ITU Regional Economic Dialogue on Telecommunications/ ICT for Africa (RED-AFR20)
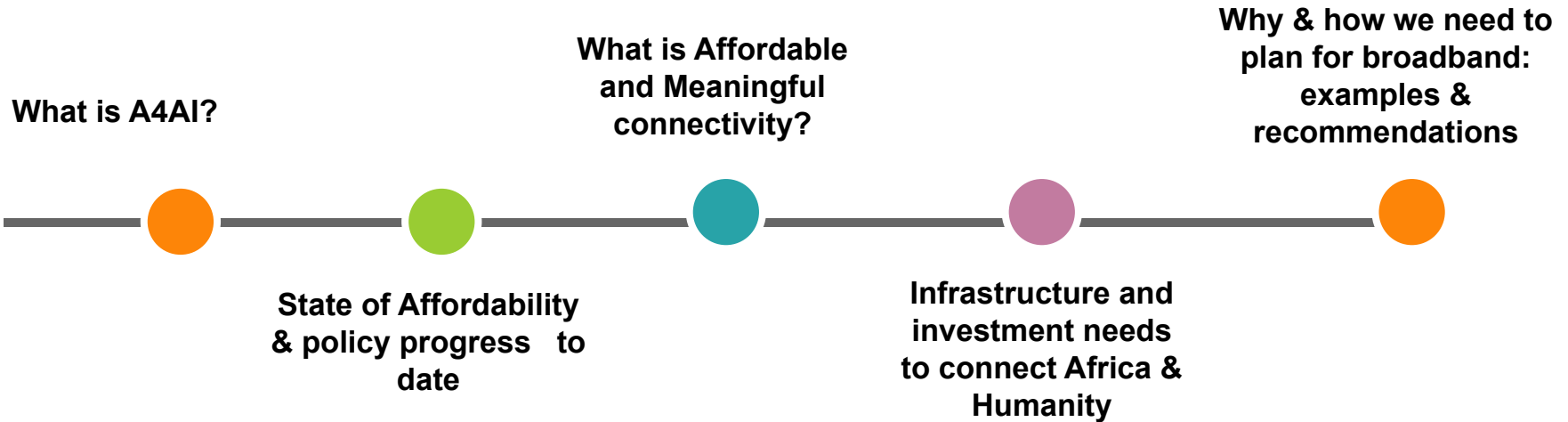
Why planning for affordable and meaningful connectivity matters for the economic impact and recovery of a digital Africa, now and post covid19

November 11, 2020

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Alliance for Affordable Internet (A4AI)
Deputy Director and Policy Lead

Flow of Presentation

What is A4AI?

State of Affordability & policy progress to date

What is Affordable and Meaningful connectivity?

Infrastructure and investment needs to connect Africa & Humanity

Why & how we need to plan for broadband: examples & recommendations

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WE ARE THE
WORLD'S BROADEST TECHNOLOGY SECTOR ALLIANCE & LEADING ADVOCATE OF AFFORDABLE AND MEANINGFUL BROADBAND.
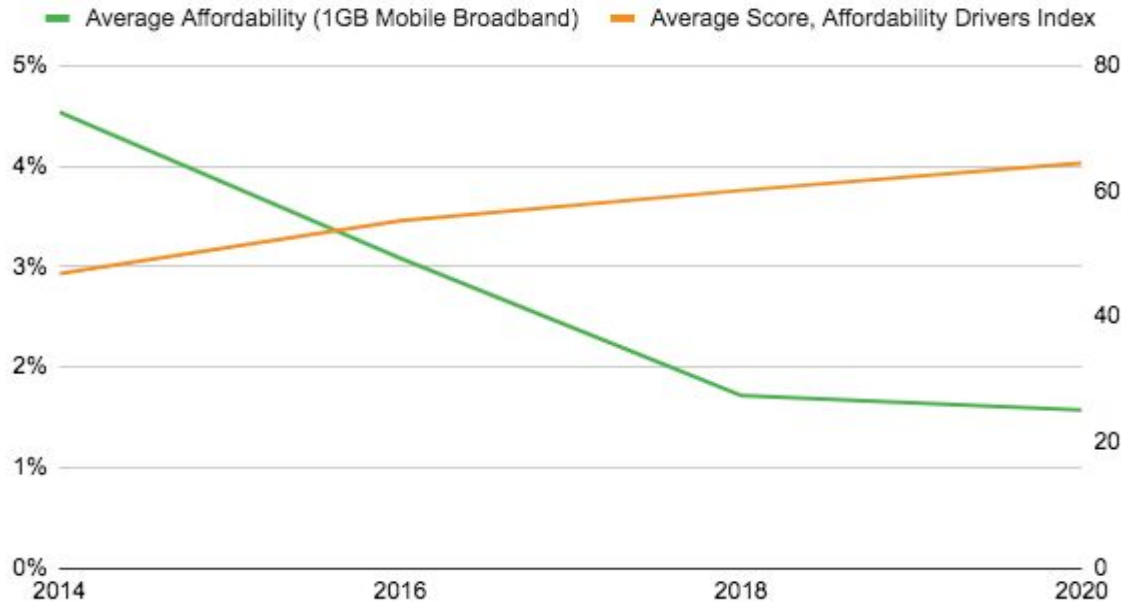
WE WORK TO
DRIVE DOWN THE COST OF BROADBAND

BY
TRANSFORMING POLICY AND REGULATORY FRAMEWORKS

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Average Prices in LMIC countries are reducing but progress is slow. See Average affordability and ADI scores over time - I

Using 2014 ADI countries only, weighted by population

— Average Affordability (1GB Mobile Broadband) — Average Score, Affordability Drivers Index

The ADI is a tool developed by A4AI to assess how well a country's policy, regulatory, and overall supply-side environment is positioned to lower industry costs and ultimately create more affordable broadband.

