

## Affordable & Meaningful Connectivity

Highlighting the need, articulating the goals and exploring policy, regulatory and financing approaches to achieving them in the Caribbean Context.

August 25<sup>th</sup> 2021



### Agenda

- A4AI team introductions
- Who we are, what we do advocacy research engagements
- Overview of key proposals
  - Latest Affordability report
  - New "1,2,5" Affordability targets proposed
  - Meaningful Connectivity intro
  - Measuring MC and Device affordability (Ana)
- WRO and gender mainstreaming in digital policies (Muthoni)
- Universal Service Funds 2021 research findings preview (Nathalia)
- Rural Broadband Policy Framework
- Open discussion







### Who we are





We are the world's broadest technology sector alliance working to achieving universal affordable and meaningful connectivity transforming policy and regulatory frameworks.

# Public-private collaboration in action with 100+ member organisations





Society All have endorsed one set of best practices

- grounded on the principles of internet freedom and the fundamental rights of expression, assembly, and association online -

for making affordable broadband internet a reality.

## Initial principles and good practices

- ✓ Internet freedom and the fundamental rights of expression, assembly, and association
- Access to the Internet is a significant enabler of human development
- ✓ Open and competitive markets are the most effective way to reduce delivery costs, affordable pricing, and innovations
- •Nurture healthy market competition
- •Regulator established as an effective and independent expert agency

- •Promote evidence-based policymaking and regulatory processes with meaningful public participation
- •Streamlined processes for infrastructure deployment and sharing
- •Effective spectrum management, innovative use and sharing
- •No luxury taxation or excessive customs
- •Effective Universal Service Fund (USF) administration
- •Systematize data collection of key indicators to **measure effectiveness**

### A4AI is hosted

WORLD WIDE WEB Foundation

Founded by web inventor Sir Tim Berners-Lee to advance the open web as a public good and a basic right for everyone

Working to deliver digital equality - a world where everyone has the same rights and opportunities online









#### How We Work

Driven by the belief that affordability should not be a barrier to internet access, we use a combination of advocacy, research, and in-country engagement to develop the policies needed to reduce the cost to connect and enable everyone, everywhere to afford to come online.

	Research	Country Engagement	Advocacy
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## **Policy Advocacy**





Affordable Internet – Journey from 1 to 5 Find out more  $\rightarrow$ 

#### Meaningful Connectivity Read more →

Rural Broadband Policy Framework Read more → Covid 19: Internet Access & Affordability Policy Brief →

### **Recommendations to tackle the challenges**



Encouraging the adoption of ambitious affordability and meaningful connectivity targets to drive down prices & increase access

Working with national coalitions & stakeholders to develop policies needed to improve affordable meaningful connectivity Improving collection of gender- and povertydisaggregated data to track progress

> Advocating for expanded public access initiatives

Designing gender-responsive policy

## **Research and publications**







Sustainable Access Report



FROM LUXURY TO LIFELINE Reducing the cost of mobile devices to reach universal internet access

From luxury to lifeline: Reducing the cost of mobile devices to reach universal internet access



Improving Mobile Broadband Quality of Service in Low- and Middle-Income Countries

## Research and publications (2)





Who wins? Who loses? Understanding women's experiences of social media taxation in East and Southern Africa



Universal Service and Access Funds: An Untapped Resource to Close the Gender Digital Divide



Covid-19 Policy Brief: Internet Access and Affordability



Closing the Investment Gap: How Multilateral Development Banks Can Contribute to Digital Inclusion



The impact of taxation on internet affordability: the case of Benin



Mobile Data Plans in Kenya: Quantifying Women's Access to the Digital World





#### ICT Price Baskets 2020

#### 2020 Price Baskets



#### >> Download the full datasets in csv format or xlsx format

jamaica	100MB	500MB	1GB	2GB	5GB	10GB
Countries •	GNI per capita 🌒	GNI per capita	GNI per capita 🔹	GNI per capita •	GNI per capita 🔹	GNI per capita 🔹
🐼 Jamaica	2.85%	2.85%	2.85%	2.85%	2.85%	5.71%





