

Chapter 2

Global Policies and Initiatives for E-Government in Pacific SIDS

Gisa Fuatai Purcell and Graham Hassall

Abstract Because the internet is a world-wide system of intercommunications, significant policy dialogue concerning its organization and functioning takes place at global meetings of governments, technical bodies, business, development agencies, and user groups. This “global architecture” for policy-setting covers both internet governance and e-government. This chapter focuses on the latter, particularly on the interaction between global agencies and policy dialogue processes with SIDS (Small Island Developing States), more particularly those in the Pacific Islands. While small states, such as those in the Pacific, have not played a large role in decision-making at global level, their sharing of their experience, perspectives, and preferences has contributed to the gradual recognition of their distinct development context. Since Agenda 21, through to the recognition of SIDS as a particular category of developing states in global development assistance frameworks, the challenges of e-government have been given ever-closer consideration. At the current time building e-government capacity and capability in Pacific Island SIDS is shaped by the plan of action flowing from the third SIDS Conference in Apia in 2014 and by the 2030 Agenda for Sustainable Development, a comprehensive set of development goals agreed at the United Nations for the period 2015–2030. Developing the capability of Pacific States has included increasing the extent of their participation in global e-government dialogue processes, as partners in development rather than as recipients only.

2.1 Introduction

This chapter reviews recent global policy dialogue about e-government, with particular emphasis on how it has affected the development of e-government in SIDS. The first section examines global thinking about e-government developed by the International Telecommunication Union (ITU) and other UN bodies. This is fol-

G.F. Purcell · G. Hassall (✉)

Victoria University of Wellington, Wellington, New Zealand

e-mail: graham.hassall@vuw.ac.nz

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lowed by sections that describe the outcomes of the World Summit for the Information Society (WSIS) (in Geneva 2003 and in Tunis 2005); introduce additional inter-governmental organizations such as the World Bank and the Organization for Economic Cooperation and Development (OECD) which operate globally and actively in the development of e-government; examine the third international conference on SIDS and its outcome, the Samoa Pathway; appraise the impact and effectiveness of this global policy architecture in the context of the Pacific Island Countries, and link each of these initiatives to the 2030 Agenda for Sustainable Development.

Internet governance is distinct from e-government. The Working Group on Internet Governance defined the former in 2005 as “the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures and programs that shape the evolution and use of the Internet”, (Working Group on Internet Governance 2005) and the latter, e-government, which concerns the ways in which the internet serves the purposes of delivering government. There is, of course, an overlap between these two topics.

Global policy dialogue discovers felt needs, shares knowledge, generates policy options, identifies decision-making authorities, links policies with implementation strategies and appropriate resources, and includes evaluative processes that help to refine subsequent policy engagement in the same or related areas. Whether these processes are cyclic or iterative is less important than whether they are inclusive, deliberative, and, ultimately, emancipatory. Of course, in the absence of global political institutions, the term “global policy” implies recommendations for consideration and action by national governments, rather than directives. Such recommendations by networks of inter-governmental agencies, national governments and a host of other actors, constitute the global governance of e-government at the current time. Their effectiveness depends on the quality of their discursive practices rather than on any constituted authority (Risse 2004).

The Paris Declaration on Aid Effectiveness (OECD 2005) agreed by 100 developed and developing countries added an influential values framework for global dialogue on e-government policy. Borne of OECD member countries’ concerns about aid effectiveness, the principles addressing ownership, alignment, harmonization, results management, and accountability seek to change the relationship between donor and recipient countries toward “partnership” for development. This was consolidated through the Busan Partnership Agreement, on which the Global Partnership for Effective Development Co-operation was established in 2011.

An established policy for e-government at global level provides options for the implementation efforts of individual countries and their various development partners. The internet ecosystem (or internet universe) consists of several layers of policy makers: globally through such UN agencies as its Department of Economic and Social Affairs (UN DESA), the United Nations Education and Scientific and Cultural Organization (UNESCO), the International Telecommunications Union

(ITU), the World Health Organization (WHO), the United Nations Development Programme (UNDP), and the United Nations Office for Disaster Risk Reduction (UNISDR), and regionally through Regional Internet Registries (RIRs) such as the Asia Pacific Network Information Centre (APNIC), the Asia-Pacific Telecommunity (APT), Regional CERTs (Computer Emergency Response Teams); and individual countries' regulatory systems. Private sector actors, especially network operators, also play significant roles in the development of internet infrastructure and policy.

The United Nations has convened a series of global meetings which have brought these actors together to make decisions on policy; and UN Agencies such as ITU have been instrumental in providing assistance in such areas as Universal Service/Access, Spectrum, Next Generation Network, among others. Some International Organizations such as Commonwealth Secretariat, OECD, EU, the International Organization for Standardization (ISO), the Internet Corporation for Assigned Names and Numbers (ICANN), the Internet Engineering Task Force (IETF) and the Number Resource Organization (NRO) have also helped shaped key areas from a global policy level. The World Bank and the private sector have focused on financing and building infrastructure, although the World Bank has also developed a significant global knowledge repository. ICANN ccNSOs (Country Code Name Supporting Organizations) have helped shape the ccTLD (Country Code Top Level Domain) policies concerning country code top level domain names, and the Internet Society and NROs have helped influenced and shape policies and aid capacity building surrounding Internet Exchange Points (IXPs) and ccTLDs. Number addressing policies have been shaped by NROs and various RIRs in conjunction with their members.