ADI scores countries across two main policy groups:

- **Infrastructure** — the extent to which internet infrastructure has been deployed, as well as the policy framework in place to encourage future infrastructure expansion; and

- **Access** — current broadband adoption rates, as well as the policy framework in place to enable equitable

- On **average**, prices in low- and middle-income countries have become more affordable, moving from 4.54% of average monthly income in 2015 to 1.58% in 2019.

Source:A4AI

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**A few countries have made strong progress
in average affordability and ADI scores over time**

- Countries like **Rwanda**, **Ecuador**, and **India** have seen the cost of 1GB mobile broadband come down by more than 60% during this time period.

- In the case of **Rwanda**, the price of 1GB as a fraction of the average monthly income in that country has decreased from **20.16% to 3.39%** between 2015 and 2019.

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But, Africa still scores low when comparing latest affordability of 1GB to ADI score

Americas ● Africa ● Asia ● Oceania

Score on the Affordability Drivers Index, 2020

Affordability of 1GB Mobile Broadband, 2019
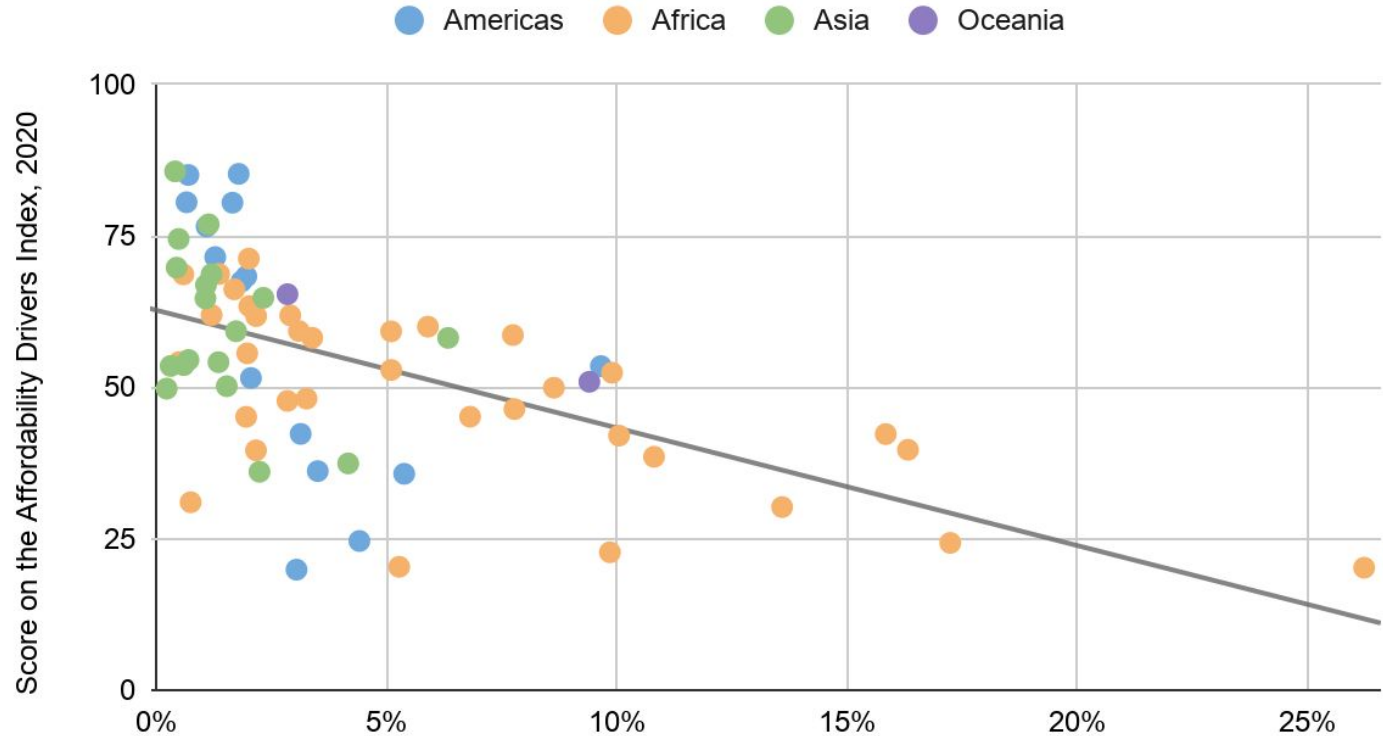
Africa scores both on having the lowest ADI scores and the least affordability, at a regional level. More work needed to improve policy progress

Source: A4AI

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Top Ten, 2020 Affordability Drivers Index

1	Malaysia	(=)
2	Colombia	(=)
3	Costa Rica	(=)
4	Argentina	(+3)
5	Peru	(-1)
6	Thailand	(+2)
7	Mexico	(-2)
8	Turkey	(-2)
9	Dominican Republic	(+1)
10	Morocco	(+5)

Top Ten, Among Least Developed Countries

1	Senegal	25th
2	Benin	27th
3	Cambodia	29th
4	Uganda	31st
5	Rwanda	32nd
6	Nepal	33rd
7	Myanmar	38th
8	Tanzania	41st
9	Mali	42nd
10	Bangladesh	45th