# In each member country, we form a national multi-stakeholder coalition



to IDENTIFY KEY BARRIERS TO AFFORDABLE ACCESS & DEVISE TAILORED POLICY SOLUTIONS

### **Direct support & action**





## Women's Rights Online







## IAWRT-Kenya

International Association of Women in Radio and Television





GENDER HESEARCH CENTER





DERECHOSDIGITALES Derechos Humanos y Tecnología en América Latina



### INSTITUTO DE INVESTIGAÇÃO

- EN CIÊNCIA INDVAÇÃO E TECNOLOGIAS DE INFORMACÃO E COMUNICAÇÃO
- SCIENCE INNOVATION AND INFORMATION AND COMMUNICATION TECHNOLOGY RESEARCH INSTITUTE















#### WORLD WIDE WEB OUNDATION

### We can close the digital gender gap if we R.E.A.C.T







Content



Targets

@webfoundation

#WomensRightsOnline

Access

WORLD WIDE WEB FOUNDATION

### **Connecting the Next Billion:**

Why we must **REACT** to the Growing Digital Gender Gap



## **Connecting humanity**

#### **Connecting humanity**

Assessing investment needs of connecting humanity to the Internet by 2030 August 2020



\$450

\$400

\$350



ICT Skills & Content

~\$40bn

Remote Area

Coverage\*\*

Policv &

Regulation

~\$6bn

An estimated **USD\$428 billion** is needed to connect all of humanity to the Internet by 2030. In LAC, this amount corresponds to **USD\$47 billion**.

### Infrastructure Alone is not Sufficient





#### 4G Coverage of the Population - 2019

#### **Beyond infrastructure:**

Complementary initiatives are needed to connect people already covered by broadband networks. These include programs to increase and support **device affordability**, **affordability of data and services**, **digital skills programs and content**, with a special focus on **closing the digital gender gap**.

USA and Canada: 96% coverage/ 17% unconnected LAC: 79% coverage / 55% unconnected



### AR 2020



A global coalition working to make broadband affordable for all

ALLIANCE FOR

### AFFORDABILITY REPORT 2020



### AFFORDABILITY REPORT 2020

Measuring policy towards affordable internet

Why plan for broadband?

**11** out of **21** countries surveyed have affordable internet prices

Costa Rica Argentina Brazil Dominican Rep. Mexico Colombia Cuba Peru Paraguay Bolivia Ecuador

ADI RA (AMER	NK RICAS)	GLOBAL ADI RANK	COUNTRY	ACCESS SCORE	INFRASTRUCTURE SCORE	ADI SCORE (OUT OF 100
1	•	2	Colombia	86.9	75.1	85.3
z		3	Costa Rica	94.9	66.8	85.1
3	4.2	4	Argentina	85.5	67.6	80.6
4	▼1	5	Peru	79.8	73.2	80.5
5	▼1	7	Mexico	74.5	71.0	76.6
6	•	9	Dominican Republic	76.9	59.0	71.5
7	<b>A</b> 1	12	Brazil	71.6	59.2	68.8
8	▼1	16	Ecuador	68.9	61.0	68.3
9	•	17	Jamaica	71.3	57.0	67.5
10	A.1	40	Honduras	50.0	51.7	53.5
11	•1	43	Bolivia	48.2	49.8	51.5
12	•	53	El Salvador	32.2	48.2	42.3
13	•	56	Venezuela	41.4	35.3	40.6
14	•	61	Guatemala	34.7	34.1	36.2
15	٠	63	Nicaragua	41.4	26.5	35.7
16		66	Belize	17.2	29.6	24.6
17	•		Haiti	16.9	20.9	19.9



MOBILE BROADBAND PENETRATION Source 444 Prov. GIBNA 2028



ONLINE POPULATION Bauter (712, 2019



### Affordability by income quintiles





Source: A4AI, 2019



#### Americas Top Ten, 2020 Affordability Drivers Index

1	Colombia	(0)
2	Costa Rica	(0)
3	Argentina	(+3)
4	Peru	(-1)
5	Mexico	(-2)
6	Dominican Republic	(+1)
7	Brazil	(0)
8	Ecuador	(-5)
9	Jamaica	(0)
10	Honduras	(-4)





# Lack of Competition as a Barrier to Affordability



The Herfindahl-Hirschman Index (HHI) measures market concentration.

