COUNTRY ANALYSES AND PLANS

Zimbabwe

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$36M of CapEx funding and $40M of annual OpEx funding will enable Zimbabwe to connect a further 6,611 schools.

This investment will bring **2.6 million students and teachers** online and bring connectivity to **3.5 million community members** who live locally, potentially enabling up to $0.6 billion USD in GDP (1.4%) growth.

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"It is envisaged that all sectors of the economy and society at large will harness the power of ICT for the development of our nation."
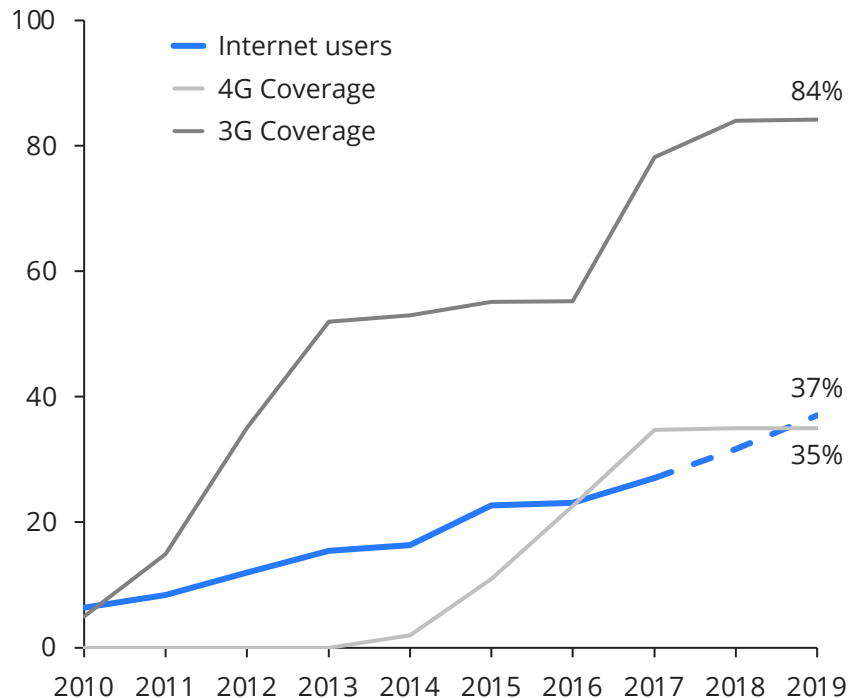
H.E. PRESIDENT EMMERSON MNANGAGWA
President of the Republic of Zimbabwe

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Over the last 10 years significant progress has been made to reach the government's 2020 universal access target

In the last 10 years mobile connectivity has expanded, use has steadily increased

Broadband coverage and internet penetration, % of population. (ITU, 2020)

The Government of Zimbabwe is aiming to drive economic growth through digitization, with universal access to connectivity in 2020

Zimbabwe hopes to achieve this target through the following internet connectivity and education policies:

- Zimbabwe National Policy for ICT 2016: Set the country on a path to become a knowledge-based society targeting ubiquitous connectivity by 2020. Strategic focus included: closing the digital divide through rural coverage, improved electricity access, ICT skills development and policy streamlining. The policy also includes a target that 30% of applications used by government are developed locally. ICT usage in primary and secondary schools is flagged as a policy priority

- Education Sector Strategic Plan (2016-2020): Concurrently a major pillar of the education sector plan put ICT at the center of the curriculum and placed an emphasis on the provision of specialist equipment/rooms. The plan also emphasizes the importance of ICT to improve institutional management and administration