The significance of participating in the “global information society” is not lost on small island and other developing states. This is confirmed by a 2010 United Nations report which notes that since the economic crisis of 2008, e-government services have assisted governments to enhance transparency, assuage public unease, increase public trust, enhance the tractability of the usage of public stimulus funds and improve the added value of government data holding. The Sustainable Development Goals, adopted by the small island states in late 2015, provide a contemporary focus for the application of ICT solutions to challenges that are global as much as local—climate change for one, and health, education, and sustainable development are also vitally important.

Many international conventions and declarations take into account the needs of SIDS: these include the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), the Convention on the Rights of the Child (CRC), and the UN Framework Convention on Climate Change (UNFCCC). Such key conventions are applicable to the social welfare of people and therefore must be considered when developing e-government. All UN agencies are required to incorporate relevant conventions into all projects. That is, any e-government policy and action plan must consider that women and children are included, even if the government has not ratified the convention. This also applies to programs addressing natural disasters and effects of climate change.

2.2 United Nations bodies

Although discussion of information societies and indeed “knowledge societies” pre-dates the internet, the significance of ICTs emerged through the World Summit on the Information Society¹ (2003–2005), convened on behalf of the UN by the ITU. In the years since that pivotal event, the UN General Assembly has continued to coordinate activities within the UN system focused on the expansion of ICT capability, on the articulation of internet governance and the roll-out of e-government. United Nations General Assembly Resolution 64/187 of 21 December 2009, for instance, concerning information and communication technologies for development,² envisaged ICTs as contributing to solving development challenges, fostering economic growth and competitiveness, improving access to information and knowledge, eradicating poverty and improving social inclusion. It noted the role of government in designing public policies for these outcomes and providing public services “responsive to national needs and priorities”, using multi-stakeholder approaches, and in support of national development efforts. To ensure effectiveness across these dimensions, the Resolution looked to a joined-up approach coordinated by the United Nations Group on the Information Society on behalf of the UN System Chief Executives Board for Coordination, and involving the ITU, UNDAF, UNDP, and UNESCO. The UN Secretariat’s Department of Economic and Social Development (UN DESA) has been at the forefront of promoting e-government as a key strategy for improving government services and the effectiveness of public policies and programs³. And in 2014 the United Nations University established the Portugal-based Operating Unit on Policy-Driven Electronic Governance⁴.

2.2.1 *The World Summit for the Information Society*

In 2001 the United Nations General Assembly endorsed the holding of a World Summit for the Information Society (WSIS) to build political will, to take concrete steps toward establishing an “information society for all”, and to identify international policies necessary to ensure that every country has access to the internet and can maintain this access for all members of society. A High-Level Summit Organizing Committee (HLSOC) was established under the patronage of then UN Secretary-General Kofi Annan to coordinate the efforts of the United Nations family to prepare, organize and hold the WSIS. Geneva-based ITU (described in some

¹<http://www.itu.int/net/ws/is/index.html>.

²http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/64/187.

³<http://www.un.org/en/development/desa/news/sustainable/ict-and-e-government-for-sustainable-development-in-sids.html>.

⁴<http://egov.unu.edu/about/about-unu-egov#overview>.

detail below) was the lead agency, and an Executive Secretariat (WSIS-ES) was established at ITU headquarters under the authority of the HLSOC to assist in the preparation of the Summit. Host countries Switzerland and Tunisia also established Executive Secretariats to focus on preparing their respective phases of the Summit.

2.2.1.1 WSIS I: Geneva Phase, December 2003

The first phase of the Summit, held in Geneva 10–12 December 2003, marked the culmination of many months of consultations and negotiations among member states, UN experts, the private sector, non-governmental representatives and civil society, who reviewed vast amounts of information and shared a broad spectrum of experiences in issues related to the information society. These consultations and negotiations took place before the summit itself and constituted the preparatory process (ITU 2003). WSIS I focused on developing and fostering a clear statement of political will and taking concrete steps to establish the foundations for an “Information Society for All”, reflecting the different interests at stake (ITU 2003). Presentations from the Pacific region were made by Samoa’s minister for Communications and Information Technology Palusalua Faapo II, Niue’s Associate Minister for Post and Telecommunications John Tiakia and Fiji’s Head of the Delegation Abel Caine (who also chaired the Summit’s credentials committee). Other PICs present included Palau, Papua New Guinea, Tonga and the Federated States of Micronesia.

At this first phase, more than 11,000 participants from 175 countries gave political support to the Geneva Declaration of Principles and Geneva Plan of Action adopted on 12 December 2003. These principles elaborated on the role of governments and all stakeholders, explained the centrality of ICT infrastructure to connectivity, stressed the importance of access to information and knowledge, advocated capacity building, building confidence and security in the use of ICTs and explained factors essential to creating enabling environments. Furthermore, they emphasized the benefits of ICTs in all sectors, and the goal of ensuring that ICTs promote cultural diversity and identity. Not least among the statement of principles was the importance of international and regional cooperation (World Summit on the Information Society 2003a, b).

The Pacific Islands’ Report to WSIS

The Pacific Islands report to WSIS (Pacific Islands Forum Secretariat 2003) summarized the status of ICTs in the Pacific, the principles and strategies underpinning the regional framework, and priorities for implementation. These plans and initiatives were expressed in three documents: Forum Communication Action Plan (Pacific Forum 2002), containing ministerial decisions about what the region will pursue to develop the ICT sector; the Pacific ICT Policy and Plan (PIIPP), which was a framework to implement ministerial decisions by coordinating regional activities and offering guidelines for national activities; and Pacific I4D Initiative, a partnership initiative developed for the World Summit on Sustainable

Development, proposing partnerships and resources for implementation (these reports and plans are considered in more detail in Chap. 3).