Only 1 from Africa in top10

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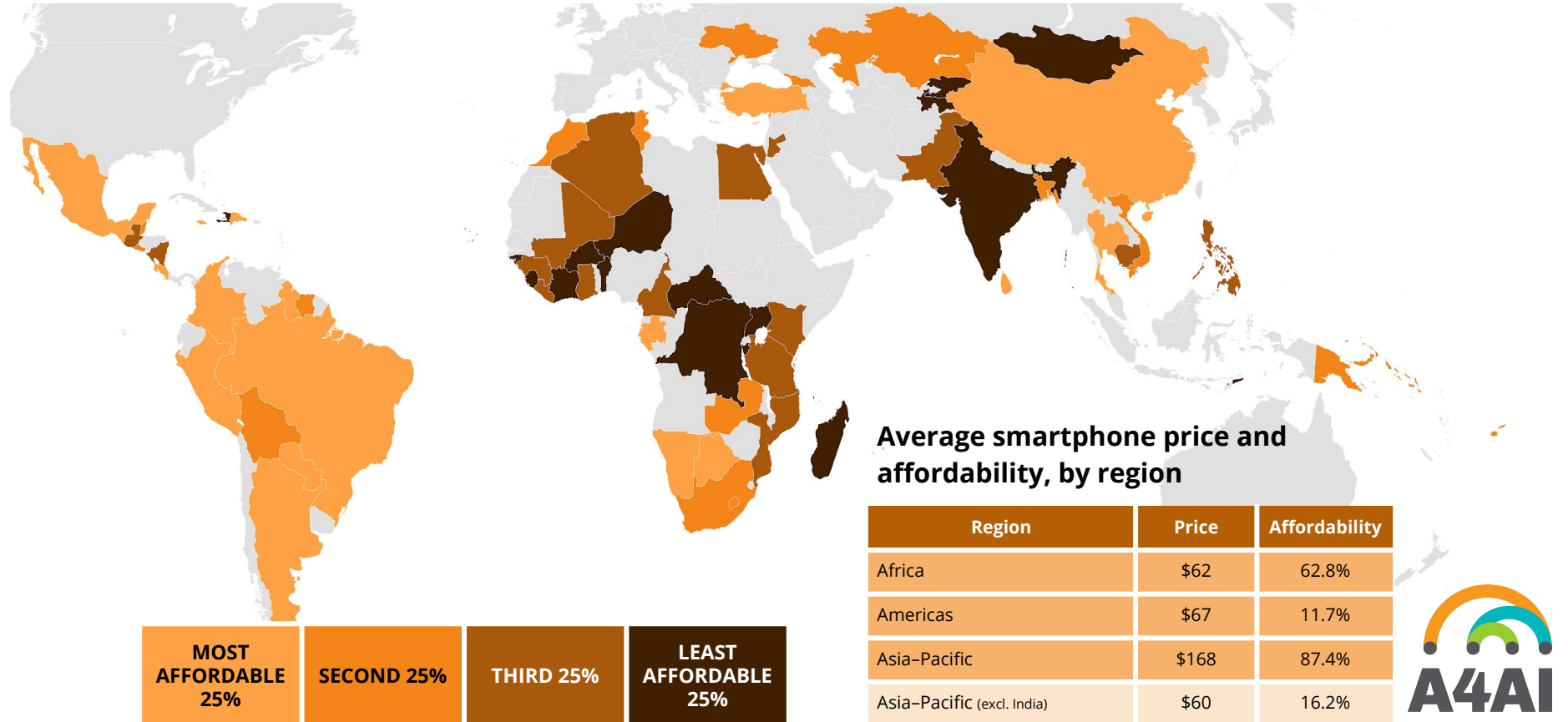# We need affordable and Meaningful Connectivity now and to build back better. Here's why

The high cost to connect is excluding billions from the digital revolution:

Nearly **half of the world's population is still offline. Large unconnected populations in SSA and South Asia**

The UN expected the world would reach universal Internet access (coverage and affordability) by 2020 (SDG 9c). At current rates, we will miss this target **by 20+ years*.** *Basic access is not enough*


Source: Alliance for affordable Internet Affordability Report Research

Affordable data alone is not enough, we also need device affordability for meaningful connectivity

MOST AFFORDABLE 25%	SECOND 25%	THIRD 25%	LEAST AFFORDABLE 25%

Average smartphone price and affordability, by region

Region	Price	Affordability
Africa	$62	62.8%
Americas	$67	11.7%
Asia–Pacific	$168	87.4%
Asia–Pacific (excl. India)	$60	16.2%

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Some Facts on Mobile Device Affordability

