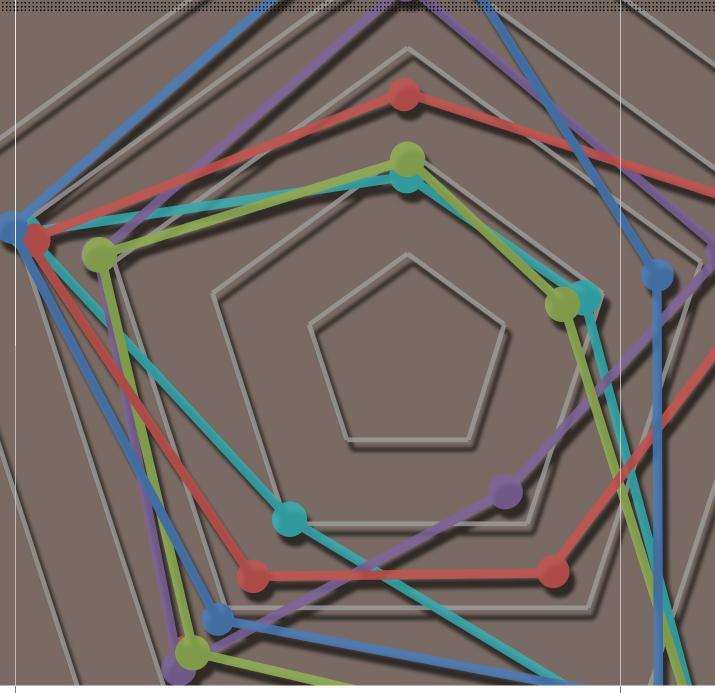
MAKING ALL VOICES COUNT

RESEARCH REPORT

A GRAND CHALLENGE FOR DEVELOPMENT

Evolving an open e-governance index for network societies



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Evolving an open e-governance index for network societies

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Summary

The Open e-Governance Index (OeGI) is a framework for measuring open e-governance, developed and tested in four Asian countries in 2012. This report discusses the second phase of OeGI project, which examined whether the framework was applicable to countries outside Asia. It describes the concept and methodology of the OeGI and provides an overview of its use in Colombia, Indonesia, Pakistan, the Philippines and Uganda.

Open e-governance is about how state and non-state actors use information and communications technologies (ICTs) to steer society collectively. The OeGI project defines open e-governance as the presence of:

- *meshed e-government:* the ability of government to provide integrated, citizencentric online services
- *e-participation channels*: the existence of digital channels for public engagement that complement existing face-to-face or traditional media-led interactions
- *digital inclusion:* the presence of policies and programmes that support the public's wider use of ICTs for development
- *civil society use of ICTs*: the use of ICTs by non-state actors to promote their interests in the public sphere
- an open legal and policy ecosystem: the extent of access among the general public to information and knowledge, and government recognition of the right to free expression and rights over personal communication, cultural freedom and the use of local languages.

This framework was used to assess e-governance in five countries. This revealed that while there is progress towards open e-governance, there are dimensions that need to be strengthened. For example, while there is a great demand for online participation among citizens, there are many policies and programmes that governments need to undertake before this can happen. Further, norms for transparency and accountability are critical in ensuring that national ICT systems can be used for political and socio-economic progress.

Key themes in this paper

- E-government
- Governance indices
- Open legal and policy ecosystems

The OeGI is an action research project that aims to measure the state of openness in the implementation of e-governance around the world

1. Introduction

A nation's system of politics and governance is a key driver of development. The quality of a nation's political and governance mechanisms is often a powerful indicator of its potential for continuing progress in a complex global environment. On one hand, it is the realm of politics and governance that seeks to address the needs and aspirations of its citizens; on the other, it allows a nation to integrate itself in a relevant way within the global community. The domain of politics and governance often drives reform and innovation in all other spheres of society: the economic, social and cultural realms.

In a globalising world characterised by advances in information and communications systems and technologies, various shifts in the objective and subjective conditions that underpin societies have served to challenge traditional notions of politics and governance in ever-increasing ways. Concepts of sovereignty, representation, participation, and even the nature of government and citizenship, are evolving rapidly as technology enables new arenas of public administration and political mobilisation.

The capacities of national communities and nation states to adjust to these shifting realities play a large part in how governments can become more relevant to their various constituencies. In the 'network societies' that are emerging from such shifts, nation states have been forced to rethink and even reinvent traditional governance paradigms. Governments are discovering that there is much value in enabling an environment in which information and communications – through their infrastructure, systems, applications and content – can best be leveraged to achieve development goals. Parallel to this, states have been similarly challenged by how information and communications technologies (ICTs) have had an impact on the democratic equation.

A growing discourse on aspects of 'open e-government', and the broader 'open e-governance' (see Box 1), is emerging in this sphere of politics and governance. The value of 'openness', though not a new concept, is now increasingly emerging as a political value by which states, as well as non-state actors, seek to extend traditional notions of democracy and visions of development. In a very real sense within the realm of 'realpolitik', such a measure of open governance would be especially useful in the context of policy advocacy. Policy stakeholders may use such measurements to

audit their governments according to certain norms and standards that are fast gaining acceptance.

It is in this context that the Foundation for Media Alternatives (FMA), a non-governmental organisation (NGO) involved in research, training and advocacy for ICTs for development issues, developed a framework for measuring 'open governance' through the use of an Open e-Governance Index (OeGI). This work builds on an earlier effort by FMA, with partners in several countries, to develop and popularise such an index. An initial framework and assessment tool was developed and pilot tested in four Asian countries in 2012, with funding support from the International Development Research Centre (IDRC) in Canada.

Despite the proliferation of different ICT indices, the OeGI has unique features: (1) it measures the extent to which civil society groups utilise ICTs to ensure their participation in societal steering; and (2) it measures the extent of openness in the social and political environment to ensure that citizen engagement / participation is realised.

The OeGI is an action research project that aims to measure the state of openness in the implementation of e-governance around the world. While it was implemented as a pure research project during the pilot phase (OeGI 1.0), the organisers hoped that future iterations would allow it to be more action-oriented, so that the research findings would enable ICT experts and advocates to push for policy and programmatic changes in the political environment.

The objectives of the OeGI 2.0 project, which ran from January 2016 to March 2017, were to:

- further understand democratic e-governance, particularly through developing the discourse of open e-governance
- help develop policy on ICTs and governance, and engage policy stakeholders directly around the notions of open e-governance
- develop a concrete resource for citizens / individuals and groups / NGOs to engage policy-makers on open e-governance.

This iteration of OeGI research addresses the particular aim of examining whether the framework for open e-governance, which was implemented in four Asian

countries and territories (Hong Kong, Pakistan, the Philippines and Thailand) in the previous round, is also as appropriate for other regions. The project in this round was implemented in one country in Latin America (Colombia) and one in Africa (Uganda), as well as three in Asia (Indonesia, Pakistan, the Philippines). The study assessed whether adjustments would have to be made to ensure that the indicators and variables were sufficient to describe the open e-governance environment outside Asia.

This report describes the concept and methodology of the OeGI and provides an overview of its use in Africa, Asia and Latin America. Section 2 provides an analysis of the research's conceptual framework, followed by a comparison of various e-government indices (Section 3), and an assessment of the methodology used (Section 4). Section 5 presents and discusses the results from the research process, and in Section 6 we provide our conclusions and recommendations.

Box 1. Definitions of e-government and e-governance

E-government is the use of ICTs to improve the activities of public sector organisations. It is often linked to back-office processes and interactions within the entire government framework, and to making public / citizen services convenient, efficient and transparent (Lallana 2012). "It involves using information technology, and especially the Internet, to improve the delivery of government services to citizens, businesses, and other government agencies. It enables citizens to interact and receive services from the federal, state, or local governments twenty-four hours a day, seven days a week" (Palvia and Sharma 2007: 8).

E-governance is a series of activities composed of coordinating, arbitrating, networking and regulating with and of ICTs, not only by the state, but also by non-state actors. It is also the use of ICTs by these political actors, in both the domain of administration (e.g. the delivery of public goods, the management of peace, order and justice, the provision of infrastructure), and in the domain of politics (e.g. electoral competition at the local, national and international levels) (Lallana 2012).

It is "the public sector's use of [ICTs] with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process and making government more accountable, transparent and effective". It is generally considered to be "a wider concept than e-government, since it can bring about change in the way citizens relate to governments and to each other" (United Nations Economic, Social and Cultural Organization [UNESCO], cited in Palvia and Sharma 2007: 3).

2. Conceptual framework

2.1 The notion of e-governance

In the past, governance – "the processes and institutions, both formal and informal, that guide and restrain the collective activities of a group" (Keohane and Nye 2000, cited in Ansell and Torfing 2016: 245) – was the domain of government. But with the widespread use of ICTs, the effective participation of non-state actors – business, civil society organisations (CSOs), NGOs, academia, even ordinary citizens – in governance has become possible.

E-governance (see Box 1) is critically linked to the essential 'steering' functions of the state, but also to the normal functions of other political actors and institutions in ensuring that people can participate in decision-making (Misaruca 2007). It is a process of connecting within and among state and non-state actors. In its present incarnation, it is also defined as an approach in which "government and the public interact and collaborate in order to make the best use

of information and services, sometimes coming up with new products and services" that are not deemed possible without using this approach (Alegre, Lapuz and Tuano 2011).

Initially, e-governance was linked to the concept of e-government, or the use of ICTs to improve the efficiency of the operations of the public sector. This started in the 1930s, when the first modern computers were manufactured; in the UK, for example, they were used to crack the cipher codes of foreign governments. By the 1940s, computers were being used extensively in the defence establishments of many countries to calculate firing trajectories, and by the 1950s to tabulate the results of large censuses and assist in the operations of atomic energy laboratories in the USA.

