SUSTAINABLE CAPACITY BUILDING: INTERNET GOVERNANCE IN AFRICA

An Action Plan

Prepared by

Marilia Maciel
Digital Policy Senior Researcher, DiploFoundation

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List of abbreviations and acronyms

AAU - Association of African Universities

ACBF - African Capacity Building Foundation

ACE - African Center of Excellence

ACEIoT - African Center of Excellence in Internet of Things

ADC - Africa Development Centre

Af* - AfStars

AfNOG - The African Network Operators Group

AfREN - Africa Research and Education Networking

AFRINIC - African Network Information Centre

AfTLD - Africa Top Level Domains Organization

AI - Artificial Intelligence

AIS - African Internet Summit

APC - Association for Progressive Communications

AU - African Union

C3SA - Regional Cybersecurity Capacity Centre for Southern Africa

CB - capacity building

CEN-SAD - Community of Sahel–Saharan States

COMESA - Common Market for Eastern and Southern Africa

DNS - Domain name system

EAC - East African Community

EC - European Commission

ECCAS - Economic Community of Central African States

ECOWAS - Economic Community of West African States

EGIGFA - E-Governance and Internet Governance Foundation for Africa

GIGANET - Global Internet Governance Academic Network

ICANN - Internet corporation for Assigned Names and Numbers

ICT - Information and Communications Technology

IG - Internet governance

IGAD - Intergovernmental Authority on Development

IGF - Internet Governance Forum

IoT - Internet of Things

ISOC - Internet Society

IT - Information Technology

NASIG - North Africa School on Internet Governance

NEPAD - New Partnership for Africa's Development

PRIDA - Policy and Regulation Initiative for Digital Africa

RECs - Regional Economic Communities

RIA - Research ICT Africa

SADC - Southern African Development Community

SDGs - Sustainable Development Goals

SIG - School on Internet Governance

WASIG - West Africa School on Internet Governance

WGIS - UN Working Group on Internet Governance

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Introduction

The Policy and Regulation Initiative for Digital Africa (PRIDA) is the fruit of a partnership between the African Union Commission and the European Commission. The overall objective of PRIDA is to foster universally accessible, affordable, and effective wireless broadband across the continent to unlock possible future benefits of Internet-based services. Its specific objectives are: a) to facilitate efficient and harmonised spectrum utilisation, b) to harmonise measurable ICT/Telecommunications policy as well as legal and regulatory frameworks, and c) to strengthen the ability of African stakeholders to actively participate in global Internet governance (IG) processes. Activities pertaining to the latter are collectively referred to as the Internet governance track of PRIDA.

This study is part of PRIDA's IG track. Its key objective is to develop an Action Plan for the sustainability of capacity building initiatives in IG in Africa, suggesting concrete steps that should be taken in the continental, regional and national levels, as well as the role of the African Union Commission and PRIDA in supporting the implementation of measures to foster sustainability.

Enhancing sustainable capacity building on IG would have positive consequences within and beyond the African context. Considering the importance of the issues that fall under the framework of IG – ranging from providing access to infrastructure to promoting cybersecurity and fostering emerging technologies – it is possible to conclude that strengthening IG capacity building could ultimately contribute to developing the capacities required for implementing the Digital Transformation Strategy for Africa (2020-2030) (African Union, 2020a) and the Agenda 2063 (AU Commission, 2015), Africa's strategic framework for achieving the continent's development and technological transformation.

IG capacity building could facilitate the process of harnessing digital technologies and innovation to generate inclusive economic growth, stimulate job creation, and promote socio-economic development. At the same time, capacity building could positively contribute to the engagement of African stakeholders in global digital policy discussions, effectively promoting African interests in the international arena.

This report takes into consideration the contribution that IG capacity building can make in assisting African stakeholders to achieve the digital policy objectives they have set for themselves, as well as strengthening their capacity to influence the course of international discussions on digital issues. The report is structured in six sections. Section 1 corresponds to this introduction.

Section 2 provides an overview of the theoretical framework and methodological aspects of the study. It is divided into four sub-sections: 2.1 the key differences between capacity building and capacity development, 2.2 an overview of the concept of sustainability and its key pillars, 2.3 challenges in defining Internet governance capacity building, and 2.4 methodological approach.

An overview of a sample of capacity building initiatives available on the continental, at regional, and national levels in Africa is presented in Section 3. This analysis encompasses aspects such as the identification of key stakeholders for the promotion of capacity building, methodological approaches, topics which are well-covered by existing initiatives as well as substantive gaps, and the identification of predominant types of capacity building in Africa.

The summary of the findings in Section 3 (presented under sub-section 3.6) will provide the basis for the development of an analysis of strengths, weaknesses, opportunities, and threats (SWOT) in Section 4. The evaluation of concrete initiatives enables the identification of strengths and weaknesses (endogenous aspects) that will be matched against the current scenario of opportunities and threats encountered in the IG policy space (exogenous aspects). This correlation will facilitate the identification of low hanging fruits as well as potential obstacles, which provide useful guidelines for the development of the Action Plan.

Section 5 proposes a concrete Action Plan and Roadmap for enhancing the sustainability of capacity development initiatives in Africa, on the continental, regional and national levels.

Section 6 presents an indication of the estimated time of implementation of steps in the Action Plan, in the form of short and mid-term goals.

2. Theoretical framework and methodology

2.1. From training to capacity development

The development of capacities is a key element to engender human development. It provides an arsenal of skills and knowledge that are key to devising strategies to tackle common problems, such as economic, climate, and food crises. Capacity development also enables progress towards achieving the development objectives set forth by the sustainable development goals (SDGs). In Africa, the New Partnership for Africa's Development (NEPAD) has identified capacity constraints as a major obstacle to sustainable development.

Capacity development and capacity building are two terms often heard in development discussions. The term capacity building was in use before capacity development. One of the primary reasons for the shift in terminology is that capacity building is now seen by some to imply starting at a zero point with the use of external expertise to create something that did not previously exist. This concept does not acknowledge or respect the inherent capacity and ongoing development processes that exist everywhere. Capacity development, on the other hand, emphasises the existence of endogenous development processes in all countries and communities, and addresses the need to support and/or facilitate processes that are already underway. Although there is no universal agreement about which is the most appropriate term, and both are still in common usage, many organisations have moved away from capacity building in favour of capacity development.

The key point is that capacity building and capacity development should involve more than providing training to enhance the knowledge, skills and know-how of individuals. They depend on the recognition that these individuals operate within organisations that employ them, which are, in turn, influenced by societal contexts. Holistic development of capacities is not only about skills, but also about providing incentives and support to individuals and enhancing governance structures. It can only be achieved through the alignment of individual, organisational, and systemic levels. The different levels of capacity development can be visualised in the capacity development butterfly.

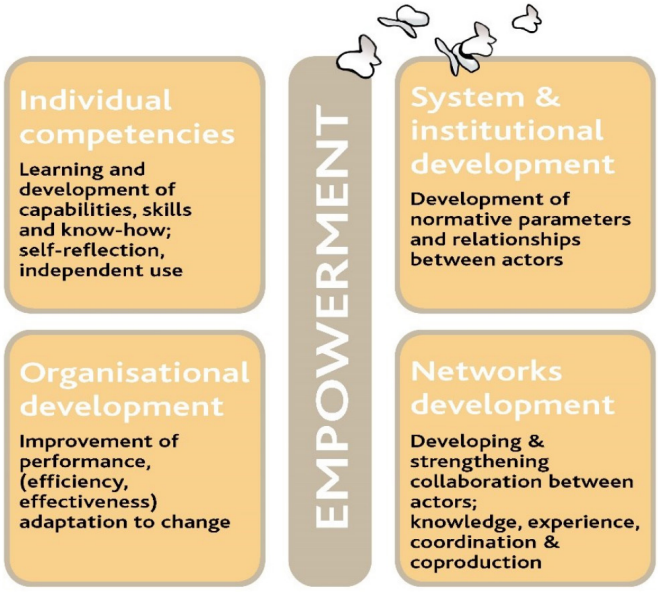

Figure 1. Capacity development butterfly Source: SDC (2006)

The differences between individual training and capacity building – or capacity development – are key to this report in two ways. First, while mapping existing initiatives aimed at expanding IG capacity in Africa, the research attempts to identify the presence of elements that go beyond training, adopting a holistic approach. Secondly, since capacity development relies on the view that 'developing countries should own, design, direct, implement and sustain the process themselves' (UNDP, 2009), this research adopts the assumption that, in the long run, promoting capacity development would be more sustainable than focusing on training by ensuring that the progress achieved is deep-rooted in the local environment and leverages the capacities that already exist in the community instead of being disconnected from them.

Terminology employed in the research

The expression capacity development is more widely used in development studies, however, capacity building and capacity development are frequently employed interchangeably. Capacity building is the term most frequently used in the framework of the PRIDA project; therefore, it is the expression adopted for this report.

The analysis of concrete examples of initiatives aimed at enhancing capacities on IG in Africa made it possible to conclude that training – with the goal of enhancing the knowledge and skills of individuals – is the most common type of intervention. Training initiatives are important in many contexts, but these initiatives can be even more powerful if carried out in accordance with a broader strategy, conceived as an endogenous change process that outlives the life cycle of particular initiatives (Keijzer and Janus, 2014).

Against this backdrop, the development of an Action Plan to enhance the sustainability of capacity building in IG in Africa should aim, first and foremost, to unleash, channel, and strengthen existing potentials. This is in line with the goal of 'recasting the African mind-set to a concept of African ownership', one of the pillars of Africa's Agenda 2063 (AU Commission, 2015) vision, and with the imperative to utilise African potential, skills, and resources for capacity development, a cornerstone of AU/NEPAD Capacity Development Strategic Framework (NEPAD, 2012).

2.2. Sustainability as a cornerstone of capacity development

The last decades have witnessed a surge in attention to sustainability, both in academic and media discourses. Despite this, sustainability remains an open concept with myriad interpretations and context-specific understanding (Purvis et al., 2019). One particularly prevalent description of sustainability employs three interconnected pillars encompassing economic, social, and environmental factors, represented by the three intersecting circles in Figure 2.

Their interdependence was made clear from critiques to economic growth-based development, which privileged short-term gains over long-term considerations such as environmental and social impacts. The three pillars are embedded in most theories and contemporary thinking on sustainability, and also serve as a backdrop to the Sustainable Development Goals (SDGs).

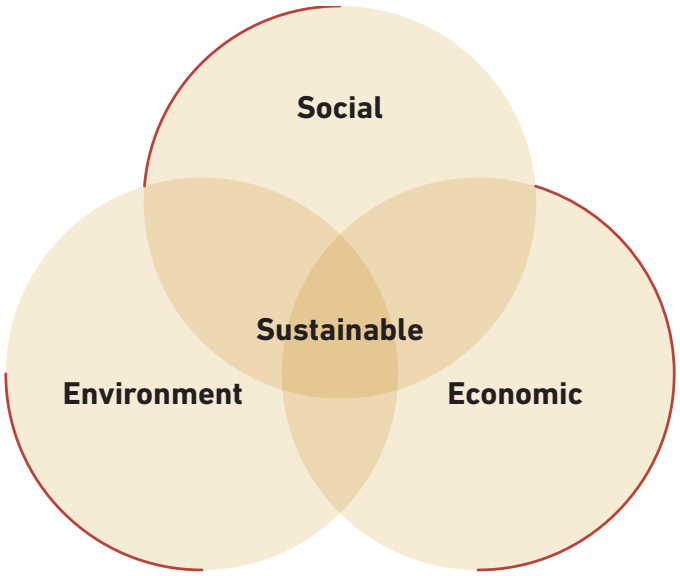

Figure 2. The three pillars of sustainability

Sustainability is one of the characteristics increasingly expected from capacity building initiatives. Capacity building is sustainable when its benefits are maintained and scaled up beyond the end of the intervention. To be sustainable, initiatives should take into account the three pillars of sustainability. This means that sustainability concerns should be present in their design, not only when planning the employment of financial and human resources, but also conducting assessments of the environment in which initiatives will be deployed. This holistic approach allows the early

identification of challenges and opportunities and the mitigation of risks.

When it comes to the sustainability of capacity building in IG in Africa, some important elements to consider are, for example:

- economic sustainability: mobilisation of the continent's own resources (national, regional, continental), efficient utilisation of resources, strengthening of multistakeholder partnerships.
- Social sustainability: harnessing endogenous human capacities, reinforcing community building, and networking.
- Environmental sustainability: creating an enabling environment for capacity development, introducing harmonised impact indicators, and ensuring that capacities are absorbed upstream by organisations.

These and other elements under the three sustainability pillars have been taken into account when assessing a sample of existing initiatives aimed at enhancing capacities in the field of IG in Africa (Section 3). This analysis will enable the identification of elements that would enhance the sustainability of IG capacity building (Section 4).

2.3. Challenges in defining Internet governance capacity building

Since the World Summit on the Information Society, the expression Internet governance has been broadened beyond narrow technical concerns to include a wider range of Internet-related policy topics. A possible way to cluster these topics is to place them in seven thematic baskets, according to their main policy characteristics: infrastructure, legal, economic, development, socio-cultural, security, and human rights.[1]

In spite of this broad scope, the identification of specific initiatives of capacity building related to IG presents some methodological challenges. Firstly, the conveners of many initiatives do not perceive themselves as providing capacity building in IG. This is particularly true when the initiative is focused on a narrow thematic area, such as intellectual property in the digital context. In these cases, the expression Internet governance rarely appears textually in course descriptions and syllabuses, which makes it harder to identify them through desk research.

Secondly, there are no clear-cut lines separating initiatives that are focused on technical aspects related to the functioning of the Internet from initiatives that focus primarily on technical aspects, but also encompass a governance dimension. This research aimed at the latter, and sought to identify the governance dimension of predominantly technical capacity building initiatives. The importance of standards to policy development, for example, should not be downplayed. Different choices of standards may uphold or undermine certain values and rights. This holistic understanding of IG, which places weight on technical and non-technical aspects, underpins the research.

2.4. Methodological approach

The methodological approach of the research was based on three pillars: desk research, expert interviews, and an online survey. Desk research was the main method to identify the capacity building initiatives offered by a sample of organisations from several stakeholder groups (Section 3). Websites, blogs, and social media pages were visited to gather relevant information.

Desk research had two important limitations. First, as explained above, the conveners of many capacity building initiatives do not perceive themselves as providing capacity building in IG. Second, desk research was limited by a large number of inactive websites, broken links and incomplete information. Because of these limitations, the use of complementary ways to gather information proved to be extremely important.

