



## **5th CABO VERDE INTERNET GOVERNANCE FORUM**

**“Building Digital Governance Together”**

### **Report**





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## 1. Introduction

The 5th edition of the Cabo Verde Internet Governance Forum (IGF Cabo Verde 2025) took place in the city of Mindelo, on the island of São Vicente, under the theme **“Building Digital Governance Together.”** The event brought together representatives from government, regulatory authorities, the private sector, academia, civil society and the technical community, providing a multistakeholder space for dialogue on the main challenges and opportunities of digital transformation in the country.

The Forum established itself as a strategic instrument for collective reflection, the sharing of national and international experiences, and the formulation of recommendations aimed at promoting inclusive, sustainable, secure and human rights-based internet governance.

## 2. Opening Lecture: Global Digital Compact and WSIS+20

The opening session of the Forum was dedicated to a lecture focused on two key milestones of global digital governance: the **Global Digital Compact (GDC)** and the **WSIS+20 review process (World Summit on the Information Society)**.

The session was moderated by the Rector of the Universidade Técnica do Atlântico, **Professor João do Monte Duarte**, and featured a remote intervention by **Dr. Vinícius Santos**, Advisor to the Brazilian Internet Steering Committee (CGI.br).

In his introductory remarks, the moderator highlighted the speaker’s academic and professional background, as well as his active participation in international forums on information technologies and internet governance. He framed the topic within the strategic priorities of the United Nations, underlining its relevance for inclusive and sustainable digital transformation. The presentation was followed by an interactive question-and-answer session with participants.

In his presentation, Vinícius Santos outlined the evolution of the internet and the formation of the global digital ecosystem, emphasizing the importance of the physical infrastructure of the network—particularly submarine cables—as well as the governance models that regulate its operation worldwide. He explained the different understandings of the concept of internet governance, ranging from its





technical dimension—associated with the management of critical resources such as domains and protocols—to its social, economic and political dimensions, based on a multistakeholder approach.

The speaker addressed key historical milestones of the WSIS process, highlighting the Tunis Agenda of 2005, which formalized the concept of internet governance and established the Internet Governance Forum (IGF). He also referred to the origin and evolution of the Global Digital Compact, launched in 2021 under the United Nations Common Agenda and culminating in the Summit of the Future in 2024.

Analytical models of the digital ecosystem proposed by organizations such as ICANN, the Internet Society (ISOC) and the DiploFoundation were presented, addressing concepts such as interoperability, modular structure and the need to balance innovation, fundamental rights and regulation. At the national level, the Brazilian experience of CGI.br was shared, highlighting its multistakeholder structure, guiding principles and the role of the Brazilian Internet Forum as a space for civic participation.

Throughout the lecture, the importance of local appropriation of global models was emphasized, valuing national data production, South–South cooperation, and the integration of sustainability and inclusion principles from the design stage of digital policies and projects. Digital transformation, it was argued, should be guided by ethical values and the active participation of all sectors of society.

During the debate with the audience, questions were raised regarding the challenges of digital governance in the era of artificial intelligence and the Internet of Things, the specific limitations faced by island countries, the risks associated with technologies such as blockchain and decentralized autonomous organizations (DAOs), as well as the fundamental role of law in mediating between technology and society. The importance of data-driven public policies and stronger regulation of major digital platforms was also discussed.

Vinícius Santos' intervention was widely recognized for its clarity and depth, establishing the conceptual and practical foundations for the debates developed throughout the Forum.





### 3. Panel 1 – Digital Security and Resilience in Cabo Verde

The first panel of the Forum addressed the theme “**Digital Security and Resilience in Cabo Verde,**” bringing together **Valdemar Monteiro** (CV Telecom) and **Luís Correia** (NOSi), under the moderation of **Erick Sotelo** (ARME). The session focused on challenges and strategies related to the protection of critical infrastructure and the continuity of digital services.

In his opening remarks, the moderator highlighted the complementarity between security and resilience, emphasizing that system protection must go hand in hand with ensuring continuous operation. He also stressed the strategic role of the institutions represented in sustaining the country’s essential services.

Valdemar Monteiro presented the measures adopted by CV Telecom to ensure network resilience, including the use of redundant topologies and investment in specialized technical teams. He noted that, despite the high associated costs, the creation of communication rings and duplicated infrastructure is essential to guarantee service continuity in the event of failures or disasters, such as the incident that occurred at the Praia data center. He also highlighted coordination with ARME and the importance of technical information sharing among entities.

Luís Correia shared the experience of NOSi as the manager of the State’s main digital systems. He emphasized that digital security begins with people, is supported by robust infrastructure, and depends on well-defined procedures. He referred to investments in redundant connectivity, advanced technologies, offline backup systems and the future implementation of a disaster recovery system in São Vicente, which will enable a faster response in crisis situations. He recalled the ransomware attack of 2020 and explained how that experience led to a significant strengthening of the institution’s security architecture.