In the 1990s, after the global ICT boom, notions of e-governance were associated with 'new public management', or the introduction of private sector tools to the public sector. This supported the central

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idea that to support the primary role of the private sector – to advance economic growth – governments, in playing a supporting role in market economies, should be just as efficient in the delivery of the public goods that are necessary for economic development.

By comparison, e-government is the automation of procedures to support and then transform the workings of the public sector, including the coordination of decision-making and the delivery of public services, promoting the participation of citizens in policy and electoral choices, and measuring the efficiency of government interactions. There are several processes involved in e-government, including automation (replacing current human-executed processes that involve accepting, storing, processing, outputting or transmitting information), informatisation (supporting current human-executed information processes) and transformation (creating new ICT-executed information processes or supporting new human-executed information processes).

As noted by many writers (e.g. Misaruca 2007; Heeks 2001), e-governance can provide many advantages for the public sector, in terms of improving the efficiency of bureaucratic process and reducing the costs of transactions made by citizens across different government agencies. It can support increased interaction by policy-makers and citizens, so that government can improve the timeliness, relevance and quality of public services, and hasten the delivery of these services to the general public.

At the same time, there have been questions in developing countries about whether e-government services can be undertaken in the face of persistent social, political and economic problems (Basu 2004). However, the implementation of e-government can provide several advantages. These include: the possibility of providing better materials to upgrade the provision of services and programmes; the development of an infrastructure to transmit information more efficiently across the geographical confines of a country; better systems to facilitate the flow of investments from outside a country; improvements in the use of human resources, by increasing the use of educational resources; and the enablement of decentralised governance within a country.

Integral to understanding the concept of e-governance is the term 'openness'. Though not a new concept, openness is now increasingly emerging as a political value by which states, as well as non-state actors, seek to extend traditional notions of democracy and visions of development. It signifies not only the respect of basic human rights (e.g. to access information and free expression), but also leverages the benefits of new social technologies and innovative ICT applications to deepen democracy. This includes strengthening the

democratic environment (e.g. the education system, diverse and independent media, and socio-cultural freedoms – all of which comprise 'communication rights') and the range of policy / regulatory alternatives that are available for governments to adopt; the protection and extension of the public domain and 'fair use' to encourage open-access models in publishing and academia; alternative licensing systems for content (e.g. Creative Commons); and state use of social media.

In terms of establishing relationships with stakeholders, e-governance is the "public sector's use [of ICTs] with the aim of improving information and service delivery, encouraging citizen participation in decision-making processes and making government more accountable, transparent and effective" (UNESCO, cited in Palvia and Sharma 2007: 3). As a governance concept, e-governance involves the creation of new digital connections (Heeks 2001), including:

- connections within government, meaning 'joined-up thinking' or the strengthened ability of government to communicate better in the planning, implementation and evaluation of public policy and programmes; this includes sharing databases, information resources and capabilities to enhance efficiency and effectiveness (Ndou 2004)
- connections between NGOs and government to strengthen the accountability of public actions to the general public
- connections between government and businesses / citizens, such as improved service delivery (e.g. the provision of business registry services, education and health services), allowing for more electronic transaction initiatives (e.g. electronic marketplaces for government procurement of goods and services) (Fang 2002)
- connections within and among NGOs, supporting learning and concerted action, including the mobilisation of resources for legislative and executive advocacy, heightened awareness of issues among policy-makers and the general public, and the exchange of information
- connections within and among communities that build social and economic development through supporting collaboration, reducing conflict and improving the quality of public services.

The use of social media has been increasing, especially in terms of facilitating communication across individuals and groups, because of its ability to transmit large volumes of information at low cost. As such, governments have increasingly turned to Web 2.0 tools, and recent e-government initiatives have increasingly embraced the use of these tools. The Australian Government Taskforce 2.0 (2009) pointed out that the use of social media tools has

E-governance is broader than, and encompasses, e-government; it refers to the use of ICTs to enhance the participation of different societal actors in issues concerning public life

become ubiquitous among the general public, which necessitates a different type of response in terms of the use of ICTs across government. Because Web 2.0 tools are generally open, the culture within government in the use of ICTs should be one that facilitates participation by the general public, and relinquishes control over the view that civil servants may express informally or candidly – without undermining people's confidence in governance.

However, e-governance is broader than, and encompasses, e-government. It refers to the use of ICTs to enhance the participation of different societal actors in issues concerning public life. By this definition, ICTs are not only used in designing and delivering public services, but also as a means of increasing information-sharing and broadening citizen / public engagement in policy development and rule-making. It also includes the use of ICTs by CSOs to organise collective action to promote their goals.

2.2 The concept of open e-governance

It is important to understand e-governance in terms of being 'open'. Traditionally understood as a lack of restriction or concealment, openness is now emerging as a political value. It signifies not only a preference for increased access to information and greater citizen participation in decisions regarding a society's future using technology, but also the presence of enabling or constraining political, legal, economic and social

structures and institutions. For example, a country may have developed e-participation channels as part of its e-government initiatives, but these channels are less meaningful if the country also has stringent national security laws in place.

Thus, open e-governance is about how state and non-state (societal) actors, in the context of enabling or constraining settings, use ICTs to steer society collectively. In our OeGI project, we define open e-governance as the presence of:

- meshed e-government: the ability of government to provide integrated, citizen-centric online services
- e-participation channels: the existence of digital channels for public engagement that complement existing face-to-face or traditional media-led interactions
- digital inclusion: the presence of policies and programmes that support the public's wider use of ICTs for development
- civil society use of ICTs: the use of ICTs by non-state actors to promote their interests in the public sphere
- an open legal and policy ecosystem: the extent of access among the general public to information and knowledge, and government recognition of the right to free expression and rights over personal communication, cultural freedom and the use of local languages.

These terms are explained in more detail in Annex I.

3. A review of e-government indices

In the past decade or so, there has been an explosion of empirical research measuring e-governance across the globe (World Bank 2006). Various universities, research centres and international organisations have measured its different aspects, but as Ojo, Janowski and Estevez (2007) point out, since there is no single prescription for measuring the relative, or even absolute, level of e-government in different countries, several indicators exist. This results in varying conclusions with respect to e-governance. While there are similarities in some of the indicators used across composite indices – especially in terms

of the use of ICTs (e.g. the number of mobile phones or Internet users per 100 people) and access to human capital services (e.g. literacy rates, primary school participation) – each indicator system focuses on measuring a specific area of e-government. Some of the leading indices for measuring e-government include the following:

 The E-Government Development Index,¹ developed by Brown University, USA, and the World Markets Research Center, measures the online availability of information and public services in different

¹ See: www.brown.edu/academics/taubman-center/research-and-initiatives/e-government

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countries, including privacy and security policy, and the ability of governments to undertake public outreach through the Internet. A subjective questionnaire is translated into an index ranging from 0 to 100. The indicators are based on the availability of information, including publications and databases, and the number of online services provided by the government. The index was produced yearly from 2001 to 2007.² It also analyses access for people with disabilities and those who speak foreign languages.

- 2. The United Nations Public Administration Network (UNPAN) regularly publishes an e-government readiness index,3 currently called the **E-Government Survey**. This provides a calculation of an e-government development index, which is a composite measure of the capacity and willingness of governments to utilise e-government services. It ranks different countries in terms of infrastructure availability, ICT penetration and the level of human capital available to utilise ICTs. It uses data primarily from the International Telecommunications Union (ITU) and UNESCO. The survey started in 2003 and in the latest version, for 2016, it assessed the level and quality of online presence for selected government agencies, the number of different types of ICTs per 100 inhabitants, and selected human capital indicators.
- 3. UNPAN also calculates the **E-Participation Index**⁴ as a supplement to the E-Government Survey. Its questions relate to governments' use of the Internet to facilitate the information provision to, and consultation and engagement with, citizens in the development and implementation of policies and programmes. The results are released alongside its E-Government Survey Indices.
- 4. The Economist Intelligence Unit, a sister company of *The Economist* newspaper, regularly publishes the **e-readiness rankings**,⁵ a composite ranking of 38 indicators and 81 sub-indicators that measure the ability to utilise ICTs to improve the macroeconomy and strengthen economic and social welfare in each country. The dimensions measure the presence of ICT infrastructure (including penetration and affordability), the overall business climate, the socio-cultural environment (including education, Internet literacy, degree of entrepreneurship and innovation), the legal environment, the government's ICT strategy, and the adoption of ICTs by the

- general public. This ranking was renamed the **Digital Economy Rankings** for the 2010 round.
- 5. The ICT Development Index, formerly known as the Opportunity Index or the Digital Opportunity Index, is currently being overseen by ITU. It is a merger of the Digital Access Index, which was also overseen by ITU, and the Monitoring the Digital Divide / Infostate framework developed by Orbicom, an international network linking government, media and corporate leaders to exchange information on new media, which is affiliated with UNESCO. The index includes 11 indicators grouped into three areas: ICT infrastructure and access; use of ICTs by individuals; and human capital.
- 6. The World Economic Forum has published the Networked Readiness Index⁷ annually for the past decade. It includes more than 70 indicators in nine dimensions, including: the presence of infrastructure and policies to promote ICTs; the capacity of households, firms and governments to utilise ICTs; and actual access to and usage of ICTs.
- 7. Waseda University, Japan, publishes the International e-Government Rankings,8 which are based on seven sets of indicators, including: the proportion of the population that are ICT users; the presence of government ICT frameworks (i.e. enterprise architecture, administrative systems) and related policies; the use of ICTs in government services and decision-making; the quality of the government portal; and the presence of chief information officers in various government agencies.
- 8. The World Justice Project last published its **Open Government Index**⁹ in 2015, describing it as
 "the first effort to measure government openness
 based on the general public's experiences and
 perceptions worldwide". It presents aggregated
 scores and rankings, as well as individual scores, for
 the following dimensions of government openness:
 publicised laws and government data; the right
 to information; civic participation; and complaint
 mechanisms. Its questionnaire is applied to two
 populations: a sample of 1,000 ordinary citizens
 taken from the three largest cities, and relevant
 experts and practitioners.

