Chapter 5
2003 World Telecommunication Development Report
Access Indicators for the Information Society

Press Briefing
19 November 2003
UN
Why measure access?

“We, the representatives of the peoples of the world, assembled in Geneva from 10-12 December 2003 for the first phase of the World Summit on the Information Society, declare our common desire and commitment to build a people-centered, *inclusive* and development oriented Information Society, where *everyone* can create, *access*, utilize and share information and knowledge, enabling individuals, communities and peoples to achieve their full potential in promoting their sustainable development and improving their quality of life…”

Why an index?

A selection of indicators compiled into an index gives a better overview than any single indicator.
Why an another ICT index?

- Almost all existing ICT indices concentrate primarily on developed economies
- Some do not use internationally comparable indicators and some have methodological snags or are susceptible to distortions due to the use of qualitative variables
- Most are not specifically targeted at measuring ICT access
- Wherever these indices use too many variables, transparency compromised
Digital Access Index

- **ITU expertise:**
  - Leading source of ICT data
  - Analysis and research strength

- **Inclusive:**
  - 178 economies, most of any other ICT index

- **Transparent:**
  - 5 categories, 8 indicators, easy to decode

- **Classifications:**
  - High, upper, medium, low

- **Flexibility:**
  - Gender sub-index
  - National indices
  - Index over time
### Compiling DAI: Hong Kong, China

<table>
<thead>
<tr>
<th>Category</th>
<th>Variable</th>
<th>HK, China</th>
<th>÷ Goalpost</th>
<th>= Indicator</th>
<th>* Weight</th>
<th>= Index value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Infrastructure</td>
<td>1. Fixed telephone subscribers per 100 inhabitants</td>
<td>56.6</td>
<td>60</td>
<td>0.94</td>
<td>½</td>
<td>0.47 + 0.46</td>
</tr>
<tr>
<td></td>
<td>2. Mobile cellular subscribers per 100 inhabitants</td>
<td>91.6</td>
<td>100</td>
<td>0.92</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>2. Affordability</td>
<td>3. 1 – (Internet access price as percentage of per capita income)</td>
<td>99.8</td>
<td>100</td>
<td>0.998</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3. Knowledge</td>
<td>4. Adult literacy</td>
<td>93.5</td>
<td>100</td>
<td>0.94</td>
<td>2/3</td>
<td>0.62 + 0.21</td>
</tr>
<tr>
<td></td>
<td>5. Combined primary, secondary and tertiary school enrolment level</td>
<td>63.0</td>
<td>100</td>
<td>0.63</td>
<td>1/3</td>
<td></td>
</tr>
<tr>
<td>4. Quality</td>
<td>6. International Internet bandwidth (bits) per capita</td>
<td>1,867</td>
<td>10,000</td>
<td>0.89(^a)</td>
<td>½</td>
<td>0.44 + 0.21</td>
</tr>
<tr>
<td></td>
<td>7. Broadband subscribers per 100 inhabitants</td>
<td>14.6</td>
<td>30</td>
<td>0.49</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>5. Usage</td>
<td>8. Internet users per 100 inhabitants</td>
<td>43.0</td>
<td>85</td>
<td>0.51</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Digital Access Index (Average of 5 categories above)**  
0.79

**Note:**  
a) Because of the large spread of values among economies, a logarithm is used to calculate this value:  
\( \frac{\log(1'867) - \log(0.01)}{\log(10'000) - \log(0.01)} \)
Where ICTs are headed

Fixed telephone subscribers per 100 inhabitants in Sweden

Mobile telephone subscribers per 100 inhabitants in Taiwan, China

Broadband Internet subscribers in Korea (Rep.)