Declaration of Principles

The two significant outcomes of this first phase of the WSIS relevant to this study were the Declaration of Principles and the establishment of the Working Group on Internet Governance (WGIG). The Declaration of Principles produced by WSIS I, which was slightly amended during the second summit, continues to be the main declaration on global ICT policy (ITU 2013). The Plan of Action includes a section on e-government, citing the experience of some developed countries on its value in the efficient and effective delivery of public services. Paragraph 16 of the Declaration focusses on the development of ICTs in SIDS, and other UN-approved categories of developing countries. Specific recommendations for the implementation of e-government set out in the WSIS Geneva 2003 Plan of Action include:

- That all countries should aim “to connect all local and central government departments and establish websites and email addresses” (WSIS 2003);
- That governments should “develop national e-government initiatives and services, at all levels, adapted to the needs of citizens and business, to achieve a more efficient allocation of resources and public goods” (WSIS 2003); and
- that governments should “support international cooperation initiatives in the field of e-government, in order to enhance transparency, accountability and efficiency at all levels of government” (WSIS 2005).

Furthermore, the Declaration also addressed the context of small island developing states, noting at paragraph 16: “...we will pay special attention to LDCs, SIDS, LLDCs and countries with economies in transition” (World Summit on the Information Society 2003a). (When first drafted this paragraph referred only to SIDS, but during the first reading LDCs and LLDCs requested that they also be included, given that they were recognized by the UN General Assembly at the Rio conference on the Millennium Development Goals as developing countries with special needs).

The WGIG was established during the Geneva summit to study the future of internet governance. But because the Working Group was not able to file a comprehensive result of its work, the Geneva summit requested the UN Secretary General to approve continuation of its work for consideration and appropriate action of WSIS II in Tunis in 2005. The request was approved, and WGIG was asked to:

- develop a working definition of internet governance;
- identify the public policy issues relevant to internet governance;
- develop a common understanding of the respective roles and responsibilities of governments, existing international organizations and other forums as well as the private sector and civil society from both developing and developed countries (World Summit on the Information Society 2003b).

The Working Group's report, considered in Tunis, proposed the creation of a Global Internet Council consisting of governments and stakeholders to assume the oversight role currently held by ICANN, creation of an International Internet Council to manage most aspects of internet administration, and creation of three additional bodies: a Global Internet Policy Council, a World Internet Corporation for Assigned Names and Numbers, and a Global Internet Governance Forum (Working Group on Internet Governance 2005)—although only the last of these, the Internet Governance Forum, has so far been established.

2.2.1.2 WSIS II: Tunis, November 2005

The main policy challenge addressed at WSIS II, held in Tunis, Tunisia, in November 2005, was management of internet governance by the International Corporation for Assigned Names and Numbers (ICANN). Developing countries maintain that since over half of internet users are from developing countries, a new public body should be established to be responsible for its governance, leaving ICANN free to focus on the technical side of the internet. The United States maintained that ICANN should continue to govern the internet, in addition to overseeing technical issues such as the top-level domain names (ccTLDs) and many others. At the eleventh hour, it was agreed that ICANN should continue to manage internet governance, and the Government Advisory Committee (GAC) should continue to provide input into policies relating to internet governance. The GAC's key role is to provide advice to ICANN on issues of public policy, especially where there may be an interaction between ICANN's activities or policies and national laws or international agreements. This agreement to leave the technical side of internet governance to countries with the technical knowledge and sufficient human resources to ensure that the internet remains available to all, with support of the GAC on policy matters, and regulation and legislative aspects of internet governance, was one of the significant outcomes of the Tunis phase. Most importantly, WSIS established mechanisms for on-going dialogue, notably the Internet Governance Forum, established in 2006.⁵

Pacific Island governments made three presentations at the Tunis Summit: Secretary for Transportation and Communications in the Republic of the Marshall Islands, Jorelik Tibon, addressed the sixth plenary session on 17th November, and Palusalua Faapo II, Samoa's Minister for Communications and Information Technology, addressed the seventh plenary session on the next day. The Federated States of Micronesia's Secretary of the Department of Transportation, Communications and Infrastructure, Robert Yatilman, also spoke that day, in the ninth plenary session. Each of these presentations emphasized the challenges faced

⁵<http://www.itu.int/net/wsis/docs2/tunis/off/7.html>; <http://www.itu.int/net/wsis/docs2/tunis/off/6rev1.html>.

by small states in establishing adequate infrastructure and the need for partnerships to achieve their ICT aspirations—but the small number of presentations by Pacific states at both the Geneva and the Tunis summits suggests a low level of engagement with ICT policy at this period.

The Tunis Commitment and Tunis Agenda for the Information Society, adopted on 18 November 2005 (World Summit on the Information Society 2005), also promoted the use of ICTs in government as a priority and crucial target area for ICT-based development interventions as well as human resource and institutional capacity in the public sector (World Summit on the Information Society 2005). Together, WSIS summits I and II established global policy networks, regional and sectoral frameworks for implementation of ICT policies. Another key aspect of the summits was the establishment of a process to encourage and monitor implementation. The WSIS Stocktaking Platform⁶ includes a database of ICT-related initiatives, periodic country reports, WSIS Forum and social media presence.

Embedded in the Tunis Agenda was a recommendation that the Summit's results be reviewed after 10 years; this series of events, referred to as WSIS+10, took place in December 2015.⁷ Although there were no presentations from the Pacific Islands among the 85 country and organization presentations at the WSIS Forum's High-Level Track Outcomes and Executive Brief, held in Geneva in May 2016, WSIS Stocktaking reports have noted a number of initiatives in PICs in recent years. The Report for 2013, for instance, noted under the heading "Information and communication infrastructure: an essential foundation for the information society," included Samoa and Papua New Guinea among countries in the Asia Pacific region assisted by ITU to develop their own wireless broadband master plans, "which will eventually provide access to broadband-supported services and applications at rates that are affordable and comparable to those in developed countries" (WSIS Stocktaking Report 2013, p. 15). The Report also noted that the ITU, in cooperation with the Republic of Korea and Japan, was updating guidelines on digital broadcasting "to take account of new developments in the area of DTTB and MTV implementation and convergence, while adding sections on IPTV, satellite TVtc" to countries, including Papua New Guinea, Fiji, Vanuatu, and Micronesia (WSIS Stocktaking Report 2013, p. 16).