Semi-structured interviews were conducted with experts in IG with experience in capacity building. These interviews provided key elements for the research, not only by filling the gaps of information that could not be gathered through desk research, but also by providing the fundamental input of professionals from Africa, with extensive knowledge of the grassroots level.

[1] This taxonomy underpins the Digital Watch Observatory of the Geneva Internet Platform. It was also adopted by the report *Mapping of International Internet Public Policy Issues*, commissioned by the Working Group on Enhanced Cooperation, created under the auspices of the UN Commission on Science and Technology for Development, and was adopted by the Global Internet Policy Observatory (GIPO) of the European Commission.

Finally, information-gathering was complemented by an online survey, conducted in English and French, comprising twelve questions. The online survey was widely advertised from 18 February 2020 to 30 March 2020. A total of 59 individuals replied to the survey – 30 in English and 29 in French. The break-out by nationality can be found below, as well as the weight of representation of AU Regional Economic Communities (RECs) among respondents.

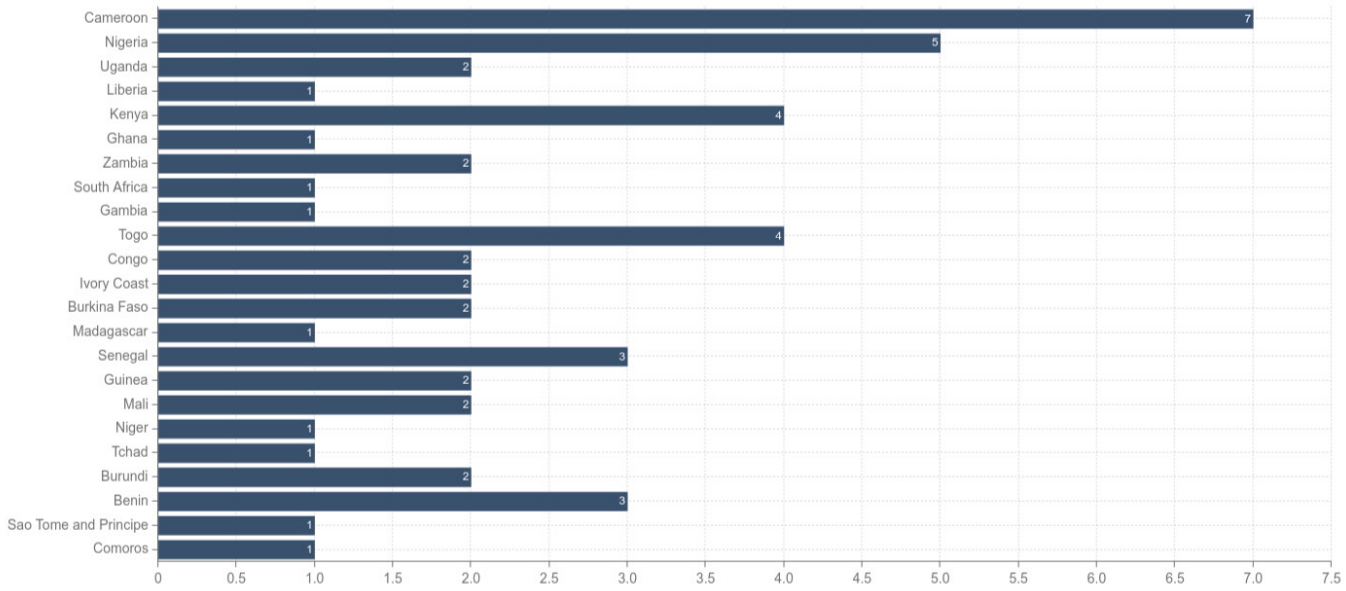

Figure 3. Break-out of PRIDA online survey respondents by nationality

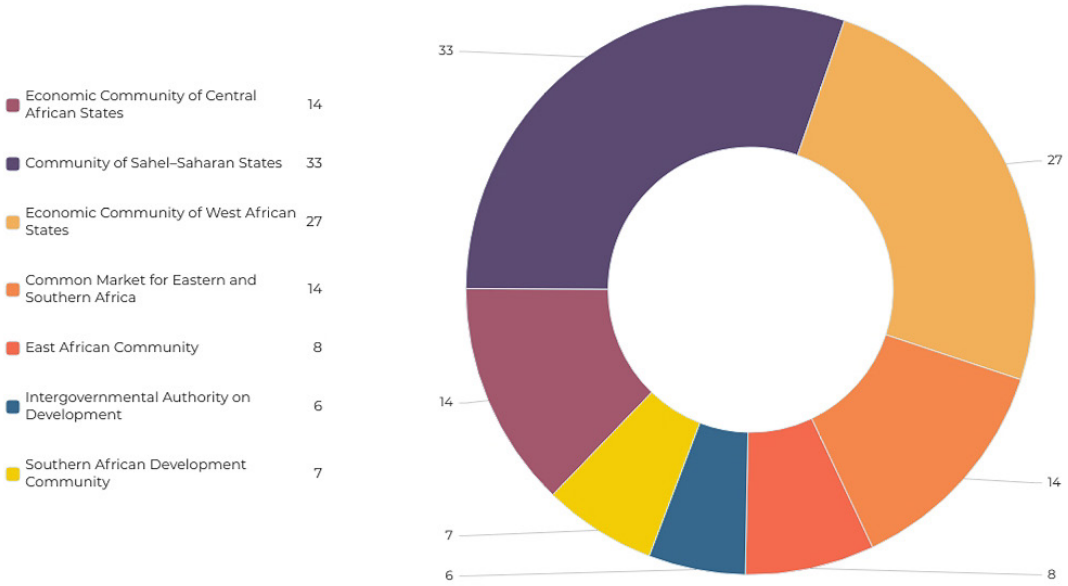

Figure 4. Weight of representation of AU RECs among PRIDA online survey respondents

3. An overview of capacity building initiatives on the continental, regional and national levels

This section provides an analysis of a sample of capacity building initiatives in IG offered in Africa. Desk research was the primary method for gathering information on these initiatives. The mapping was then complemented with information gathered from a survey, several interviews with selected experts and practitioners working on capacity building in the African continent, and literature review of the previous work conducted on IG capacity building under the framework of PRIDA.

The definition of the sample observed the following criteria:

- Multi-level diversity: the identification of examples in the continental, regional, and national levels.
- Regional diversity: the sample encompasses examples of initiatives from several Regional Economic Communities (RECs).2
- Stakeholder diversity: the sample encompasses initiatives being led by the technical community, academia, civil society, and the private sector. There are also examples of partnerships in which leadership is shared by different stakeholder groups.

The aim of this mapping exercise was not to be exhaustive, but to identify the main models of capacity building currently in supply on the African continent, in order to gather elements that will be relevant to the SWOT analysis conducted in Section 4. The clustering of initiatives was made by stakeholder groups. A summary of the main findings from this mapping exercise is presented in sub-section 3.6.

3.1. Capacity building provided by the technical community

The Internet technical community is significantly involved in enhancing capacity in the field of IG, as providers of training or sponsors of initiatives provided by other stakeholder groups. This section is focused on assessing the role of African Internet technical organisations as providers of capacity building. The sample selected for the study encompasses some of the organisations included in the group of the Af* (AfStars)[3] which is composed of actors responsible for supporting the growth of the Internet connectivity in the region, particularly from a technical standpoint: AFRINIC, AFNOG, AfTLD, and AfricaCERT. Some Africa-oriented activities promoted by ISOC and ICANN, two organisations of global scope, were also mentioned.

The technical community adopts myriad approaches when it comes to enhancing capacity on IG in Africa, which include: face-to-face and online activities, policy immersion, and other types of support. Af* organisations conduct activities at the continental, regional and national levels. In general, their capacity building activities are offered to applicants from all African countries, but they may also be focused on particular regions or countries.

[2] According to the African Union, the purpose of the RECs is to facilitate regional economic integration between members of the individual regions and through the wider African Economic Community (AEC), which was established under the Abuja Treaty (1991). This Treaty, which has been in operation since 1994, ultimately seeks to create an African Common Market using the RECs as building blocks. The eight RECs are the following: Arab-Magreb Union (UMA), Common Market for Eastern and Southern Africa (COMESA), Community of Sahel–Saharan States (CEN–SAD), East African Community (EAC), Economic Community of Central African States (ECCAS), Economic Community of West African States (ECOWAS), Intergovernmental Authority on Development (IGAD), Southern African Development Community (SADC).

[3] There is no consensus on the organisations that are part of Af*. The categorisation proposed by Calandro *et al.* (2016), for example, includes the aforementioned organisations as well as the African IGF (AfIGF) and the African Peering and Interconnection Forum (AfPIF), which holds an annual event organised by ISOC and held since 2010 to address the key interconnection, peering and traffic exchange opportunities and challenges on the continent.

Table 1. Analysis of IG capacity building offered by a sample of organizations from the technical community

Organisation	Mission	Geographical scope	Modalities of CB	Activities	Topics covered
African Network Information Centre (AFRINIC)	Regional Internet registry for Africa	Continental, regional, and national	Online, face-to-face, policy immersion, and fellowships	E-courses, live webinars, workshops, certification, train the trainers, deployathon, and readiness assessment	Infrastructure, with emphasis on the transition to IPv6
The African Network Operators Group (AfNOG)	Forum for cooperation and the exchange of technical information between operators of Internet-connected networks in Africa	Continental, regional, and national	Face-to-face workshops and tutorials	Week-long hands-on advanced workshops, one /two full-day advanced tutorials, and training the trainers	Infrastructure, with emphasis on network technology
Africa Top-level Domains Organization (AfTLD)	Association of country code top -level domain registry (ccTLD) managers in the Africa region	Continental, regional, and national	Face-to-face courses	Advanced Registry Operators Course (AROC)	Infrastructure, with emphasis on registry, advanced installation, and configuration architecture, monitoring tools, and scripting
AfricaCERT	Nonprofit organization founded to provide leadership in cybersecurity related issues in Africa and assist in strengthening cyber readiness in African Internet Ecosystem	Continental, regional, and national	Workshops	One-day workshops on CSIRT creation and management, CSIRT maturity, and incident response	Infrastructure and security, with focus on incident response
Internet Society (ISOC)	Non-profit organisation empowering people to keep the Internet a force for good: open, globally connected, secure, and trustworthy	Global, with initiatives of interest to Africa	Online, face-to-face, policy immersion, support to initiatives organised by third parties	Moderated online courses, self-paced online tutorials, face-to-face workshops, and financial and expert support to Schools on IG (SIGs) in Africa	Infrastructure, with focus on standards, IXPs and community networks, general overview of IG, cybersecurity, human rights, and economic issues
Internet Corporation for Assigned Names and Numbers (ICANN)	Develops policy on the Internet's unique identifiers	Global, with initiatives of interest to Africa	Fellowship program	Face-to-face training and policy immersion	Aspects related to the DNS and ICANN's multi-stakeholder model

Among the Af*, AFRINIC distinguishes itself by the comprehensive array of initiatives offered online and face-to-face and for advancing a capacity development strategy that includes three pillars: building individual, institutional and systemic capacities. The website of AFRINIC's IP Academy proposes activities to build my expertise, targeted at engineers and managers, lead my organisation, aimed at ISPs, non-governmental organisations (NGOs) and universities, and advance my country, targeted at government officials dealing with ICT matters, ICT regulators and policymakers, and law enforcement agencies. In addition, within each of these pillars, there are specific activities aimed at enhancing knowledge, providing certification, or supporting technology deployment using concrete exercises and simulations.

AfNOG also promotes activities that aim at capacity development on individual, organisational, and systemic levels. The goals of the advanced workshop on network technology include: a) To train a critical mass of trainers and professionals in network infrastructure and services to be able to support an extension of Internet-related activities within the African countries represented; b) To identify and share individual and institutional contacts as well as information sources that will assist the process of national development, using international Internet connections.

Af* organisations take advantage of the opportunity offered by the African Internet Summit (AIS) to advance training and capacity development initiatives. The AIS is an annual multistakeholder event combining workshops, conferences, and networking for the internet Industry in Africa. AfTLD, for example, offers its Registry Operators Course

(AROC) during AIS, while it organises sub-regional capacity building workshops throughout the year, such as the Af-TLD Francophone West Africa ccTLD Workshop. AfricaCERT also takes advantage of AIS to offer one-day workshops on topics that fall within their mandate.

The Africa Research and Education Networking (AfREN) organises a one-day meeting during AIS for discussions on issues of interest to the research and education networking (REN) community such as collaboration, advocacy, and coordination of activities. For the purpose of this research, the AfREN meeting was not considered a capacity building initiative, but it presents a valuable moment for the exchange of information and good practices, and an interesting opportunity to bring together regional RENs for a session on inter-regional updates.
The Internet Society (ISOC) and the Internet Corporation for Assigned Names and Numbers (ICANN) are two technical organisations with a global mission and scope, that provide capacity building initiatives of relevance to African stakeholders. ISOC offers moderated online courses and self-paced online tutorials that can be taken by any interested actor. It has a grassroots presence in Africa, since there are 34 ISOC chapters in the continent. This facilitates the organisation of face-to-face meetings, such as the community networks summit, and ensures ISOC's involvement in capacity building initiatives in Africa, such as the financial support provided to several Schools on Internet Governance (SIGs) and the participation of ISOC experts as speakers.

ICANN offers a fellowship program that provides the support for interested individuals to attend ICANN meetings and take part in face-to-face training which combines knowledge-sharing and policy immersion, covering the main issues under the organisation's mandate and ICANN's multistakeholder model. The program seeks to meet regional diversity, and over the years, it served as an entry point for more than 190 participants from Africa to become engaged in the global work carried out by the organisation.

Concluding remarks

The African technical community is remarkably active in the field of capacity building. This stakeholder group also presents a high degree of coordination when compared to other groups. This could be explained by the fact that the Af* label denotes and provides a sense of common identity within the group, and also by the fact that the AIS provides a focal point for several capacity building initiatives. Some organisations also go beyond the provision of training and capacity building, and present holistic capacity development strategies, which aim at building individual, institutional and systemic capacities.

In terms of methodological approach, face-to-face initiatives are largely predominant, although AFRINIC and ISOC make intensive use of online learning mechanisms. The duration of the activities varies from a short session to several days. The target audience mainly consists of engineers, network managers, and other technical staff, but there are also activities especially targeted at government officials and regulators (e.g. AFRINIC government working groups) or aim to attract a broad range of stakeholder groups (e.g. ISOC online training opportunities and the ICANN fellowship programme).