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

Americas · **Africa** · **Asia-Pacific**
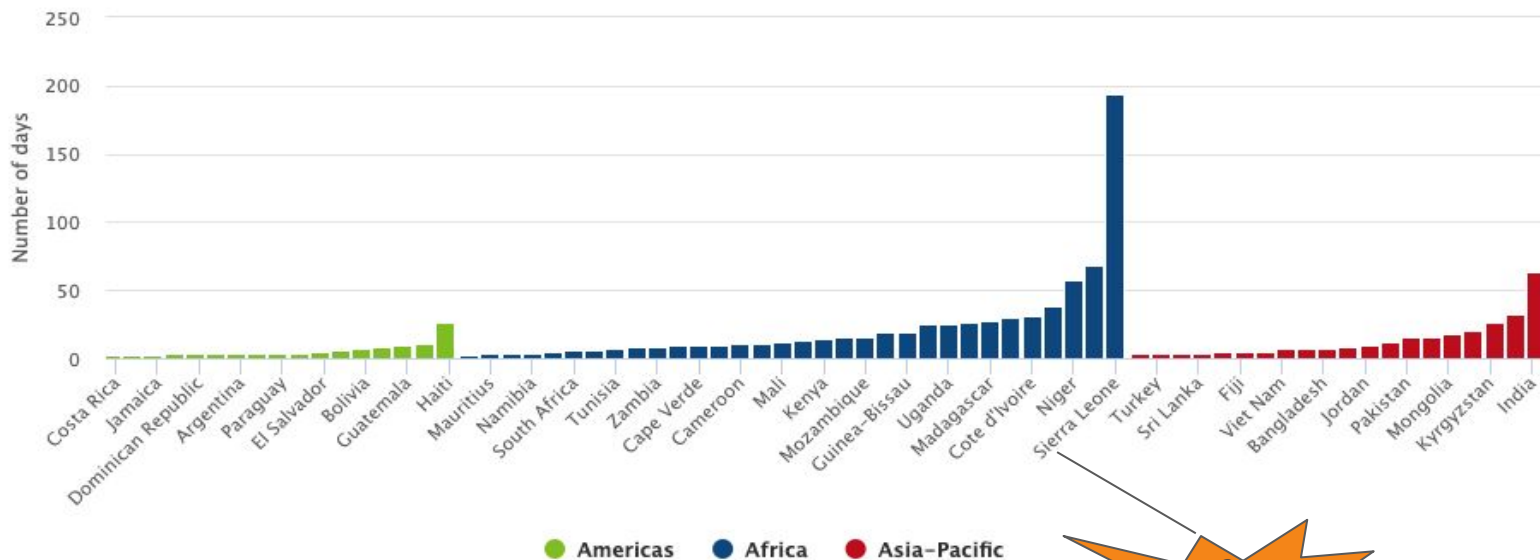
6 months!

Investement is crucial: Connecting Humanity 2030

Connecting humanity
Assessing investment needs of connec[t]ing
humanity to the Internet by 2030
August 2020

An estimated **USD$428 billion** is needed to connect all of humanity to the Internet by 2030.

Source : ITU.

ICT Skills & Content
~$40bn

Policy & Regulation
~$6bn

Remote Area Coverage**
~$70bn

Network Operation Maintenance*
~$140bn

Metro & Backbone Fibre
~$70bn

Mobile Infrastructure CapEx
~$104bn
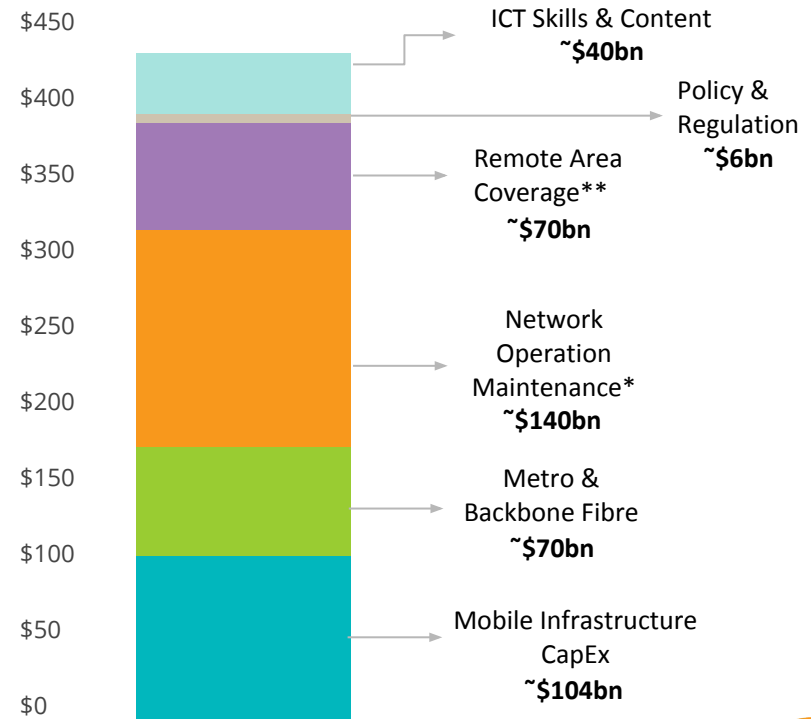
Source: ITU/A4AI, 2020

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Investment Needs to Achieve Universal Access by 2030 (Africa Specific)

~$100 bn is needed to achieve universal access to broadband connectivity in Africa