During the audience discussion, Professor Emanuel Vieira (UniMindelo) highlighted the need to train qualified cybersecurity professionals, announcing the creation of a master’s degree program in the field. Celestino Barros (Uni-CV) advocated for the partial sharing of incident reports as a way to





strengthen collective resilience, a proposal positively received by the panelists, albeit with reservations regarding information sensitivity.

The speakers emphasized the growing demand for specialists in systems, networks and security, valuing specific technical certifications. The panel concluded with a note of awareness: institutions and citizens alike are potential targets, and digital security also depends on fostering a culture of shared responsibility.

#### **4. Panel 2 – Online Protection for Children and Vulnerable Groups**

The second panel of the Forum addressed “**Online Protection for Children and Vulnerable Groups,**” moderated by psychologist **Denise Centeio**. The panel included **Iria Monteiro** (ICCA), **Celeste da Paz** (UniMindelo), **Érico Fortes** (Uni-CV and Casa das Ciências) and **Cláudia Gonçalves** (psychologist and researcher), promoting an in-depth reflection on risks associated with the digital environment, with a focus on digital literacy, education and mental health.

Cláudia Gonçalves opened the discussion by presenting data on the intensive use of the internet by children and young people and the associated negative impacts, particularly the worsening of mental health issues. She noted that since around 2010, with the mass adoption of smartphones and social media, there has been a significant increase in anxiety, depression and low self-esteem, especially among adolescents. Factors such as social validation pressure, excessive exposure and lack of adequate filters were identified as aggravating elements.

Celeste da Paz emphasized that vulnerable groups in the digital context are not limited to children, also including older persons, people with disabilities and users with low levels of digital literacy. She defended the promotion of digital citizenship and the empowerment of parents and caregivers as fundamental tools for protecting children online.

Iria Monteiro presented concrete cases followed by ICCA, related to phenomena such as sexting, cyberbullying and grooming. She highlighted the difficulty of early detection by families and identified warning signs such as social isolation, irritability and declining academic performance. She advocated





for a child- and family-centered approach, based on balanced technology use and open, continuous communication.

Érico Fortes warned about the widespread lack of awareness of basic digital security practices among children, young people and adults. He proposed the use of accessible technological tools such as Google Family Link and NetNanny, as well as gamified solutions to promote digital education from an early age. Cláudia Gonçalves added the Forest application as an example of a tool that encourages healthier and more disciplined digital habits.

Digital literacy was identified as a central element for online protection. Celeste da Paz defended an integrated approach focused on inclusion and active citizenship, while Iria Monteiro called for strengthening legal and technological mechanisms, including more effective reporting platforms and parental support tools.

Specific vulnerabilities were also discussed. Cláudia Gonçalves highlighted the differentiated impact of social media by gender and among children with autism spectrum disorders, while Érico Fortes reinforced the importance of interactive educational tools, such as digital games with preventive messages.

During the audience discussion, Pauleth Santos (ARME) expressed concern about the increase in suicide cases among young people. Denise Centeio warned about the Werther effect, which refers to the contagion of suicidal behaviors through media and digital exposure, and called for emotional vigilance, family dialogue and timely psychological support.

The panel concluded with a call for collective action, emphasizing that protecting children and vulnerable groups online requires the active involvement of families, educators, health professionals, government, the private sector and academia. More than restricting access, it is essential to educate, include and empower to ensure a safe, conscious and responsible digital presence.





## 5. Panel 3 – Responsible and Sustainable Innovation for the Digital Future

The third panel of the Forum focused on “**Responsible and Sustainable Innovation for the Digital Future**” and was moderated by **Emanuel Vieira**, lecturer at UniMindelo. Speakers included researcher **Estanislau Lima**, **Carlos Monteiro**, President of **TechParkCV**, and software engineer **Nilson Nascimento**, founder of the company **Chuva**. The panel promoted an in-depth debate on the challenges and opportunities of technological innovation in Cabo Verde, with emphasis on environmental, economic and social dimensions.

Estanislau Lima opened the discussion by reflecting on the environmental impact of digital infrastructures, noting that although Cabo Verde is still at an early stage of technological development, this represents an opportunity to build a sustainable model from its inception. He advocated the use of renewable energy sources such as solar and wind, as well as the implementation of recycling strategies and environmental education. He emphasized that digital progress should be guided by social responsibility and collective awareness.

He also addressed the potential of artificial intelligence in education as a tool for inclusion, particularly in remote areas. Sharing his personal experience as a resident of Ribeira Alta in Santo Antão, he argued that AI can contribute to the democratization of education, provided it is accompanied by adequate investments in training and infrastructure. He warned, however, that a major challenge lies in the lack of planning and insufficient preparation of teachers to use these technologies effectively.