Technical community capacity building concentrates on topics related to Internet infrastructure. Although this specialisation is naturally expected, one expert interviewed for this research noted that the training provided by the technical community needs to be strengthened with a layer of policy analysis. Infrastructure alone is not sufficient; it needs to be included in a broader strategy aiming at achieving national and regional development. Therefore, technical training needs to be provided in tandem with the policy implications of technical decisions, including at the development-related goals that countries and regions are seeking to achieve.

Table 2. Breakdown of topics covered by the technical community capacity building

	Infrastructure	Cyber security	Legal Issues	Human Rights	Economic issues	Development	Socio-cultural
AFRINIC	X						
AfNOG	X	X					
AfTLD	X						
AfricaCERT	X	X					
ISOC	X	X		X	X		
ICANN	X						

3.2. Capacity building provided by civil society

The identification of civil society organisations dedicated to IG capacity building poses methodological challenges. While some of them have a clear and continuous focus in both IG and capacity building, many others embed the development of capacities within a broader advocacy strategy. In the latter case, capacity building initiatives are often ad-hoc and needs-based. The second type was considered beyond the remit of this research. The aim of the selected sample is not to be exhaustive, but to provide an overview of the diverse nature of capacity building provided by civil society in Africa.

Table 3. Analysis of IG capacity building offered by a sample of civil society organizations

Organisation	Geographical scope	Modalities of CB	Activities	Topics covered[1]
Access Now	Global	Support to activists and to other organisations	Research and development of materials, train the trainers, funding	Human Rights Online, business and human rights, online security.
Africa Cybersecurity & Digital Rights Organisation (ACDRO)	Continental and national (Ghana)	Face-to-face training, consulting, assistance on policy implementation	Assist governments on the development of their national cybersecurity strategy, assist in establishing CERTS.	Human Rights, cybersecurity
Article 19	Global. In Africa, the organisation is active in MENA, West Africa and Senegal, and East Africa	Face-to-face training, support to activists and to other organisations	Training	Personal protection online, freedom of information, freedom of the media, hate speech.
Association for Progressive Communications (APC)	Global. In Africa, the organisation is active at the continental, regional and national levels	Face-to-face training, support to other organisations, IG schools	Workshops, peer-to-peer learning, research and development of materials, train the trainers, practical exercises, convening AfriSIG.	Human Rights online, infrastructure, development.
CIPESA	Continental.	Face-to-face training, funding	Training, funding (sub-granting)	Human Rights and security
Humanist Institute for Cooperation with Developing Countries (Hivos)	Global. In Africa, particularly active in the North-Africa region.	Face-to-face training, support to online courses, support to other organisations	Training, peer-to-peer learning, research and development of materials, train the trainers, funding	Human Rights, freedom of information
DiploFoundation	Global. Some initiatives targeted at African stakeholders.	Online, face-to-face and hybrid courses, policy immersion	Courses, development of course materials, fellowships.	Infrastructure, cybersecurity, legal, human rights, economic issues, development, socio-cultural
KICTANet	Kenya. Active in the continent through partnerships	Face-to-face trainings, research, Kenya SIG	Workshops, events, convening Kenya SIG	Human Rights, cybersecurity, economic issues, development
Women of Uganda Network (WOUGNET)	Uganda	Face-to-face trainings	Training, peer to peer learning, train the trainers, research and development of materials.	Human Rights, cybersecurity

Civil society encompasses a broad and heterogeneous group of organisations, such as foundations, think-tanks, and activist NGOs. This diversity is reflected in the nature of capacity building offered by civil society – some run IG schools in partnership with other institutions, some develop training materials to be used by third parties, others hold courses and workshops, while others build knowledge and capacity through networks.

The activities conducted by Access Now have a global scope, and the organisation frequently works together with regional and local partners. They are physically present in Africa with a Helpline office in Tunis, providing real-time technical assistance to users at risk, including civil society groups, activists, journalists, and human rights defenders. They also produce resources to educate on issues related to digital security. Access Now provides grants to projects developed by other organisations. In 2019, they funded organisations based in Ethiopia, Ghana, Kenya, and Uganda. In partnership with local actors, such as the Media Foundation for West Africa, the organisation is also promoting awareness about the growing issue of Internet shutdowns in Africa.

Article 19 also works in collaboration with local partners at the regional and national levels in Africa. In 2018, training was provided: a) in the MENA region to civil society groups, journalists, and LGBTQ with a focus on hate speech and personal protection online; b) in West Africa and Senegal, with a focus on freedom of expression and freedom of the media and; c) in East Africa, with focus on personal protection online, right to information and hate speech. The target audience consisted of civil society groups, students, journalists, bloggers, government officials, judiciary, professional groups, human rights defenders, LGBTQ.
APC frequently works in partnerships with other NGOs, institutions, donors, consultants, and governments. It played a key role in the creation of the African School on Internet Governance (AfriSIG), currently convened by APC, the African Union Commission and Research ICT Africa, which has served as an inspiration to many other IG schools across the African continent.

APC conducts research that guides its activities in the field of human rights, with special emphasis on access and gender issues. APC's Women's Rights Programme is particularly relevant when it comes to training and developing capacities. One of the activities conducted in Africa was the Feminist Tech eXchange (FTX), which creates spaces of capacity building, and exchange of experiences. Women build collective knowledge and ownership about the political and practical use of technology. Technology is used as a way to tackle concrete issues on individual and institutional levels. APC also focuses on developing capacities for the emergence and growth of community networks and other community-based connectivity initiatives in developing countries, including in Africa.

Women of Uganda Network (WOUGNET) partners with several other organisations across Africa. They present a special focus on enhancing the capacity of women to take part in ICT policy development in their countries and also in the broader IG discussions.

ACDRO also shows a special emphasis on the training of government officials in the field of cybersecurity. One of the main goals of the organisation is to assist government officials on the development and implementation of national cybersecurity strategies. It also aims to assist governments and the business sector to create CERTs across the African continent.

Of the civil society initiatives mapped, DiploFoundation shows substantial engagement in capacity building, given its core competency. Its courses employ different teaching methodologies and are offered online, blended, and face-to-face. In terms of substance, DiploFoundation provides a general overview of the broad range of issues encompassed under the IG agenda through its course 'Introduction to Internet Governance'. It also provides specialised and in-depth courses in particular areas, such as technical issues, cybersecurity and e-commerce, and emerging issues, such as artificial intelligence (AI). The book An introduction to Internet Governance by Dr. Jovan Kurbalija, director of DiploFoundation – which is the base for Diplo's course on IG – is suggested as a reading by several other capacity building initiatives.

The courses offered by DiploFoundation can be targeted at the general public, particular professional groups, such as diplomats and policymakers, or professionals with particular expertise, such as trade negotiators. In terms of geographical coverage, although most courses are open to a global audience, some of them can be focused on participants from certain regions, such as the Capacity Development in Multilateral Diplomacy for Africa (CD-Multi Africa), which ran in 2016, and the development of an online course offering an introduction to IG and policy with Africa-specific content for policymakers and experts, delivered to AU Internet stakeholders in French and English in 2020 under the framework of the PRIDA project.

Because of the restrictions and limitations on international travel caused by the COVID-19 pandemic, DiploFoundation launched an online course 'Online meetings and conferences: how to run effective and secure events' aiming at helping organisations with their transition to holding meetings online or switch to hybrid formats which combine online and onsite meetings.

Hivos is dedicated to myriad fields, ranging from sustainable food to women's empowerment. When it comes to digital issues, the organisation works to consolidate and safeguard Internet freedom through activities covering three areas: prevention and protection (digital safety and security for activists), policy and privacy (IG policy and privacy protection), and pressure against online human rights abuses. The organisation contributes to raising activists' awareness of and skills in preventing and dealing with online security threats. It manages the Digital Defenders Partnership (DDP), which coordinates emergency support for journalists, human rights defenders, civil society organisations, bloggers and cyber-activists, and is particularly active in sub-Saharan Africa. Hivos conducts research, offers training, and encourages peer-to-peer learning to enhance secure communication. Hivos has launched the

IGMENA programme, aimed to improve knowledge and awareness of IG among different regional stakeholders, and to contribute to enhancing the legislation on Internet policy in the region.

Some organisations focus on providing support and financial resources for the development of activities by civil society, including in the field of training and capacity development. Among them, some are significantly active in supporting themes that fall under the scope of IG, such the International Development Research Centre (IDRC), the Ford Foundation, the Open Society Foundations and Open Technology Fund. The Ford Foundation, for example, is one of the supporters of AfriSIG.

Countries are also active donors in the field of IG training and capacity development offered by civil society. Some examples are the foreign ministries of the Netherlands, Finland, Estonia, Latvia, Canada, the US State Department, the Federal Ministry of Economic Cooperation and development of Germany, the Federal Department of Foreign Affairs (FDFA), and the Federal Office of Communications (OFCOM) of Switzerland and, the Swedish International Development Cooperation Agency (SIDA).

Concluding remarks

Capacity building is not at the core mandate of most civil society organisations, but many of them present some activities within their projects, aiming to enhance capacities. The target audiences for civil society initiatives vary. They do, however, appear to fall into two broad camps. Firstly, there are initiatives that seek to strengthen the knowledge and skills of civil society activists and organisations, and thereby increase the influence of these actors in policy spaces. Secondly, there are initiatives targeted at policymakers and regulators and, to a lesser extent, the private sector. Since project funding usually has a determined and short duration, the capacity development activities provided by civil society may lack continuity.

The high degree of coordination and partnerships among civil organisations is a remarkable feature. While some organisations focus on providing capacity building, others provide grants or sub-grants to third party organisations in the region. The training material they use seems to be mostly inspired by policy research conducted by the same organisations.

With regard to the content delivered by civil society, in general, it can be said that, apart from courses offering a wide-ranging span of issues (such as DiploFoundation's Introduction to Internet Governance), civil society organisations reflect their particular areas of concern in their capacity building initiatives. Most of them present a strong human rights approach, with an emphasis on freedom of information and expression, privacy, and gender rights. Development concerns are also present as a stand-alone topic or as a transversal concern. There has been an increasing focus on security issues, in particular with the aim of enhancing personal security of endangered or marginalised groups, such as activists, bloggers, journalists, and women (see Table 4 for breakdown). With the exception of the online courses offered by DiploFoundation, face-to-face training is the methodological approach most often used by civil society.

Table 4. Breakdown of course issues topics covered by civil society organisation capacity building

	Infrastructure	Cyber security	Legal Issues	Human Rights	Economic issues	Development	Socio-cultural
Access Now		X		X			
ACDRO		X					
Article 19		X		X			
APC				X		X	
CIPESA		X		X			
DiploFoundation	X	X	X	X	X	X	X
Hivos		X		X			
KICTANet		X		X	X	X	
WOUGNET		X		X		X	

In general, the development of alumni networks after the courses appears to be an important goal of civil society initiatives, and some of them present mechanisms to keep participants in contact with each other through online discussion groups (e.g. WhatsApp, Diplo's Alumni Facebook private group). Policy immersion and fellowships opportunities are offered by some organisations such as DiploFoundation, Hivos, and APC.

3.3. Capacity building provided by universities in Africa

The identification of capacity building initiatives provided by universities through desk research is challenging. Most university courses and centers of research dedicated to issues that traditionally fall under the scope of IG are not labeled as Internet Governance, but solely ascribed to the areas of learning to which they belong in a literal technical sense. For example, courses on intellectual property (IP) fall under legal studies, even if they present a clear emphasis on intellectual property online. Likewise, ICT courses are placed under engineering, and courses that largely focus on online content are linked to communications and media studies, without cross-referencing to their Internet and digital policy concepts.

A potential reason to explain this issue was suggested by an interviewee, who mentioned that the policymaking and political dimensions are usually lacking in university courses. They focus on explaining current technical aspects, norms and arrangements, without questioning why and how the decisions on these particular arrangements were made, and without questioning their adequacy to present and future policy challenges.

To define the sample of academic institutions to be included in this research, the courses offered by the following universities were analysed: a) a sample of academic institutions which are part of the Association of African Universities (AAU), b) additional institutions identified in desk research, and c) additional institutions identified in interviews/survey. The decision to include a particular university on the list below was based on the following criteria: a) the university offers courses or another type of activity to enhance capacities in an area that would traditionally fall under the scope of IG and b) the course or activity clearly tackles governance and policy issues or adopts a multidisciplinary approach (for example, a course on information technology that does not only take into account issues related to computer engineering, but also cybersecurity and innovation).

Many universities that are members of the AAU offer courses and programs on computer science or computer engineering, but there is no detailed explanation about the courses, or the link to the course syllabus does not work. This makes it difficult to measure these programs against our criteria. In these cases, the universities have not been included in the table below.

Table 5. Analysis of IG capacity building offered by a sample of universities

Organisation	Geographical scope	Activities	Topics covered
ABM University College	Botswana	ABMA Computer engineering	IT, networking, cloud computing, human-machine interaction
Accra Institute of Technology	Ghana	Face-to-face and online certificate courses and postgraduate studies.	IT, programming, management of information systems, computer science, information technology, telecommunications engineering, mobile and wireless engineering, software engineering, multimedia communications, data studies.
African Center of Excellence for Data Science University of Rwanda	Rwanda	Short courses, Master, PhD	Data management, data mining and data analysis, machine learning.
African Center of Excellence in Internet of Things (ACEIoT) - University of Rwanda	Rwanda	Short courses, Master, PhD	IoT, drones, standards, security, privacy, ethics, blockchain
Carnegie Mellon University Africa	Rwanda	Master. Possibility to follow some courses online towards degree	Wireless networks, machine learning, data analytics, robotics, internet of things, software engineering, cyber security, and telecommunications
LINK Centre - University of witwatersrand johannesburg	South Africa	PhD, Master, certification courses	Telecommunications Policy, Regulation and Management; Digital knowledge economy

Centre for Intellectual Property and Information Technology Law at Strathmore University	Kenya	Face-to-face and online courses	Intellectual property, economic issues, block-chain, data protection, cybersecurity, AI
Regional Cybersecurity Capac-ity Centre for Southern Africa (C3SA) - Department of Informa-tion Systems, University of Cape Town	Regional - southern Africa	Conduct assessments of capacity development, supports postdoctoral research	Cybersecurity
Research ICT Africa (RIA)	Continental	Produces research and materials, supports indi-vidual researchers and other academic networks	RIA members come from all areas of IG

Some universities try to build a strong connection with the job market by diversifying the types of courses they offer. This is the case, for example, of the University of Witwatersrand Johannesburg (LINK Centre), which offers not only PhD and Master certification in areas related to IG, but also certificate courses, which are short courses of approxi-mately one week targeted at professionals. For example, the course on Telecommunications Policy, Regulation and Management (TPRM) and on Broadcasting and Digital Media Policy-Regulatory Trends are targeted at decision-mak-ers and policymakers from national policy departments, parliamentarians, and members of industry self-regulatory bodies. The university also grants Certificates in Chief Information Officer (CIO) Practice, offered on three levels, which can vary from 10 weeks to 13 months.