Reviewing these e-governance indices, and comparing them with the operational framework for the OeGI, it is clear that the existing indices focus on the presence of capacity and actual usage of ICTs, mostly by

² See for example, West (2007) for the latest report.

³ See: www.unpan.org/egovkb/global_reports/o8report.htm

⁴ See: https://publicadministration.un.org/en/eparticipation

⁵ See: https://graphics.eiu.com/pdf/E-readiness%20rankings.pdf

⁶ See: www.itu.int/net4/ITU-D/idi/2016

⁷ See: http://reports.weforum.org/global-information-technology-report-2016/networked-readiness-index

⁸ See: www.waseda.jp/top/en-news/43676

⁹ See: https://worldjusticeproject.org/our-work/wjp-rule-law-index/wjp-open-government-index-2015

Table 1. Presence of open e-governance framework dimensions in existing e-governance indices

| E-governance | | | | Open e-gov | Open e-governance dimensions | 10 | | |
|--|--|--|--|------------------------------------|--|---|---|---|
| index | Meshed e-government | e-Participation Digi | Digital inclusion | ICT- empowered civil society | Open access to data, information and knowledge | Communication rights | Other dimensions Methodology | Methodology |
| 1. E-Government Development Index | None | None | Primary area of measurement: the online presence of government agencies | None | None | None | | Subjective assessment of government websites |
| 2. E-Government Survey | None | None | One of its three measurements: e-services available in government portals and websites | None | None | None | Two other measurements: availability of ICT infrastructure; human capital development (literacy, enrolment) | Secondary data, mainly from the ITU and UNESCO; assessment questionnaire on the content of government websites |
| 3. E-Participation Index | None | Primary area of measurement: use of ICTs to facilitate participation | None | None | None | None | | Assessment questionnaire on usefulness of government sites to facilitate interaction and participation in decision-making |
| 4. E-readiness rankings | Measures e-government strategy but also the impact of other government | None | None | None | None | Measures level of censorship, but as part of the broader measure of legal environment | | Secondary data |

| E-governance | | | | Open e-gov | Open e-governance dimensions | S | | |
|---|---|---|--------------------------------------|---|---|---|--|--|
| index | Meshed e-government | e-Participation | Digital inclusion | ICT- empowered civil society | Open access to data, information and knowledge | Communication rights | Other dimensions Methodology | Methodology |
| 5. ICT Development Index | None | None | None | None | None | None | Like the E-Government Survey (2), it primarily measures the availability of infrastructure and human capital development | Secondary data, mainly from the ITU |
| 6. Networked Readiness Index | Measures government prioritisation of ICTs | None | N on e | None | None | Measures presence of laws covering ICTs, but as part of a broader measure of the political and regulatory environment | Has an extensive set of indicators covering the availability of ICT infrastructure, human capital development, and the market and business environment | Secondary data from the World Bank, ITU and World Intellectual Property Organisation |
| 7. International e-Government Rankings | Measures the presence of e-government policies (e.g. enterprise architecture) and e-government projects | Measures the quality of national portals and the use of ICTs in participatory decision-making | Measures e-government services | None | None | None | Uses indicators related to ICT use | Secondary data |
| 8. Open Government Index | None | None | N On O | Measures the ability of civil society stakeholders to make their voices heard | Measures the quality and accessibility of government-provided information and regulations | Measures media freedom and opposition to communicating grievances | Various indicators measuring the health of democratic institutions | A poll of ordinary citizens and experts; questions can be binary or scaled |

government and business. At the same time, there is a notable lack of integration in measuring the extent of support provided by the legal and policy ecosystem – in terms of communication rights and access to data, information and knowledge – to be able to better utilise e-governance services. Most of the existing indices described are weighted heavily in favour of assessing, in quantitative terms, ICT infrastructure availability and human capital development. Table 1 compares the presence of the different dimensions of open e-governance with the indices reviewed.

None of these indices measures civil society's use of ICTs, and none measures the extent of legal provisions that would provide citizens with access to information

from government ('freedom of information') or to government-funded research ('open content'), or allow citizens to utilise government data and allow innovative uses of these data ('open data'), among other aspects of openness.

In terms of the methodologies used by the different e-governance indices, most use secondary data from the ITU, World Bank and other international organisations. However, a few use subjective assessment surveys, such as Brown University's E-Government Development Index and UNPAN's E-Government Survey, which evaluate the ease of use and the availability of features in national portals and other government websites.

4. Framework and methodology for implementing an open e-governance index

The OeGI 2.0 project builds on an earlier effort by FMA and partners in several countries to develop and popularise an open e-governance index. During the original project (OeGI 1.0), a framework and an assessment tool were developed and pilot tested in four Asian countries in 2012, with funding from IDRC. Building on this, the OeGI 2.0 project aimed to:

- update the OeGI framework and assessment tool, utilising new knowledge in the field developed in the intervening two years
- test the revised OeGI instrument in some of the original four Asian countries, and in different countries
- consolidate the results of the above to strengthen the OeGI instrument, and finalise a global OeGI for support and adoption worldwide as a legitimate indicator system to measure openness
- provide initial policy recommendations to ensure open e-governance is adopted by governments as a normative tool for the regular assessment of the rights of citizens in the digital age.

4.1 Project timeline

To realise OeGI 2.0, FMA convened a Philippines-based core group to assess the previous work done and come up with an updated framework and assessment tool to test the revised OeGI instrument. This group comprised senior researchers, academics and governance advocates (see Annex II for a full list).

A preliminary roundtable discussion was convened in March 2016 to discuss the process for agreeing the

revised areas for assessment. Several meetings were held between April and December 2016, which led to a revised conceptual framework and data-gathering methodology. Email exchanges and online discussions complemented the face-to-face meetings.

In OeGI 1.0, country partners were asked to conduct a perception survey to measure the OeGI scores of the case study countries. But one of the lessons from the initial project was that not all survey respondents had expert knowledge on all OeGI dimensions. It was decided that interviews and focus group discussions would be the primary data-gathering method in OeGI 2.0.

An advisory panel comprising selected members of the Philippines-based core group recommended the following data-collection methods for OeGI 2.0:

- desk research on the legal and policy ecosystem, and on the basic ICT indicators
- key informant interviews, using an interview questionnaire developed for this project (it was stipulated that key informants be interviewed only on their areas of expertise)
- a validation workshop to confirm their findings, based on the desk research and key informant interviews (see Section 4.2 for more details).

The advisory panel also recommended that FMA develop a concept note, a methodological note, a project toolkit, a survey instrument and a glossary for country partners. The interview questionnaire and the protocols necessary to implement this were finalised

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in January 2017. FMA conducted a pre-test of this in February 2017 with representatives from CSOs in the Philippines.

FMA started contacting potential OeGI 2.0 partners in May 2016. Those invited to take part included OeGI 1.0 partners in Hong Kong, Pakistan, the Philippines and Thailand, as well as other organisations based outside Asia. The project team tried to include a mix of nations with different levels of ICT development. By December 2016, participants from five countries had confirmed their desire to take part: Colombia, Indonesia, Pakistan, the Philippines and Uganda (only Pakistan and the Philippines were part of OeGI 1.0). After contracts were signed in January 2017, the concept note, the initial drafts of the methodological notes, the project toolkit, the survey instrument and the glossary were sent to the country partners, 10 who were asked to start gathering secondary data and select key informants for interview and for the validation workshops.

From January to March 2017, FMA undertook the desk research, and conducted key informant interviews and validation workshops in the five countries. There was continuous contact between the country teams and the research team during this period, in order to fine-tune the process. A total of 88 key informants – 52 male and 36 female – participated in the validation workshops in the five participating countries.

A regional synthesis workshop was held in March 2017 in Bangkok, Thailand, to discuss the country results and identify issues in the project's implementation. This was also an opportunity to exchange information and views on the project framework and dimensions, and to map further plans to strengthen the analysis and conclusions of the different country papers.

After the workshop, the computational methodology was reviewed to ensure comparability of results across countries and simplicity in calculating the OeGI. Coordination meetings and regular communications were made by the research team with the different country teams to ensure the completeness of the country reports.

4.2 Implementation process

The OeGI is a composite of five country assessments. The following organisations participated in these assessments: Colnodo in Colombia; ICT Watch in Indonesia; Bytes for All in Pakistan; FMA in the Philippines; and the Collaboration of International and ICT Policy Center for Eastern and Southern Africa (CIPESA) in Uganda. Each country team conducted the three main research activities – desk research, key informant interviews, validation workshop – in their respective countries.

The desk research gathered background information on each country. A list of indicators and possible data sources were provided to country partners; the final list of indicators depended on the availability of data. The desk research consisted of reviewing the documents available for specific quantitative and qualitative measures for e-governance indicators, obtained from the following sources:

- official government reports, especially from the government's central information and communication technology policy ministry / unit and development planning ministry / unit
- reports of statistical surveys and administrative data, especially from the national statistics offices
- · academic studies and papers
- NGO and private sector documents
- · other sources, including newspaper reports.

Key informant interviews were undertaken to gather qualitative data. The key informants were ICT policy and governance policy experts. For the *validation workshops*, each country team was asked to conduct a focus group discussion with 15 to 25 informants. The informants were selected based on their knowledge of and expertise in the major components of the OeGI, and on their diversity to cover a representative sub-set of sectors around the country. Table 2 identifies these sectors

Reports summarising the national-level results were then written, which included a review of the related indicators in the contextual data research. These were submitted and consolidated at the regional (continental) level. The results in each country were discussed in a dissemination workshop that included key informants from the perception surveys and other experts consulted during the drafting of the reports. Major policy-makers from government, business and civil society were also invited.