ICT Skills & Content
~$18.0bn

Policy & Regulation Costs
~$2.4bn

Network Operation & Maintenance*
~$53bn
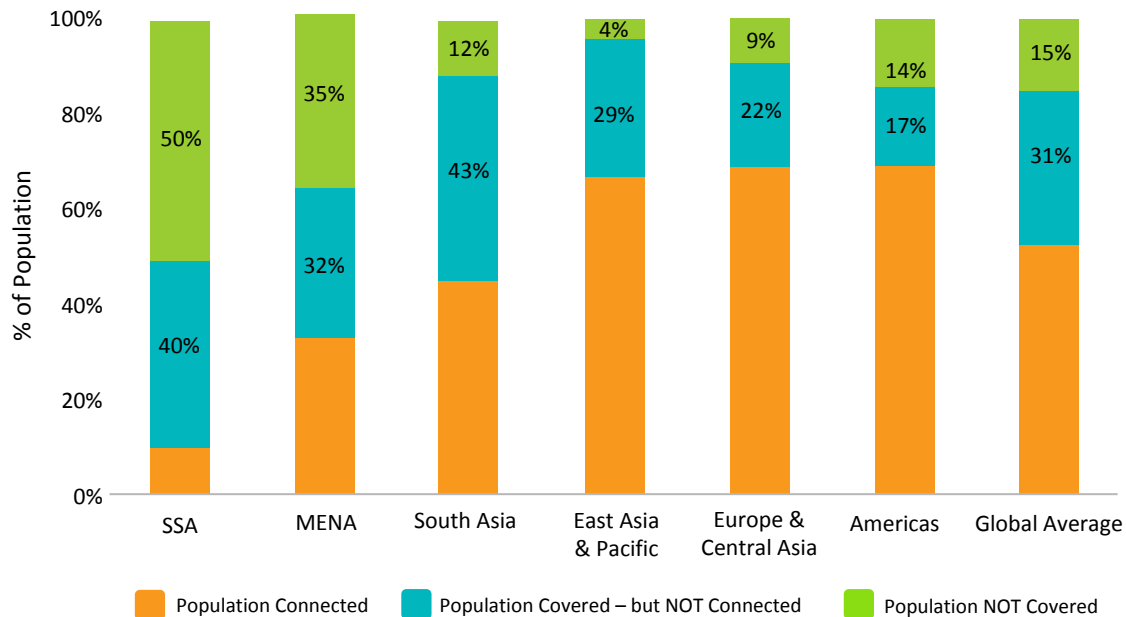
Infrastructure CapEx
~$29.5bn
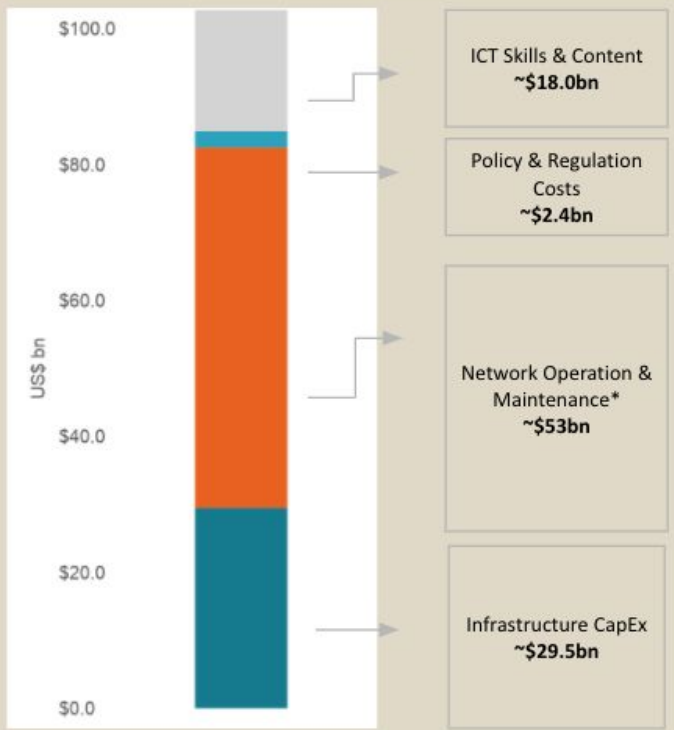
TOTAL REQUIRE-MENTS

- Around $100bn will be needed to achieve universal access to broadband connectivity in Africa by 2030.

- The challenge is considerable. **Countries will need to add around 1bn new connected users** to 4G and other high speed networks to achieve the proposed targets;

- **We estimate that achieving this target would require the rollout of around 250k 4G BTS across the region,** depending on the nature of available spectrum.

- Achieving the proposed network reach also implies the rollout of around **250,000 kilometers in terrestrial fibre infrastructure**, and potentially more depending on the favoured backhaul technology mix.

KEY DRIVERS OF INVESTMENT

- Achieving universal access to broadband in Africa is, for the most part, an **infrastructure investment challenge.** Around 30% of total requirements would have to be allocated to CapEx buildout for broadband last mile and transmission networks capable of reaching and serving at least 90% of the target population.

- Including the recurring cost of operating and maintaining such networks (another ~50% of total), **~80% of required investments are directly tied to the need to roll out and maintain broadband networks** to support the additional connected user base and related traffic;

- Around **17% of required investments are tied to the need to build the user skills and local content foundation** to ensure that the deployed infrastructure is used adequately, in a manner that would support its long-term viability, with the remaining 2%-3% allocated to regulation and policy framework building.