These initiatives were followed by ITU support for developing wireless broadband master plans, with the Republic of Korea providing technical assistance for the formulation of broadband policies/plans for the Marshall Islands and a number of Asian countries (WSIS Stocktaking Report 2014, p. 17). ITU launched a project to build the first interactive online transmission maps tracking national backbone connectivity (fiber and microwave) and other key metrics in the ICT sector for countries, including Fiji and Papua New Guinea. Vanuatu was being assisted with the transition from analogue to digital terrestrial television broadcasting and for the introduction of mobile television. Micronesia, Kiribati, Nauru, Samoa and Solomon

⁶<http://www.itu.int/net4/wsis/stocktaking/en>.

⁷<https://publicadministration.un.org/wsis10/GA-High-Level-Meeting>.

Islands were assisted with updating guidelines on digital broadcasting to take into account new developments in the area of digital terrestrial television broadcasting (DTTB) and mobile television (MTV) implementation and convergence, while adding sections on Internet Protocol television (IPTV), satellite television and other applications. All of these activities were accompanied by capacity-building training on conformity assessment procedures and testing for different domains, such as electromagnetic compatibility (EMC) and mobile terminals (WSIS Stocktaking Report 2014, p. 17–18). In the Marshall Islands, a partnership between the Mejit (a remote region of five islands and 29 atolls with just 300 to 400 inhabitants) local government, the Marshall Islands National Telecommunication Authority (MINTA) and Japan's Ministry of Internal Affairs and Communications, funded by an Asia-Pacific Telecommunity grant, resulted in a "Far Remote Island MCT project" to provide connectivity to Mejit (WSIS Stocktaking Report 2014, p. 19–20).

2.2.2 *UN Department of Economic and Social Affairs*

The desire to improve e-government performance globally has stimulated the development of bench-marking, indexing and diagnostic projects by a range of global agencies that includes several within the United Nations Organization. These include UN DESA's *United Nations E-Government Survey* (seven editions from 2003 to 2014), DPADM (Department of Public Administration and Development Management) and UNPAN (UN Public Administration Network); and the ITU's ICB4PAC (already noted above).

Global rankings of UN DESA's *United Nations E-Government Survey* for 2014 (United Nations Department of Economic and Social Affairs, 2014) show Fiji to be the best performing PIC (85th), with the remainder ranged between 98 and 188 out of 190 countries surveyed. Whereas such global surveys have their place, they raise the issue as to whether developing countries, particularly those that are SIDS, can benefit from being compared with significantly larger and better resourced countries. The ITU's ICB4PAC project, in contrast, concerning "Capacity Building and ICT Policy, Regulatory and Legislative Frameworks for Pacific Island Countries" (International Telecommunications Union 2013), applies a methodology premised on the need to consider the circumstances of individual countries, and to tailor development projects to the priority areas that they have identified. It was less concerned with rankings than with ensuring that each PIC developed appropriate laws and institutions that provide National ICT policy, Licensing, Cybercrime and Universal Access and Service.⁸

E-government is one of the main initiatives in the work of UNPAN, a division of the United Nations Department of Economic and Social Affairs mandated to

⁸http://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/ICB4PAC/Documents/In-country%20support%20documents/ICB4PAC_KPI_In-country_Technical_Assistance_10Oct2013.pdf.

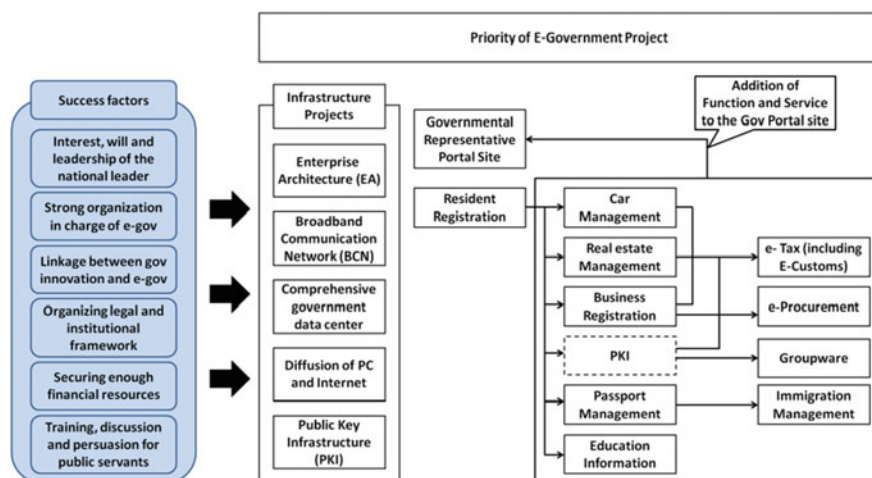


Fig. 2.1 Success factors and activity priorities for e-government in SIDS. *Source* Lee (2014). E-Government for Promoting Sustainable Development in Small Island Developing States (SIDS): Background Paper for the Special Event of the 69th Session of the United Nations General Assembly Second Committee. New York: United Nations, p. 134

provide capacity building and knowledge management to achieve effective, accountable and inclusive institutions. UNPAN provides online learning about e-government. Another of UN DESA's programs, DPADM, has a program entitled UNPACS—UN Public Administration Country studies, which maintains an e-government Development Database.⁹ UN DESA's Project Office on Governance (UNPOG), established in Seoul Korea in 2005, to promote participatory, transparent and effective democratic governance in member states, has rapidly developed an active program in support of e-government that includes activities specifically addressing the needs of PICs.¹⁰

In addition to indexes and the challenges that they pose for comparing small states with large ones, there are UN agency studies articulating diagnostic frameworks for e-government. A background paper (Lee 2014) put to the 69th United Nations General Assembly Second Committee in 2015, for instance, laid out "success factors and activity priority flow chart" for e-government in SIDS (Fig. 2.1).