The final country reports will be published after comments from the country workshops have been integrated, so that the results are available to a broad audience; they will also be disseminated to relevant stakeholders, including participants in the implementation process.¹¹

4.3 Issues in methodology design and implementation

During the synthesis workshop in Bangkok, partners had the opportunity to discuss, face to face, the methodology design and implementation, and raised the following issues and concerns, as well as how some of these were resolved:

¹⁰ Available at: www.fma.ph

¹¹ For the draft country reports, see: www.fma.ph

Table 2. Sectors represented in validation workshops

| Sector | Designation, key roles and core competences |
|---------------------------|---|
| Academia | Academic experts in governance and ICTs Members of academic institutions and research organisations, including professors, teachers and administrators |
| Business / private sector | Leaders of significant business and professional associations, especially those with knowledge of policy |
| CSOs and NGOs | Leaders of significant NGO networks Associations / networks of people's organisations and marginalised groups, including trade unions and farmers' groups Leaders of cooperatives, with an emphasis on women's organisations |
| Government | Senior officials (i.e. chief of division and above) of central government agencies responsible for development planning, ICT policy and gender policy Chief information officers of government agencies undertaking significant information technology (IT) projects (i.e. ministries / departments of education, health, infrastructure) Government agencies responsible for election monitoring and human rights monitoring Members of congress / parliament who are part of IT policy committees Leaders of associations of subnational / local governments familiar with ICT policy |
| Media | Members of print, broadcast and online media (e.g. editors, columnists, writers, reporters) covering ICTs and governance |
| Political parties | Leaders of major national and regional political parties in the country |

- Partners raised the need to clarify specific questions and use of terminology so that comparisons between countries were clearer. In Colombia, for example, there was a lack of conceptual / semantic understanding among stakeholders about what e-governance means as opposed to e-government; this took up most of the time allotted for validation during the focus group discussion.
- In the Philippines, some respondents wanted to change some of the questions in the survey.
- Use of the term 'civil society', and who should be considered part of civil society, differs by country.
 Partners resolved this by adopting an international standard definition of what a CSO is.
- There was an absence of questions about the implementation of policies in the surveys. The partner from Uganda raised the issue of the presence of policies versus their actual implementation, and how this would affect the scores in the OeGI. For example, under the digital inclusion dimension, both Pakistan and Uganda scored the highest because of the presence of universal access and literacy policies but their implementation leaves much to be desired. Internet penetration in Uganda is only 44%, while in Pakistan it is only 18%.

- The dynamics of national and regional frames were raised by partners from Indonesia and Pakistan.
 Indonesia consists of more than 14,000 islands and there are policies in some regions that differ from national policies. In this instance, the partner focused on national / federal government policies.
- Partners from Indonesia and Pakistan were concerned that they were unable to include stakeholders from certain regions who could have contributed to the research. In the case of Pakistan, the political situation, as well as a lack of resources, constrained them from reaching certain regions and possible key informants.
- On the selection of key informants, there were concerns that partners may have failed to invite representatives from certain groups or sectors, such as people with disabilities, certain gender groups and donor agencies. The partner from Colombia expressed concern that they did not invite guerrilla groups, which may have been useful.
- The partner from Uganda raised the difficulty of convening everyone in one group, as there is a lack of responsiveness from political parties, since this issue is not a priority for them. However, one of the project advisory committee members noted that

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while diversity is ideal, it does not always mean that the 'correct' answers will be generated.

- Also in relation to the issue of stakeholder diversity, partners in Colombia, Indonesia and Pakistan wanted to bring the focus group discussions to different regions so that the views and inputs from these stakeholders were included. The partner from Colombia also wanted to include a greater number of respondents.
- On the issue of stakeholder dynamics, it was noted that the relationship between the implementing partner and stakeholders may affect the research. If there is a good relationship, then it may be easier to build consensus around contentious issues. However, one partner from Uganda raised concerns that some key informants may be afraid to say things in a group setting.
- As to whether a validation workshop works, a partner from Pakistan said that key informant interviews would have worked better, allowing the researcher to ask probing questions. The partner from Uganda echoed these sentiments, and said that it was difficult to schedule focus group discussions because of key informants' busy schedules.
- There were a few clarifications made on the issue of scoring. For example, under the 'open legal and policy ecosystem' dimension, there was confusion about how to score the presence of a restricting law on freedom of expression (including censorship), since this has an inverted score, compared to the

- other indicators. Each country has censorship policies: Indonesia clarified that in their case, there are many ways to censor or block websites. Some of these have a legal basis, and some are not covered by the law but still censored, such as those with lesbian, gay, bisexual and transgender or religious content.
- The issue of relative weighting was raised, with the question of whether certain dimensions should have more weight than others. It was decided that there would be no change in the current scoring, but this can be considered in the future.
- In the desk research process, there were concerns about the lack, or limited availability, of data for some dimensions, particularly the use of ICTs by CSOs. In Uganda, some data on the use of ICTs by civil society are outdated. In Pakistan, there are no official data available. In the Philippines, because there is a dearth of data regarding ICT use by civil society, FMA had to conduct a mini-survey among different groups. The Philippines partner also suggested that, in future, more resources should be allocated to conduct research into the use of ICTs by CSOs.

Other issues raised related to social media use by governments: how best to measure social media engagement; where to get data; and how to integrate these into the index. It was pointed out that social media sites have their own analytics and, in future, country teams may want to work with the analytics team of various social media channels to gain more insights into government use of social media.

Box 2. Calculating the OeGI

In calculating the OeGI, responses to the survey instrument and secondary data research were translated into numerical scores to calculate scores for each dimension.

- For presence questions (i.e. the presence of policies), a negative response in the questionnaire scored 0 and a positive response scored 1.
- For indicators on content regulation (e.g. sexual content, online gaming, promoting alcohol, promoting dissent) a score of 0 was given for a positive response (i.e. no regulation) and 1 for a negative response (i.e. regulation).
- For perception questions, a range of scores between 0 and 1 were given in response in multiple choice questions. The mean scores across the respondents for each country were calculated, and the scores were added for each dimension.

To calculate the country score, each dimension was weighted and the scores were calculated. The weighting system used ensured the different dimensions were given equal weight.

5. Results

This section examines the results from the OeGI research in each of the five countries, along with the major findings that can be drawn from these.

5.1 Country results

Colombia

Colombia scored 0.91 for meshed e-government; 0.51 for e-participation; 0.83 for digital inclusion; 0.63 for an ICT-empowered civil society; 12 and 0.81 for an open legal and policy ecosystem. Figure 1 provides an illustrative summary.

Colombia's high score for meshed e-government is due to the country having several significant e-government plans and policies in place (e.g. for e-government, IT architecture, interoperability, open data), although the degree of implementation of these is average and some are not yet fully implemented. Nevertheless, Colombia is one of the leaders for e-government in Latin America and an international benchmark.

This is the result of ongoing efforts by the Colombian government, which began more than ten years ago with the Connectivity Agenda. This strategy, guided by the Presidency, aimed to build an efficient, transparent and participatory state, and to integrate the country into the 'knowledge society' through open access to information and the massification of new ICT technologies. The overall ambition was to realise a more integral and cross-cutting vision and establish the architecture and management of ICT policies needed.

Colombia's high digital inclusion score shows that it has made important advances in its digital infrastructure, through strategies such as installing the national fibre optic network, efficient management of its radio electric spectrum and free Internet access via government telecentres. However, progress is still limited in many regions, where the coverage or quality of the connection is decisively lacking. In addition, there are other obstacles to access, such as gender, ethnicity and economic barriers. In particular, issues must be addressed around ICT access for young indigenous women, young people with disabilities and / or low income, and young heads of households.

Colombia also scored highly for an open legal and policy ecosystem. There are laws that seek to guarantee freedom of expression and association, and respect for media independence, intellectual property and the right to privacy and protection of personal data. But there are historical mitigating circumstances that, while not totally counter to enforcing these rights, have undermined legal and regulatory efforts made to guarantee them. One of the most worrying recent developments is the increase in mass surveillance by the state, justified by the fight against crime and the internal conflict the country endures. ¹³ Because there is no clear regulatory system to restrict the parameters of legal vigilance, there has been a lack of transparency in the system of mass surveillance.

Although Colombia is legally seeking 'net neutrality', ¹⁴ there are strong market pressures to alter this, either through commercial strategies from telecommunications

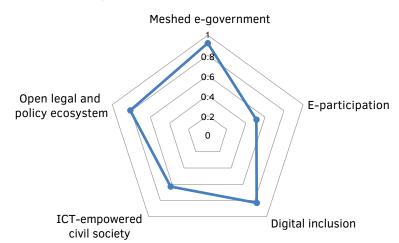


Figure 1. OeGI score for Colombia, 2017

¹² This score is based on estimates and perceptions; there is a need for further research to validate it.

¹³ Only one of the two major guerrilla organisations signed the recent peace agreement in Colombia.

¹⁴ This is the principle that Internet service providers should enable access to all content and applications, regardless of the source, and without favouring or blocking certain products or websites. See: https://en.wikipedia.org/wiki/Net_neutrality

companies or from traditional sectors that are affected by disruptive technologies that seek to block applications.

Indonesia

Indonesia scored 0.54 for meshed e-government; 0.82 for e-participation; 0.50 for digital inclusion; 0.54 for an ICT-empowered civil society; and 0.78 for an open legal and policy ecosystem (see Figure 2).

Indonesia's score for meshed e-government indicates that this is not yet integrated or interoperable. More e-government policies are coming from central government, however. For example, forthcoming policies for 'one data' and data privacy will significantly boost the meshed e-government dimension. It is also important to note that this score reflects national or federal government policies, not regional e-government policies, strategies, plans and programmes.

The country scored highly for in e-participation, reflecting the existence of online / digital platforms that support citizen engagement. For example, various government websites have embedded social media channels, YouTube videos and picture galleries. Most also accept user comments, and offer polls and

surveys, whistle-blowing systems, government public relations services, complaints forms and contact forms.

