Future of e-Government Assessment in the era of Artificial Intelligence

UN DESA Action Lines Facilitation Meeting

C1: Public governance
C7: e-Government
C11: International cooperation

AI, e-government assessment and the role of human expertise

For more information, visit http://bit.ly/WSIS_UNDESA
• We would like to get your views on promotion of ICTs (WSIS Action Line C1) and partnerships (C11) via the assessment of e-government portals (C7-egov) at national and city levels

• Before the session, please be familiar with the UN E-Government Survey and its Methodology

• Please also check the UN E-Government Knowledgebase – i.e. visit your country page

• The next few slides will give you an overview of the United Nations E-Government Survey.

• Remote participation is available following this link Session 192—Future of e-government assessment in the era of AI: Opportunities and... | WSIS Forum 2023 (itu.int)
✓ Biannual publication - once every 2 years, since 2003

✓ Only survey that assesses e-government development of all 193 UN Member States

✓ Assesses also the most populous city in each country starting from 2022 edition

✓ A benchmark tool to measure e-government development, build governments’ capacity, provide policy recommendations and share good practices around the world.

http://publicadministration.un.org/egovkb
E-Government Development Index (EGDI)

OSI - Online Service Index
Based on web features under five categories:
✓ Institutional framework
✓ Content provision
✓ Service provision
✓ Participation
✓ Technology
*(UN DESA)*

HCI - Human Capital Index
✓ Adult literacy
✓ Gross enrollment ratio
✓ Expected years of schooling
✓ Mean years of schooling
*(UNESCO, UNDP)*

TII - Telecommunication Infrastructure Index
✓ Mobile subscribers per 100 inhabitant
✓ Fixed broadband subscriptions per 100 inhabitants
✓ Internet users per 100 inhabitants
✓ Active mobile-broadband subscriptions
*(ITU)*

EGDI = ⅓ OSI + ⅓ TII + ⅓ HCI
86 indicators relating to five criteria assessing city portals

**Institutional framework (8)**

Focuses on municipal e-government strategy, organizational structure, legislation governing access to information and privacy, and open data policy.

**Content provision (25)**

Aims to identify the extent to which essential public information and resources are available online.

**Services provision (18)**

Focuses on the availability and delivery of targeted government services.

**Technology (18)**

Focuses on technical features of the portals to specify how the site and content are made available for users.

**Participation and engagement (17)**

Assesses the availability of mechanisms and initiatives for interaction and opportunities for public participation in local governance structures.
UN E-Government Survey Process

Preparatory phase
Preparatory surveys send out to Member States and Cities
Recruitment of volunteers

Assessment phase
Assessment of portals with volunteers who are native speakers
Discrepancy phase

Data verification and finalization
Key Findings

✓ E-government development has improved between 2020 and 2022: Global average EGDI value rose from 0.5988 to 0.6102
✓ 133 UN Member States (70%) have Very high (60) and High (73) EGDI values: A 5% increase since 2020
✓ Only 7 countries have Low-EGDI level: all 7 are LDC/LLDC/SIDSs; 6 in Africa, 1 in the Americas
✓ The trend for the last 8 years suggests increasing number of countries improving e-government development

<table>
<thead>
<tr>
<th>EGDI Level</th>
<th>2022</th>
<th>2020</th>
<th>2018</th>
<th>2016</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low EGDI</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Middle EGDI</td>
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<td>0.25</td>
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<tr>
<td>High EGDI</td>
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<td>0.5</td>
<td>0.5</td>
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<tr>
<td>Very high EGDI</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
<td>0.75</td>
</tr>
</tbody>
</table>

7 countries
53 countries
73 countries
60 countries
EGDI Series (2008-2022)

Local Online Service Index (LOSI)?