HHI does not address all the complexities related to competition dynamics within countries, but it is a solid measure of market competitiveness.

Increasing competition is key to drive prices down, but it needs to be accompanied by additional policy and regulatory measures that increase incentives, market certainly, and oversight.

Source: A4AI & GSMA, 2018



#### BROADBAND PLANS MAKE THE INTERNET AFFORDABLE

CREATE







## » Policy Recommendations

A plan must have inputs from a diverse and representative set of players across the private sector, public sector, and civil society before publication.

A plan must have targets that address a country's most critical gaps, have a clear measurement and a time limit, and at least one target for network coverage and data affordability each.



A plan must come with **funding commitments** and a stated plan for transparent **assessment and review** that occurs at least every other year.





## The affordability journey 1-2-5

## **The Journey of 1-2-5** Recasting our vision for affordable and meaningful connectivity for everyone

In the next five years, we want to see a world where 5GB of broadband costs no more than 2% of the average monthly income in a low- or middle-income country.







A4AI's Price Benchmarking & The '1-2-5' Journey —				
1	Continue to focus on the affordability of <b>1GB</b> of mobile broadband and expand our advocacy around the relevance of this target for all segments of society — across different income quintiles and accounting for the gender wage gap.			
2	Through our partnership with the International Telecommunications Union, support the identification of <b>2GB</b> of mobile broadband as the new point of global affordability measurement and international comparison (e.g., "2 for 2").			
3	Encourage policymakers to think boldly and set visions for the long-term over the next five years, with national-level targets around the affordability of <b>5GB</b> – both mobile and fixed.			



## Meaningful Connectivity (MC)







4G mobile connection

Smartphone ownership

Unlimited broadband access point



internet use



#### Why do we need a new definition?



UNDERWHELMING DEFINITION	<i>Current UN definition:</i> internet access from any location/device within the last three months.
INSUFFICIENT BINARY	<i>Civil society stopgaps:</i> <b>Increasing number of reports and</b> statements referring to 'meaningful access' as something more. No precise definition.
ILLUSION OF COVERAGE	<i>Digital divide:</i> Without a better definition and better measures, risk perpetuating digital inequalities.

		Has to be		
RELEVANT	MEASURABLE	EVIDENCE -BASED	GENDER -RESPONSIVE	OPEN INTERNET ACCESS



### **Dimensions of meaningful connectivity**

SUFFICIENT SPEED (10 proxy 4G MOBILE CONNECTION	A SMART DEVICE SMARTPHONE ACCESS
SUFFICIENT DATA UNLIMITED CONNECTION AT HOME OR PLACE OF WORK/STUDY	SUFFICIENT RELEVANCE DAILY INTERNET USE


# Measuring MC and Device affordability (Ana)



# Meaningful Connectivity & ICT Affordability

Ana María Rodríguez, Research Analyst <ana.rodriguez@webfoundation.org>

25 August 2021 — CIGF











Smartphone ownership

Unlimited broadband access point



Daily internet use



Δ4ΔΙ

# Quantitative Measures of Meaningful Connectivity

QUANTITATIVE MEASURES OF MEANINGFUL CONNECTIVITY

AAI AULIANCE FOR INTERNET



#### MEANINGFUL CONNECTIVITY INDICATORS

MC1	Individuals with a mobile internet connection, by technology
MC2	Individual device access, by ownership
MC3	Proportion of individuals with access to an unlimited broadband connection, by location
MC4	Frequency of internet use

# Measuring Dimensions of Meaningful Connectivity



					Meaningful Connectivity	Internet Use
co <b>Colombia</b>	40.4	66.5	53.6	42.8	50.8	84.1
сн Ghana	5.1	29.0	3.3	7.0	11.1	30.3
10 Indonesia	26.6	76.9	24.7	66.8	48.7	77.6
	4G connection	Smartphone access	Fixed (wired or wireless)	Daily internet use		Source: A4AI, 2020

% of people who have...