Carlos Monteiro highlighted legislative challenges related to regulating emerging technologies without stifling creativity and innovation. He stressed the need for continuous training of legislators and regulators to keep pace with rapid technological evolution. He pointed to the inauguration of the TechParkCV hub in São Vicente as an important milestone for boosting the digital economy in the northern islands, noting that Cabo Verde enjoys near-universal electricity coverage, which facilitates digital expansion.







He also referred to the role of new actors in strengthening connectivity, such as Starlink, and provided examples of young Cape Verdeans exporting talent and knowledge from TechParkCV. He argued that the digital sector should be viewed as a strategic economic anchor, alongside tourism.

Nilson Nascimento brought a practical and critical perspective, arguing that Cabo Verde should prioritize the development of its own technological solutions, adapted to local resources and context, rather than indiscriminately importing external models. He emphasized that digital innovation can thrive even with limited resources, provided there is internet access, adequate training and entrepreneurial drive. He defended technological autonomy and a focus on simple, useful solutions tailored to everyday needs.

He also addressed technological efficiency, highlighting solutions developed by Chuva using open APIs and serverless architectures. He criticized bureaucracy and legal barriers that hinder the development of local solutions and called for a more favorable regulatory environment for innovation, based on accessible, collaborative and sustainable technologies.

During the question-and-answer session, Carlos Monteiro clarified that the technology park buildings—excluding data centers—will operate entirely on solar energy, with the process of obtaining an international green certification underway. He also indicated an estimate of up to 1,500 direct jobs to be created across the Praia and São Vicente hubs.

Dalila Silva, from Chuva, highlighted the need to strengthen the internal innovation ecosystem and questioned dependence on foreign companies for managing sensitive data. Carlos Monteiro defended market freedom as a driver of development, while underscoring the State's regulatory role in data protection. Estanislau Lima complemented the discussion by criticizing limited democratization of public data and advocating open access as a catalyst for science and innovation.

Lecturer Estefânio Silva emphasized the need for public policies that encourage young entrepreneurs to develop local digital solutions, pointing out existing technical and legal obstacles. Carlos Monteiro acknowledged these challenges but reaffirmed that exporting digital solutions represents a real opportunity for national economic growth.





Student Ricardo Oliveira concluded the debate with a reflection on public resistance to adopting new technologies. Nilson Nascimento responded that the best way to overcome such resistance is by creating accessible and useful solutions, reinforcing the role of youth as agents of technological diffusion. He also criticized the costs and requirements imposed on digital entrepreneurs, calling for a more supportive environment for local innovation.

The panel was closed by moderator Emanuel Vieira, who thanked the speakers and the audience, recognizing the depth and relevance of the reflections shared.

## **6. Panel 4 – Access and Inclusion of Women in ICTs, Digital Rights and Democracy in the Digital Era**

The fourth and final panel of IGF Cabo Verde 2025 addressed “**Access and Inclusion of Women in ICTs, Digital Rights and Democracy in the Digital Era**” and was moderated by **João do Monte Duarte**, Rector of the Universidade Técnica do Atlântico. The session featured **Milton Cabral** (Cabo Verde Digital), **Nuno Andrade Ferreira** (journalist and researcher) and **Vanine Spencer** (Women in Tech representative in São Vicente), focusing on digital inclusion challenges, with particular emphasis on gender equality, digital literacy and democratic consolidation.

Milton Cabral began by emphasizing that digital inclusion goes beyond physical access to the internet, requiring the development of critical and creative capacities to use technology effectively. He defended a balanced approach between innovation, digital sovereignty and regulation, warning of the risks of excessive dependence on foreign platforms. He also highlighted the role of the Cabo Verde Digital program in promoting training, capacity building and the development of local technological solutions.

Nuno Andrade Ferreira presented a critical reading of digital transformation, structured in three phases: an initial phase marked by technological enthusiasm; a second phase characterized by confrontation with phenomena such as disinformation and hate speech; and a third, current phase focused on seeking sustainable responses. He argued that critical education and media literacy, with long-term investments, constitute the only structural response to disinformation. He also warned of the practical



fragility of digital rights and the risks associated with the privatization of the digital public sphere, in the absence of an effective global regulatory framework.

Vanine Spencer presented the initiatives of Women in Tech Cabo Verde, including the *Kids Lab* and *Mudjeres na Tech* projects, which aim to inspire and empower girls and women in technology. She addressed the imbalance between the strong performance of girls in secondary education and the low representation of women in ICT higher education programs, advocating for the dismantling of stereotypes from an early age and the promotion of female role models in technology.