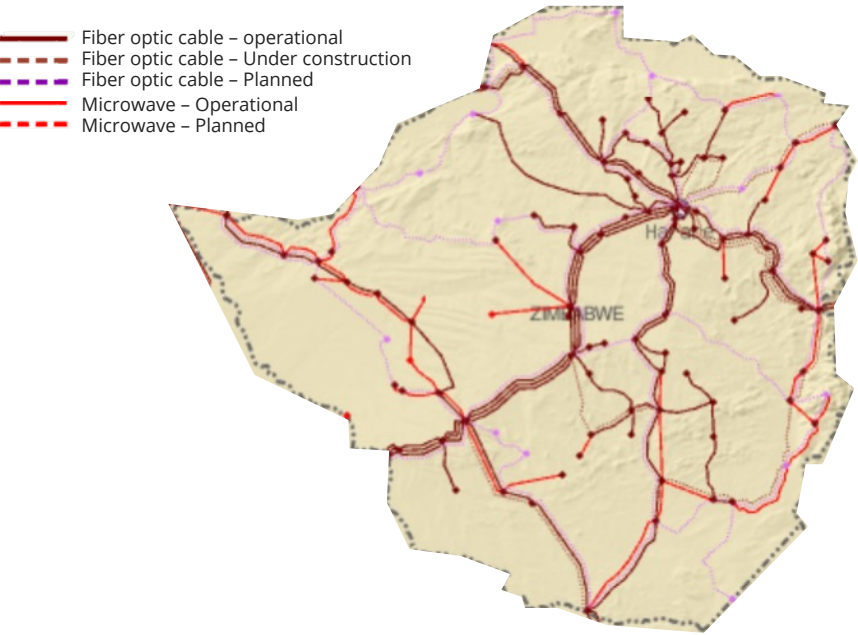Note: Figure refers to 4G and broadband networks.
Source: ITU (2020) World Telecommunication/ICT Indicators Database; Ministry of Information, Communication, Technology, Postal and Courier Services of Zimbabwe (2016) Zimbabwe National Policy for Information and Communications Technology (ICT); Ministry Of Primary And Secondary Education (2015) Education Sector Strategic Plan 2016 – 2020

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National fiber network

Legend:
- Fiber optic cable – operational
- Fiber optic cable – Under construction
- Fiber optic cable – Planned
- Microwave – Operational
- Microwave – Planned

# Current status: National Coverage and Connectivity

The country's National Broadband Backbone (NBB) has three international connections. The transmission network has over 9,500km of fiber interconnecting major cities and towns across the country

	Mobile	Fixed
Subscriptions per 100 inhabitants	52	1.4
5-year CAGR	+4%	+4%

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School Coverage and Connectivity

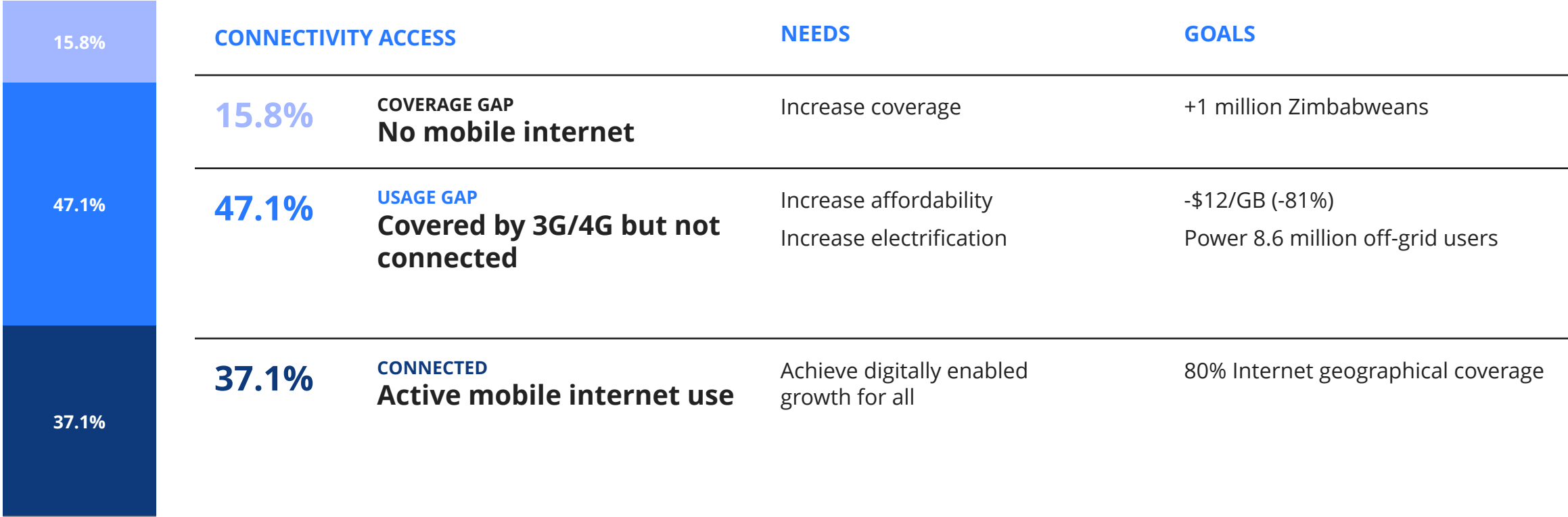| School type	Total	With	Without
Primary	6,671	1,751	4,920
Secondary	2,954	1,263	1,691
Total	**9,625**	**3,014**	**6,611**

