

ANNEX 1: A BRIEF REVIEW OF SA CONNECT

Contents

Key References from SA Connect International Conference 11/12 November 2013	2
SA Connect Targets set in 2013:	2
The Results in 2020?	2
The Official Published SA Connect Targets in 2013	3
The Reality in 2021: STATS SA P0318.....	3
Schools Connectivity	3
NEIMS Internet Access Reports	4
Cost to Communicate in South Africa 2022.....	4
Poverty and the Cost to Communicate in South Africa:	4

Key References from SA Connect International Conference 11/12 November 2013

1. **Department of Communications Introductory Presentation:** In line with the broader vision of the NDP, the 2020 Vision for broadband is that **by 2020, 100% of South Africans will have access to broadband services at 2,5% or less of the population's average monthly income.** *Opening presentation by the DoC on 11 November 2013.*
2. **World Bank:** Broadband in education targets insufficiently ambitious (should be 100% connectivity and a minimum of 10 Mbit/s per class by 2016, not per school) – *Tim Kelly Presentation 11 Nov 2013*
3. **Dr Ernest C Ndukwe,** OFR, former CEO of Nigerian Communications Commission, NCC.: “People will sign on for Broadband internet when: ● it is available; ● they understand and appreciate its benefits; ● it is affordable; ● relevant content is available to meet their needs and tastes”: *Access to Underserved and Rural Areas and Licensing, 12 Nov 2013*
4. **Dr Raul Katz,** Columbia University/ITU: *The impact of South Africa Connect on jobs and the economy, 12 November 2013:* – “If SA Connect delivered by 2020, R 90,397 billion added to GDP, 400,000 jobs per annum. Demand Gaps in 2012/2013: 65% fixed, 56% mobile: Primary obstacle is AFFORDABILITY!”
5. **André Gomes,** Ministry of Communications, Brazil: *Policies and Challenges on the Brazilian National Broadband Plan* 12 Nov. 2013: Aggressively assigned and allocated 2,5 GHz, 450 MHz and 700 MHz spectrum bands for rapid broadband rollout and price reductions, 35Mbps download speed at 450MHz band LTE Rural Service, Full DTT migration by 2016.
6. **Ms Marzena Sliz** – *Republic of Poland: Key Messages, 12 Nov. 2013:* ● All broadband maps with full details in 100% public domain, attracting investors to fill all access gaps; ● Access targets: 100% households at 30 Mbps, 50% at 100 Mbps by 2020; ● 100% Open Access Networks, all non-telecommunications infrastructure utilised, including electrical power pole-mounted and buried cable routes;
7. **Mait Heidelberg,** Ministry of Economic Affairs and Communications, Estonia: Broadband – 12 Nov. 2013 Presentation: *Why, and How? Lessons from Estonia: Country Background:* ● Population//Population Density: 1.3m//29/km² (Compare S. Africa 2022 – 66.7m//25/km²); ● Fixed Broadband per 100//Fixed Broadband Households: [2010 - 26%/68%: 2021 – 33%/92% | S. Africa 2010 – 1.45%/10%: 2021 – 2.2%/8.3%] ● Schools: Absolute equality of schools and children; All schools connected at >10 Mbps per class; Best Educational Outcomes in EU; Online presence and identity from birth; ● Difficult terrain and access rural areas given high priority; ● Most resilient ICT networks – hostile former colonial power, major cyber-attacks in 2007 and 2022, rapid restoration of services.

SA Connect Targets set in 2013:

“In line with the broader vision of the NDP, the 2020 Vision for broadband is that by 2020, 100% of South Africans will have access to broadband services at 2,5% or less of the population's average monthly income” [Page 13 of 62 in Government Notice 953 of 6 December 2013](#)

The Results in 2020?