The Accra Institute of Technology provides a range of types of certification which cater to different professional needs. The most relevant University Schools to the purpose of this research are the School Of Advanced Technolo-gies, Engineering and Science (SATES) and the Advanced School of Systems and Data Studies (ASSDAS). In both cases, students can start their path towards certification with a one-semester Certificate of Technology (CTech) in Information Technology or Computer sciences which provides basic knowledge and concepts. Successful CTech stu-dents can take a one-semester Diploma on Technology program (DTech) in areas such as Computer Science, Infor-mation Engineering, Computer Engineering, Software Engineering or Telecommunications Engineering. The DTech is called the academic track of qualification, since the level of knowledge acquired is considerably more advanced than CTech, providing 'an end qualification in itself'. There are also special DTech programs called Industrial-based DTech, which are especially focused on the job market. They are 'designed to equip students with relevant job-ready industry-relevant skills and competencies that will prepare them for the workplace soon after the completion of their program of studies'. Industrial-based D-Techs are offered in areas such as telecommunications engineering, mobile and wireless engineering, and computer engineering.

The traditional undergraduate course is taken in four years at the Accra Institute. Students can complete a Bachelor of Sciences (BSc) in computer science or information technology. In the latter case, the student can choose to spe-cialise in different areas, such as software development, e-commerce, information systems, web development, or multimedia systems. Undergraduate and postgraduate courses (Master and PhD) can be offered either on-campus or online, as part of the Open University Program.

The Carnegie Mellon University Africa strengthens the connection with the job market by tackling a large number of emerging topics, such as data analytics, AI, and the Internet of things (IoT), and by publishing yearly analysis of the impact of their alumni on the job market. The University of Addis Ababa Institute of Technology (AAiT) was not included in the table above because there was not enough information available online to evaluate the activities carried out by the School of Electrical and Computer Engineering. However, it provides an interesting case of part-nerships being established between the academia and the private sector to provide certification. AAiT's Huawei Network Academy, for example, provides certificates that validate the knowledge and skills required for basic con-figuration and maintenance of small to medium-sized networks. The certificate serves as proof of basic understand-ing in the area. There is a similar partnership between AAiT and Cisco.

There are also partnerships being created between academia, governments, and International organisations, such as the World Bank, which has financially supported the creation of African Centers of Excellence (ACE). The ACE project aims to train experts in various research fields to find solutions to regional developmental challenges. ACEs are hosted by universities in West and Central Africa (ACE phase I) and in East and Southern Africa (ACE phase II) Most ACEs are dedicated to areas that do not pertain to IG, but there are also ACEs that could potentially fall within the scope of this study. Some examples are the Centre d'Excellence Africain en Technologies de l'Information et de

la Communication (CETIC), harboured by the University of Yaounde, in Cameroon, the African Center of Excellence in Internet of Things (ACEIoT), hosted by the College of Science and Technology of the University of Rwanda, and the African Center of Excellence for Data Science, hosted by the College of Business and Economics of the University of Rwanda. The last two ACEs offer short courses and have Master and PhD programs. ACEIoT, in particular, presents a multidisciplinary approach, taking into account aspects related to security, privacy and ethics, for example, when tackling the IoT in its Master of Science in Internet of Things: Wireless Intelligent Sensor Networking program.

Some universities include research centers that deal with IG issues. The Center for Information Knowledge and National Development in Africa, which is part of the Faculty of Commerce of the University of Cape Town, for example, maintains a project on extending the benefits of e-commerce with the aim to improve business in Africa and foster the use of ICTs for development. The ICT4D Centre at the University of Cape Town (UCT) functions as an academic hub for researchers focused on creating solutions that address socio-technical problems across Africa and in other developing regions. Although it was not possible to gather evidence that the hub influences the curricula of university training, it serves as a focal-point for reflection and for the development of projects that may foster innovative thinking in the university realm and beyond.

It is also worth mentioning the work developed by Research ICT Africa (RIA), a network of academics from 20 African countries committed to advancing research on digital governance. Unlike other institutions and initiatives mapped in this section, the RIA shows a clear focus on IG, and its main researchers have been involved in several IG policy forums at the global level. RIA also hosts the Regional Academic Network on IT Policy (RANITP), a network of African academics and researchers from the Centre for Intellectual Property and Information Technology Law at Strathmore University, the Lagos Business School, and the Duncan of Jordanstone College of Art and Design at the University of Dundee. RANITP aims to promote high-level multidisciplinary research on IT policy across the continent. RANITP's research is currently focused on AI, more specifically on the thematic areas of AI and gender, AI and digital ID, AI ethics, and AI and data protection.

Table 6: Breakdown of topics covered by universities in their capacity building

	Infrastructure	Cyber security	Legal Issues	Human Rights	Economic issues	Development	Socio-cultural	Emerging issues (machine learning, IoT)
ABM University College	X							
Accra Institute of Technology	X				X			X
African Center of Excellence for Data Science University of Rwanda						X		X
African Center of Excellence in Internet of Things (ACEIoT) University of Rwanda	X	X		X		X		X
Carnegie Mellon University Africa	X	X						X
Centre for Intellectual Property and Information Technology Law at Strathmore University		X	X	X	X			X
LINK Centre - University of witwatersrand johannesburg	X		X		X			
Research ICT Africa (RIA)	X	X	X	X	X	X	X	X

Concluding remarks

Identifying capacity building initiatives promoted by universities in the field of IG presents several challenges, as described in the introduction to this section. This suggests that separate in-depth research focused on the initiatives put forth by academia is necessary. Most of the academic institutions mentioned above tackle issues that fall within the scope of IG, but they do not make direct references to IG or similar expressions. Therefore, it is not clear if the conveners of capacity building activities would perceive themselves as active in the IG capacity building landscape. Some universities make efforts to strengthen the link with the job market. This is reflected in the substance and the

length of the courses, and also on the type of certification provided. Nevertheless, this market-oriented approach seems to be an exception, not the general rule among African universities. Moreover, there are few examples of university initiatives focused on governments and regulators. The online survey and the expert interviews indicate that this target audience should be given priority, and that the academic sector could play an important role in offering capacity building opportunities to government actors.

African Centers of Excellence (ACE) are an example of the importance of multistakeholder partnerships to leverage capacity building in Africa. The collaboration between international financial institutions, governments, and universities has engendered high quality academic capacity building, capable of tackling some of the topics and policy issues that are at the forefront of global digital policy discussions. The reduced number of ACEs dedicated to digital issues shows that there is much room for the creation of multistakeholder partnerships across the continent.

Academic networks seem to have great importance when it comes to enhancing knowledge of IG issues in Africa. RIA and RANITIP are explicitly dedicated to digital governance and policy. According to an interviewee, most university departments adopt a classical perspective when approaching their areas of study, not leaving enough space for individual professors to include digital policy issues. One can notice that much of the research in IG is not happening in universities, but in academic networks, within NGOs, or coming from the private sector.

Research from private actors can be very valuable, but it does not substitute the role of academia, which is committed to high standards of methodological rigor. This rigor is essential for research to serve as a guide to policy decisions. In the absence of a multidisciplinary approach that would allow professors to take into account policy challenges, the creation of academic networks may be an efficient way to connect and build fruitful academic exchanges with peers across the continent. These academic networks offer a valuable resource, still to be fully explored, by IG capacity building initiatives.

3.4. Schools of Internet Governance in Africa

Schools on Internet governance (SIGs) are increasingly important in the capacity building landscape. Their creation can be traced back to the conclusions of the UN Working Group on Internet Governance (WGIG), which recognised a lack of academic research and teaching in IG at that time. Academic members of the WGIG contributed to the organisation of an expert meeting in Rathen (Germany), in June 2006, which produced a number of recommendations, such as the establishment of a Global Internet Governance Academic Network (GIGANET) and the launch of the SIGs. GIGANET was created in 2006, and the pilot of the European Summer School on Internet Governance (Euro-SSIG) took place in 2007. The number of schools have multiplied in recent years, encompassing regional schools and national ones.

In Africa, training by the schools is typically offered once a year. It usually consists of face-to-face activities over a period of two to five days. Most schools take place back-to-back with the regional or national Internet Governance Forum meetings (IGFs). This is not only a way to maximise attendance and resources, but also to offer participants the opportunity for policy immersion. In some cases, the IGF is the formal convener and organiser of the school, such as the West Africa School on Internet Governance (WASIG), convened by the Secretariat for the West Africa Internet Governance Forum (WAIGF) and ECOWAS. Some schools are convened by other actors, such as civil society. An example on the national level is the Ghana SIG, convened by the E-Governance and Internet Governance Foundation for Africa (EGIGFA).

The African School on Internet Governance (AfriSIG) takes place at the continental level. It is considered an inspiration to other schools, although an interviewee highlighted that it would be incorrect to see it as a model to be followed by other SIGs, not only because the organisation of AfriSIG requires an amount of resources that is not always available on the regional and national levels, but also because SIGs in Africa adopt a diversity of approaches to adapt and cater to local needs.

When it comes to its methodological approach, AfriSIG adopts a mixture of lectures, seminars, break-out sessions, peer learning, practical exercises, policy immersion, and mentorship. There is also an attempt to build a long-lasting network among participants, through the creation of WhatsApp groups.

IG schools consistently offer propaedeutic knowledge in IG. Topics such as the history of the Internet and the actors and characteristics of the multistakeholder model are covered. AfriSIG approaches these introductory issues from a continental perspective, discussing the history of Internet development in Africa and the most relevant actors in the African policy landscape.

The regional schools on IG faced exponential growth in recent years. They serve as a stepping stone to increase the involvement of underrepresented countries and regions in continental and global IG discussions. The West Africa IG School (WASIG) held its second edition in Banjul, Gambia, in 2019. Its main objective is to build capacity in general, raise emerging issues IG issues, and to prepare participants to contribute effectively at the national, regional, continental and global IG processes. The school offers a 3-day program which consists of lectures and practical exercises focused on the West African region.

The North Africa School on Internet Governance (NASIG) held its first meeting in 2019, in Nouakchott, Mauritania. During desk research, it was not possible to identify dedicated websites for the Central Africa SIG, the East Africa SIG, and the Francophone School on IG, but they were mentioned by interviewees. The website of the NASIG was not fully operational.

Concluding remarks

Most schools in IG seem to function, first and foremost, as an entry point for newcomers. They can also broaden the knowledge of actors who have been professionally focused on specific areas of IG, and did not have the opportunity to be exposed to a zoomed-out approach to the IG ecosystem.

The number of schools on the regional and national levels has multiplied in recent years. The impossibility to find detailed information about many of them through desk research is an obstacle to understanding their methods and thematic focus. By and large, they are seen as a positive development by interviewees and survey respondents, although, for some of them, it is early to evaluate their concrete impact. AfriSIG put in place the practice of yearly assessments and produced an in-depth tracer study (APC, no date) to detect changes in levels of engagement and roles played before and after the capacity building by participants. Similar mechanisms could be envisioned by other schools.

One interviewee mentioned that the number of SIG participants per year is still too small to effectively impact the landscape of IG capacity and skills. Moreover, most SIGs provide individual skills and basic acquaintance with the topics. They do not cater, therefore, to those who need advanced and in-depth knowledge.

3.5. Capacity building initiatives involving the private sector

The private sector contributes to capacity building in mainly two different manners: a) in an indirect way, supporting the efforts of other stakeholder groups; b) in a direct way, as the main provider of capacity building. In the first case, the support from the private sector for initiatives aimed at capacity building specifically in the field of IG is clear. In the second case, the main motivation seems to be strengthening competencies valued by the job market and leveraging local talent. The relationship with IG is, therefore, less clear. The goal of this section is to provide a few selected examples of the two modalities of support provided by the private sector.

The private sector contributes to enhancing capacity in an indirect way by, for example, providing funding for initiatives which are organised by third parties, or having industry experts among the speakers in training. The support that Facebook provides to AfriSIG, WASIG and to the Kenya IG School are some examples. Google.org, Google's philanthropic arm, supports training by non-profit and social enterprises focusing on privacy, trust and safety online in Kenya, Nigeria, and South Africa. Microsoft provides support to RANITP, hosted by RIA. The support for research focused on policy issues could be explained by the fact that companies would benefit from clearer regulatory standards across the continent, which would increase legal certainty.

It is more difficult to identify initiatives in which the private sector acts as the main provider of capacity building. Many initiatives that are labeled as capacity building on company websites are dedicated to offer information and tutorials about the best way to use products and to take advantage of their functionalities more fully. These initiatives were not included in the scope of this research, because they only refer to the technology provided by a specific company, in spite of offering strong job market skills. An example is the partnership between Google and Flutterwave to create business clinics aimed at helping SMEs across Nigeria. The sessions help participants to use Google and Flutterwave products to grow their businesses and acquire the skills and tools needed to leverage their online presence for growth.

Despite that, it is possible to identify some private sector organisations that are direct providers of initiatives focused on enhancing capacity in Africa. Microsoft partners with the African Capacity Building Foundation (ACBF) to foster capacity building initiatives for government officials and African citizens on the use of basic technology, for Government officials on an advanced level of technology implementation, and for NGOs. In 2019, the company opened its first Africa Development Centre (ADC) in Nairobi, Kenya and Lagos, Nigeria. To gain access to human resources and local talent, Microsoft plans to create partnerships with local universities to update their curriculum and is recruiting graduates that will have access to working in ADC, in fields such as data science, AI, and augmented reality (Microsoft, 2019).

Under the 4Afrika initiative, Microsoft offers online courses through its Virtual Academy 4Afrika, with a focus on promoting entrepreneurship and small businesses across Africa. It also organises the School of Government, designed for senior government leaders across Africa, who are responsible for defining and implementing national and regional policy regarding ICT. The school provides a forum for participants to analyse, contextualise, share, and implement principles and best practices in ICT policy.