Approximately 31% of Zimbabwe's primary and secondary schools have internet access. In rural areas the vast majority are connected by ADSL or VSAT. Primary schools form the bulk (75%) of the country's 6,611 unconnected schools.

Connected to the internet
Not connected to the internet
No data
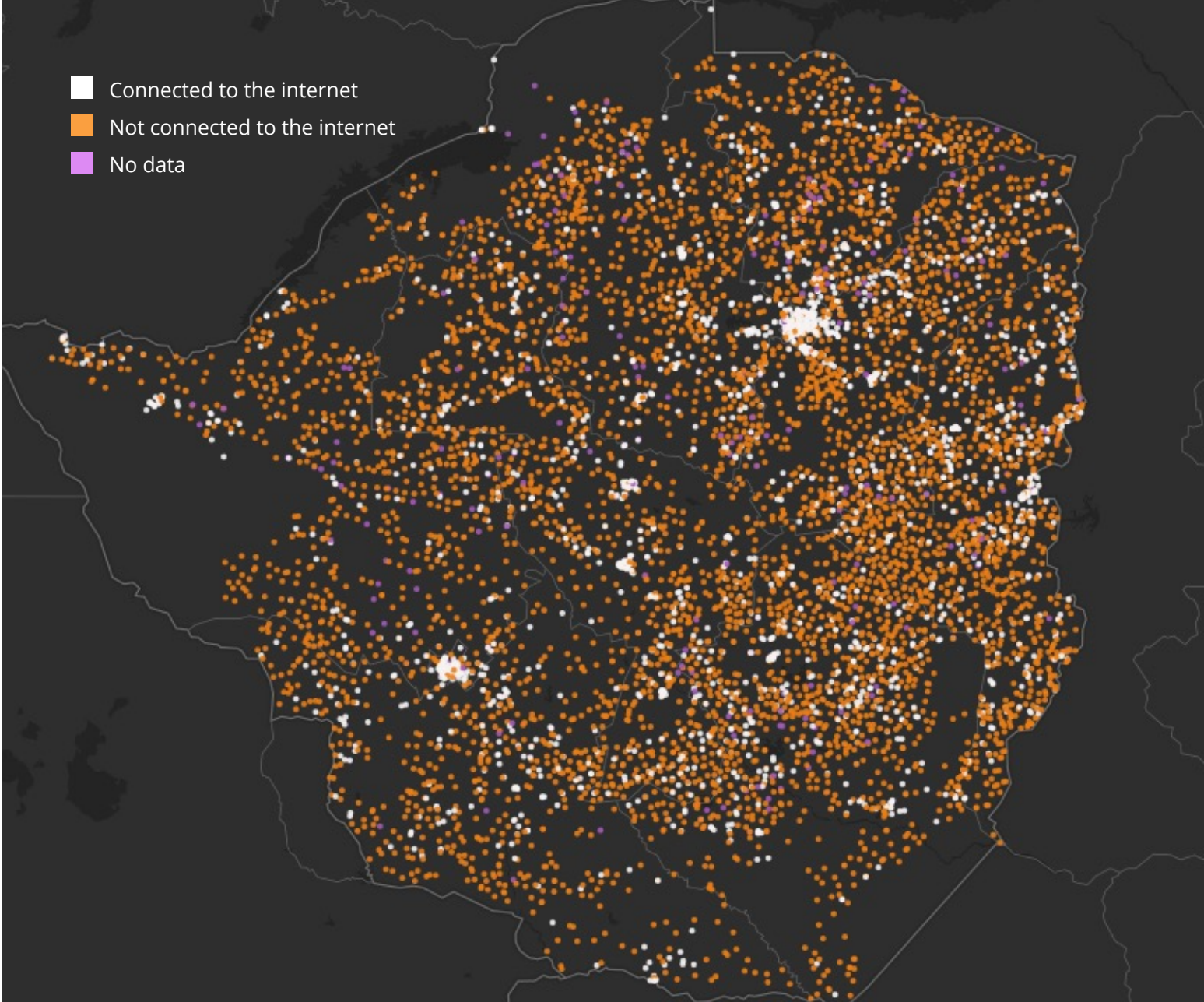
Note: From the 2017 Census to the more recent education statistics report school without internet connectivity actually increased for both primary schools (4683 to 4920) and secondary schools (1499 to 1691)