- Just 10.4 South African Homes have internet connections for Entertainment, Information, Education and Learning, and holistic personal and community development for a decent existence.
- The Average for Upper-Middle-Income emerging economies like South Africa, and many poorer ones like Vietnam, is approximately 60%. South Africa's deficiencies in broadband growth for all leads directly to the alarming inequality differentials depicted by the IMF in “Increasing Inequality in South Africa”:
<https://www.imf.org/en/News/Articles/2020/01/29/na012820six-charts-on-south-africas-persistent-and-multi-faceted-inequality>

The Official Published SA Connect Targets in 2013

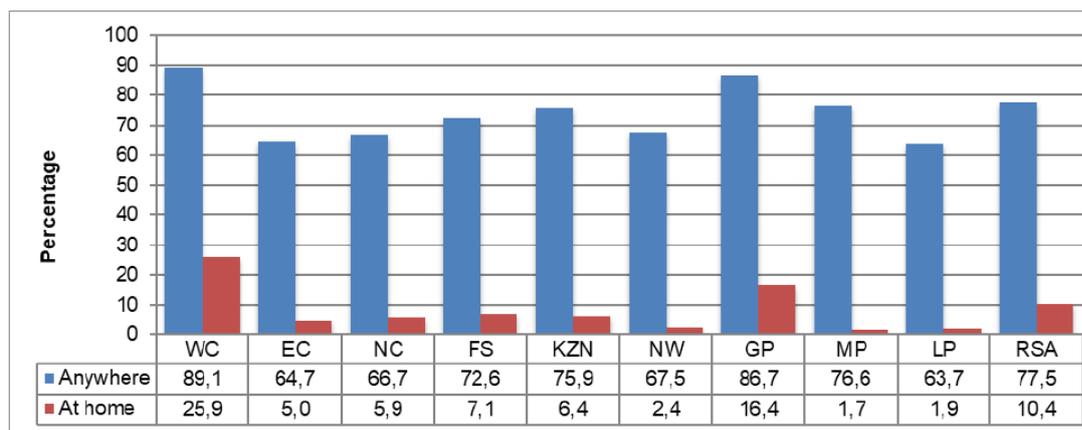
SOUTH AFRICA CONNECT: CREATING OPPORTUNITIES, ENSURING INCLUSION		Broadband Targets			
		 the doc Department: Communications REPUBLIC OF SOUTH AFRICA			
Target	Penetration measure	Baseline (2013)	By 2016	By 2020	By 2030
Broadband access in Mbps user experience	% of population	33.7% Internet access	50% at 5Mbps	90% at 5Mbps 50% at 100Mbps	100% at 10Mbps 80% at 100Mbps
Schools	% of schools	25% connected	50% at 10 Mbps	100% at 10Mbps 80% at 100Mbps	100% at 1Gbps
Health facilities	% of health facilities	13% connected	50% at 10Mbps	100% at 10Mbps 80% at 100Mbps	100% at 1Gbps
Public sector facilities	% of government offices		50% at 5Mbps	100% at 10Mbps	100% at 100Mbps

Reviewed periodically and supplemented by pricing and quality of service targets as well as speed of installation and fault repair

A global leader in the development and use of Information and Communication Technologies for socio-economic development

The Reality in 2021: STATS SA P0318

Figure 13.2: Percentage of households with access to the Internet at home, or anywhere, by province, 2021



Schools Connectivity

- In 2021, the National Education Infrastructure Management System Report ([NEIMS 2021](#)) states that just 20% of South Africa's Schools were equipped with Internet for Teaching and Learning – Quality/Quantity unknown, unstated.
- 30% of all schools had internet connections for Admin Only.