Internet users per 100 inhabitants in Iceland

Per 100 households

Per 100 inhabitants

% of sample population (12-80)

% of entire population
# Top 10

<table>
<thead>
<tr>
<th>Rank</th>
<th>Economy</th>
<th>Infrastructure</th>
<th>Affordability</th>
<th>Knowledge</th>
<th>Quality</th>
<th>Usage</th>
<th>DAI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sweden</td>
<td>0.94</td>
<td>0.99</td>
<td>0.99</td>
<td>0.64</td>
<td>0.67</td>
<td>0.847</td>
</tr>
<tr>
<td>2</td>
<td>Denmark</td>
<td>0.89</td>
<td>0.99</td>
<td>0.99</td>
<td>0.66</td>
<td>0.60</td>
<td>0.828</td>
</tr>
<tr>
<td>3</td>
<td>Iceland</td>
<td>0.89</td>
<td>0.99</td>
<td>0.96</td>
<td>0.50</td>
<td>0.76</td>
<td>0.820</td>
</tr>
<tr>
<td>4</td>
<td>Korea (Rep.)</td>
<td>0.74</td>
<td>0.99</td>
<td>0.96</td>
<td>0.74</td>
<td>0.65</td>
<td>0.817</td>
</tr>
<tr>
<td>5</td>
<td>Norway</td>
<td>0.84</td>
<td>0.99</td>
<td>0.99</td>
<td>0.55</td>
<td>0.59</td>
<td>0.793</td>
</tr>
<tr>
<td>6</td>
<td>Netherlands</td>
<td>0.78</td>
<td>0.99</td>
<td>0.99</td>
<td>0.61</td>
<td>0.60</td>
<td>0.792</td>
</tr>
<tr>
<td>7</td>
<td>Hong Kong, China</td>
<td>0.93</td>
<td>1.00</td>
<td>0.83</td>
<td>0.68</td>
<td>0.51</td>
<td>0.790</td>
</tr>
<tr>
<td>8</td>
<td>Finland</td>
<td>0.81</td>
<td>0.99</td>
<td>0.99</td>
<td>0.55</td>
<td>0.60</td>
<td>0.786</td>
</tr>
<tr>
<td>9</td>
<td>Taiwan, China</td>
<td>0.98</td>
<td>0.99</td>
<td>0.95</td>
<td>0.56</td>
<td>0.45</td>
<td>0.786</td>
</tr>
<tr>
<td>10</td>
<td>Canada</td>
<td>0.69</td>
<td>0.99</td>
<td>0.97</td>
<td>0.64</td>
<td>0.60</td>
<td>0.779</td>
</tr>
<tr>
<td>11</td>
<td>United States</td>
<td>0.74</td>
<td>0.99</td>
<td>0.97</td>
<td>0.54</td>
<td>0.65</td>
<td>0.778</td>
</tr>
<tr>
<td>24</td>
<td>Slovenia</td>
<td>0.78</td>
<td>0.97</td>
<td>0.94</td>
<td>0.44</td>
<td>0.44</td>
<td>0.716</td>
</tr>
</tbody>
</table>
Reversal of fortune

Change in rank relative to 40 economies

- New Zealand 1998: 0.60, 2002: 0.72, change: +2
- Australia 1998: 0.61, 2002: 0.74, change: +1
- United States 1998: 0.66, 2002: 0.78, change: +2
- Canada 1998: 0.66, 2002: 0.77, change: +1
- United Kingdom 1998: 0.61, 2002: 0.77, change: +6
- Japan 1998: 0.58, 2002: 0.75, change: +17
- Singapore 1998: 0.56, 2002: 0.75, change: +19
- Hong Kong, China 1998: 0.59, 2002: 0.79, change: +20
- Taiwan, China 1998: 0.56, 2002: 0.78, change: +22
- Korea (Rep.) 1998: 0.55, 2002: 0.81, change: +26
2003 *World Telecommunication Development Report*

Access Indicators for the Information Society
Launch 8 December 2003

World Summit on the Information Society (WSIS) [Geneva, December 2003]
Main event [December 10-12]  
http://www.itu.int/wsis

Statistical event [December 8-9]  

Thank you!

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