In addition to identifying such features as leadership, organizational capacity, innovation, legal environment, and financing and training, this report articulated four inter-weaving policy areas critical to the overall success in the implementation

⁹<https://publicadministration.un.org/egovkb/en-us/#.V0T0amlf37Y>.

¹⁰See "Capacity Building Training Workshop on E-Government Development in Pacific SIDS", November 9, 2015, and other activities, at <http://www.unpog.org/activity/activity02.php>.

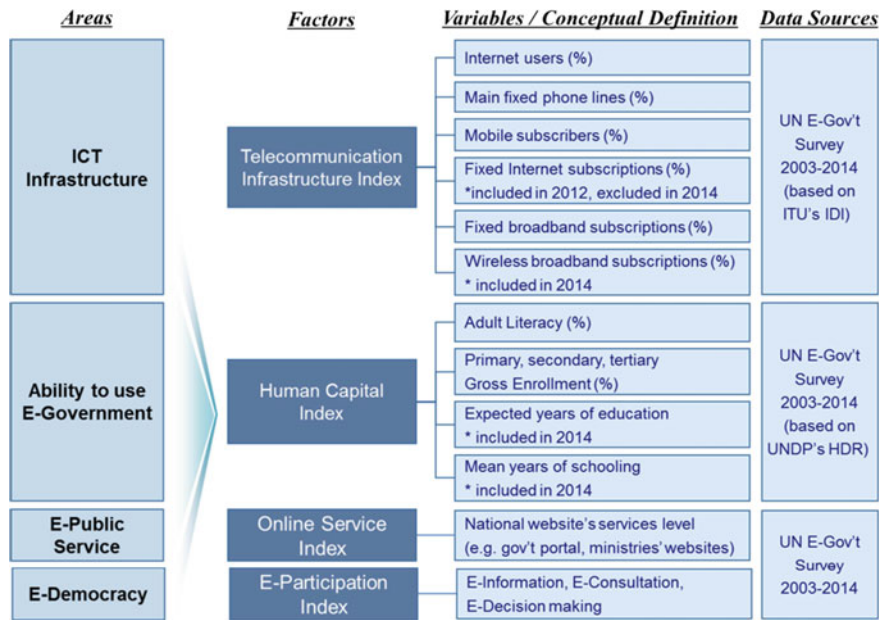


Fig. 2.2 Policy areas critical to success of an e-government strategy. *Source* Lee (2014). E-Government for Promoting Sustainable Development in Small Island Developing States (SIDS): Background Paper for the Special Event of the 69th Session of the United Nations General Assembly Second Committee. New York: United Nations, p. 16

of an e-government strategy: ICT infrastructure, ability to use e-government, e-Public Service and e-Democracy (see Fig. 2.2) (Lee 2014, p. 16).

The studies provided in the following chapters illustrate the complex interconnections between these four areas. It is often the case that those leading the development of ICT in a country are well-aware of their potential.

2.2.3 The International Telecommunications Union (ITU)

The Geneva-based International Telecommunications Union ITU, the oldest United Nations agency and one of the primary actors in the establishment of global ICT policy, holds specific responsibility for the establishment of technical standards and telecommunication rules for spectrum and frequency allocation. Its programs deal with climate change, least developed countries and small island developing states, regulatory and market environment, emergency telecommunications, cybersecurity, ICT applications, capacity building, ICT statistics and indicators, technology and network development, digital inclusion and spectrum management and broadcasting.

Under the umbrella of the WSIS Declarations, ITU is among the global agencies developing ICT capability with a focus on the Pacific Islands region. Its Development Department, in particular, focuses on policy development, regulation and legislation in all areas of ICTs; emergency telecommunication and climate change adaptation; infrastructure development and concentrated assistance to member states. This assistance includes:

- all phases of disaster management, i.e. disaster preparedness including early warning, disaster response/relief and rehabilitation of telecommunication networks;
- making a smooth transition from analogue to digital broadcasting;
- developing broadband access in urban and rural areas; and
- developing appropriate policy and regulatory framework, enhancing skills, increasing information-sharing, and strengthening regulatory cooperation.

The ITU engages with numerous global agencies and networks to promote the effective dissemination of ICTs. There is, for instance, the Partnership on Measuring ICT for Development, consisting of 14 regional and international organizations established in 2004. In 2013 the ITU collaborated with the European Community to survey the status of National ICT policies in PICs, as part of a broader study of ICT policies in Africa, Pacific and Caribbean countries (International Telecommunications Union 2013).

2.3 The World Bank

In addition to the global ICT and e-governance initiatives under UN auspices introduced above, are those of the World Bank. As a development bank that operates under considerably different governance arrangements to those of the UN, the World Bank has increasingly lent resources, knowledge and expertise to finance and otherwise capacitate the development goals set by the UN. In addition, it has developed indicators to measure the economic gains of e-government implementation (World Bank 2016).