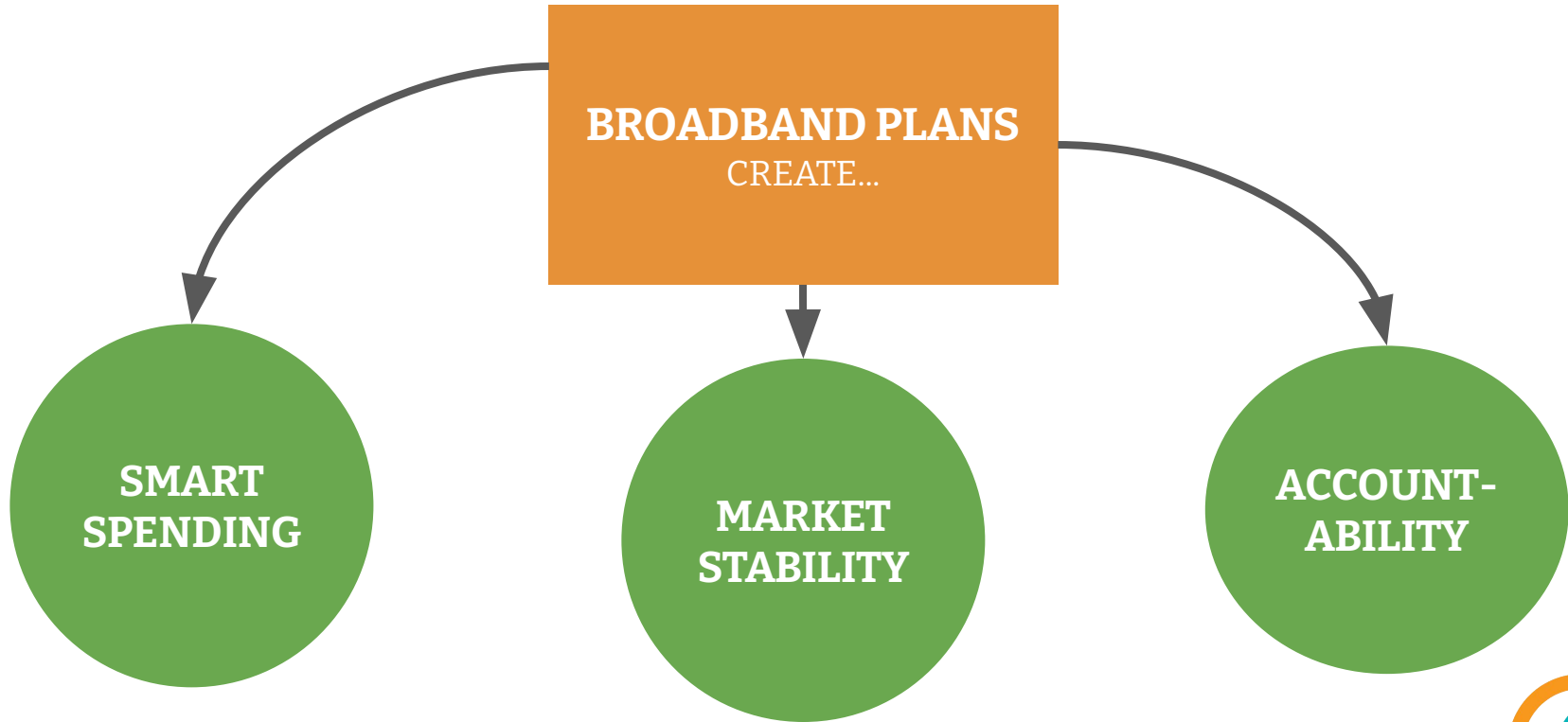# But : Infrastructure Alone is not Sufficient

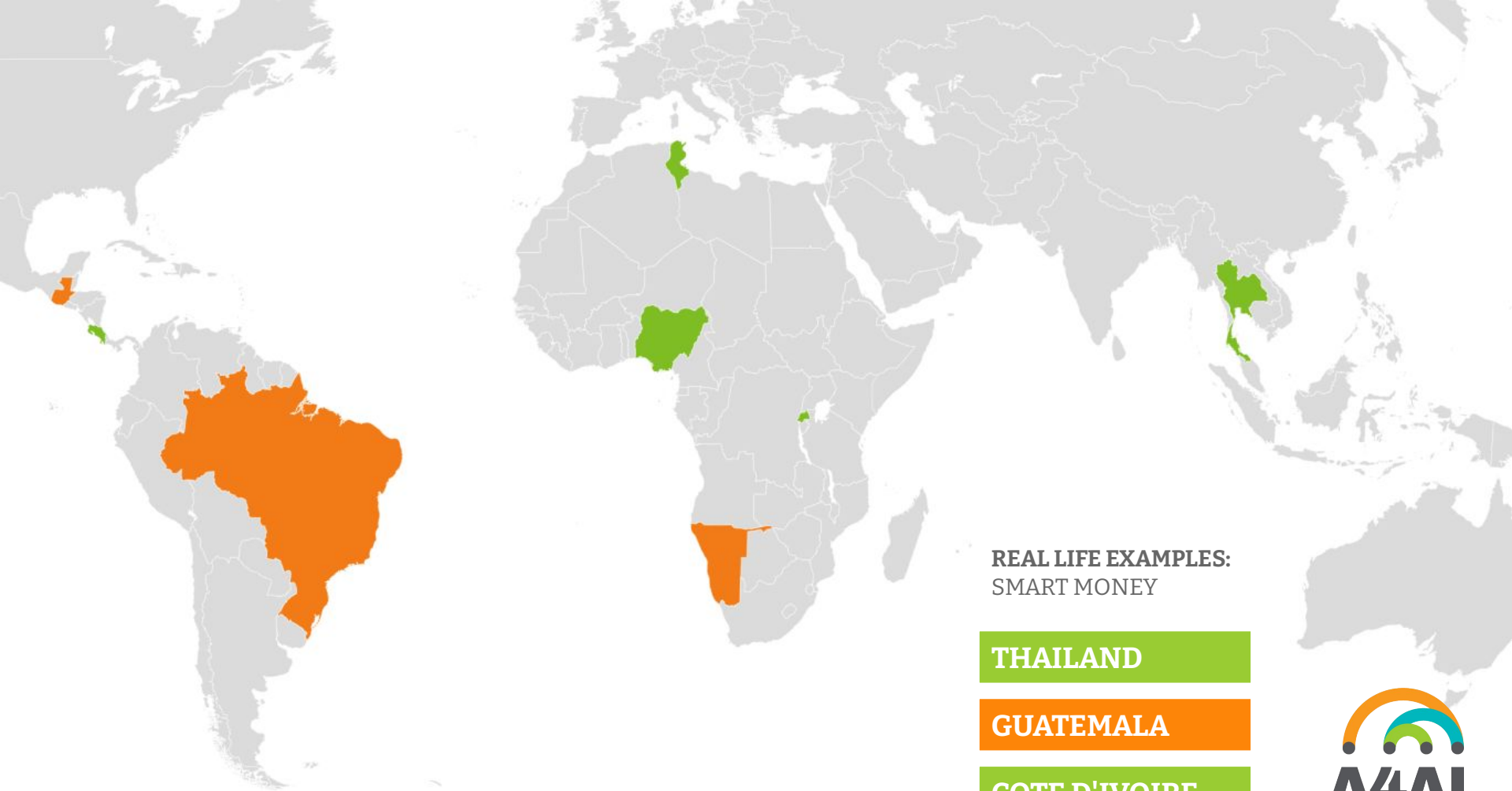**4G Coverage of the Population - 2019**

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**.