#### 

#### MEANINGFUL CONNECTIVITY | MARGINAL CONNECTIVITY | UNCONNECTED

# GH Ghana

MEANINGFUL CONNECTIVITY MARGINAL CONNECTIVITY UNCONNECTED

#### ID Indonesia

co Colombia

#### 





Source: A4AI 2020 | 2020 Web Foundation nationally representative household survey data in Colombia





### Affordability of Mobile Broadband, Caribbean Countries 2020







### **Device Affordability 2021**





### Device Affordability, Caribbean Countries 2021



Most Affordable		
1	Turks & Caicos Islands	<b>0.7</b> % (\$19)
2	Cayman Islands	<b>1.9%</b> (\$110)
3	Aruba	<b>2.8</b> % (\$66)
4	Bahamas	<b>3.9</b> % (\$89)
5	Curacao	<b>4.9</b> % (\$83)

Least Affordable			
1	Haiti	<b>48.9% (</b> \$63)	
2	Suriname	<b>32.7% (</b> \$102)	
3	Cuba	<b>27.6</b> % (\$172)	
4	Belize	<b>25.1% (</b> \$85)	
5	Grenada	<b>20.3% (</b> \$145)	

# How many days to you have to work to afford a smartphone







# Mainstreaming gender perspective in digital inclusion policies (Muthoni)





# **Gender-Responsive (ICT) Policy**

Presented by: Muthoni Muriithi Senior Gender Policy Manager Web Foundation

www.webfoundation.org

#### A Persistent Digital Gender Gap



# Internet penetration rate for men and women, 2019\*



Note: \* ITU estimate. Penetration rates in this chart refer to the number of women/men that use the Internet, as a percentage of the respective total female/male population.

Web Foundation analysis has found that <u>men are 21% more</u> <u>likely to be online than</u> <u>women</u> — rising to 52% more likely in the world's least developed countries (LDCs)

Source:

ITU 2020 & Economist Inclusive Internet Index



#### **Digital Gender Gap Across Regions**





The gap in internet access between men and women is large and continues to grow, across regions and globally

Left unchallenged, this growing divide is a major threat to progress on gender equality

Source:

ITU 2019 & Economist Inclusive Internet Index



The digital gender divide is not only about inequalities in the technology women and men have access to, but how they are able to use that technology and the threats it poses to their safety, rights and opportunities. Digital equality means considering all of these factors as a whole, and building an ecosystem that serves everyone equally without replication of existing social inequalities and oppressions.

Meaningful Connectivity means that people can use the internet every day using an appropriate device with enough data and a fast connection.

#### Digital gender gaps: From access to A4AI Meaningful Connectivity





- Time (linked to care burden)
- Affordability
- Digital Education and Skills
- Safety, data protection and privacy
- Relevant content
- Social norms that hinder or impact women's access to meaningful connect

\*Source WRO Report 2020

#### Barriers to Access & Meaningful A4AI connectivity





#### Why is the Digital Gender Gap Important?



- No one should be left behind
- Closing the digital gender gap is the driver of a competitive digital economy
  - Critical to harnessing worldwide knowledge, talent and innovation capacity
- Women need to access online information and services that are key to daily life
  - Women are more likely to lack relevant digital skills to access important online services (including public services) - During Covid-19 - the internet is a lifeline!!
- Women's knowledge and experiences should be equally r infrastructure/systems and in online spaces



#### Sustainable Development Goals on Women and Tech



- Use information and communications technology (ICT), to empower women (SDG 5b)
- Provide universal & affordable internet access by 2020 (SDG 9c)
- By 2030, ensure that all men and women have equal rights to economic resources, as well as access to basic services...[and] appropriate new technology (SDG 1.4)
- By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship (SDG 4.4)
- Partnerships to achieve the objectives (SDG 17)



#### Why do (ICT) Policies need to be gender-responsive?



- "Allowing for gender perspectives in policy means **to fully understand** the different impacts of public policy on people in society."
- Women are not a homogenous group policy should consider the experience of women from different socio-economic groups, ethnicity, age, sexual orientation etc.
- Women have differential access to the internet due to factors such as income, education level, social norms which need to be taken into account when developing inclusive policies.