NEIMS Internet Access Reports: Internet Connections to Schools – 2011 to 2021

Report Date	Number of Schools	Internet for Teaching and Learning		Internet for Admin Only		Comments
		Number	Percent	Number	Percent	
2011	24,793	3167	13%			
2012	24292	3133	13%			
2013	23909	3182	13%			
2014	23740	4589	19%	5800	24%	
2015	23589	4599	19%	5849	25%	
2016	23577	4646	20%	6041	26%	
2017						No report
2018	23471	4675	20%	6574	28%	
2019	23258	4695	20%	6770	29%	
2020	23267	4723	20%	6852	29%	
2021	23276	4738	20%	6938	30%	

Cost to Communicate in South Africa 2022

Cost of Broadband: The lowest cost of 1 GB per month in South Africa ([July 2022](#)) was reported to be Rand 89. This amounts to about 12% of the total monthly income for up to 76% (48 million) South Africans who are deemed poor. This also amounts to 17% of the available income for nearly 14 million South Africans who cannot afford enough food for themselves and their families, those who lived at or below the Food Poverty Line (FPL) of R531 per month (2015), as reported by the [STATS SA's Poverty Trends Report of 2017](#). All this before the global coronavirus pandemic added to the woes of South Africa's poorest citizens.

The cost-to-communicate statistics relevant to this discussion are:

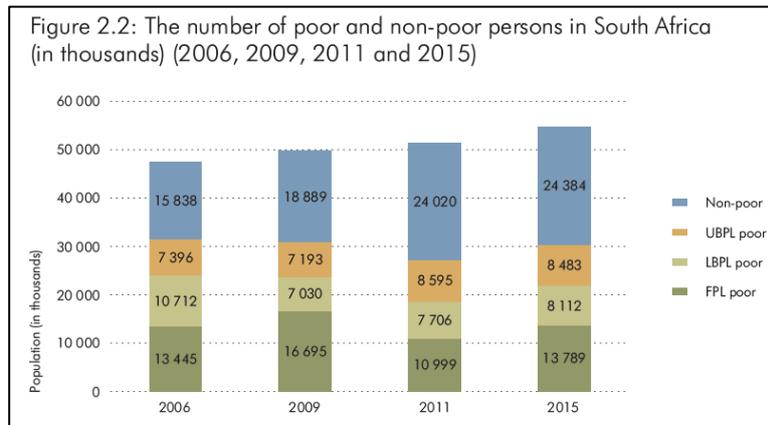
- SA Connect Target: 2.5% of monthly income or expenditure. This equates to an average of Rand 19.2 per month for those South Africans living below the national poverty lines based on 2015 data.
- The International Recommendation for empowering transformative broadband service is 2% of monthly income or expenditure for 1GB of mobile broadband per month (<https://a4ai.org/1for2-affordability-target/>). This equates to an average monthly cost of Rand 15.36 for South Africans living below the national poverty lines (2015 data).
- The lowest cost of 1 GB per month in South Africa is thus is 4.6 times SA Connect target, 5.8 times the Internationally Recommended target, and demands that the poorest South Africans who struggle to afford food must spend about 17% of what they have on the broadband they need to find the food they need.

Further Detailed Discussion in <https://www.compcom.co.za/wp-content/uploads/2019/12/DSMI-Non-Confidential-Report-002.pdf> with detailed submissions from South African interest groups in <https://www.compcom.co.za/submissions-to-the-data-inquiry-provisional-findings-and-recommendations/>

Poverty and the Cost to Communicate in South Africa:

The last formal national census conducted by Statistics South Africa was in 2011. This vital statistical planning tool is being updated through the latest National Census 2022, the most relevant results of which will be the [fifth large-scale Income & Expenditure Survey \(IES\) 2022/23](#), which is in progress with results expected in 2024.

Given the dearth of recent statistical data, the best source of the key statistics enabling an assessment of the actual cost to communicate and its relationship with poverty remains the STATS SA publication [Poverty Trends in South Africa published in 2017](#).