World Bank support for development of telecommunications in the Pacific Islands dates to at least the 1960s. In Papua New Guinea, for example, it supported its first telecommunications project from 1968, a second from 1972 and a third from 1997. The first two projects focused on the expansion of phone lines and satellite, the third introduced data communications, management information systems and the organizational structure for the Post and Telecommunication Corporation (PTC).

In 2011 the World Bank initiated a five-year Pacific Regional Connectivity Program to increase bandwidth, capacity and competition in the ICT sector, and access to the internet and telephones, including mobile services. The Program, initially designed to be implemented in five phases in five different island countries

at an estimated cost of US\$186.5 million (plus IDA contribution of US\$88.2 million), seeks to reduce the cost and increase the availability of international bandwidth for participating countries, and thereby facilitate the development of a wide range of ICT applications to support social and economic development in the region. These projects invariably include additional development partners such as the Asian Development Bank,¹¹ the Pacific Region Infrastructure Facility and private sector actors.

In 2012 the WB announced a new focus on the development of ICT capability, reliant on three principles themes:

- *Transformation*: Making development more open and accountable and improving service delivery by, for instance, facilitating citizen feedback to governments and service providers;
- *Connectivity*: Scaling up affordable access to broadband, including for women, disabled citizens, disadvantaged communities and people living in remote and rural areas;
- *Innovation*: Developing competitive IT-based service industries and fostering ICT innovation across the economy with a focus on job creation, especially for women and youth.¹²

The emphasis on capital investment and economic development and growth, Strickland suggests, has emphasized the expansion of market access and neoliberalism, rather than the mere provision of infrastructure and access alone (Strickland 2015, p. 105). In the case of Solomon Islands and Papua New Guinea, for instance, the bmobile expansion project of 2011 provided US\$9 million to support the expansion of bmobile's ICT infrastructure following the cessation of Telecom PNG's monopoly position.¹³ Samoa's Telecommunications and Postal Sector Reform Project (WB075739 0), in operation from 2002 until early 2011, included IDA financing to undertake Competition and Sector Reform designed to improve the regulatory framework (particularly in the areas of interconnection, convergence and downstream effects of privatization) and to privatize SamoaTel.

Box 2.1 World Bank Pacific Regional Connectivity Program

Phase 1

Tonga-Fiji Submarine Cable Project (2011–2016) provided a cable, strengthened the telecommunications regulatory framework, and increased competition—to develop rural services and infrastructure, and infrastructure services for private sector development.

¹¹ADB engagement with e-government in the Pacific Islands is addressed in Chap. 3.

¹²<http://www.worldbank.org/en/news/press-release/2012/07/25/world-bank-group-announces-new-focus-on-using-ict-for-greater-development-impact>.

¹³<http://www.adb.org/projects/44937-014/main#tabs-0-2>.

Phase 2

Solomon Islands Broadband for Development Project (2012–2017) to build a submarine cable connecting with an existing cable between Guam and Sydney to expand access to markets and services for Solomon Islands' geographically isolated areas.

Phase 3

Samoa Connectivity Project (2016–2020) to build a Submarine Cable System between Samoa and Fiji and landing stations; to reduce the cost and increase the availability of Internet services, support the private sector and rural areas, and build regulation and competition policy capacity.

Phase 4

The Vanuatu Telecommunications and ICT Technical Assistance Project to strengthen oversight institutions for telecommunications and ICT in Vanuatu.

Kiribati/Project (2012–2017) to provide ICT Policy and Legal Support, and ICT Regulatory Support, to enable “transition to a market-driven telecommunications sector and facilitating improved connectivity for the Outer Islands.”

Phase 5

Northern Pacific Connectivity, approved in 2014, to reduce costs and increase availability of ICT services for Palau and the Federated States of Micronesia by constructing a seabed cables between (1) Palau, Yap, and Guam; (2) Chuuk and Pohnpei; and (3) a link to Kosrae.

Sources: World Bank Website; (Beschoner et al. [2015](#)) (Beschoner [2015](#))

2.4 Other Global Initiatives on E-Government

A key component of the architecture of global policy for e-government is the ability of multiple government and non-government organizations to share and integrate information across their traditional organizational boundaries. E-government interoperability represents a set of multidimensional, complementary and dynamic capabilities needed among these networks of organizations in order to achieve successful information sharing. This complexity challenges researchers and practitioners to develop multiple and diverse interoperability capabilities. Researchers and practitioners alike are investing in efforts to build the necessary understanding to create new capability for coordinated action (Jansen et al. [2010](#)). A few such global initiatives are the Internet Governance Forum, the Open Government Partnership,

the OECD's digital government and the Inter-Parliamentary Union's (IPU) e-Parliament initiatives, each of which will be introduced here in brief.

As noted above, the Internet Governance Forum was established in 2006 as a multi-stakeholder forum at which public policy issues related to key elements of Internet governance could be addressed. These issues include sustainability, security, stability and the desirability of having all governments making a commitment to ensuring that these objectives are met. The IGF serves, in addition, as a platform for addressing the gaps in ICT infrastructure referred to as the "digital divide".

Increasing the transparency of government information is being promoted through the Open Government Data Project (OGD¹⁴). OGD assessment focuses on sectoral datasets for education, health, finance, social welfare, labor and environment. The project is also concerned about the quality of online data, and has identified eight principles for OGD: complete, primary, timely, accessible, machine-processable, non-discriminatory, non-proprietary and license-free. Of all the PICs, only Papua New Guinea has as yet associated with the Open Government Data project.¹⁵ (PNG attended a meeting in 2014, at which it signaled its intention to join, but is yet to meet all the technical requirements for full membership.)