Indonesia's digital inclusion score suggests access, adoption and application are not well implemented. The ultimate goal of creating digitally inclusive communities is still far away, but its chances could be enhanced by providing free or low-cost Internet access and digital literacy services; this could be implemented by multiple stakeholders.

CSOs in Indonesia have not made use of ICTs for e-governance, and the relatively low score here shows that civil society needs to increase their use to enhance their role in e-governance. By contrast, the high score for an open legal and policy ecosystem for e-governance means that the policy and regulatory environment is supportive of ICT-enabled participation in governance.

Pakistan

Pakistan scored 0.39 for meshed e-government; 0.32 for e-participation; 1.00 for digital inclusion; 0.71 for an ICT-empowered civil society; and 0.63 for an open legal and policy ecosystem (Figure 3).

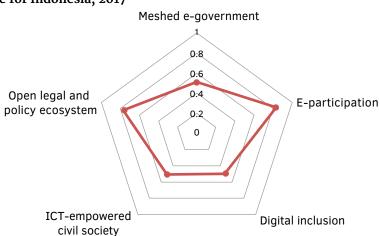
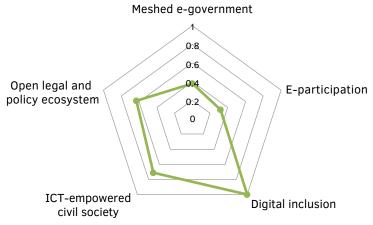


Figure 2. OeGI score for Indonesia, 2017

Figure 3. OeGI score for Pakistan, 2017



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The score for meshed e-government reflects the presence of a comprehensive e-government plan and several related policies. However, no report of its implementation status is available. Despite acknowledging the need for, and benefits of, interoperability in e-government projects, the government has not defined any standards to guide its agencies in implementing e-government projects.

The National Action Plan advises agencies to conduct financial cost–benefit assessments for making decisions about open source versus proprietary software acquisitions and development. The Freedom of Information Ordinance 2002 advises the government to provide public data in open formats. However, no implementation of this has been witnessed. Open data standards have not been defined and data are not being made available in open, reusable formats by most government agencies.

More encouragingly, Pakistan has signed a letter of intent to join the Open Government Partnership, and is in the process of developing a consultative work plan to move towards open governance goals in the next two years. Yet data protection and cyber security are not properly legislated, exposing citizens to risks of human rights violations. A detailed E-Procurement Plan exists, but isn't being implemented or used by government agencies. The payment of almost all utility bills is possible through functional e-payment and e-banking systems. Several government agencies accept the e-filing of public documents, such as tax returns.

In terms of e-participation, a growing number of government agencies are trying to incorporate ICTs into their communication with the public. But at present, fewer than half of government agencies have the capacity and systems to connect with people via text messages. Over half have interactive websites and active social media platforms, but these websites are not regularly updated in most cases. Further, government websites do not have any special features to make them more accessible to people with disabilities, and most do not have national language content (e.g. in Urdu) – although given that until recently English was the official language, this is not surprising. The Pakistan government, through the Senate's public petition feature and other websites, is inviting public participation in legislative processes. However, the public is not able to monitor the implementation of government projects through any digital platforms.

Digital inclusion is the only OeGI focus area where Pakistan has a perfect score. Our analysis found that the policy for universal access and digital inclusion is excellent. The key findings are: (1) a comprehensive universal access plan is available and is being run largely through the Universal Service Fund, an operation funded by the telecommunications industry;

(2) various initiatives and policy decisions are being taken to increase access to women, while policy and practical projects are in place to increase digital literacy and professional education and training for women in the ICT sector; and (3) some policy decisions have been made to enable access to disadvantaged groups, particularly people with disabilities, while a few projects are underway to increase access to ICTs and to increase digital literacy.

Pakistan's ICT-empowered civil society score reflects the fact that most major political parties, civic groups, people's organisations, community-based organisations, NGOs and CSOs, religious and faith-based organisations, and gender-based organisations are using ICTs for internal use, internal and external communications and advocacy, and lobbying activities. However, not many of these organisations are able to undertake Internet-based crowdfunding, as the legal and regulatory position of crowd-sourced funds is unclear. Due to the lack of regulatory mechanisms, taking advantage of Internet-enabled crowdfunding may create trouble for civic organisations, which are already working in an increasingly hostile environment.

Other issues related to the legal and policy ecosystems in Pakistan include the following.

- The right to information is guaranteed through the constitution and by law. However, at the federal level, the Freedom of Information Ordinance 2002 is weak and creates the space for the legalised withholding of information.
- Media-related laws are generally progressive, but questions persist about the independence and neutrality of regulatory bodies.
- The main challenge to freedom of expression for the media is the prevalence of impunity in the face of continued attacks on journalists and media workers, and the presence of a parallel, unwritten policy that creates an environment where journalists are free to criticise the elected government – but have to remain careful about reporting on issues dealing with the military establishment.
- Censorship is prevalent, especially online. A growing trend of hate campaigning against journalists, activists and others showing dissent is leading to a growing trend for self-censorship in the mainstream media and on social media.
- Both state and private corporations benefit from ignoring the principle of net neutrality and offering 'cheap' deals to customers at the cost of neutrality. The public and many activists remain uninterested or unaware of the implications of this.
- There are clearly defined laws dealing with surveillance, but there are some contradictions between the different laws. In addition, these laws

Pakistan has signed a letter of intent to join the Open Government Partnership ... yet data protection and cyber security are not properly legislated, exposing citizens to risks of human rights violations

are invasive and have raised fears of possible human rights violations.

- Neither the development of regional languages nor cultural practices via digital means appears to be a priority for the Government of Pakistan.
- The media industry in Pakistan is growing; the number of owners of media channels is increasing, but consolidation of power within large media groups continues.
- Excessive commercialisation of the media industry has limited its potential for the inclusion of diverse perspectives.

The Philippines

The Philippines scored 0.72 for meshed e-government; 0.65 for e-participation; 0.33 for digital inclusion; 0.77 for an ICT-empowered civil society; and 0.63 for an open legal and policy ecosystem (Figure 4).

The Philippines ranked highly in terms of civil society use of ICTs. This is not surprising; the country has one of the most vibrant civil society sectors in Asia (and perhaps the world) and Filipinos use social media a lot, while NGOs and other groups use ICTs for internal communication and advocacy.

Also significant is the score for meshed e-government. Since the country's score in OeGI 1.0, there has been a general improvement in the policies and programmes

implemented in this regard. Several policies, such as an e-government framework and a government interoperability framework, have already been adopted.

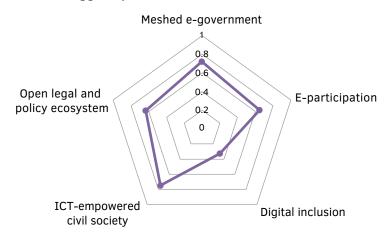
However, the scores for e-participation and digital inclusion leave significant room for improvement. Several policies still need to be undertaken, despite the many initiatives that have been started. Access policies, especially for disadvantaged sectors, need to be established, while standards and programmes for ICT literacy are also needed. There is a continued lack of e-channels for participation in bureaucracy, although some efforts (e.g. the Freedom of Information Act) have been undertaken.¹⁵

The open and legal policy ecosystem has possibilities for growth and development in various dimensions. The country is still underachieving in terms of the supply of ICT services to the public and the ability to meet the demand for citizens' participation.

As stated, part of the problem lies in the weak capacity of ICT agencies to respond to the demands of open e-governance. This implies a gap in political leadership, which in many ways illustrates the low capacity of the state – particularly key members of the ICT bureaucracy and especially in the past – in addressing the challenges of Internet governance competently.

This implies that state capacity is sorely lacking, resulting in many gaps in ICT governance that persist today. It is, after all, the government's responsibility to

Figure 4. OeGI score for the Philippines, 2017



¹⁵ While the bill on the Freedom of Information Act has not yet been passed, the President signed Executive Order No. 2 in 2006, operationalising the people's constitutional right to information.

lead in this, and political leadership has been lacking time and time again – sometimes due to circumstances it could not control, but also due to circumstances it certainly could.

At the same time, structures for the participation of civil society groups in governance, especially via ICT tools, have been sorely missing. Even if there has been demand for participation, the lack of government capacity to address this constricts the ability of the public sector to contribute to resolving this issue.

Overall, the Philippines should continue to enhance policies and programmes that enhance access to, and use of, ICTs, while also increasing the mechanisms and processes that allow for greater transparency in governance and participation in decision-making. Policies for enhancing universal access, especially for women and basic sectors (e.g. workers and indigenous peoples) need to be developed. At the same time, policies for ICT literacy programmes are needed, beyond those being provided in secondary education. While mobile phones have become more widespread, their use for the dissemination of public information and for citizens to send feedback still needs to be strengthened. Public participation can also be enhanced by developing policies that allow for the greater use of government agency websites by marginalised groups.

Uganda

Uganda scored 0.35 for meshed e-government; 0.36 for e-participation; 1.00 for digital inclusion; 0.39 for an ICT-empowered civil society; and 0.78 for an open legal and policy ecosystem (Figure 5).

Overall, the Government of Uganda has made considerable progress in the adoption of open e-governance on the legal and regulatory front. The adoption of an E-Government Framework, in addition to the Access to Information Law and instruments around improving digital inclusion, are all steps towards the

implementation of open e-governance in Uganda. Yet although information and cyber security legislation are present to safeguard e-transactions, the absence of laws around data protection and privacy, open standards and open policy are a huge hindrance to the full adoption of open e-governance.

Our findings indicate an appetite for use of ICTs in service provision by both the government and CSOs. The government needs to improve its efforts by passing legislation that promotes the use of open data and standards for publishing information. This will make it easier for the public to fully utilise e-governance initiatives while building trust in government operations.