Source: Ministry Of Primary And Secondary Education (2020) 2019 Primary And Secondary Education Statistics Report; Information And Communication Technology (ICT) Census (2017) – Access And Use By Education Institutions Report
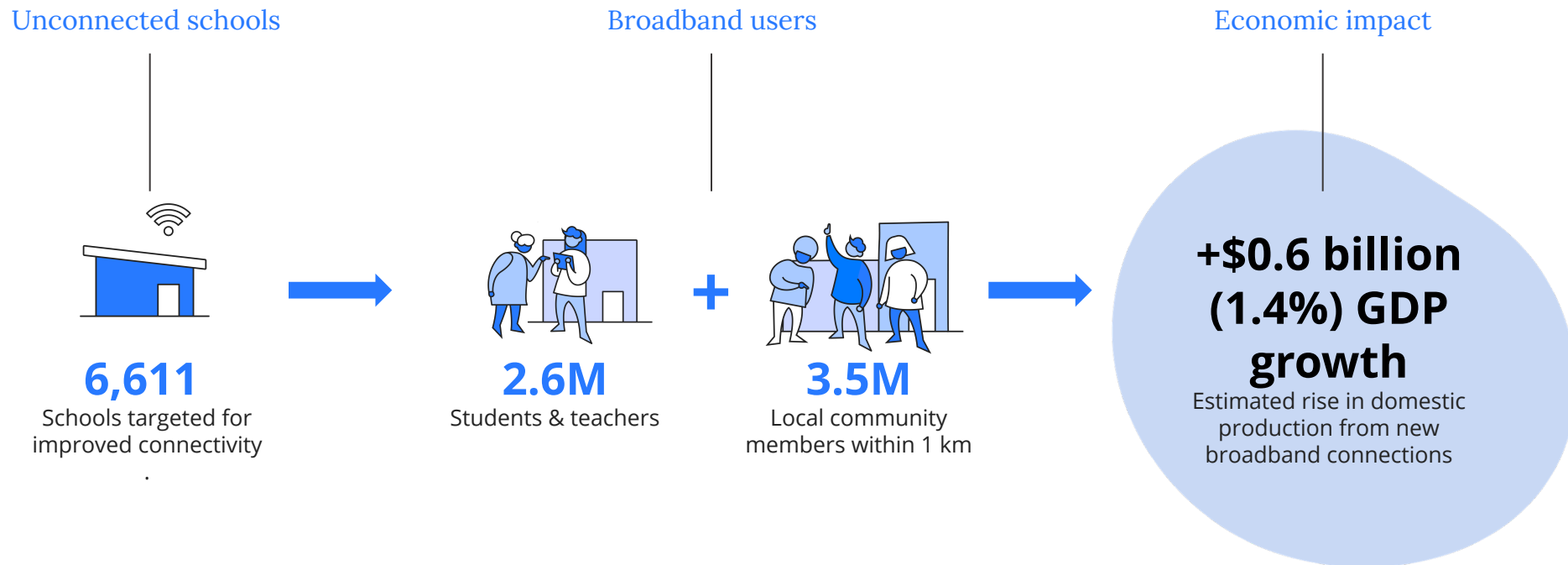
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Almost 16% of Zimbabweans lack coverage and 47% face affordability and electrification challenges