As described in more detail in Chap. 6, the Inter-Parliamentary Union, when calling on national parliaments to attend the WSIS in Geneva, urged them to make full use of the ICTs to enhance, among other objectives, the "effectiveness, efficiency and transparency of their activities"; to establish "... the necessary structures to follow up and monitor annually the development of e-government" in their countries; to establish "... national and regional policies that incorporate the development of information and communication infrastructures and existing resources". (Inter-Parliamentary Union 2003) The IPU has subsequently issued a *World e-Parliament Report* biennially since 2008 (Inter-Parliamentary Union 2016) and hosted a biennial World e-Parliament Conference since 2007.

Observatories for the assessment in e-government progress are also in place, such as Waseda University's Institute of e-government, which produces an annual ranking survey based on nine indicators and 32 sub-indicators, with the principal nine being Network Preparedness/Digital Infrastructure; Management Optimization; Online Services/Applications; National Portal/Home page; Government Chief Information Officer; e-government promotion; E-Participation/Digital Inclusion, Open Government Data; and Cyber Security. Fiji is the lone Pacific Island country in this survey and in 2015 was ranked 18th of the 18 Asia Pacific countries included (Obi 2015).

¹⁴<http://www.opengovpartnership.org>.

¹⁵<http://www.opengovpartnership.org/countries>.

2.5 Small Island Developing States (SIDS)

As early as the United Nations Conference on Environment and Development (UNCED), held in Brazil in June 1992, SIDS have been recognized as a group of countries facing specific social, economic and environmental vulnerabilities. This recognition was made specifically in the context of Agenda 21, Chap. 17 G (United Nations 1992).¹⁶ The SIDS agenda has evolved since the 1992 UN Conference on Environment and Development and Agenda 21 through the SIDS conferences, the first in Barbados in 1994 (Barbados Program of Action), the second in Mauritius in 2005 (United Nations. Secretary General 2005) and the third in Samoa in 2014 (The Samoa Pathway).

The Mauritius Strategy conference agreed on further implementing the Barbados Plan of Action, referred in Chap. XX to the goal of enhancing ICT development, including connectivity and access to affordable hardware and software. While there was no specific mention of e-government, the focus on ICT development and connectivity provided some stimulus in the direction of e-government.

2.5.1 SIDS 3

The third SIDS conference, held in Samoa 2–5 September 2014, brought more direct scrutiny to levels of support for e-government in PICs (20 of the 52 SIDS are PICs). SIDS III included numerous pre-events and side events, including some directly related to ICTs. The ITU, for instance, held a pre-event on “Addressing Connectivity in SIDS” on 29 August, and a multi-stakeholder dialogue pre-event on Disaster Risk Reduction and Climate Change Adaptation for SIDS on 30 August. The most significant of these side events, which addressed the theme “Bridging Barriers of Broadband for SIDS through genuine and durable partnerships” under the moderation of UNDP Administrator Helen Clark, concluded with the signing of an agreement between the ITU and 11 Pacific SIDS, and between the ITU and development agencies to develop a project for satellite connectivity in remote islands and rural areas. Expanding connectivity in remote areas via very small aperture satellites improves access to emergency telecommunications and to internet access for education, health, climate change, agriculture, environment and other essential information. Should disaster strike, it will allow the satellites to send photos of damage and advise relevant agencies about their priority needs. In addition to an “outcomes document” (Samoa Pathway) the SIDS III Conference established 300 partnerships addressing such priority areas as Sustainable

¹⁶The United Nations also recognizes the 38 UN-Member States belonging to the Alliance of Small Island States (AOSIS), an ad hoc negotiating body established by SIDS at the United Nations. AOSIS also includes other island entities that are non-UN Member States or are not self-governing or non-independent territories that are members of UN regional commissions.

Economic Development, Climate Change & Disaster Risk management, Social Development in SIDS, Health and NCDs, Youth and Women, Sustainable Energy, Oceans, Seas and Biodiversity, Water and Sanitation and Food Security and Waste Management.

2.5.1.1 The Samoa Pathway

Although there are just three references to ICTs in the “Samoa Pathway”,¹⁷ it is nonetheless the first SIDS outcome statement to refer to the development of ICT Infrastructure. Paragraph 23 notes that one of the challenges of developing ICTs in SIDS is having the ability to sustain infrastructure networks with limited human and institutional capacity. Paragraph 27 (b) refers directly to enhancing the enabling environment at national and regional levels relating to infrastructure. Paragraph 27 (g) also urges the international community to continue to promote and enhance the use of ICTs for development and economic sustainability. In paragraph 37 the conference urged developed countries to increase technology, finance and capacity-building support to increase mitigation of challenges facing SIDS. Paragraph 49 urges the international community to continue to provide adequate support, including in the areas of capacity-building and technology transfer. More specifically, paragraph 109 (h) relates to establishing national and regional ICT platforms and information dissemination hubs to facilitate information exchange and cooperation. For the first time since the Barbados Plan of Action, a SIDS conference outcome document has included a specific section on technology. This new section, at paragraph 110, recognizes the importance of SIDS having access to appropriate reliable, affordable, modern and environmentally sound technologies in order to achieve their sustainable development objectives.

The conference also agreed in this outcome document that science, technology and innovation are essential enablers and drivers for sustainable development. The conference reaffirmed, furthermore, in paragraph 111 its commitment to help SIDS increase connectivity and the use of ICT through improved infrastructure, training and national legislation, as well as public and private sector involvement. Yet another section emphasizes the importance of data and statistics, which are essential to the measurement and evaluation of development outcomes.

These four paragraphs, 23, 27, 110 and 111, provide SIDS with the mandate to focus on developing appropriate, reliable, affordable and secure ICT infrastructure which will allow the development of e-government. They provide Pacific SIDS with an assurance that the international community will be ready when they seek financial and technical assistance for the development of ICT infrastructure, policy, regulation and regulatory frameworks. The speed at which the aspirations of the

¹⁷SAMOA is an acronym for SIDS Accelerated Modalities Of Action: <http://www.sids2014.org/samoapathway>.