Although ICT penetration rates continue to grow, access and affordability remain an issue for the poor, rural populations and disadvantaged groups such as women, people with disabilities and youth. Whereas the national ICT policy, among other frameworks, calls for programmes to raise access for women, the government has not put this into effect. Similarly, access for people with disabilities is paid lip service, despite the Disability Act (2006), the Telecom Policy (2006) and the Uganda Communications Commission Act (2013) all requiring the government to take measures to ensure their access to ICTs.

The limited use of ICTs by government agencies, particularly to offer services to citizens, remains a stumbling block to increased e-governance. The private sector, through mobile money services, e-payment systems and other innovations, is at the forefront of championing the adoption of e-services, and the government seems to be raising its game too, albeit at a slower pace.

A growing number of services are being offered by public agencies, such as e-taxation and e-filing. Similarly, initiatives such as the National Information Technology Uganda's (NITA-U) e-Citizen portal, which curates several e-services offered by government bodies, could go a long way towards encouraging

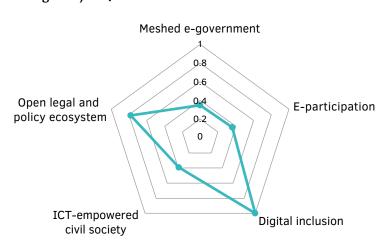


Figure 5. OeGI score for Uganda, 2017

more ministries, departments and agencies to offer e-services, including those for e-payments.

Uganda has passed several enabling laws and policies, some of which are positive for citizen participation, free expression and open governance. However, implementation remains a challenge, undermining the growth of e-governance. The National E-Government Framework (Government of Uganda 2011: 1) aims to "enhance and promote the efficiency and transparency in the functioning of government through the increased use of ICT for online service delivery to citizens and business". Moreover, Uganda has developed an E-Government Master Plan, under which a National Enterprise Architecture Plan will be implemented during 2017.

The NITA-U is the overarching body charged with overseeing the development of ICT use in government and the implementation of the National E-Government Framework. Uganda has also had a Ministry for ICT since 2006 and a telecoms regulator since 1999, both of which are supporting efforts to develop the ICT industry in Uganda. Laws such as the Computer Misuse Act, the E-Signatures Act and the E-Transactions Act, and frameworks such as the draft Broadband Strategy, are largely supportive of the development of e-governance, but the slow pace of implementation reduces the use of these e-governance tools.

On the downside, Uganda does not have a government interoperability framework, and both the Open Standard Policy and Open Data Policy are in draft form, with only the latter open for public input. The lack of interoperability mechanisms, open standards and open data policies means that Uganda is a long way from attaining meshed e-government.

Furthermore, the NITA-U's weak enforcement of some of its policies (e.g. the Government Website Standards) undermines efforts to improve e-governance. Uganda's unexplained failure to join the Open Government

Partnership demonstrates the lack of political will to implement open e-governance programmes.

At present, most ICTs in government are used for internal efficiency rather than enabling citizens to receive services, provide feedback on government plans and decisions, share their views, and interact with public officials. In turn, most of the e-government services are government-to-government rather than government-to-citizen, indicative of a low level of e-government development. Further, only a handful of social media / ICT-based initiatives promote active engagement between citizens and public officials.

Nonetheless, some recent initiatives point to a possible change in stance, such as the Government Citizen Information Center, which will periodically release information and encourage public feedback. The drafting of the Open Standards Policy and the Open Data Policy is also a step in the right direction.

5.2 Cross-country scores

Figure 6 illustrates the summary scores of the five countries, while Table 3 summarises the dimensional scores and overall OeGI scores.

Colombia, which has the highest overall score, also topped the meshed e-government and open legal and policy ecosystem dimensions. Indonesia topped the e-participation dimension, while the Philippines topped the ICT-enabled civil society dimension. Pakistan and Uganda tied for first place in the digital inclusion dimension.

It is important to note that the scores were largely estimated based on the presence of laws, policies and projects. Most of the indicators did not evaluate whether these policies and projects are being implemented, or *how* they are being implemented. Thus, it is possible for countries to score highly in one dimension simply because policies exist – not because they are effective.

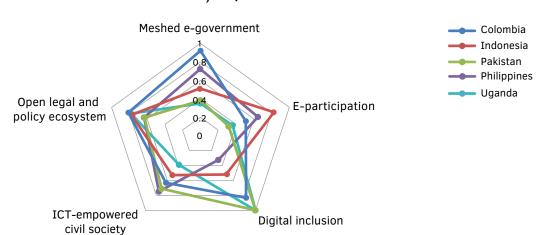


Figure 6. OeGI scores for all five countries, 2017

Table 3. Dimensional and country index scores

| Dimension | Colombia | Indonesia | Pakistan | Philippines | Uganda | Average |
|---------------------------------|----------|-----------|----------|-------------|--------|---------|
| Meshed e-government | 0.91 | 0.54 | 0.39 | 0.72 | 0.35 | 0.58 |
| e-participation | 0.51 | 0.82 | 0.32 | 0.65 | 0.36 | 0.53 |
| Digital inclusion | 0.83 | 0.50 | 1.00 | 0.33 | 1.00 | 0.73 |
| ICT-empowered civil society | 0.63 | 0.54 | 0.71 | 0.77 | 0.39 | 0.61 |
| Open legal and policy ecosystem | 0.81 | 0.78 | 0.63 | 0.63 | 0.78 | 0.73 |
| Average | 0.74 | 0.64 | 0.61 | 0.62 | 0.58 | 0.64 |

5.3 Dimensional scores

Tables 4 to 8 provide the country scores for each dimension.

Meshed e-government

Under this dimension, which represents the ability of government to provide seamless, online citizen-centric services:

- four countries (Colombia, Pakistan, the Philippines and Uganda) have an e-government plan / strategy, but only Colombia has a national enterprise architecture
- only Colombia and the Philippines have government interoperability frameworks, and only Colombia has an open standards policy

Table 4. Country scores for meshed e-government¹⁶

| Indicator | Colombia | Indonesia | Pakistan | Philippines | Uganda |
|---|----------|-----------|----------|-------------|--------|
| E-government plan / strategy | 1 | 0 | 1 | 1 | 1 |
| National enterprise architecture | 1 | 0 | 0 | 0 | 0 |
| Government interoperability framework | 1 | 0 | 0 | 1 | 0 |
| Open Standards policy | 1 | 0 | 0 | 0 | 0 |
| Open data: | | | | | |
| • open data policy | 1 | 1 | 0 | 0 | 0 |
| • publication in reusable format | 1 | 0 | 0 | 1 | 0 |
| membership of the Open Government Partnership | 1 | 1 | 1 | 1 | 0 |
| Data privacy / protection policy | 1 | 1 | 0 | 1 | 0 |
| Information / cybersecurity plan | 1 | 1 | 1 | 1 | 1 |
| E-procurement, e-payment and e-filing: | | | | | |
| • e-procurement system | 1 | 1 | 0 | 1 | 0 |
| • e-payment system | 1 | 1 | 1 | 1 | 0 |
| • e-filing system | 1 | 1 | 1 | 1 | 1 |
| Agency overseeing e-government | 1 | 1 | 1 | 1 | 1 |
| Agencies implementing e-government | 0.5 | 1 | 0.25 | 1 | 0.25 |
| Agencies addressing women's concerns | 0.5 | 0.25 | 0 | 0.25 | 0.25 |
| Mean score | 0.91 | 0.54 | 0.39 | 0.72 | 0.35 |

¹⁶ For Tables 4 to 8, the mean scores are calculated from the scores for each main category. For example, for open data in Table 4, the mean score of the combined sub-categories (in italics) is used when calculating the overall mean score for each country.

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- only Colombia and Indonesia have Open Data policies, while Colombia and the Philippines publish data in reusable formats
- all countries except Uganda are members of the Open Government Partnership
- Colombia, Indonesia and the Philippines all have policies on data privacy and protection
- Colombia, Indonesia and the Philippines have e-procurement systems, Colombia, Indonesia, Pakistan and the Philippines have e-payment systems, and all five have e-filing systems
- all five countries have an agency overseeing e-government, and all have agencies implementing e-government projects:
 - in Indonesia and the Philippines, all national government agencies implement e-government projects
 - o in Colombia, half of the agencies implement these
 - in Pakistan and Uganda, only a quarter of agencies do

 all countries except Pakistan have agency websites addressing women's issues.

E-participation

Under this dimension, which represents the use of digital channels for public participation:

- all five countries have unified call centres
- all five countries have agencies using short message services (SMS, or text messages) to enable citizen participation:
 - in Indonesia, all agencies use SMS to engage with citizens
 - o in Colombia, half use SMS
 - in Pakistan, the Philippines and Uganda, only a quarter of agencies use SMS
- all five countries have agencies using social media:
 - in Indonesia and the Philippines, all agencies use social media
 - o in Columbia and Uganda, half use social media
 - o in Pakistan, only a quarter use social media

Table 5. Country scores for e-participation

| Indicator | Colombia | Indonesia | Pakistan | Philippines | Uganda |
|---|----------|-----------|----------|-------------|--------|
| Use of call centres: | | | | | |
| • unified call centre | 1 | 1 | 1 | 1 | 1 |
| • agencies using SMS | 0.5 | 1 | 0.25 | 0.25 | 0.25 |
| • agencies using social media | 0.5 | 1 | 0.25 | 1 | 0.5 |
| Government websites: | | | | | |
| agencies updating website on weekly basis | 0.75 | 1 | 0.25 | 1 | 0.5 |
| • agencies allowing interactivity | 0.5 | 1 | 0.75 | 1 | 0.25 |
| agencies using social media to engage users | 0.5 | 1 | 0.5 | 1 | 0.25 |
| Government sites with accessibility for people with disabilities | 0.5 | 1 | 0 | 0.25 | 0 |
| Government sites in local languages | 0.5 | 1 | 0.25 | 0.25 | 0 |
| Government sites with women's content | 0.5 | 0.25 | 0 | 1 | 0.25 |
| Feedback mechanisms: | | | | | |
| government websites encourage comment | 1 | 1 | 1 | 1 | 1 |
| government websites enable citizen monitoring | 0 | 1 | 0 | 1 | 1 |
| government websites encourage rule-making | 0 | 0 | 1 | 0 | 1 |
| Mean score | 0.51 | 0.82 | 0.32 | 0.65 | 0.36 |