In 2020, Google launched the first Google Developer Space in Africa, located in Lagos, Nigeria. It serves as a hub to African developers, entrepreneurs, and startups and Google training initiatives. Google Developer Groups and Women Techmakers, for example, provide training and support for developers aligned with competencies required by the job market.

Many global companies in the digital field find and hire African experts in software and programming with the help of Andela, an American company that identifies and leverages the talent of software developers. In Africa, it has offices in Nigeria, Kenya, Rwanda, and Uganda. Andela provides the infrastructure for distributed teams of engineers that work as programmers for companies like Microsoft, Google and Facebook.

Jumia, an online marketplace founded in Lagos, Nigeria, is an example of an African company that offers training and capacity building programmes. Some of them are focused on strengthening entrepreneurship among women and young people. Jumia's 'Women & Youth Empowerment' pilot programme, launched in Lagos, in 2019, is aimed at providing training and support to young women who are looking to expand their sources of income and empower women through e-commerce (Jumia, 2019).

An interviewee opined that indirect support from the private sector is very positive, but their directive involvement in capacity building, especially when it comes to capacity building that encompasses policy and regulatory aspects, presents some caveats. For example, the content of the capacity building initiative could be perceived as biased if developed and delivered by the private sector.

3.6. Capacity building initiatives: summary of the analysis

The points raised in this concluding section are based on observations made during desk research, and the input received during interviews and through the online survey. These conclusions have been clustered in the following overarching themes: conceptual frameworks, geographic and stakeholder coverage, mechanisms for communication and collaboration, mechanisms for inclusion in global IG discussions, substantive issues, and language, certification and evaluation.

Conceptual frameworks

To promote capacity building, it is important to envision ways in which initiatives are likely to impact individual, institutional and systemic capacities. Most initiatives to enhance capacities are focused on individual capacity, as could be noticed from the desk research, interviews, and survey – more than 70% of respondents in the English version of the survey and 65% in the French survey believe that IG capacity building helped to develop their individual skills, while 57% and 56%, respectively, believe it helped to improve institutional capacity. Even in cases in which it would be reasonable to assume that individuals could impact the institutional and systemic levels – e.g. activities that involve senior members of government, or university students that will later integrate the workforce – it could be useful to clearly spell out individual, institutional and systemic goals in the planning phase of capacity building.

It is important to integrate sustainability concerns in the design of initiatives aiming at IG capacity building. To achieve that, there is a need to clarify what sustainability means, and if and how the three pillars of sustainability – economic, social and environmental – could be applied in the context of IG capacity building.

***Internet governance* is an expression that no longer galvanises actors, especially those dedicated to areas that perceive the Internet as a mere enabling infrastructure to their core activity.** Some examples are professionals working with big data, machine learning, and AI. Therefore, it is challenging to attract them to IG-related discussions on capacity building, even if the topic at hand would have a clear intersection with their work, such as discussions related to data protection, or online discrimination. There is a need to consider if the expression Internet Governance continues to be the most appropriate when offering capacity building in this area – e.g. some organisations are increasingly referring to digital governance instead – and how to attract actors working in emerging areas to capacity building initiatives.

A multidisciplinary approach to IG capacity building that cuts across hard sciences and social sciences needs to be strengthened. Themes which are considered technical have been kept apart from policy and regulatory concerns. This applies to the capacity building initiatives promoted by the technical community and by Academia. With very few exceptions, policy and regulatory aspects are absent from university initiatives related to telecommunications, ICTs, and new technologies, such as the IoT. Interviews conducted to formulate the present report as well as previous investigations conducted under the framework of PRIDA suggest that technology and policy-related departments at universities should be called on to play a more active role in IG research, particularly in developing the African IG agenda. Existing networks, such as the Association of African Universities, could be a mechanism to reach out to academic institutions.

Capacity building should take into account the principles of subsidiarity and decentralisation. This means that: a) preference should be given to capacity building initiatives that take place as close as possible to the grass-roots level. Regional and continental initiatives are very important, but there needs to be a clear view on why these would be the most adequate levels for providing capacity building; b) training the trainers is paramount, not only to decentralise and multiply the number of capacity building opportunities, but also to be able to reach out to local communities more effectively, by providing capacity building in their native languages and using real-life and concrete challenges as a starting point to discuss policy issues . These trainers do not need to be prominent IG experts, but rather community leaders that know how to operate at the grass-roots level. The principles of subsidiarity and decentralisation are also part of the recommendations made by the 2063 Capacity Development Plan Framework (African Capacity Building Foundation, 2016) .

Geographic and stakeholder coverage

There is a concentration of initiatives to develop Internet governance capacities in some countries and regions. This concentration creates inequalities when it comes to access to capacity building opportunities. This has been apparent in desk research, mentioned in interviews and also reflected on the survey – the concentration of initiatives in some countries and regions was considered 'a very important problem' by more than 70% of respondents in the English version of the survey and by more than 75% of respondents in the French survey.

There is insufficient focus on the capacity building for government officials, policymakers, parliamentarians, and diplomats. These professionals have a high potential for leveraging systemic change; therefore capacity building targeted at them should be given priority. Most of these actors would benefit from participating in entry-level training, but they would benefit even more from advanced capacity building that focuses on the concrete policy issues they are confronted with. Capacity building for these professionals should be based on a problem-solving approach. For example, if a country is developing its cybercrime law, a tailored initiative should be offered, bringing together people with expertise in cybersecurity and on the development of national frameworks.

There is little use of online methods of capacity development across the continent at all levels. Most capacity building activities are conducted face-to-face. More than 88% of the respondents of the English version of the survey and 92% of the French survey mentioned that the activities they took part in happened face-to-face. This impacts the financial sustainability of capacity building, since costs of travel, accommodation, and infrastructure necessarily increase in the face-to-face modality. The availability of online forms of capacity building could not only reduce financial costs, but also help to address the relative lack of opportunities in some regions and countries in Africa. It could also represent the only viable option to continue promoting capacity building in the context of the COVID 19 pandemic. In spite of the advantages of online capacity building, there is a need to take into account the bottlenecks related to connectivity in the region. Capacity building should use learning platforms that are accessible for individuals with low bandwidth.

Training on how to plan and conduct online meetings and conferences should be offered to capacity building organisers. Capacity building initiatives, including those that take place face-to-face, could benefit from integrating an online component in their strategies, for example, in the preparatory process, during the event (enabling remote attendance), or to provide just-in-time briefings and updates to participants and alumni. This requires not only knowledge about technical aspects (e.g. which platform to use depending on the goal of the online activity) but also about methodological ways to keep online participants active and involved, increasing the productivity of online gatherings.

Mechanisms for communication and collaboration

There is no one-stop-shop that provides information on the resources available for IG capacity building in the continental, regional and national levels. The creation of a centralised database could facilitate finding and mobilising pan-African expertise. This database – which should allow tailored searches in particular regions and countries – could contain information such as: a) existing initiatives; b) IG experts and their fields of work; c) publications and reading materials; d) centres of research; e) potential academic advisors. This one-stop-shop would benefit not only African stakeholders, but also actors from other regions (e.g. assist in identifying potential speakers from Africa that may help to increase diversity in African participation in global IG debates). This recommendation resonates with the 2063 Capacity Development Plan Framework (African Capacity Building Foundation, 2016), which suggests building 'capacity inventories at various levels'.

There is a lack of formal mechanisms for mutual support, and for the exchange of experience and good practices among Internet governance capacity building organisers. The creation of a network could, for example, enhance understanding about conceptual frameworks on sustainable capacity building, help to identify a basic curriculum that would increase harmonisation among entry-level CD initiatives across the continent, assist in leveraging national and regional experts, and facilitate the implementation of the Action Plan. The creation of a network of capacity building organisers would resonate with the recommendation to create 'mechanisms to facilitate interaction across levels', made by the 2063 Capacity Development Plan Framework (African Capacity Building Foundation, 2016), as well as with the recommendation to promote horizontal learning and exchange of capacities made by AU and NEPAD's Africa's Capacity Development Strategic Framework.

A significant number of websites of capacity building initiatives either do not work or contain broken links. This negatively impacts access to information about capacity building opportunities. Support to capacity building organisers who wish to improve their websites is necessary. Some initiatives do not have websites, but share information only through profiles on social networks, such as Facebook. This should be addressed with capacity building and help desk support.

Mechanisms for inclusion in continental and global IG discussions

Opportunities for policy immersion help to potentialise the benefits of capacity building. Some skills, experience, and knowledge are acquired formally, through education and training, while others come informally, through doing and observing. Policy immersion is not only an opportunity to confront capacity building participants with policy discussions and with other stakeholders, but it is also a chance to promote their inclusion in networks of experts and practitioners. For example, ambassadors programmes usually provide pre-meeting preparation, mentoring, and opportunities to continue involved in the future.

Capacity building needs to be complemented by leadership development and mentoring. Enhancing individual capacity is important, but it is not a game-changer if it is not accompanied by support to continue evolving and to build a career in the field of IG. Awareness is the first step, but African stakeholders need to enhance their capacity to be influential. Leadership development is key to sustainable involvement in continental and global IG discussions.

The organisers of capacity building initiatives should be encouraged to keep in contact with their alumni, fostering the creation of networks. Stakeholders consulted through the study 'Identification Of The Challenges To African Involvement In Internet Policy And Governance' (Chetty, 2019), conducted under the PRIDA project, mentioned that one of the barriers for participation in global IG meetings is the absence of cohesion amongst the African stakeholder groups attending these meetings when working toward concrete outcomes. Alumni networks could facilitate the sharing of information, and opportunities, and might enhance coordination of African participation in global IG forums.

The creation of a help desk to provide support for African stakeholders to engage in global policy discussions should be seen as an aspect of continued and sustainable capacity building. This help desk could assist, for example, with elaborating session proposals for the global IGF, writing fellowship applications, etc. One of the goals of capacity building is to promote the involvement of the African community in global IG discussions. This involvement, however, is frequently hampered by a lack of knowledge about procedures or about the specific lingo that resonates with the global IG community. Supporting African stakeholders in having equal chances to compete in global calls should be one of the goals of capacity building. Help desks are part of the architecture for digital cooperation envisioned by the UN Secretary General's High-level Panel on Digital Cooperation (2019) 'The Age of Digital Interdependence' (recommendation 5A).

Substantive issues

There is a need to distinguish initiatives focused on providing basic building-blocks of knowledge in IG from those that provide in-depth expertise, and to promote both types of initiatives. The former are important as a way of disseminating information and raising general awareness about IG, but the latter are necessary, for example, to support professionals engaged in policy making and international negotiation processes across stakeholder groups.

Research in IG policy is insufficient in universities, negatively impacting the production of evidence-based information for in-depth capacity development and policymaking. Most research in IG comes from academic networks, or happens within NGOs and the private sector. Research conducted by other stakeholders is valuable, but it does not substitute research conducted by academia, which is committed to high standards of methodological rigor. This rigor is essential for research to serve as a guide to policy decisions.

The content of many capacity building initiatives does not reflect the specificities of the African context. They seldomly offer a useful global overview of IG issues, but need to be complemented by an analysis of continental, regional, and national specificities and policy challenges. In some areas, the content produced in other regions cannot be adjusted to Africa, because realities and assumptions greatly differ (e.g. the assumption that there are strong human rights frameworks in place, strong institutions, fully competitive markets, or fully functioning democracies). Therefore, it is important that at least part of the materials for capacity building initiatives is conceptualised by members of the African community.

The content of capacity building initiatives should put concrete issues faced by African stakeholders at the center. For capacity building to be useful and meaningful to African stakeholders, knowledge should not be purely theoretical, but be built upon problem-solving and real-life challenges. For example, the concrete challenges faced by young people trying to fill an online application for a job could raise questions related to data protection, security, and the downsides of the potential use of AI by the employer to screen applications. Moreover, according to the research conducted by Cheety (2019), it is important to show participants how IG and policy decisions help to advance developmental and socio-economic objectives.

Just-in-time capacity building may be important in some areas which are highly dynamic and advance at a fast pace. A just-in-time approach presents the flexibility to incorporate current developments into the learning process. While, in general, course materials and content should be frequently updated prior to each iteration of the capacity building, in fast-moving fields this is not sufficient. Hence, capacity building should also cover breaking news and the most recent developments. Some of the ways to achieve this include: periodically offering courses facilitated by experts in the area, and organising webinars and other ad hoc meetings whenever needed.

Capacity building initiatives focused on infrastructure should give attention to the interplay between technical and policy aspects. Capacity building on technical issues should tackle the policy implications of technical decisions and consider the development-related goals that countries and regions are seeking to achieve.

Language, certification, and evaluation

Language barriers are a key obstacle to promoting wider inclusion in Internet governance capacity building opportunities. Very few organisations offer capacity building in more than one language. In cases they do, English and French are the two languages adopted. It was not possible to identify examples of initiatives being offered in native languages, which is a key obstacle for a large part of Africans to take part in capacity building. For example, in Benin, there are 55 native languages, and French is spoken by only 33% of the population (Gallimard et al., 2018).

Certification is important for capacity building initiatives that aim to provide in-depth expertise. While certification of participation may be sufficient for entry-level capacity building, professionals who take advanced courses would benefit from certification. Nevertheless, certification needs to be introduced with caution: one interviewee recalled that certification does not necessarily mean quality, and called attention to the dangers of an exaggerated focus on certification, which frequently enables providers to charge more for participation.

A regime of tiered certification could be needed (professional certification, Masters, PhD). There is a need for market-oriented and professional certification as well as academic certification across Africa. As a starting point, certification provided by universities could be discussed. Universities are strategic because if the capacity building program is accredited by a recognised academic institution, it could be easier for governments, for example, to commit to setting aside a budget for training their staff. One interviewee recalled that investment in professional qualification needs to happen in parallel with fostering a vibrant job market; otherwise capacity building will generate a certified but unemployed workforce.

There are no frameworks for periodic evaluations of the impact of capacity building initiatives. Systematic evaluation is important to gauge how successful the Action Plan has been to enhance the sustainability of capacity building in IG. It would also show the impact of capacity building on the levels of engagement of African stakeholders in IG policy discussions at the continental and at the global levels, and would detect trends of institutional and systemic impact. Evaluation would also reveal measures which are not delivering the expected results, enabling the adaptation of the Action Plan to the reality on the ground.