During the audience discussion, questions were raised regarding institutional preparedness to support young entrepreneurs and the low presence of women in technical courses. Estefânio Silva questioned the effectiveness of existing mechanisms, to which Milton Cabral and Vanine Spencer responded by emphasizing the importance of behavioral literacy and a culture of representation. Professor Celeste da Paz noted that although girls constitute the majority in secondary education, few pursue technological fields in higher education, to which Vanine Spencer responded by highlighting outreach work with younger age groups, including in peripheral areas.

Leila Barros, from EPEC, shared her personal experience as one of the few women in computer engineering in Cabo Verde, lamenting the limited progress in the sector over the years. She advocated for concrete public policies, including incentives inspired by the Parity Law. Vanine Spencer agreed, stressing the need to ensure visibility for women in leadership positions, while Milton Cabral highlighted positive examples, such as NOSi, where women lead critical technological projects, reinforcing the importance of mentorship as a tool for cultural change.

The Chair of the Board of Directors of ARME intervened to emphasize that the inclusion of women in ICTs is not only a matter of equality, but also a strategic necessity for the country's economic development, encouraging women's active participation in national digital transformation.

Jurist Francisco Ferreira added a constitutional perspective to the debate, arguing that in a data-driven society, the exercise of power must be regulated in accordance with the principles of human dignity and a balanced relationship between fundamental freedoms and effective legal regulation.





In his final intervention, Nuno Andrade Ferreira was challenged to reflect on the consolidation of digital democracy in Cabo Verde. He considered that, despite progress achieved, digital rights remain fragile in practice, arguing that combating disinformation must be done cautiously so as not to undermine freedom of expression. He also highlighted Cabo Verde's advantage in learning from the mistakes of other countries by anticipating challenges and adopting preventive solutions.

## 7. Closing Address

The closing of the 5th edition of the Cabo Verde Internet Governance Forum was delivered by the **ARME Administrator, João Tomar**, who expressed a strong sense of accomplishment. He highlighted the honor of holding the event in the city of Mindelo under the theme “**Building Digital Governance Together,**” and thanked the Municipality of São Vicente for its promptness and enthusiasm in joining the initiative as a key partner.

He also acknowledged the contribution of the University of Mindelo, represented by its Rector, Professor Albertino Graça, for the hospitality and academic collaboration demonstrated throughout the organization of the Forum.

João Tomar praised the role of the speakers, whose contributions enriched the debates over the two days of the event, highlighting in particular the panel dedicated to online protection of children and vulnerable groups, composed exclusively of women, and underlining the sensitivity, depth and quality with which a frequently neglected topic was addressed. He nevertheless emphasized the overall excellence and relevance of all panels in the current context of digital transformation.

He thanked the media for their coverage and for amplifying the Forum's messages, and addressed a special greeting to the young students present, encouraging their active and continuous participation in building a more inclusive digital ecosystem. The National Police were also acknowledged, particularly for the strong presence of female officers, symbolizing the progress of Cape Verdean society. Special thanks were extended to the ARME team, the University of Mindelo and Professor Risandra Soares for their dedication and professionalism.





In his address, João Tomar reflected on the transformative role of the internet in people's lives, societies and economies, asserting that no one should be left behind in the digital transformation process. He emphasized that building a more just, inclusive and sustainable digital future must be a collective commitment involving regulators, academia, civil society and the private sector.

He also highlighted ARME's role in promoting digital inclusion and engaging with communities, citing strategic advances such as the installation of submarine cables and the creation of technology parks in Praia and Mindelo. He further noted the recent achievement of WebTrust compliance certification by ARME, signaling its commitment to a secure, reliable and forward-looking digital ecosystem.

The ambition for the ICT sector to represent up to 25% of the national Gross Domestic Product in the future was reiterated—an ambitious but achievable goal, supported by knowledge, technical capacity and collective will.

The choice of Mindelo as the host city for this edition was considered appropriate, demonstrating its academic, human and logistical potential to establish itself as a regional technological hub. The closing concluded with the reaffirmation that the Forum actively contributes to building a more resilient, inclusive and innovative digital future for Cabo Verde.

## **8. Final Considerations and Recommendations**

IGF Cabo Verde 2025 highlighted the growing maturity of the national digital ecosystem and the importance of internet governance grounded in principles of inclusion, sustainability, security, human rights and multistakeholder cooperation.

From the debates held, the following key recommendations emerged:

- Strengthen digital and media literacy at all levels of education;
- Invest continuously in cybersecurity and the resilience of critical infrastructures;
- Promote inclusive public policies, with particular focus on women, youth and vulnerable groups;
- Encourage local innovation, technological autonomy and open access to public data;





- Consolidate IGF Cabo Verde as a permanent space for dialogue, monitoring and evaluation of national digital policies.