Source: A4AI & Xalam Analytics, 2020

Here's why it's critical to plan for national broadband

BROADBAND PLANS
CREATE...

SMART SPENDING

MARKET STABILITY

ACCOUNT-ABILITY

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Here are some good real life case studies

REAL LIFE EXAMPLES:
SMART MONEY

THAILAND

GUATEMALA

COTE D'IVOIRE
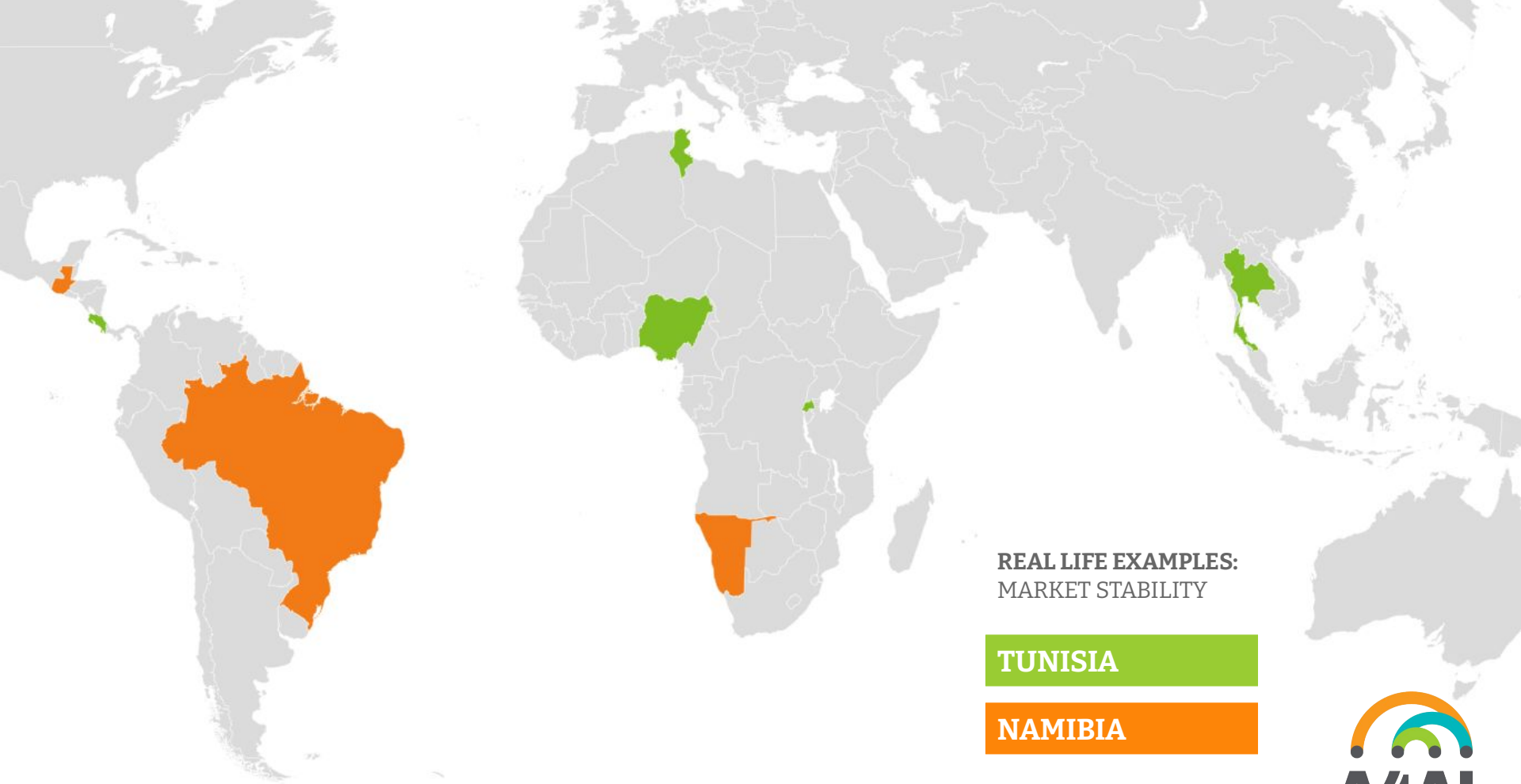
Source: A4AI (AR -2020)