#### **Digital Gender Gap Audits**







#### HOW CAN POLICYMAKERS TACKLE THE PROBLEM?







#### How Will You REACT?



<u>R</u>IGHTS

Make the internet safe and empowering for women and girls by protecting online rights including safety & privacy **EDUCATION** 

Ensure everyone – especially women and girls – have the opportunity improve their digital skills and information literacy so they can access, use and evaluate information, and use the internet to its full potential

#### <u>A</u>CCESS

Achieve the A4AI journey of "1 for 5" affordability target and "Meaningful Connectivity"

Develop more public access solutions

Create options for subsidised basic data allowance, focused on women

#### **<u>C</u>ONTENT**

Prioritise women's participation in technology development, local content creation and ICT innovation

Support women to be equal creators and producers of online content and services

#### **<u>T</u>ARGETS**

Adopt concrete ICT gender equity targets, backed by adequate budgets

Collect ICT data disaggregated by gender, income & location

Develop new indicators to measure impact of technology on women



#### Some examples from countries globally



#### Senegal

The <u>Digital Senegal plan includes a</u> <u>high-level commitment to</u> <u>mainstream gender in all</u> <u>broadband policy decisions</u> and also sets a clear target for a 33% rate of use of e-commerce and public services by the rural female population by 2025.

#### 🔁 Costa Rica

The <u>national broadband plan in</u> <u>Costa Rica includes women's access</u> <u>as a core component</u> and sets goals around supporting women's online entrepreneurship within the plan's targets.

#### 🗃 Thailand

While lacking gendered targets in its national broadband plan, the country's <u>Women Development</u> <u>Strategy includes promotion of</u> <u>women's access, training, and use</u> <u>of the internet</u> – all with the ambition of supporting a greater proportion of women pursuing STEM-related degrees.

#### Globally

A lack of gender-disaggregated data is a challenge for closing the digital gender gap, but innovative uses of online advertising data provide an opportunity to fill in gaps and set baselines for progress.



#### A Call to Action



- Involve gender advocates and experts in the policy and planning process from the start
- Collect and use gender data to inform gender-responsive project design and implementation
- Establish time-bound targets to achieve gender equality in access across all areas of policies and plans
- Invest in projects, programs, policies and laws that address barriers to women internet access and use
  - Adopt Meaningful Connectivity as the target for internet use to enable women to afford data



#### A Call to Action



- Invest digital skills and ICT education for women and girls
- Support women's participation in technology development, local content creation and ICT innovation
- Safeguard the online privacy of women and girls (including addressing online gender based violence)
- Target social norms that limits women's access and use
- Integrate ICT policies to existing gender and development strategies ( for example, education, agriculture etc.)
- Break silos through gender-responsive policy-making





# QUESTIONS?



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# **KEEP IN TOUCH**

#### www.webfoundation.org

@webfoundationfacebook.com/webfoundationhttps://webfoundation.org/wro-network/

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# Latest USF research preview (Nathalia)



# **Rural Broadband Policy Framework**

We need to target and speed up rural connectivity : The Rural Broadband Policy Framework







