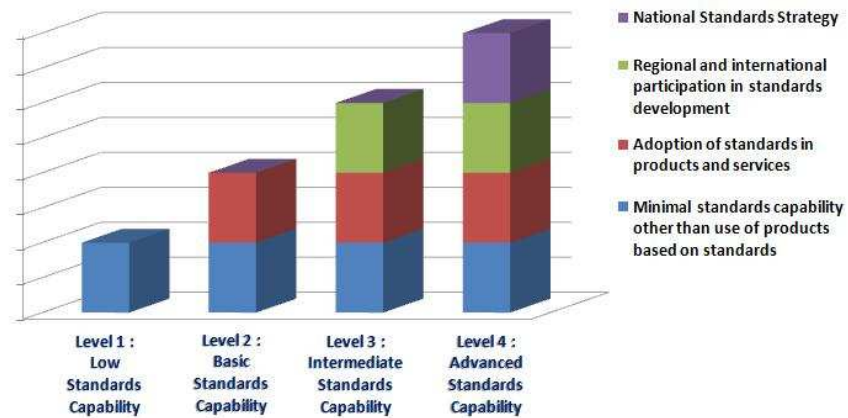Committed to connecting the world
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ITU-T Research : Measuring and Reducing the Gap

- Standards Development Capability

- Government Standards Policy

- Standardisation Human Resources

- National Standards Use and Adoption

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National Standards Capability Scale

Four Levels of National Standards Capability

- National Standards Strategy
- Regional and international participation in standards development
- Adoption of standards in products and services
- Minimal standards capability other than use of products based on standards

Level 1 : Low Standards Capability

Level 2 : Basic Standards Capability

Level 3 : Intermediate Standards Capability

Level 4 : Advanced Standards Capability

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ITU-T Activities to Bridge the Gap

- Improve standards making capabilities
- Assist in enhancing efforts in standards applications
- Human resource building
- Establish regional groups for bridging the gap
- Set up BSG Fund

Improve Standards Making Capabilities

- Research on new tools for measuring and reducing the gap
- Free access to ITU-T Standards
- Increase remote participation and collaboration
- Admission of Sector Members and Associates from developing countries
- Increase number of officials (Chairs / Rapporteurs) from developing countries in ITU-T Study Groups
- Increase SG meetings in the regions
- Implement Res. 76 on capacity building and creation of test labs in the regions

New Membership Category for Academia

- PP-10 approved two resolutions to introduce new membership categories for academia and for SME companies from developing countries at reduced fee.

- Sector membership to academic and research institutions
  - Developed Countries : CHF 3,975
  - Developing Countries : CHF 1,987.50

  http://www.itu.int/members/index.html

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Assist in Enhancing Applications of Standards

- Publication of Handbooks on applications of ITU-T Recommendations

  - E.g. Fibre Optic Systems, ITU-T Security, EMC

- Workshops on Standardisation

  - 2 workshops on BSG were held in Fiji in September 2009 and another in Cyberjaya, Malaysia in June 2010, to provide best practices and guidance on improving national standards readiness.

  - 3 workshops planned in 2011.

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Human Resource Building

- Capacity Building

  - ITU-T Recommendations

    - Better understanding of the ITU-T Recommendations, how to design and implement projects choosing the most appropriate equipment according to the state-of-the art.

    - ITU-T Tutorial on Optical Fibre Cables and Systems

    - Tutors are leading experts from industry

  - Conformity and Interoperability

  - Simulated Study Group Meetings

- Fellowships for representatives of developing countries

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Regional Groups

- Regional Groups and meetings

  - SG2 Group for Arab Region

  - SG3 Groups for Asia and Oceania, Africa, Europe and Mediterranean, Latin America and Caribbean (Tariff and accounting principles)

  - SG12 for Africa (Performance, QoS)

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BSG Fund

- BSG Fund set up in 2008

- Objective

  - Facilitate the participation of developing countries in the standards development process

  - Allow developing countries to profit from access to new technology development

  - Ensure that the requirements of developing countries are taken into account in the development of standards

- CHF 288,000

- Korea Communications Commission, Nokia Siemens Networks, Microsoft, Cisco

Conclusions

- Bridging the Standardization Gap requires efforts from ITU and its Membership

  - Increase the use of ITU-T Recommendations, membership and participation of developing countries

  - Capacity building on standardisation

  - Increase participation in Study Groups, Workshops, Meetings and number of contributions

Thank you