THE MOBILE INTERNET COVERAGE AND USAGE GAP

	CONNECTIVITY ACCESS	NEEDS	GOALS
15.8%	**COVERAGE GAP** **No mobile internet**	Increase coverage	+1 million Zimbabweans
47.1%	**USAGE GAP** **Covered by 3G/4G but not connected**	Increase affordability Increase electrification	-$12/GB (-81%) Power 8.6 million off-grid users
37.1%	**CONNECTED** **Active mobile internet use**	Achieve digitally enabled growth for all	80% Internet geographical coverage

Bar chart values: 15.8%, 47.1%, 37.1%

Notes: *Mobile internet prices have fluctuated within the last 12 months, in part due to price increase by POTRAZ but also due to unstable domestic currency. Some sources quote much higher prices, up to $75 (Cable, 2019). 2% GNI per capita is the Broadband Commission's global recommendation. Note that Individuals in remote locations will likely spend a higher proportion due to lower income levels.
Source: ITU (2020) World Telecommunication/ICT Indicators Database

Targeted financing for connecting 6,611 schools can create GDP growth of over $0.6 billion

Universal expansion to all schools provides a gateway to community connectivity

Unconnected schools

Broadband users

Economic impact

6,611
Schools targeted for improved connectivity
.

2.6M
Students & teachers

+

3.5M
Local community members within 1 km

+$0.6 billion (1.4%) GDP growth
Estimated rise in domestic production from new broadband connections

Note: Economic impact calculation assumes that school connectivity is comparable to gaining access to a fixed line connection in a middle/lower income country in terms of reliability, bandwidth, use etc. Assumes middle income fixed broadband which is a conservative assumption when compared to low income mobile broadband
Source: Dalberg Analysis;; ITU (2020) World Telecommunication/ICT Indicators database; UNESCO UIS.Stat, 2018; World Bank (2020) World Development Indicators (WDI); ITU (2018) The Economic Contribution of Broadband

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School connectivity will require an estimated $36M of upfront capital expenditure and up to $40M of ongoing annual funding

Giga will help to mobilize investment and financing to bridge initial infrastructure gaps and provide mechanisms to supply longer-term financing to boost geographic reach and affordability through smart subsidies

(Schools to be connected: 6,611)

UPFRONT LAST-MILE INFRASTRUCTURE CAPITAL

Based on an initial technology assessment: 28% Fiber, 33% WISP, 18% 4G and 21% Satellite

$36M | Estimated total capital expenditure needed to reach 6,611 schools*

*This does not factor in potential volume discounts or other sources of funding

ONGOING ANNUAL FUNDING FOR REGULAR SERVICE FEES

Estimates based on an all-in service FEE (64%) and a maintenance and technical support fee (36%):

$40.8M [a] | Potential service fees for 6,611 schools (Current estimate)*

*This does not factor in potential volume discounts or other sources of funding

The Government of Zimbabwe has invested $xxM in connecting schools since xxxx year.[b]