- **2018**: 40 cities, 60 indicators
- **2020**: 100 cities, 80 indicators
- **2022**: 193 cities, 86 indicators
### Current Status of Local E-government

#### Cities in the **VERY HIGH LOSI group**

<table>
<thead>
<tr>
<th>City</th>
<th>Country</th>
<th>LOSI score</th>
<th>City</th>
<th>Country</th>
<th>LOSI score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berlin</td>
<td>Germany</td>
<td>0.9767</td>
<td>Reykjavik</td>
<td>Iceland</td>
<td>0.8372</td>
</tr>
<tr>
<td>Madrid</td>
<td>Spain</td>
<td>0.9767</td>
<td>Helsinki</td>
<td>Finland</td>
<td>0.8256</td>
</tr>
<tr>
<td>Tallinn</td>
<td>Estonia</td>
<td>0.9535</td>
<td>Kiev</td>
<td>Ukraine</td>
<td>0.8256</td>
</tr>
<tr>
<td>Copenhagen</td>
<td>Denmark</td>
<td>0.9419</td>
<td>Riga</td>
<td>Latvia</td>
<td>0.8256</td>
</tr>
<tr>
<td>Dubai</td>
<td>United Arab Emirates</td>
<td>0.9186</td>
<td>Stockholm</td>
<td>Sweden</td>
<td>0.8256</td>
</tr>
<tr>
<td>Moscow</td>
<td>Russian Federation</td>
<td>0.9186</td>
<td>Manama</td>
<td>Bahrain</td>
<td>0.8140</td>
</tr>
<tr>
<td>New York</td>
<td>United States of America</td>
<td>0.9186</td>
<td>Almaty</td>
<td>Kazakhstan</td>
<td>0.8023</td>
</tr>
<tr>
<td>Paris</td>
<td>France</td>
<td>0.9186</td>
<td>Luxembourg City</td>
<td>Luxembourg</td>
<td>0.8023</td>
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<tr>
<td>Singapore</td>
<td>Singapore</td>
<td>0.9070</td>
<td>Vilnius</td>
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<tr>
<td>Shanghai</td>
<td>China</td>
<td>0.8837</td>
<td>Montevideo</td>
<td>Uruguay</td>
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<td>Bogota</td>
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<td>Seoul</td>
<td>Republic of Korea</td>
<td>0.7674</td>
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<tr>
<td>Tokyo</td>
<td>Japan</td>
<td>0.8605</td>
<td>Warsaw</td>
<td>Poland</td>
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</tr>
<tr>
<td>Zurich</td>
<td>Switzerland</td>
<td>0.8605</td>
<td>Brussels</td>
<td>Belgium</td>
<td>0.7558</td>
</tr>
<tr>
<td>Rome</td>
<td>Italy</td>
<td>0.8488</td>
<td>Oslo</td>
<td>Norway</td>
<td>0.7558</td>
</tr>
<tr>
<td>Sao Paulo</td>
<td>Brazil</td>
<td>0.8488</td>
<td>Riyadh</td>
<td>Saudi Arabia</td>
<td>0.7558</td>
</tr>
<tr>
<td>Vienna</td>
<td>Austria</td>
<td>0.8488</td>
<td>Sydney</td>
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</tr>
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<td>Auckland</td>
<td>New Zealand</td>
<td>0.8372</td>
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<td>Croatia</td>
<td>0.7558</td>
</tr>
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- Kiev and Riyadh moved from the **MIDDLE** to the **VERY HIGH LOSI group**
- Minsk moved from the **LOW** to the **HIGH LOSI group**
Insights

- **Inequalities** between local and national portals performances

- The **average LOSI** value increased from **0.43** to **0.51** between 2020 and 2022

- **More populous cities** tend to have **higher LOSI value**

- **Service provision** criterion has the **lowest rate of compliance**

- Most city portals have a dedicated **COVID-19 page** or section serving as a **hub for pandemic related information**, contributing to **recovery efforts**

- Local governments should **consider the opinions of the residents** both for **service provision** and in **decision-making processes**.

- **Broadening the LOSI coverage** would allow to **identify needs** and **develop targeted solutions** in line with local priorities and budgets

- **Collaboration** between cities of similar size and with similar needs
Session guiding questions

Please pick one question and share your comments within 3 minutes so everyone in the room can get a chance to respond.

1. What kind of online public services are waiting for us in the future?

2. What will be the key trends in e-government technologies, how public officials will interact with people, how will people conduct business with governments in the coming years?

3. How can UN DESA advance the UN E-Government Survey methodology to improve data collection and assessment of e-government development at national level in line with mega trends such as AI, blockchain and big data?

4. How can UN DESA utilize AI and new technologies to assess e-government portals?
Thank You

Please reach out to Ms. Saae Kwon for questions saae.kwon@un.org