Alignment among different sectors within the government around the goals and steps contained in the Action Plan to enhance the sustainability of Internet governance capacity building is key. It is insufficient to have a national focal point committed to PRIDA objectives. Some of the steps recommended in the Action Plan require the support from national governments. Alignment among different sectors within the government around the goals and steps contained in the Action Plan is important for its success.

4. SWOT analysis of Internet governance capacity building in Africa

This section is dedicated to an analysis of the strengths, weaknesses, opportunities and threats (SWOT) related to enhancing the sustainability of IG capacity building at the continental, regional, and national levels in Africa. The analysis has been based on the six thematic areas that served as a cluster for the analysis made at the end of Section 3, namely: a) conceptual frameworks; b) geographic and stakeholder coverage; c) mechanisms for communication and collaboration; d) mechanisms for inclusion in global IG discussions; e) substantive issues; and f) language, certification, and evaluation.

Strengths and weaknesses refer to intrinsic elements that could be identified from the observation of capacity building initiatives. Opportunities and threats are related to the external environment, such as the political, economic, and technical scenarios in the continent and at the global level that could either favor or pose an obstacle to measures proposed to enhance the sustainability of IG capacity building. For the purpose of this report, the elements of the SWOT analysis could be defined as:

- **Strengths:** elements that present an advantage to capacity building initiatives.
- **Weaknesses:** elements that present a disadvantage to capacity building initiatives.
- **Opportunities:** circumstances in the environment that initiatives could exploit to enhance their sustainability.
- **Threats:** circumstances in the environment that could pose difficulties for the sustainability of initiatives.

The SWOT analysis assists in identifying actions aimed at enhancing sustainability that could be considered low hanging fruits, and others that demand the mobilisation of more resources – economic and human resources, as well as time – to come to fruition. This assessment could be a valuable input in the process of deciding which steps to actually implement and when – an evaluation that will be reflected on the timeline of the Action Plan (Section 5)

A SWOT table has been created for each of the six thematic areas, and they will be presented in the following format:

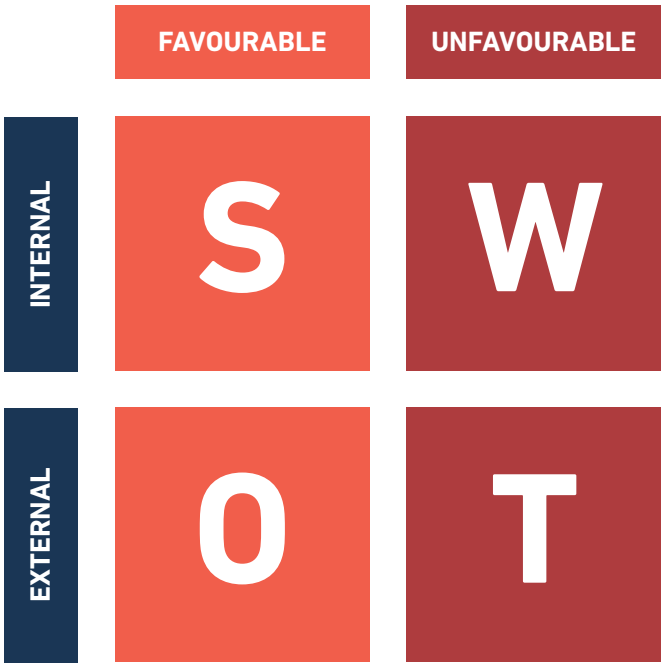

Figure 5. Framework of the SWOT analysis

Based on the analysis of the strengths, weaknesses, opportunities and threats, conclusions will be drawn in the following manner:

Scenario 1: the most numerous or the most important elements are concentrated in the S-O sections of the table. This suggests that the steps contained in the Action Plan are low hanging fruits.

Scenario 2: the most numerous or the most important elements are concentrated in the S-T sections of the table. This suggests that the steps contained in the Action Plan will assist actors in benefiting from available strengths and mitigating threats.

Scenario 3: the most numerous or the most important elements are concentrated in the W-O sections of the table. This result raises the question: can the weaknesses be addressed in a relatively easy manner, so that capacity building initiatives can surf the wave of opportunity? The activities suggested in the Action Plan would benefit from a feasibility analysis before implementation.

Scenario 4: the most numerous or the most important elements are concentrated in the W-T sections of the table. This would suggest that considerable resources (human, time or financial) are necessary to overcome endogenous and exogenous difficulties. These resources should be secured before implementing steps in this area. The activities suggested in the Action Plan would benefit from a feasibility analysis before implementation.

Table 7. SWOT analysis of conceptual frameworks.

Conceptual Frameworks		
	FAVOURABLE	**UNFAVOURABLE**
INTERNAL	**STRENGTHS**	**WEAKNESSES**
	The implementation of the PRIDA Action Plan on IG CB creates opportunity and momentum for discussing conceptual frameworks, such as sustainability, capacity development, Internet governance, subsidiarity and decentralisation. 'Training the trainers' is an approach adopted by some IG CB in the continent and also under the PRIDA project, contributing to subsidiarity, decentralization and a more efficient allocation of resources. Lessons could be learned from existing initiatives that seek to go beyond capacity building and aim to promote individual, institutional and systemic capacities.	Lack of an harmonized framework on capacity building and capacity development in the field of IG. Lack of clear understanding about what sustainable capacity development means in practice. Silos between technical and policy themes and communities.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	AU/NEPAD Capacity Development Strategic Framework sets a vision that could inspire a framework on IG CD. The principles of subsidiarity and decentralisation are part of the recommendations made by the AU 2063 Capacity Development Plan Framework. Sustainability ranks high in the international agenda creating momentum for the discussion on how to enhance it.	The economic crisis generated as a flipside of the Covid-19 pandemic could mean that less resources will be available for CD, posing an obstacle to financial sustainability of CD initiatives. Some important initiatives being developed in Africa, such as the creation of ACEs, seem to miss the opportunity to tackle the problem of silos between technical and policy knowledge.
Conclusion: the SWOT analysis suggests that the advancement of conceptual frameworks would fit into a type 1 scenario, therefore could be considered low hanging fruit.		

Table 8. SWOT analysis of geographic and stakeholder coverage.

Geographic and stakeholder coverage		
	FAVOURABLE	**UNFAVOURABLE**
	STRENGTHS	**WEAKNESSES**
INTERNAL	Scarcity of IG capacity building in some regions and countries means that there is a suppressed demand. This could contribute to enhancing local motivation to develop capacity building initiatives, if adequate support is provided. The online course developed under the PRIDA project could be a starting point for encouraging a more extensive adoption of online learning. Training content on IG to support diplomatic missions and institutions is being developed under the framework of the PRIDA project. The PRIDA project and Action plan on enhancing the sustainability of IG capacity building present an opportunity to further diversify geographic and stakeholder coverage.	Relatively less availability of financial resources and IG experts in regions and countries that are currently underserved in terms of IG capacity building. Possible need to increase government sensitisation about the importance of their involvement in IG capacity building. Limited experience with capacity building initiatives conducted entirely online.
	OPPORTUNITIES	**THREATS**
EXTERNAL	There has been an increase in the number of regional and national IGFs in Africa. They could provide opportunities for gathering stakeholders in capacity building initiatives (e.g. enhance the number of SIGs that happen back-to-back with IGFs). There is an increasing global recognition of the importance of parliamentarians and diplomats in IG discussions. The 2019 IGF, for example, had a special track dedicated to promoting awareness-raising and knowledge-sharing among parliamentarians. The Digital Transformation Strategy for Africa (2020-2030) (African Union, 2020a) sets targets for 'massive e-skills development programs' on digital privacy and security. The Covid-19 crisis has put in evidence the importance of online mechanisms for working, holding meetings and interacting with peers and the adoption of e-participation will likely increase after the crisis.	The COVID-19 pandemic could mean that there is no other option, but to conduct capacity building entirely online. Bottlenecks related to connectivity in Africa demand a careful planning of online capacity building in order to avoid excluding those with low bandwidth. Geographic concentration could be worsened by the creation of public or private Centers of excellence (e.g. Microsoft's Africa Development Centres) in regions and countries in which financial and human resources are already relatively more abundant (e.g. Nigeria, Kenya). Insufficient capacity building for governments, parliamentarians and diplomats could negatively impact the adequacy of public policy and regulation across the continent, as well as countries' abilities to meaningfully engage in global IG discussions and negotiations.
Conclusion: the SWOT analysis suggests that addressing issues related to geographic and stakeholder coverage would fit into a type 2 scenario. The steps contained in the Action Plan would help actors in the region to benefit from available strengths and mitigate threats.		

Table 9. SWOT analysis of mechanisms for communication and collaboration

Mechanisms for communication and collaboration		
	FAVORABLE	**UNFAVORABLE**
INTERNAL	**STRENGTHS**	**WEAKNESSES**
	Abundant expertise in some thematic areas, although concentrated in some regions, which needs to be mapped and leveraged. Stakeholders in the region have experience in collaborating through networks. Events that provide a focal point for CB and enable optimization of resources	Lack of awareness about available pan-African resources and expertise. Unavailable or difficult to retrieve online information on CB opportunities. Lack of formal mechanisms for mutual support, and for the exchange of experience and good practices among IG CB organisers.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	Finding and mobilising pan-African expertise is one of the goals in the AU 2063 Capacity Development Plan Framework. Creating 'mechanisms to facilitate interaction', is one of the goals of the AU 2063 Capacity Development Plan Framework, and promoting horizontal learning and exchange of capacities is comprised in AU and NEPAD's Africa's Capacity Development Strategic Framework.	Lack of global visibility of African IG experts and resources could enhance the trend of concentration of African participation in global IG debates around a few individuals.
Conclusion: the SWOT analysis suggests that fostering mechanisms of communication and collaboration would fit into a type 1 scenario, therefore could be considered a low hanging fruit.		

Table 10. SWOT analysis of mechanisms for inclusion in global IG discussions.

Mechanisms for inclusion in global IG discussions		
	FAVORABLE	**UNFAVORABLE**
INTERNAL	**STRENGTHS**	**WEAKNESSES**
	Policy immersion is already offered by some capacity building initiatives, and needs to be strengthened. Some capacity building initiatives already have experience in forming networks of alumni and could share good practices.	Most capacity building initiatives focus on individual capacity, but without a follow-up process, strengthened capacity may not translate into professional development and leadership.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	Help desks are part of the architecture for digital cooperation envisioned by the UN Secretary General's High-level Panel on Digital Cooperation (recommendation 5A).	An insufficient number of individuals in leadership positions may hamper systemic improvement. Actions on global inclusion are partially dependent on the opportunities provided in global processes.
Conclusion: the SWOT analysis suggests that mechanisms of communication and collaboration would fit into a type 2 scenario. The steps contained in the Action Plan would help the region to benefit from available strengths and mitigate threats.		

Table 11. SWOT analysis of substantive issues.

5. Substantive issues		
	FAVORABLE	**UNFAVORABLE**
INTERNAL	**STRENGTHS**	**WEAKNESSES**
	Experts at the continental, regional and national levels could be involved in the process of producing or tailoring content. Existing academic networks dedicated to research on IG (ex. RIA) could leverage academic research on IG, including in universities.	Entry-level and in-depth initiatives are clustered indiscriminately under the label of CB. Syllabuses and course materials do not sufficiently tackle the African context. Insufficient in-depth research to provide the knowledge necessary to adapt the content of capacity building initiatives to the African context and for evidence-based policymaking.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	There was wide recognition of the value of distinguishing between entry-level and in-depth capacity building during expert interviews. In-depth knowledge of IG issues is key to advance the goals of regulatory harmonisation present in the Digital Transformation Strategy for Africa (2020-2030) (African Union, 2020a). Renewed global interest in Africa could mean that other regions may also be keen to learn more about specificities of the African IG context.	Without solid knowledge about policy and regulatory issues, the work of policymakers and international negotiators could be undermined. The content of capacity building may not keep pace with cutting-edge and very dynamic areas, becoming quickly obsolete. Some important initiatives being developed in Africa, such as the creation of ACEs, seem to miss the opportunity to tackle the problem of silos between technical and policy knowledge.
Conclusion: the SWOT analysis suggests that substantive issues would fit into a type 4 scenario. In this case, there are considerable human resources and research that need to be secured in order to carry out the steps of the Action Plan. The activities suggested in the Action Plan would benefit from a feasibility analysis before implementation.		

Table 12. SWOT analysis of language, certification and evaluation

Language, certification and evaluation		
	FAVORABLE	**UNFAVORABLE**
INTERNAL	**STRENGTHS**	**WEAKNESSES**
	Ongoing initiatives to train the trainers could focus on community leaders capable of working on the grass-roots level and provide capacity building in local languages. The self-paced online introductory training course on IG, commissioned by PRIDA, could be gradually translated into local languages. There are examples of tiered certification (professional, Masters, PhD) offered by some universities that could serve as inspiration. There are examples of evaluations targeted at specific IG capacity building initiatives that could serve as inspiration to developing broader evaluation frameworks.	Lack of multilingualism makes IG CB inaccessible for a large part of the African population. There is no coordinated approach to certification granted by IG CD initiatives.
EXTERNAL	**OPPORTUNITIES**	**THREATS**
	Plans to develop an African Continental Qualifications Framework (ACQF) (African Union 2020b) could create momentum for the discussion on certification within the IG realm.	Some of the steps recommended in the Action Plan require support from national governments. Alignment among different government sectors around the goals and steps contained in the Action Plan is essential for its success.
Conclusion: the SWOT analysis suggests that 'language, certification, and evaluation' would fit into a type 2 scenario. The steps contained in the Action Plan would help the region to benefit from available strengths and mitigate threats.		

5. Action Plan for the sustainability of capacity building initiatives on Internet governance

This Action Plan identifies some of the concrete steps that should be taken to enhance the sustainability of capacity building initiatives in IG on the continental, regional, and national levels. The issues and objectives have been drawn directly from the analysis conducted in Section 3, dedicated to examining a sample of capacity building initiatives, and Section 4, which identified the strengths and weaknesses of existing initiatives. The proposed steps should not be considered an exhaustive list, but examples of concrete actions that could be taken to achieve the aforementioned objectives. Likewise, a much broader set of potential partners could be identified to pursue these actions. The aim of mentioning some actors is to provide a starting point to build these partnerships.