Notes: These high-level estimates can be further refined as the workflow progresses and more mapping and specific cost date is established. A) Based on a 2017 ICT in schools census, approximately $10.8M was spent on internet charges and connection fees across 1,752 educational institutions, averaging 6,147 per school, this is used to establish the baseline service level in Zimbabwe. B) Source: Ministry of ICT and Ministry of Education
Source: Giga and Dalberg Analysis (2020) based on Giga ACTUAL mapping and modelling input data

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Giga has started to engage with the Government of Zimbabwe (GoZ)

Key Stakeholders: The Government of Zimbabwe; Ministry of Information Communication Technology, Postal and Courier Services; Ministry of Primary and Secondary Education; Ministry of Finance and Economic Development; Information Communication Technology, Postal and Courier Services regulators and service providers

Giga engagement to date

- High level support from His Excellency President Emmerson Mnangagwa and line Ministers
- A focal point established at the Ministry of Information Technology and Courier Services
- School mapping data shared with Project Connect Team
- Completion of an upfront assessment to identify priorities, opportunities and initiatives to leverage

THE VALUE OF GIGA

"Access to affordable ICTs including the right virtual platforms will make it possible for many learners to achieve their educational goals in an increasingly connected world."

HON. JENFAN MUSWERE
Minister of Information Communication Technology, Postal and Courier Services in Zimbabwe
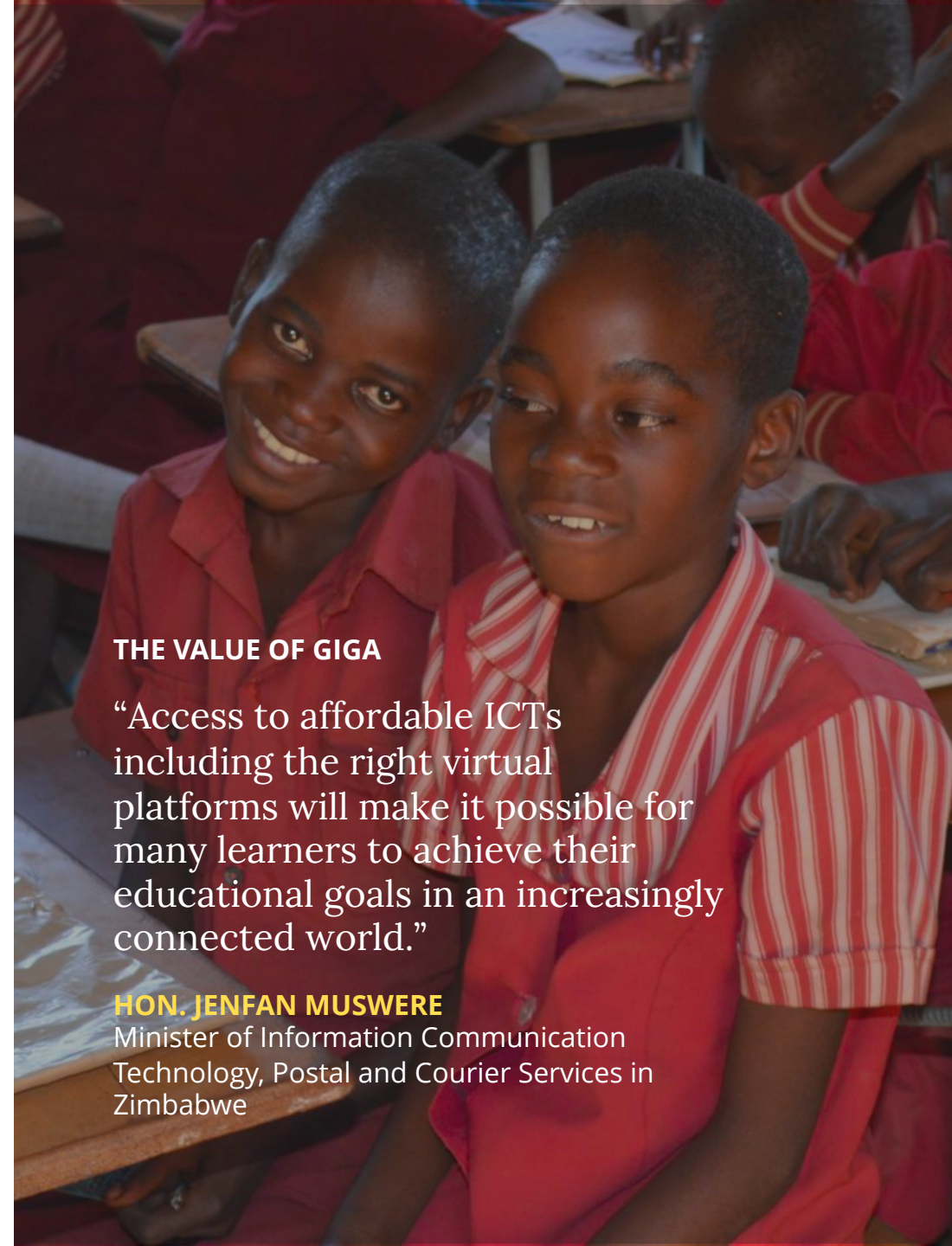
Giga has identified several activities to support the cost-effective connection of 6,611 schools