REAL LIFE EXAMPLES:
MARKET STABILITY

TUNISIA

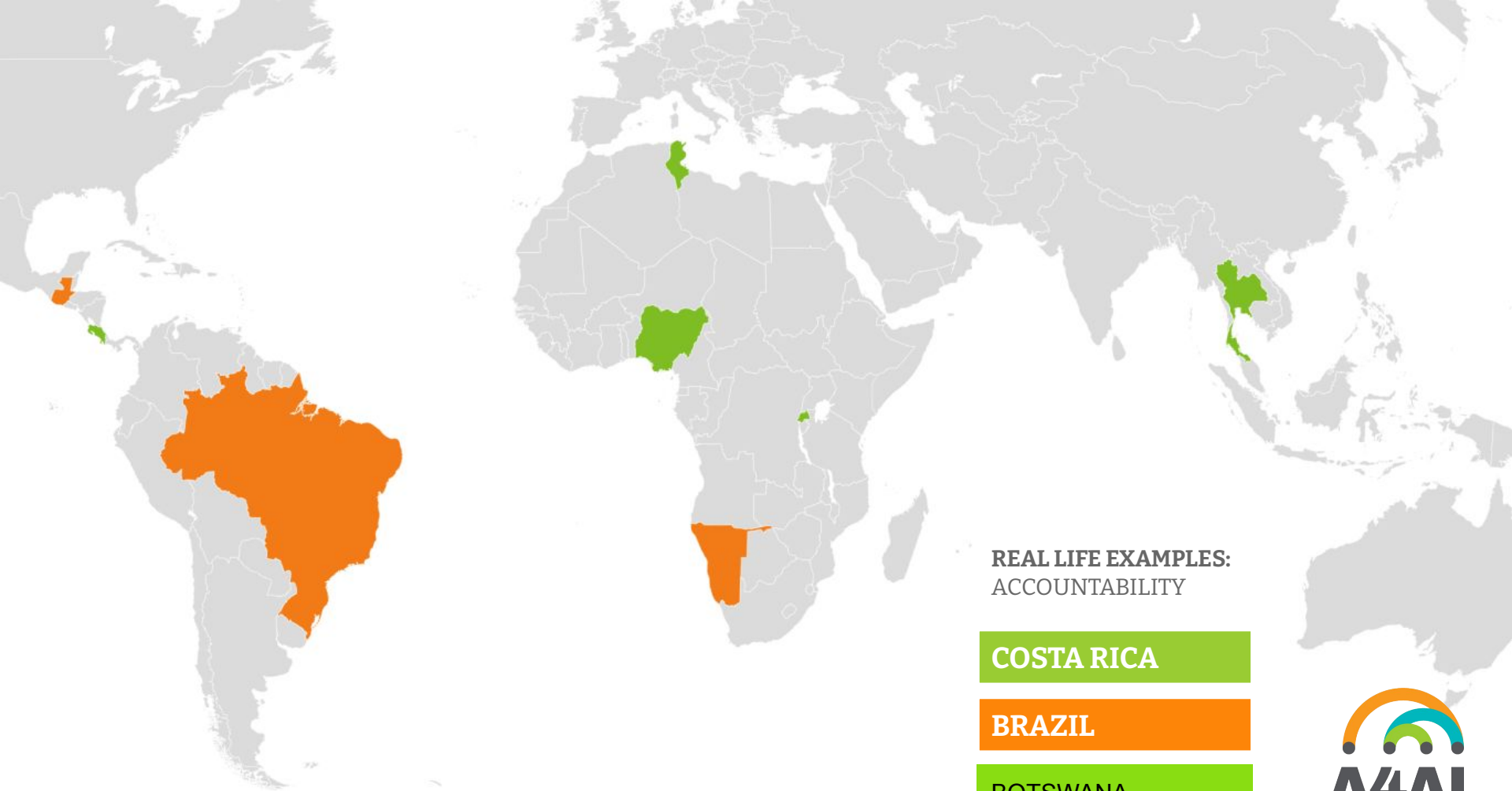NAMIBIA

Source: A4AI (AR -2020)

REAL LIFE EXAMPLES:
ACCOUNTABILITY

COSTA RICA

BRAZIL

BOTSWANA

Source: A4AI (AR -2020)

» AR 2020 Report Policy Recommendations

1
A plan must have **inputs from a diverse and representative set of players across the private sector, public sector and civil society** before publication.

2
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.

3
A plan must come with **funding commitments** and a stated plan for transparent **assessment and review** that occurs at least every other year.

Look out for the 2020 Affordability Report end of November.
www.a4ai.org

A4AI

References

- [COVID 19 policy brief](#) and [blog](#) which focuses on recommendations for access and meaningful connectivity
- [A4AI member responses](#), a blog of a compiled collection from the Alliance during COVID-19,
- [Device Affordability Report](#) - Covering 70 low- and middle-income countries, this A4AI report provides the first openly available global survey of mobile handset costs — looking not only at the retail price of a device, but their affordability: price in relation to income.This snapshot gives a picture of device affordability in 70 countries with a combined population of over five billion people.
- [Meaningful Connectivity brief](#) - This report reflects a series of consultations with A4AI members, partners, and other stakeholders around the world in 2019 and early 2020. This report illustrates how the meaningful connectivity metric can be applied in practice, and suggests what kinds of targets policymakers can use to achieve meaningful, universal access.
- [Rural Broadband Policy Framework](#) - This report provides a basis for considering and adopting policy approaches most likely to facilitate the deployment and adoption of new or better broadband infrastructure and services in underserved rural areas
- [Broadband Commission: Connecting Africa Through Broadband - Digital Infrastructure Moonshot Report](#) - The report, led by the World Bank for the UN Broadband Commission's Working Group on Broadband For All and advised by A4AI, analyzes the investment needs for bringing everyone in Africa online by 2030l.
- [Connecting Humanity – Assessing investment needs of connecting humanity to the Internet by 2030](#) - The International Telecommunication Union (ITU), in support by A4AI, analyzes the investment needs for bringing everyone in the world online by 2030.

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