Table 13. Action Plan for the sustainability of capacity building on Internet Governance

Issues	Objectives	Steps	Potential partners
1. Conceptual frameworks			
1.1. Many initiatives fall short on promoting holistic capacity building, because they focus on individual, but not on institutional or systemic capacity.	Promoting a harmonised understanding and comprehensive framework on capacity building across the continent at all levels	1.1.1 Adopting a baseline document which sets the vision and key concepts for IG CB 1.1.2. Promoting a discussion with organisers of existing CB initiatives to collect views on how to strengthen the link between individual, institutional, and systemic capacities 1.1.3. Developing guidelines for IG CB organisers in the region suggesting concrete aspects to take into account in the planning stage to promote the development of individual, institutional, and systemic capacities 1.1.4. Creating a network for continuous discussion and exchange of good practices on CB among IG CB organisers	AU as a convener of the discussion with providers of CB initiatives from across stakeholder groups and with the participation of government representatives and the private sector
1.2. Sustainability concerns are frequently absent in the design of CB initiatives.	Promoting a clear understanding of the meaning of sustainable CB	1.2.1. Promoting a discussion with organisers of existing initiatives on the applicability of the three pillars of sustainability – economic, social, and environmental – in the field of IG CB. 1.2.2. Developing guidelines for IG CB organisers suggesting concrete aspects to consider in the planning stage to promote sustainability in IG CB initiatives	AU as a convener of the discussion with providers of CB initiatives from across stakeholder groups; preferably with the participation of experts in the area of project management
1.3. Internet governance is an expression that does not appeal to a broad range of actors, especially those that perceive the Internet as an enabling infrastructure to their core activity.	Evaluating if the expression Internet governance continues to be the most appropriate when labeling CB in the area, and how to attract actors working in specific fields and with emerging technologies to IG CB initiatives	1.3.1. Promoting a discussion on the best way to refer to CB on IG 1.3.2. Sensitising actors about the interplay between their fields of work and IG policy discussions	AU as a convener of the discussion that should involve not only providers of IG CB initiatives, but also organisers of CB initiatives that are linked to broader policies and projects

Issues	Objectives	Steps	Potential partners
1.4. A multidisciplinary approach to IG CD that cuts across traditional sciences and social sciences is lacking.	Promoting cross-fertilisation and a multidisciplinary approach	1.4.1. Involving actors from different areas of knowledge in discussions around concrete IG policy questions surrounding some key technological developments (e.g. the IoT) 1.4.2. Creating a task force to propose how to strengthen cross-fertilisation and encourage this multidisciplinary approach to trickle down to IG CB initiatives.	AU as a convener of the discussion with universities and research networks that are active in IG CB, ACEs, and governments
2. Geographic and stakeholder coverage			
2.1. There is a concentration of initiatives to develop IG capacities in some countries and regions.	Disseminating opportunities for CB more evenly across regions and countries in Africa.	2.1.1. Investigating the concrete reasons behind this concentration 2.1.2. Verifying if underserved regions or countries present ongoing initiatives that could be leveraged to support additional CB (e.g. national or regional IGFs or university departments that work on IG-related themes) 2.1.3. Offering an entry-level online IG course targeted at stakeholders from particular underserved countries or regions;use the online course developed under the PRIDA project as a baseline 2.1.4. In a post-COVID 19 context, partnering with regional and local actors to support a pilot face-to-face CB initiative; with the form of an SIG: a) held periodically, b) having a clear organisational model, c) providing entry-level knowledge on a broad range of IG discussions	AU to commission a study on points 2.1.1 and 2.1.2 AU in partnership with at least one national/regional stakeholder (to be defined depending on the country or region) to spearhead the implementation of 2.1.3 and 2.1.4

Issues	Objectives	Steps	Potential partners
2.2. There is insufficient focus on CB of government officials, policymakers, parliamentarians, and diplomats.	Promoting CB for professionals with a high potential of leveraging systemic change	2.2.1. Sensitising governments to concrete benefits of IG CB 2.2.2. Using the training on IG to support diplomatic missions (project developed under PRIDA) as an inspiration for courses tailored at other professionals 2.2.3. Offering new iterations of the foundational course on IG developed with Africa-specific content and delivered for policymakers and experts under the framework of PRIDA 2.2.4. Contacting the targeted professionals in advance to map their needs in terms of CB and the specific policy issues they confront so they can take part in shaping the delivery of the CB 2.2.5. Providing support to participants who wish to integrate the policy issues covered by the CB in national digital strategies	AU in partnership with national governments, RECs, and experts that will be responsible for tailoring and delivering the CB, and for providing follow-up support
2.3. There is little implementation of online methods of CB across the continent at all levels.	Incentivising the adoption of online CB	2.3.1. Widely advertise the availability of a self-paced online introductory training course on IG developed under the PRIDA project 2.3.2. Discuss with CB organisers the possibility of using the self-paced online introductory training course on IG as a preparatory step for participants of IG CB initiatives	AU and IG CB organisers, PRIDA focal points, and supporters to leverage the expertise of actors offering online CB on the continent
2.4. There is a need to enhance expertise on how to organise and conduct online meetings and conferences among CB organisers. This has become urgent in the context of the COVID-19 pandemic.	Incentivising the adoption of online mechanisms for preparation, delivery, and follow-up of IG CB, which would help to enhance geographic and stakeholder coverage of CB initiatives	2.4.1. Facilitate access to training on how to make efficient use of online mechanisms in the context of meetings and CB, encompassing knowledge about technical aspects and methodological ways to keep online participants active and involved	Interested CD organisers, Diplo Foundation
3. Mechanisms for communication and collaboration			
3.1. There is no one-stop-shop that provides information on the resources available for IG CB on the continental, regional and national levels.	Creating a centralised database to facilitate finding and mobilising pan-African expertise and resources	3.1.1. Commissioning the creation of an online platform/database 3.1.2. Convening a group of curators that will start populating the platform 3.1.3. Issuing a call for contributions from African stakeholders to add information and resources to the platform. Curators should oversee and validate the information added by stakeholders.	AU, PRIDA experts, African IG CB organisers, individuals with IG expertise from all stakeholder groups

Issues	Objectives	Steps	Potential partners
3.2. There is a lack of formal mechanisms for mutual support, and for the exchange of experience and good practices among IG CB organisers.	Creating mechanisms for the exchange of knowledge and support	3.2.1. Creating a network of IG CB organisers (see item 1.1.4) 3.2.2. Holding a foundational meeting of the network (which, for practical reasons, could be held back-to-back with a continental event, such as AIS) 3.2.3. Using the launch of the centralised database (see item 3.1.1) as a concrete way to galvanise actors around the network and keep them mobilised by a concrete project 3.2.4. Reaching out to CB organisers who do not necessarily see themselves as part of the IG ecosystem (e.g. university departments)	
3.3. A significant number of websites of CBinitiatives either do not work, or contain broken links.	Improving awareness about existing CB opportunities and enhancing the quality of IG CB online presence	3.3.1. Issuing a call for 'requests for assistance for website improvement' 3.3.2. Selecting the initiatives that will be supported 3.3.3. Raising awareness about the benefits of having a website presence and shortcomings of relying solely on social media profiles for communication	AU (3.3.1), CD organisers, web developers, and the technical community (3.3.2), ICANN, and regional/national partners (3.3.3)
4. Mechanisms for inclusion in continental and global IG discussions			
4.1. There is a need to enhance opportunities for policy immersion.	Helping to potentialise the benefits of CB through a practical approach	4.1.1. Identifying good practices in terms of policy immersion 4.1.2. Identifying forums in which participants could take part as a means of policy immersion 4.1.3. Introducing assessments to evaluate the efficacy of policy immersion	Network of IG CB organisers (see item 3.2.1)
4.2. Capacity development needs to be complemented by leadership development and mentoring.	Supporting leadership development, which is key to a sustainable involvement in continental and global IG discussions	4.2.1. Designing and launching a leadership development program, which may encompass several elements: CD, policy immersion, and mentoring	AU and Network of IG CB organisers (see item 3.2.1). AfriSIG, ISOC, and ICANN have experience in mentorship programs
4.3. The organisers of capacity development initiatives should be encouraged to keep in contact with their alumni, fostering the creation of networks.	Facilitating the sharing of information and opportunities and promote coordinated African participation in global IG forums	4.3.2. Sharing information on best practices adopted by IG CB organisers (e.g. creation of WhatsApp groups, and alumni lists and gatherings) 4.3.3. Exploring new ideas, such as mentorship programs, in which more experienced alumni provide coaching and support to less experienced ones	AU and Network of IG CB organisers (see item 3.2.1) and their alumni. AfriSIG, ISOC, and ICANN have experience in mentorship programs

Issues	Objectives	Steps	Potential partners
4.4. Formal obstacles to participation in global IG discussions and information asymmetry.	Creating help desks to provide support for African stakeholders to engage in global policy discussions	4.4.1. Discussing the possibility of creating one help desk per AU REC 4.4.2. Defining points of contact for each help desk that would receive and distribute requests 4.4.3. Appointing a group of expert supporters to reply to help desk requests	AU, AU RECs,and UN (follow-up of the Secretary General's High-level Panel on Digital Cooperation)
5. Substantive issues			
5.1. There is a need to distinguish initiatives focused on providing basic building blocks of knowledge on IG from those that provide in-depth expertise, and to promote both types of initiatives.	Dissociating entry-level from advanced CB on IG, and ensuring that actors enroll in CB appropriate for their level of knowledge and professional challenges	5.1.1. Working with CB providers to better clarify the differences and goals of entry-level and advanced IG CB 5.1.2. Defining a basic curriculum for entry-level IG CB, which should be offered in a harmonised way across the continent at all levels, taking into account adjustments necessary to encompass regional and national specificities. 5.1.3. See actions under 2.2	AU as a convener and catalyst of the discussion with providers of CB initiatives from across stakeholder groups
5.2. Research on IG policy is insufficient in universities, negatively impacting the production of evidence-based information for in-depth CB and policymaking.	Increasing the availability of evidence-based academic research on IG and ensuring that the knowledge reaches CB initiatives	5.2.1. Ensuring that financial support provided for research includes evidence-based and multidisciplinary academic research on IG as a priority 5.2.2. Devising strategies to leverage the research conducted by academic networks in university departments 5.2.3. Strengthening the links between Academic networks and CB initiatives 5.2.4. Creating centers of excellence on IG policy and regulatory issues (taking existing technology-centered ACEs as an example) 5.2.5. Focusing on emerging regulatory issues that would support Africa's digital transformation strategy, such as data governance	Governments, public-private partnerships, academic networks active in the field of IG, network of CB organisers (see item 1.1.4)

Issues	Objectives	Steps	Potential partners
5.3. The content of many CB initiatives is not adequate to the African context.	Seeking a balance between global issues and specific IG challenges in Africa	5.3.1. Encouraging the organisers of CB initiatives to increase the content produced and delivered by African stakeholders 5.3.2. Ensuring significant involvement of members of the African community in content design and course delivery in CB supported by the AU 5.3.3 Encouraging CB organisers to consult the database on pan-African resources (see item 3.1) to identify African experts that could provide support to content development and delivery	
5.4. The content of CB initiatives should put concrete issues faced by African stakeholders at the center.	Building knowledge in problem-solving and real-life challenges	5.4.1. Sensitising CB organisers to the importance of concrete examples and problem-solving as a methodological approach to tackling IG policy issues 5.4.2. Ensuring that concrete cases and problem-solving are prominent in content design and course delivery in CB supported by the AU 5.4.3. Adopting this methodological approach in AU initiatives dedicated to training the trainers. Instruct trainers to adopt a similar approach when providing CB on IG to communities 5.4.4. When planning their training, trainers should investigate what specific issues are relevant to the communities they intend to address	AU, IG CB organisers, IG trainers, and civil society organisations involved in IG CB
5.5. IG areas which are highly dynamic and advance at a fast pace pose the problem of the constant need to update training according to the most recent developments.	Keeping participants updated on the latest developments with several tools encompassed by a just-in-time approach to capacity development	5.5.1. Work with IG CB organisers to identify the topics of high interest which advance in a fast pace in the African context 5.5.2. Take advantage of the knowledge acquired on how to plan and organise online meetings (see point 2.4) to offer frequent updates to the alumni	AU, network of CB organisers, and experts working in these high interest fields

Issues	Objectives	Steps	Potential partners
6. Language, certification, and evaluation			
6.1. Language barriers are a key obstacle to promoting wider inclusion of African actors in IG CB opportunities.	Increasing the number of languages in which entry-level IG CB is offered	6.1.1. Mobilising experts on the national level to record videos that would teach key concepts of an entry-level IG course in local languages The videos could be used together with the course materials of a basic entry-level course on IG 6.1.2. Gradual translation of the self-paced online introductory training course on IG developed under PRIDA (see item 2.3.1) into local languages 6.1.3. Exploring the feasibility of using AI to gradually introduce automation in the process of translation	Governments and national stakeholders could identify priority native languages for translation in a pilot phase Centers of excellence and university courses dedicated to machine learning, working together with language departments, could assist with developing AI that could be used for translation
6.2. Professionals who take advanced IG courses would benefit from certification.	Making certification available for in-depth/advanced CB on IG	6.2.1. There is a need to distinguish initiatives focused on providing basic building blocks of knowledge on IG from those that provide in-depth expertise, and to promote both types of initiatives (see activities under item 5.1) 6.2.2. Starting a discussion with IG CB organisers on steps that need to be put in place to provide certification (e.g. evaluation)	AU as a convener and catalyst of the discussion with providers of CB initiatives from across stakeholder groups with participation of professionals with experience in academic certification and representatives from the private sector
6.3. There is a need for market-oriented and professional certification as well as academic certification across Africa (professional certification, Masters, PhD).	Making tiered certification available for in-depth/advanced CB on IG	6.3.1. Identifying good practices and gaps in certification 6.3.2. Focusing on certification provided by universities 6.3.3. Extrapolating lessons learned from certification within the academic sector to advanced CB provided by other stakeholders	Universities, governments, academic networks, and representatives from the private sector; AU to commission a study on 6.3.1
6.4. Provide a framework for periodic evaluations of the impact of the CB initiatives.	Identifying changes in levels of engagement and roles played by individuals before and after the CB, making it easier to notice trends of institutional and systemic impact	6.4.1. Developing a framework that can be used as a guide and adapted by IG CB organisers to evaluate the impact of CB initiatives	AU as a convener and catalyst of the discussion with providers of CB initiatives from across stakeholder groups
6.5. Some of the steps recommended in the Action Plan require the support from national governments.	Promoting alignment among different sectors within the government around the goals and steps contained in the Action Plan to enhance sustainability in IG training	6.5.1.Presenting the key goals of the Action Plan to governments	AU and government representatives