Samoa Pathway are met depends in large part on the extent to which ICT infrastructure and platforms are developed within each country.

Immediately after SIDS 3, UN DESA's United Nations Project Office on Governance (UNPOG) conducted customized research on e-government for promoting sustainable development in SIDS and co-organized a series of capacity development events in collaboration with DPADM and other institutions. These included a capacity development workshop during the 2014 UN Public Service Forum, a session on "ICT and E-Government in SIDS: Responding to the SAMOA Pathway Call for Action" during the Sixty-ninth Session of the United Nations General Assembly in November 2014, a training workshop for SIDS in February 2015 in collaboration with National Information Society Agency (NIA) of the Republic of Korea and a workshop on sustainable development and disaster risk management using e-government in March 2015.

2.6 2030 Agenda for Sustainable Development Goals (SDGs)

Although ICTs have always been important to development thinking and practice (as encapsulated in, for instance, the term "ICT4D"), a new global program initiated at the UN General Assembly in September 2015 has expanded this connection.

The global development plan known as the 2030 agenda, or the "Sustainable Development Goals" (SDGs) (United Nations General Assembly 2015b), replaces eight "Millennium Development Goals" pursued in the developing countries during the period 2000–2015. The SDGs expand the focus as well as the reach of development assistance, for they apply to all countries, not just those in the developing world, and include environmental, economic and infrastructural goals. Each of these 17 goals has targets for every country to achieve by 2030.

The 2030 SDGs provide a "comprehensive, far-reaching and people-centered set of universal and transformative Sustainable Development Goals and Targets" (United Nations General Assembly 2015a) supported by a host of associated initiatives: the Declaration of Principles and Plan of Action adopted by WSIS (discussed below); the Addis Ababa Action Agenda on Financing for Development¹⁸; the establishment of Broadband Commissions for Sustainable Development¹⁹; the activities of the Commission on Science and Technology for Development; and the Internet Governance Forum—among others.

Goal 9 (c) aims to significantly increase access to information and communication technology and to provide universal and affordable access to the internet in least developed countries by 2020 (United Nations General Assembly 2015a; United Nations General Assembly 2015b, p. 25). This paragraph, while referring

¹⁸http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA_Outcome.pdf.

¹⁹<http://www.broadbandcommission.org>.

only to LDCs, exemplifies a significant change in the mindset of member states: it identifies the importance of ICT infrastructure improvement as the agent for change which provides an international plan of action for improving the ICT infrastructure. An improved infrastructure with broadband that facilitates a faster internet is the platform required for developing e-government.

At the same General Assembly resolution 70/125²⁰ reaffirmed the WSIS vision of a people-centered, inclusive and development-oriented information society, assessed progress to date, identified gaps and challenges and made recommendations for the future.

Through extensive consultation, the WSIS Forums of 2015 and 2016 have mapped 11 ICT “lines of action” to assist in achieving the 17 SDGs. These include internet access and affordability, infrastructure, innovation, information access, increased efficiency, early warning, disaster risk management, knowledge sharing and data.²¹ Each of these has pertinence to the Pacific Islands context, and will significantly influence “ICT4D” activities in the region in the coming decades.

2.7 Conclusion

The potential of ICTs to contribute significantly to global development is evident in the extent to which they are embedded in the current global development architecture. E-government holds the potential to deliver public services efficiently, effectively and transparently, and has grown through extensive global dialogue sustained by the main intergovernmental organizations operating at global level. The UN and the World Bank have taken leading roles in the articulation of policy frameworks (in the case of the UN) and connectivity and capability (in the case of the World Bank) toward transformative e-government. Partly as individual governments and partly as a regional bloc (as will be discussed in Chap. 3), Pacific Island countries have attracted support for ICT infrastructure and for the development of capability in policy and application, and there has been growing PICs participation in global and regional meetings sponsored by ICANN, IGF and other technical and consultative groups.

The rapid development of ICTs in the past two decades has been accompanied by intergovernmental action at global level on a number of fronts. The most fundamental issue has been, and remains, determining who has “authority over”—who controls—the internet. Countries can see the merits of ensuring that the internet remains a “global public good” at the same time as they ensure that their national interests remain protected. Simultaneously with this perception, dialogue about ownership and control has been about usage, including use by government in an

²⁰Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society.

²¹<http://www.itu.int/net4/wsis/sdg/>.

expanding range of applications referred to as e-government. UN agencies such as the ITU have played a major convening role in this global policy dialogue, although other global agencies as well as global telecommunications actors have also been influential. The UN's Division for Public Administration and Development Management, for instance, has recommended that SIDS base integrated and comprehensive e-government strategies on seven "key success factors", commencing with political commitment, which should lead to adequate legal frameworks, a coordinating body, national e-government policy, sufficient budget, plus awareness and necessary government reform.

Small states, especially the small states in the Pacific region, have not been major actors in global policy settings. Some, but not all, have been represented at the global meetings and only a few among them have made statements in plenary sessions. Some struggle to meet voluntary reporting opportunities. Fiji, for instance, was the 690 only PIC to respond to a survey for the Final WSIS Targets Review: (ITU 2014). However, participation in global policy processes has steadily increased, as global agencies have tailored their programs for small island states and in some instances, for the Pacific Islands. The global agencies have shared knowledge of e-government gained from their experience in developing countries across the globe. Chapter 3 will consider in more detail the ways in which these global initiatives have influenced implementation within the countries of the Pacific Islands region.

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