The 2021 national poverty lines published by STATS SA are (some data updated using the same ratios between poverty groups as in 2015):

- Population: 60.4 million
- Non-poor population: 26.82 million
- Upper Bound Poverty Line (UBPL): R 1,335 per month or R 44.5 per day; 9.331 million persons

- Lower Bound Poverty Line (LBPL): R 890 per month or R 30 per day; 8.923 million persons
- Food poverty Line (FPL): R 624 per month or R 20.8 per day; 15.168 million persons
- The weighted average daily income for all South Africans living below the UBPL was approximately R 30 per day, equivalent to the LBPL poverty line.
- The International Poverty Line for upper-middle-income economies like South Africa has been set by the World Bank at US\$ 6.85 PPP per day, equivalent to R 47.95 per day in 2021, higher than South Africa's UBPL.
- GNI Per Capita PPP for South Africa in 2021, a proxy for the average national income, was US\$14,140 p.a. ([World Bank](#)), equivalent to R 8,248 per month, or R 275 per day. This is 9.2 times the average income or expenditure capacity of South Africa's 33.4 million people who live in poverty.

The level of poverty according to the above estimates may be grossly understated. The National Income Dynamics Study (NIDS), undertaken and published by the University of Cape Town on behalf of the South African Government, funded by the Department of Planning, Monitoring and Evaluation, estimates the impact of the coronavirus pandemic on poverty in South Africa. The report expands the 2015 poverty level from 55.5% to approximately 76% by adding the coronavirus-driven transitional and newly vulnerable poor. The full report is available at http://www.nids.uct.ac.za/images/papers/2019_02_NIDSW5.pdf.

In any endeavour to ameliorate or reverse very difficult and potentially threatening challenges like poverty and inequality, it is always best to work from the worst-case scenario; 76% poverty must be used in the search for solutions.

If the A4AI recommendation of 2 for 1, 2% of income/expenditure for 1 GB per month of mobile data is accepted, as it is by the ITU and all 80+ stakeholder supporters of A4AI, then the price of 1GB of data per month should be about R 18 per month. Previous estimates were in the range of R15 per month, the differences are due to time-dependant exchange rate variations, demographic changes, and the impact of unexpected socio-economic-political shocks like global recessions, pandemics, and local and international political conflicts and wars. All highly informative A4AI reports from the first

in 2014, to the most recent for 2021, are available from the organization's website at <https://a4ai.org/research-database/>.

The core recommendation of all these reports is simple: if a country's poverty levels are so deep that traditional models of national ICT development cannot bridge the affordability divides, then those countries should introduce nationally scaled public broadband access systems with adequate and rising qualities and quantities for use by the nation's poorest population, especially the children of the poor.

Within the context of this recommendation, the very strong July 2020 UN-HCR report and recommendation, [The parlous state of poverty eradication](#), also known as the "Alston Poverty Report", is most relevant, and must be applied to shape South Africa's response. The Alston Poverty Report is summarised as follows:

"The world is at an existential crossroads involving a pandemic, a deep economic recession, devastating climate change, extreme inequality, and an uprising against racist policies. Running through all of these challenges is the longstanding neglect of extreme poverty by many governments, economists, and human rights advocates."

"... the international community mistakenly gauges progress in eliminating poverty by reference to a standard of miserable subsistence rather than an even minimally adequate standard of living."

After intervention by the Competition Commission following its [Data Services Market Inquiry](#), the price of 1GB of mobile data per month was reduced to R 85. This is still about five times higher than the affordability limit for up to 76% of South Africans. The resulting mammoth affordability gap begs the question of whether traditional models of national ICT development are valid for the 76% of South Africa's population who are poor. Clearly such competitive free market ICT development models do not and have never worked for South Africa's poorest majority over the 160-years of ICT development in the country.

Could it be that the basic definition of an "ICT Market" needs to be reviewed? Could a dual market, one that continues to successfully address the macroeconomic ICT needs of the nation through a competitive free market model, and another that addresses the immense socio-economic-political costs of poverty, inequality, and unemployment, coexist?

Perhaps they must coexist, and dual models developed and implemented, if South Africa is to avoid the well-known historically illustrated costs of the triple threats of inequality, poverty, and unemployment. The search for such a dual market definition, and implementation of the required processes, must be intensified. There are numerous possibilities which must be examined and adopted in an intensive consultative process as provided for in SDG 17 - *Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development*.