6. Expected timeline of implementation of steps in the Action Plan

Table 14. Expected implementation timeline

		Expected time	
Issues	**Steps**	**Short-term goal**	**Mid-term goal**
1.1. Many initiatives fall short on promoting holistic CB, focusing on individual, but not on institutional or systemic capacity.	1.1.1 Adopting a baseline document which sets the vision and key concepts for IG CB	X	
	1.1.2. Promoting a discussion with organisers of existing CB initiatives to collect views on how to strengthen the link between individual, institutional and systemic capacities	X	
	1.1.3. Developing guidelines for IG CB organisers in the region suggesting concrete aspects to take into account in the planning stage to promote the development of individual, institutional, and systemic capacities	X	
	1.1.4. Creating a network for continuous discussion and exchange of good practices on CB among IG CB organisers	X	
1.2. Sustainability concerns are frequently absent in the design of CB initiatives.	1.2.1. Promoting a discussion with organisers of existing initiatives on the applicability of the three pillars of sustainability – economic, social, and environmental – in the field of IG CB	X	
	1.2.2. Developing guidelines for IG CB organisers suggesting concrete aspects to consider in the planning stage to promote sustainability in IG CB initiatives	X	
1.3. Internet governance is an expression that does not appeal to a broad range of actors, especially those that perceive the Internet as an enabling infrastructure to their core activity.	1.3.1. Promoting a discussion on the best way to refer to CB on IG	X	
	1.3.2. Sensitising actors about the interplay between their fields of work and IG policy discussions		X
1.4. A multidisciplinary approach to IG CD that cuts across traditional sciences and social sciences is lacking.	1.4.1. Involving actors from different areas of knowledge in discussions around concrete IG policy questions surrounding some key technological developments (e.g. the IoT)		X
	1.4.2. Creating a task force to make proposals on how to strengthen cross-fertilisation and on how to make this multidisciplinary approach trickle down IG CB initiatives	X	
2. Geographic and stakeholder coverage			
2.1. There is a concentration of initiatives to develop IG capacities in some countries and regions.	2.1.1. Investigating the concrete reasons behind this concentration	X	
	2.1.2. Verifying if underserved regions or countries present ongoing initiatives that could be leveraged to support additional CB (ex. national or regional IGFs or university departments that work on IG-related themes).	X	
	2.1.3. Offering an entry-level online IG course targeted at stakeholders at particular underserved countries or regions. The online course developed under the PRIDA project could provide a baseline for that.	X	
	2.1.4. In a post-COVID 19 context, partnering with regional and local actors to support a pilot face-to-face CB initiative. The pilot could take the shape of an IG school because SIGs: a) are held periodically; b) have a clear organisational model; c) provide entry-level knowledge on a broad range of IG discussions		X

2.2. There is insufficient focus on the CB of government officials, policymakers, parliamentarians and diplomats.	2.2.1. Sensitising governments to concrete benefits of IG CB.	**X**	
	2.2.2. Using the training on IG to support diplomatic missions (project developed under PRIDA) as an inspiration for courses tailored at other professionals	**X**	
	2.2.3. Offering new iterations of the foundational course on IG developed with Africa-specific content and delivered for policy-makers and experts under the PRIDA framework	**X**	**X**
	2.2.4. Contacting the targeted professionals in advance to map their needs in terms of CB and the specific policy issues they confront, so they can take part in shaping the delivery of the CB	**X**	**X**
	2.2.5. Providing support to participants who wish to integrate the policy issues covered by the CB in national digital strategies		**X**
2.3. There is little use of online methods of capacity development across the continent at all levels.	2.3.1. Widely advertise the availability of a self-paced online introductory training course on IG developed under the PRIDA project	**X**	
	2.3.2. Discuss with CB organisers the possibility of using the self-paced online introductory training course on IG as a preparatory step for participants of IG CB initiatives	**X**	
2.4. There is a need to enhance expertise on how to organise and conduct online meetings and conferences among CB organisers. This has become urgent in the context of the COVID-19 pandemic.	2.4.1. Facilitate access to training on how to make use of online mechanisms encompassing knowledge about technical aspects and methodological ways to keep online participants active and involved	**X**	
3. Mechanisms for communication and collaboration			
3.1. There is no one-stop-shop that provides information on the resources and experts available for IG CB on the continental, regional, and national levels.	3.1.1. Commissioning the creation of an online platform/database	**X**	
	3.1.2. Convening a group of curators that will start populating the platform	**X**	
	3.1.3. Issuing a call for contributions from African stakeholders to add information and resources to the platform. Curators should oversee and validate the information added by stakeholders		**X**
3.2. There is a lack of formal mechanisms for mutual support, and for the exchange of experience and good practices among IG CB organisers.	3.2.1. Creating a network of IG CB organisers (see item 1.1.4)	**X**	
	3.2.2. Holding a foundational meeting of the network (which, for practical reasons, could be held back-to-back with a continental event, such as AIS)	**X**	
	3.2.3. Using the launch of the centralised database (see item 3.1.1) as a concrete way to galvanise actors around the network and keep them mobilised by a concrete project		**X**
	3.2.4. The network should reach out to CB organisers who do not necessarily see themselves as part of the IG ecosystem (e.g. university departments)	**X**	
3.3. A significant number of websites of CB initiatives either do not work, or contain broken links.	3.3.1. Issuing a call for 'requests for assistance for website improvement'	**X**	
	3.3.2. Selecting the initiatives that will be supported	**X**	
	3.3.3. Raising awareness about the benefits of having a website presence and shortcomings of relying solely on social media profiles for communication	**X**	

4. Mechanisms for inclusion in continental and global IG discussions			
4.1. There is a need for enhancing opportunities for policy immersion.	4.1.1. Identifying good practices in terms of policy immersion.	**X**	
	4.1.2. Identifying forums in which participants could take part as a means of policy immersion	**X**	
	4.1.3. Introducing assessments to evaluate the efficacy of policy immersion		**X**
4.2. CB needs to be complemented by leadership development and mentoring.	4.2.1. Designing and launching a leadership development program, which may encompass several elements: CB, policy immersion, and mentoring	**X**	
4.3. The organisers of CB initiatives should be encouraged to keep in contact with their alumni, fostering the creation of networks.	4.3.2. Sharing information on best practices adopted by IG CB organisers (e.g. creation of WhatsApp groups, and alumni lists and gatherings)	**X**	
	4.3.3. Exploring new ideas, such as mentorship programs, in which more experienced alumni provide coaching and support to less experienced ones	**X**	
4.4. Formal obstacles to participation in global IG discussions and information asymmetry.	4.4.1. Discussing the possibility of creating one help desk per AU REC	**X**	
	4.4.2. Defining points of contact for each help desk that would receive and distribute requests for assistance		**X**
	4.4.3. Appointing a group of supporters that will reply to requests presented to the help desk according to their area of expertise		**X**
5. Substantive issues			
5.1. There is a need to distinguish initiatives focused on providing basic building-blocks of knowledge on IG from those that aim to provide in-depth expertise, and to promote both types of initiatives.	5.1.1. Working with CB providers to better clarify the differences and goals of entry-level and advanced IG CB	**X**	
	5.1.2. Defining a basic curriculum for entry-level IG CB, which should be offered in a harmonised way across the continent at all levels, taking into account adjustments necessary to encompass regional and national specificities		**X**
	5.1.3. See actions under 2.2.	**X**	
5.2. Research on IG policy is insufficient in universities, negatively impacting the production of evidence-based information for in-depth CB and policymaking.	5.2.1. Ensuring that financial support provided for research includes evidence-based and multidisciplinary academic research on IG as a priority		**X**
	5.2.2. Devising strategies to leverage the research conducted by academic networks into university		**X**
	5.2.3. Strengthening the links between Academic networks and CB initiatives	**X**	
	5.2.4. Creating centers of excellence on IG policy and regulatory issues (taking existing technology-centered ACEs as an example)		**X**
	5.2.5. Focusing on emerging regulatory issues that would support Africa's digital transformation strategy, such as data governance	**X**	
5.3. The content of many CB initiatives is not adequate to the African context.	5.3.1. Encouraging the organisers of CB initiatives to increase the content produced and delivered by African stakeholders	**X**	
	5.3.2. Ensuring significant involvement of members of the African community in content design and course delivery in CB supported by the AU	**X**	

	5.3.3 Encouraging CB organisers to consult the database on pan-African resources (see item 3.1) to identify African experts that could provide support to content development and delivery		**X**
5.4. The content of CB initiatives should put concrete issues faced by African stakeholders at the center.	5.4.1. Sensitising CB organisers to the importance of concrete examples and problem-solving as a methodological approach to tackling IG policy issues	**X**	
	5.4.2. Ensuring that concrete cases and problem-solving are prominent in content design and course delivery in CB supported by the AU		**X**
	5.4.3. Adopting this methodological approach in AU initiatives dedicated to training the trainers. Instruct trainers to adopt a similar approach when providing CB on IG to communities	**X**	
	5.4.4. When planning their training, trainers should investigate what specific issues are relevant to the communities they intend to address		**X**
5.5. IG areas which are highly dynamic and advance at a fast pace need to update training according to the most recent developments.	5.5.1. Work with IG CB organisers to identify the topics of high interest which advance in a fast pace in the African context	**X**	
	5.5.2. Take advantage of the knowledge acquired on how to plan and organise online meetings (see point 2.4) to offer frequent updates to the alumni		**X**
6. Language, certification and evaluation			
6.1. Language barriers are a key obstacle to promoting wider inclusion of African actors in IG CB opportunities.	6.1.1. Mobilising experts on the national level to record videos that would teach key concepts of an entry-level IG course in local languages. The videos could be used together with the course materials of a basic entry-level course on IG	**X**	
	6.1.2. Gradual translation of the self-paced online introductory training course on IG developed under PRIDA (see item 2.3.1) into local languages	**X**	**X**
	6.1.3. Exploring the feasibility of using AI to gradually introduce automation in the process of translation		**X**
6.2. Professionals who take advanced IG courses would benefit from certification.	6.2.1, Distinguishing initiatives focused on providing basic building blocks of knowledge on IG from those that provide in-depth expertise, and to promote both types of initiatives (see activities under item 5.1)	**X**	
	6.2.2. Starting a discussion with IG CB organisers on steps that need to be put in place to provide certification (e.g. evaluation)	**X**	
6.3. There is a need for market-oriented and professional certification as well as academic certification across Africa (professional certification, Masters, PhD).	6.3.1. Identifying good practices and gaps in certification	**X**	
	6.3.2. Focusing on certification provided by universities	**X**	
	6.3.3. Extrapolating lessons learned from certification within the academic sector to advanced CB provided by other stakeholders.		**X**
6.4. Provide a framework for periodic evaluations of the impact of the CB initiatives.	6.4.1. Developing a framework that can be used as a guide and adapted by IG CB organisers to evaluate the impact of CB initiatives		**X**
6.5. Some of the steps recommended in the Action Plan require support from national governments.	6.5.1.Presenting the key goals of the Action Plan to governments	**X**	

References

African Capacity Building Foundation (2016) African Union Agenda 2063 Capacity Development Plan Framework – Buttressing Implementation of the First 10-Year Plan – 'The Africa We Want'. Available at https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/12839/CD%20Plan%20English.pdf?sequence=1&isAllowed=y [accessed 21 December 2020]

African Union (2020a) The Digital TransformationStrategy for Africa (2020-2030). Available at https://au.int/en/documents/20200518/digital-transformation-strategy-africa-2020-2030 [accessed 21 December 2020]

African Union (2020b) African Continental Qualifications Framework (ACQF) factsheet. Available at https://www.etf.europa.eu/sites/default/files/2020-07/acqf_infographic_en_2020_final.pdf [accessed 21 December 2020]

African Union Commission (2015). Agenda 2063: The Africa We Want. Available at: https://au.int/sites/default/files/documents/36204-doc-agenda2063_popular_version_en.pdf [accessed 21 December 2020]

APC (no date) The African School on Internet Governance: Tracer Study of Four Rounds of AfriSIG (2013-2016). Available at: https://www.apc.org/sites/default/files/AfrisigTracerStudy2013-2016_0.pdf [accessed 21 December 2020]

Chetty P (2019) *Identification of the Challenges to African Involvement in Internet Policy And Governance and Identification of Challenges for Lack of Contribution in the Technical Aspects of Internet Governance. Research developed under PRIDA. DCI-PNAF/2018/399-388*

Calandro et al. (2016) Mapping Multistakeholderism in Internet Governance: Implications for Africa. Evidence for ICT Policy Action Discussion Paper. Available at: https://www.academia.edu/40658510/Evidence_for_ICT_Policy_Action_Mapping_Multistakeholderism_in_Internet_Governance_Implications_for_Africa [accessed 21 December 2020]

Jumia (2019) Jumia Supports Women Empowerment in Nigeria through Its Women-focused Program. Available at: https://group.jumia.com/jumia-supports-women-empowerment-in-nigeria-through-its-women-focused-program [accessed 21 December 2020]

Keijzer N and Janus H (2014) Linking Results-Based Aid and Capacity Development Support: Conceptual and Practical Challenges. Deutsches Institut für Entwicklungspolitik
Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2500071 [accessed 21 December 2020]

Microsoft (2019) Furthering our investment in Africa: Microsoft opens first Africa Development Centre in Kenya and Nigeria. Available at https://news.microsoft.com/en-xm/features/furthering-our-investment-in-africa-microsoft-opens-first-africa-development-centre-in-kenya-and-nigeria/ [accessed 21 December 2020]

NEPAD (2012) Africa's Capacity Development Strategic Framework. Available at https://www.nepad.org/publication/africas-capacity-development-strategic-framework [accessed 21 December 2020]

SDC (2006) Capacity Development in SDC. Available at: https://www.dfae.admin.ch/dam/deza/en/documents/die-deza/strategie/202114-capacity-development-sdc_EN.pdf [accessed 21 December 2020]

UNDP (2009) Capacity Development: a UNDP Primer. Available at: https://www.undp.org/content/undp/en/home/librarypage/capacity-building/capacity-development-a-undp-primer.html [accessed 21 December 2020]

UN Secretary-General's High-level Panel on Digital Cooperation (2019) Report The Age of Digital Interdependence. Available at: https://digitalcooperation.org/wp-content/uploads/2019/06/DigitalCooperation-report-for-web.pdf [accessed 21 December 2020]