% of Households with Internet Access

# **The Eight Policy Elements of RBPF**





Harness market competition while addressing market failures



Leverage innovative technologies, architectures, and business models



Streamline regulatory processes



Adopt appropriate tax and fee structures



Invest in and improve public access and universal service and access funds



G Stimulate demand for broadband services



Effectively manage spectrum resources



Monitoring and Accountability

н



#### **6 CRITERIA FOR SUCCESSFUL POLICY-MAKING**





#### THE PROCESS TOWARDS A RURAL BROADBAND POLICY

1	Encourage broad participation
2	Be transparent in decision-making
3	Allow for stakeholders to meaningfully participate

# A fair process enables all stakeholders to:

Evaluate the success and failures of policy decisions

Make the necessary adjustments over time

Hold other stakeholders accountable over time

# 1: Harness Market Competition





- Support market competition as the first means for encouraging innovation and investment and supporting consumer choice in service providers.
- Recognise the limits of markets to deliver universal access on their own, and use rural development funds and Universal Service & Access Funds to support network deployment.
- Encourage **infrastructure sharing** at the wholesale level—which will ultimately facilitate greater competition at the retail level.
#### 2: Streamline Regulatory Processes





- Eliminate policies and regulations that are not necessary to achieve a valid and well-defined objective.
- Create a supportive regulatory environment for nascent rural operations.
- Include space for **innovations to scale**.
- Streamline regulations governing **market entry** in rural areas.
- Streamline processes for obtaining access to **rights-of-way** (ROWs).
- Leverage potential advantages within **dig-once policies**.

## 3: Public Access and Universal Service and Access Funds (USAFs)

• Invest in **public access** solutions as part of the RBPF.



- Employ public access facilities as community institutions to ensure broader socio-economic impact in society.
- Establish and implement **effective USAFs** to support investments in underserved rural areas.
- Ensure that USAFs operate under **non-discriminatory conditions and according to transparent and consultative processes**, incorporating stakeholder inputs and priorities.
- Adopt and employ **open data** practices.

### 4: Effectively manage spectrum resources

- Seek to **"unlock" spectrum** so that it can be effectively leveraged to address rural connectivity challenges.
- ୁ ଜୁନ୍ଦୁ ଦ୍ୱି
- Incentivise operators to use their licensed spectrum resources in a **timely manner** and for the benefit of rural areas.
- Apply special, **more flexible rules** for spectrum use in rural areas.
- Enable **unlicensed use** of spectrum at additional wavelengths.
- Make spectrum available on a **technology-neutral basis**.
- Facilitate the **reallocation** of spectrum over time.
- Encourage **spectrum sharing**, under appropriate conditions.

#### 5: Leverage innovative technologies, architectures, and business models





- Afford operators **flexibility** in structuring their networks and businesses.
- Promote the **free flow of information**.
- Ensure that rural populations can benefit from the **same service standards** as others in the country (e.g., in urban areas).
- Support **network cooperation**.

### 6: Adopt appropriate tax and fee structures

- Consider reducing or eliminating **taxes and fees** charged in rural areas.
- Ensure that the tax regime is competitively and technologically neutral and **non-distortive**.
- Ensure that rural broadband services are taxed in a manner similar to or more favorable than other services.
- Ensure that tax regimes **do not render broadband services unaffordable**.

# 7: Stimulate demand for broadband services





- Seek to enhance **digital literacy** amongst the rural population.
- Promote practices that protect the safety and privacy, and personal data of rural populations.
- Facilitate the development of **relevant content** that are responsive to local needs and languages.
- **Stimulate demand** for rural broadband services, e.g., with e-services.

#### 8: Monitoring and Accountability



• Set up regular checkpoints to **monitor progress and create accountability** for policy leaders.



- Regular monitoring should include two key components data and people.
- Collecting data on performance over time will encourage stakeholders to create a track record, document improvements, and create the evidentiary basis for any case for change that might be necessary.
- Data-driven process is best enabled and supported through an **inclusive process that allows government**, **private sector**, **and civil society to contribute data and analyse** the realities in the country and advise on the best next steps.





- Which of the presented proposals tools and policy perspectives make sense to you to advocate for and implement
- How to get on board other CSOs how to convince them that their targets wont be effectively reached if we don't achieved universal affordable and meaning digital inclusion
- How to buid effective multistakeholder and "intersectional" collaboration frameworks?