ADVANCING A SUSTAINABLE INFORMATION SOCIETY FOR ALL

Presentation of background paper,
DESA EGM, New York, 8 July 2015

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The Information Society and sustainable development

Sustainable Development Goals (SDGs)
Third Earth Summit (Rio+20)
Millennium Declaration (MDGs)
First Earth Summit (Rio)
Brundtland Commission

WSIS+10 Review
WSIS Summit - Tunis
WSIS Summit - Geneva
UN ICT Task Force
CSTD Knowledge Societies report
Maitland Commission
The global reach of ICTs

Source: ITU, Facts and Figures 2015
The digital divide (ITU estimates, 2015)

Mobile broadband subscriptions

- Developed: 86.7
- World: 46.1
- Developing: 39.1
- LDCs: 12.1

Internet usage

- Developed: 82.2
- World: 43.4
- Developing: 35.3
- LDCs: 9.5

Source: ITU, Facts and Figures 2015
The digital divide – over time

Mobile broadband subscriptions

Internet usage

Source: CSTD, Implementing WSIS Outcomes, 2015, using ITU data
The WSIS+10 review
The WSIS+10 review – challenges

- Inclusiveness and the digital divide
- Unpredictability of technological and market change
- Mainstreaming ICTs into sustainable development
- Capacity-building and human development
- Monitoring and measurement of impacts
Sustainable development

Sources: based on articles by E. Barbier and by L. Hilty & B. Aebischer, cited in EGM background paper fn 14
The proposed SDGs

- **17 SDGs**
- **169 SDG targets**
- **8 MDGs**
- **18 MDG targets**

**Millennium Declaration** → **Post-2015 Development Agenda**
**ICTs in the proposed SDGs**

**Goal 9 Target c**
Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

**Goal 4 Target b**
By 2020, expand … the number of scholarships available to developing countries … for enrolment in higher education, including … information & communications technology.

**Goal 5 Target b**
Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

**Goal 17 Target 8**
Fully operationalize the … science, technology & innovation capacity building mechanism for LDCS & enhance the use of enabling technology, in particular information and communications technology.

A number of other proposed SDGs refer to the need for better information.
ICTs and development

ICTs in development

the impact made by the ways in which ICTs are used by citizens, businesses and others on their own initiative

ICTs for development

programmes and other interventions led by governments and development agencies
The impact of changing ICTs

- Economic production, distribution and consumption
- Access to information and knowledge
- Changing relationships between citizens and governments
- Changing relationships between individuals and within communities
- New patterns of work, leisure and settlement
- Changes in the exercise of rights, including expression, association and privacy
- Mass market mobile telephony & mobile Internet
- Broadband networks and devices
- Social media, mobile apps and service innovations
- Cloud computing and the cloud economy
- The Internet of Things
- Smart systems and automated processes
ICT4D policies and interventions

Timeline

Economy and society

Development strategies
Development programmes
Development applications
Development administration

Impact of ICTs

Source: D Souter, ‘The enabling environment for ICT4D’, forthcoming
changes in the underlying characteristics of society

general purpose technologies used across government & business

specific tools for specific development objectives
# A model for assessing the impact of ICTs on sustainability

<table>
<thead>
<tr>
<th></th>
<th>Economic prosperity</th>
<th>Social equity</th>
<th>Environmental sustainability</th>
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<tbody>
<tr>
<td>Direct impacts</td>
<td>Impacts that are directly related to the manufacture, use and disposal of ICTs</td>
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<tr>
<td>Indirect impacts</td>
<td>Impacts which result from the real-time use and application of ICTs</td>
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<tr>
<td>Societal impacts</td>
<td>Impacts which result from the cumulative use of ICTs by large numbers of people over a period of time</td>
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An illustrative scorecard of the impact of ICTs on sustainability

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<thead>
<tr>
<th></th>
<th>Economic prosperity</th>
<th>Social equity</th>
<th>Environmental sustainability</th>
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<tbody>
<tr>
<td>Direct impacts</td>
<td>Mostly positive</td>
<td>Mixed</td>
<td>Mostly negative</td>
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<tr>
<td>Indirect impacts</td>
<td>Mostly positive</td>
<td>Mostly positive</td>
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<tr>
<td>Societal impacts</td>
<td>Uncertain</td>
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</table>

ICT GHGs (GeSI estimates)

Source: Global eSustainability Initiative, SMARTer 2020, 2012
ICT4D policies and interventions

Timeline

- Economy and society
- Impact of ICTs

Development policies
Monitoring and measurement
Implementing the SDGs
Development administration

Source: D Souter, ‘The enabling environment for ICT4D’, forthcoming
ICTs and sustainability (the International Conference model)

**ICTs in development**

the impact made by the ways in which ICTs are used by citizens, businesses and others on their own initiative

**Sustainability by ICT**

creating, enabling and encouraging sustainable patterns of production and consumption by means of ICT

**ICTs for development**

programmes and other interventions led by governments and development agencies

**Sustainability in ICT**

making ICT goods and services more sustainable over their lifecycle by reducing energy and material flows

Source: IISD and International Conference on ICT & Sustainability
ICT & ICT4D policies & programmes

Enabling environment –
Infrastructure
Telecoms policy and regulation
National ICT/D strategies

Outcomes of developmental value which emerge from commercial applications and the use of ICTs by citizens

Government/IFI/donor initiatives intended to achieve developmental outcomes

Source: D Souter, ‘The enabling environment for ICT4D’, forthcoming
**Approaches to the relationship between ICTs and SDGs**

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<thead>
<tr>
<th>Post-2015 Development Agenda</th>
<th>Policy framework</th>
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<tr>
<td>SDGs</td>
<td>Programme objectives</td>
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<td>SDG targets</td>
<td>Projects and implementation tools</td>
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<td>International agreements</td>
<td>Development administration and coordination</td>
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<thead>
<tr>
<th>Global</th>
<th>Regional and development status (LDCs, SIDS, etc.)</th>
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<tbody>
<tr>
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# The WSIS-SDG matrix

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An overview

The impact of ICTS on economy and society
- development of an Information Society

The impact of ICTs on development sectors & SDGs
- environment,
- health,
- etc.

Demand for ICTs
- usage, disaggregated by gender and socio-economic categories

The supply of ICTs
- connectivity, access etc. in diverse localities

The growing significance of ICTS