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- government websites are regularly updated in all five countries:
 - in Indonesia and the Philippines, all agency websites are updated weekly
 - in Colombia, three-quarters of agencies update their sites weekly
 - o in Uganda, half update their sites weekly
 - in Pakistan, only a quarter update their sites weekly
- all five countries have interactive government websites:
 - in Indonesia and the Philippines, all agencies have interactive websites
 - in Pakistan, three-quarters have interactive websites
 - o in Colombia, half do
 - o in Uganda, only a quarter do
- all five countries use social media to engage users:
 - in Indonesia and the Philippines, all agencies do this
 - in Colombia and Pakistan, half of the agencies do this
 - o in Uganda, only a quarter do this
- Colombia, Indonesia and the Philippines have government websites accessible to people with disabilities
- Colombia, Indonesia, Pakistan and the Philippines have government websites in the national language (other than English):
 - only Indonesia has all government websites in the national language
 - Colombia has half
 - Pakistan and the Philippines have a quarter

- in all five countries, government websites encourage comments from users:
 - in the Philippines and Uganda, government websites enable citizen monitoring
 - in Pakistan and Uganda, government websites allow participation in rule-making (e.g. via referendums).

Digital inclusion

Under this dimension, which represents the presence of policies and programmes that support the public's use of ICTs for development:

- all five countries have a universal access policy
- Colombia, Indonesia, Pakistan and Uganda have universal ICT literacy policies
- Pakistan and Uganda have women-specific access policies
- Colombia, Pakistan and Uganda have womenspecific ICT literacy policies
- all five countries have an ICT policy for specific groups
- Colombia, Indonesia, Pakistan and Uganda have an ICT literacy policy for disadvantaged groups.

ICT-empowered civil society

Under this dimension, which represents the extent of non-state (political) actors' use of ICTs to promote their interests:

- CSOs in all five countries use ICTs for internal organisational use:
 - all CSOs surveyed in Pakistan use at least one type of ICT (e.g. mobile phones)
 - 63% of CSOs in Colombia do this, with 57% in Indonesia and 42% in Uganda

Table 6. Country scores for digital inclusion

| Indicator | Colombia | Indonesia | Pakistan | Philippines | Uganda |
|--|----------|-----------|----------|-------------|--------|
| Universal access policy | 1 | 1 | 1 | 1 | 1 |
| Universal ICT literacy policy | 1 | 1 | 1 | 0 | 1 |
| Women-specific access policy | 0 | 0 | 1 | 0 | 1 |
| Women-specific ICT literacy policy | 1 | 0 | 1 | 0 | 1 |
| ICT policy for specific groups | 1 | 1 | 1 | 1 | 1 |
| ICT literacy policy for disadvantaged groups | 1 | 0 | 1 | 0 | 1 |
| Mean score | 0.83 | 0.50 | 1.00 | 0.33 | 1.00 |

Table 7. Country scores in ICT-empowered civil society

| Indicator | Colombia | Indonesia | Pakistan | Philippines | Uganda |
|---|----------|-----------|----------|-------------|--------|
| Use of ICTs for internal organisational use | 0.63 | 0.57 | 1.00 | 0.84 | 0.42 |
| Use of ICTs for coordination with allies | 0.71 | 0.46 | 1.00 | 0.84 | 0.50 |
| Use of ICTs for public engagement | 0.50 | 0.55 | 0.58 | 0.80 | 0.38 |
| Use of ICTs for building online resources | 0.67 | 0.58 | 0.25 | 0.58 | 0.25 |
| Mean score | 0.63 | 0.54 | 0.71 | 0.77 | 0.39 |

- in all five countries, CSOs use ICTs to coordinate with allies:
- in Pakistan, all CSOs use at least one type of ICT to coordinate with allies
- in all five countries, civil society uses ICTs for public engagement
- in all countries except the Philippines, civil society uses ICTs for online resource mobilisation.

Open legal and policy ecosystem

Under this dimension:

- all five countries have a right-to-information law and / or policy
- all five countries have a national law guaranteeing independent media:
 - Colombia, Indonesia, the Philippines and Uganda enjoy the publication of content free from state intervention
- all countries except the Philippines have laws that protect citizens' freedom of expression; in the Philippines, the government has established a clearance system for media personnel to publish generally classified information, and the authorisation to wiretap journalists on suspicion of 'harbouring terrorists'
- · in terms of content regulation:
 - four countries (Colombia. Pakistan, the Philippines and Uganda) do not regulate sexual content
 - three (Pakistan, the Philippines and Uganda) do not regulate online gambling
 - four (Colombia, Pakistan, the Philippines and Uganda) do not regulate the promotion of alcohol and prohibited drugs
 - all five countries regulate the promotion of alternative religious beliefs
 - all five have no political party regulations for the Internet

- three countries (Pakistan, the Philippines and Uganda) do not regulate the promotion of racial prejudice
- all five have no regulations regarding the promotion of alternative lifestyle choices
- Colombia and Uganda have policies ensuring net neutrality
- Colombia, Indonesia and the Philippines have policies ensuring the right to privacy of personal information
- Indonesia, Pakistan, the Philippines and Uganda have policies circumscribing legal surveillance
- three countries (Columbia, Indonesia and Pakistan) do not have policies restricting freedom of assembly; in the Philippines, rallies and demonstrations of a political nature are restricted to so-called 'freedom parks' and other areas designated by local governments for such purposes
- all five countries balance intellectual property rights vis-à-vis commons, with Uganda the least successful
- government research is publicly available in all five countries
- all countries except Pakistan have policies guaranteeing linguistic diversity
- Colombia, Indonesia and Uganda have policies encouraging the sharing of culture and cultural practices over the Internet and other digital / electronic platforms
- all five countries have policies encouraging e-commerce
- the degree of industry competition varies in the five countries: Pakistan leads, followed by Uganda, Colombia, Indonesia and the Philippines
- in terms of private power in media, there is a growing concentration of media power in all five countries, while there is a diversity of media sources in all countries except Indonesia.

Table 8. Country scores for an open legal and policy ecosystem

| Indicator | Colombia | Indonesia | Pakistan | Philippines | Uganda |
|---|----------|-----------|----------|-------------|--------|
| Right-to-information law / policy | 1 | 1 | 1 | 1 | 1 |
| Freedom of expression: | | | | | |
| national law guaranteeing independent media | 1 | 1 | 1 | 1 | 1 |
| publication of content free from state intervention | 1 | 1 | 0 | 1 | 1 |
| Law restricting citizens' freedom of expression | 1 | 1 | 1 | 0 | 1 |
| Selective content regulation: | | | | | |
| • sexual content | 1 | 0 | 1 | 1 | 1 |
| • online gambling | 0 | 0 | 1 | 1 | 1 |
| • promotion of alcohol, prohibited drugs | 1 | 0 | 1 | 1 | 1 |
| • promotion of alternative religious beliefs | 1 | 1 | 1 | 1 | 1 |
| opposition to dominant political dispensation | 1 | 1 | 1 | 1 | 1 |
| • promotion of racial prejudice | 0 | 0 | 1 | 1 | 1 |
| • promotion of alternative lifestyle choices | 1 | 1 | 1 | 1 | 1 |
| Policy ensuring net neutrality | 1 | 0 | 0 | 0 | 1 |
| Policy ensuring the right to privacy for personal information | 1 | 1 | 0 | 1 | 0 |
| Policy circumscribing legal surveillance | 0 | 1 | 1 | 1 | 1 |
| Policy restricting freedom of assembly | 1 | 1 | 1 | 0 | 0 |
| Extent of balancing intellectual property rights, vis-a-vis commons | 0.5 | 0.5 | 0.5 | 0.5 | 0.25 |
| Government research available to the public | 1 | 1 | 1 | 1 | 1 |
| Policy guaranteeing linguistic diversity | 1 | 1 | 0 | 1 | 1 |
| Policy encouraging online sharing of culture | 1 | 1 | 0 | 0 | 1 |
| Policy encouraging e-commerce | 1 | 1 | 1 | 1 | 1 |
| Degree of competition in the industry | 0.5 | 0.25 | 1 | 0.25 | 0.75 |
| Degree of private power in media: | | | | | |
| • growing concentration of media | 0.5 | 1 | 0.5 | 0.5 | 0.75 |
| • diversity of media sources | 0.5 | 0 | 0.5 | 0.75 | 0.75 |
| Mean score | 0.81 | 0.78 | 0.63 | 0.63 | 0.78 |

The five countries [in this study] place a high priority on closing the digital divide and ensuring that the benefits of ICTs are widely enjoyed

6. Conclusions and recommendations

This study attempted to assess the state of open e-governance in five countries. Our framework for open e-governance goes beyond an understanding of e-governance in terms of ensuring the efficient and transparent use of e-government services within each national jurisdiction, to examine appropriate online tools that allow greater participation by civil society groups in political and economic decision-making, and in the planning, implementation and assessment of programmes and projects.

The framework was assessed using a country assessment tool (a scorecard) to evaluate the extent of development of an open e-governance framework – the OeGI – in each country. Of the dimensions considered, the highest average scores were recorded for digital inclusion and an open legal and policy ecosystem (see Table 3).

The high score for digital inclusion indicates that the five countries place a high priority on closing the digital divide and ensuring that the benefits of ICTs are widely enjoyed. This augurs well for open e-governance, as more people will eventually participate in the collective steering of society using ICTs, and suggests that the majority will soon be on the positive side of the digital divide.