Use Project Connect mapping to identify schools and refine the investment needs for unconnected schools

Augment existing service providers programming with real time monitoring to confirm service levels and report on ongoing internet service coverage

Work with ISPs and MNOs (to identify opportunities to reduce data costs for schools and students

Estimate capex and ongoing opex costs for connecting all schools

Support the design of policies and regulatory strategies for affordable last mile access technologies and connectivity options

Define a partnership and fund strategy to connect the 6,611 schools that currently lack connectivity

Co-develop sustainable models for improving affordability of connectivity along with potential incentives for successful public-private partnerships

Work with Ministries of Education and ICT to explore opportunities for DPGs to play a role alongside other emerging private e-learning platforms

Strengthen the entrepreneurial ecosystem to build a pipeline of locally developed digital public services and goods (e.g. link to venture funding and acceleration content for public goods creation)

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Rapid Regulatory Scan

Policies

Sector strategies:[1]	
Digital transformation/broadband strategy	Yes
Planned e-government roll out	Yes
Digital education in strategy[9]	Yes
Child online protection:[2]	
National strategy/policy?	Yes
Responsible agency?	Yes
Non-discriminatory inclusive use policy?	No
Data sharing:[2]	
Data protection policy?	Yes
Privacy and data protection laws	Yes

ICT Regulatory Tracker

Sector strategies:[3]	
Generation of ICT Regulation	G3
Overall	74/100
C1: Regulatory Authority	19/20
C2: Regulatory Mandate	14/22
C3: Regulatory Regime	14/30
C4: Competition Framework	26/28

Regulation

Regulatory structure[1]	
Public/private sector consultation	Yes
Regulatory autonomy from the government	Partial
Clear planning and licensing process?	Yes
Procurement or competition agency?	Yes

Competition

Regulatory structure[1]	
SMP in national anti-trust/competition law	No
Spectrum technology neutrality in place	No
No foreign investment restrictions?	Yes
Infrastructure sharing?	Yes
Wireless Operators Market HHI[4]	5398
Fixed Broadband Operators Market HHI[4]	6260

Taxation

Services	
VAT[5]	14.5%
Sector specific tax on internet services[5]	10%
ITA Participant[6]	No
ICT Equipment import duties[7]	5%
Ongoing regulatory/license fees[1]	Yes

Universal Access

Services[8]	
Is school broadband is universal service?	Yes
Operational Universal Service Fund (USF)?	Yes
Total amount allocated/disbursed so far	$44M
Contributions as % of revenue	1.5%
Other public financing mechanisms?	Yes
Fully utilized currently?	Limited
Fully active in the last 5 years?	Partial

Legend:
- 🟩 Strength
- 🟧 Neutral
- 🟥 Limitation

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