The high score for an open legal and policy ecosystem means that in these five countries there are few policy, legal and societal impediments to citizen participation in governance – with or without the use of ICTs. It is worth noting once more, however, that the scores represent the presence of policies and programmes. The OeGI does not necessarily capture whether these policies are implemented or not, and / or whether projects are effective.

The dimension with the next highest score is an ICT-empowered civil society. This means that in the five countries reviewed, CSOs are actively using ICTs in their internal work, dealing with allies and engaging the public. The potential for using ICTs for fund generation is less well explored, however.

The average score for the e-participation dimension was the lowest. This means that engaging citizens using ICTs is not a priority for the five governments in this study. Stakeholders in open e-governance need to lobby for more policies and projects to broaden the channels of participation in these countries.

As the countries were chosen purposively (not via random sampling), the conclusions presented are true only for these five countries. However, this does not mean that there are not lessons to learned by other developing countries. The need for developing and implementing e-participation channels is one of them.

This study reveals that while there is progress towards open e-governance, there are dimensions that need to be strengthened. For one, while there is a great demand for online participation among citizens, there are many policies and programmes that governments need to undertake before this can happen.

While there are many indices that measure e-governance (see Section 3), the OeGI 2.0 includes specific dimensions not found in similar indices. These other indices put a premium on the efficiency of the delivery of e-government services (and thus more economically advanced countries have higher scores), and less on the ability of these nations to improve access to ICTs for different sectors of society, especially NGOs and people's organisations, and their right to communicate.

6.1 Future use of the Open e-Governance Index

This implementation of the OeGI validated the lessons learned in its previous iteration. It shows that openness is an important area of participation of civil society actors in the state, and that the norms for transparency and accountability are critical in ensuring that national ICT systems can be used for political and socioeconomic progress.

The OeGI can also serve as a metric to steer society collectively in terms of the engagement with, and use of, ICTs by citizens. It would be good to test the OeGI in more countries, to get a sense of what the e-governance trends are in different regions. Furthermore, conducting this evaluation process more regularly should provide a picture of how governments are progressing in each area, starting from the baseline established during this initial study.

In this specific iteration of the OeGI framework (OeGI 2.0), we found that the framework is appropriate for contexts outside of Asia. More specifically, developing countries in Asia, Africa and Latin America share common issues in terms of ensuring that the tools

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and mechanisms in terms of online participation are made available, and in ensuring that there is wide participation by civil society and other groups in policy and project decision-making, planning, implementation and evaluation.

However, there are still refinements that should be made if the project is to be implemented on a larger scale in the future.

Considering the relative weighting of the different dimensions, it might be prudent to review the scoring system. In OeGI 2.0, the dimensions were given equal weight and this may not capture 'reality'.

There should be focus on the implementation of policies and projects that lead to open e-governance – not just their presence. Countries may score highly in the index because of the presence of laws and policies. But are these being put into practice? For instance, Pakistan scored highly in the digital inclusion dimension because it has plans and strategies, but this does not reflect the fact that Internet penetration in Pakistan is a little over 30% of the population, and these policies may only be applicable to a small portion of the population. One of the suggestions made during the synthesis workshop was the possibility of including indicators to measure how a policy / policies are being implemented by a country, perhaps by splitting the score for an

indicator as 50% for presence of policy and 50% for implementation.

Even if the OeGI aims to compare the state of open e-governance in different countries, it is important to consider each country's specific situation in terms of finalising the measurement tools (such as the survey and the secondary literature) and the implementation protocols. One of the major lessons learned was that there should have been a more comprehensive orientation of the tools among the different country teams, to anticipate problems in its implementation in different environments. In future implementations of the OeGI, it will be important to have an inception meeting with all country partners to ensure there is a common understanding of phrases and terminologies. Pre-testing with each of the country partners would also be useful.

The OeGI should be a composite of subnational OeGIs. The project focused on national laws and policies, as well as activities by cabinet-level agencies only. This may be seen as being capital-centric, reflecting only the perspective of the dominant region, and in large countries may not capture regional differences. For instance, Indonesia has a decentralised government, and it is possible for a province or an autonomous region to veto a national law or to have its own policies.

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Annexes

Annex I. The dimensions of the Open eGovernance Index

Using the conceptual definition of open e-governance, the research team based in the Philippines further distilled the methodological definition of its five dimensions. These were identified from the different functions that different state and non-state actors should undertake in terms of their 'steering' functions of and with ICTs. The precise indicators for each dimension can be seen in Tables 4 to 8.

1. Meshed e-government

This dimension reflects a government's ability to place its public functions online, which comprises many aspects of ICT enablement. Its components are ICT-based mechanisms to enhance efficiencies and the effectiveness of back-office operations within government. These include the ability of different government agencies to share data and communicate with one another, how data storage is undertaken, the level of automation of government, and the ability of government to develop and implement a unified policy for using ICTs within government bureaucracy. This includes the presence of national e-governance plans, and the extent of e-governance programmes and projects.

The indicators for this dimension capture the presence of open digital and technological standards, as well as government interoperability frameworks. This dimension also reflects the extent to which the government uses ICTs to enhance in-house operations, and its ability to pull all its agencies together under an interoperable framework within which entities can share data in the most efficient manner. The presence of cybersecurity frameworks and policies are also included.

2. E-participation

This dimension captures citizen-facing applications, or front-office e-governance mechanisms. In general, it examines the new (ICT) channels available to citizens to obtain information from and about government, share / express their views with decision-makers and / or policy-makers, and collaborate in governance. It includes dimensions that are related to interfacing with citizens, providing services, asking for feedback, and listening to feedback. It does not include the use of ICTs for internal efficiencies.

In the OeGI, this component was designed to measure how well and how much a government utilises ICTs. That is, it seeks to reflect the presence of citizen-facing applications, the quality of government content, and the extent to which its products are utilised in the daily practice of governance. Applications include,

broadly, websites, SMS, social networking sites and blogs. This dimension also measures the use of ICTs by disadvantaged socio-economic sectors, including women and people with disabilities, and measures the participation in ICT procurement and payment systems.

3. Digital inclusion

This dimension measures the extent to which government ensures that all citizens benefit from the different ICTs available. These include the presence of universal access and universal literacy policies, competition policy and the concentration of media ownership, affordability and access of ICTs to the general population, and the multiplicity of information sources.

This dimension also measures the extent of access for the general population to information and knowledge. This includes the presence of policies relating to freedom of information, access to publicly funded research (open content), availability of government data in a reusable format (open data) and the ability of citizens to access information relevant to their needs.

4. ICT-empowered civil society

Since the OeGI not only measures e-government but also e-governance, it includes the ICT readiness and utilisation by CSOs and other non-state organisations (e.g. political parties and people's organisations). While openness in the information gathered and shared by government is imperative for open e-governance, citizens must have alternative sources of information and opinion; this is a critical part of fostering transparency in governance. Independent organising and the independent creation of knowledge is an indicator of decentralised power. As Gilbert (2010) notes, technological capacity is related to technological and social capital embedded in particular societies.

This dimension seeks to assess the abilities of independent social and political actors, and their attempts to generate and mobilise support for a person, issue, or cause – essentially all to measure the extent to which such groups are using ICTs to achieve their objectives.

5. Open legal and policy ecosystem

This includes the extent to which the government recognises and fosters the right to free expression, and rights over personal communication, cultural freedom and the use of local languages. It also measures the extent to which the government controls or limits the use of ICTs among its citizens. Indicators were gathered in relation to the extent of telecoms infrastructure, human capital, the concentration of media power, political freedom (including freedom of expression, privacy and censorship), economic indicators and socio-cultural freedoms.

Annex II. Experts engaged in the project

FMA engaged the following senior researchers, academics and governance advocates to assess OeGI 1.0 and develop an updated framework and assessment tool for OeGI 2.0:

- Dr Emmanuel Lallana, Chief Executive Officer, IdeaCorp
- Dr Philip Arnold Tuano, Economics Department, Ateneo de Manila University, Philippines
- Dr Clarissa David, Assistant Professor and Director of Research and Publications, College of Mass Communications, University of the Philippines
- Dr Sherwin Ona, Associate Professor, De La Salle University, Philippines
- Mr Redempto Parafina, Executive Director, Affiliated Network for Social Accountability East Asia and the Pacific
- Ms Maria Teresa Garcia, Policy Director, Department of Information and Communications Technology
- Mr Sixto Donato Macasaet, Executive Director, CODE NGO
- Ms Maxene Tanya Hamada, Former Assistant Secretary for Monitoring and Evaluation Sector, Philippines
 Department of Budget and Management
- Mr Winthrop Yu, Chairperson, Internet Society Philippines Section
- Mr Alan Alegre, Board Member, Foundation for Media Alternatives

They were supported by two researchers, Mr Kenneth Reyes and Ms Christina Lopez, who conducted a literature review and assisted in developing the e-governance indicators.

About Making All Voices Count

Making All Voices Count is a programme working towards a world in which open, effective and participatory governance is the norm and not the exception. It focuses global attention on creative and cutting-edge solutions to transform the relationship between citizens and their governments. The programme is inspired by and supports the goals of the Open Government Partnership.

Making All Voices Count is supported by the UK Department for International Development (DFID), the US Agency for International Development (USAID), the Swedish International Development Cooperation Agency (SIDA) and the Omidyar Network, and is implemented by a consortium consisting of Hivos, IDS and Ushahidi.

Research, Evidence and Learning component

The programme's Research, Evidence and Learning component, managed by IDS, contributes to improving performance and practice, and builds an evidence base in the field of citizen voice, government responsiveness, transparency and accountability (T&A) and technology for T&A (Tech4T&A).

About Foundation for Media Alternatives

FMA is an NGO based in the Philippines that assists citizens and communities – especially CSOs and disadvantaged sectors – in their strategic and appropriate use of ICTs for democratisation and popular empowerment.

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