

The impact of the ECA Amendment Bill on the cost to communicate in South Africa

Prepared for: Parliament of South Africa

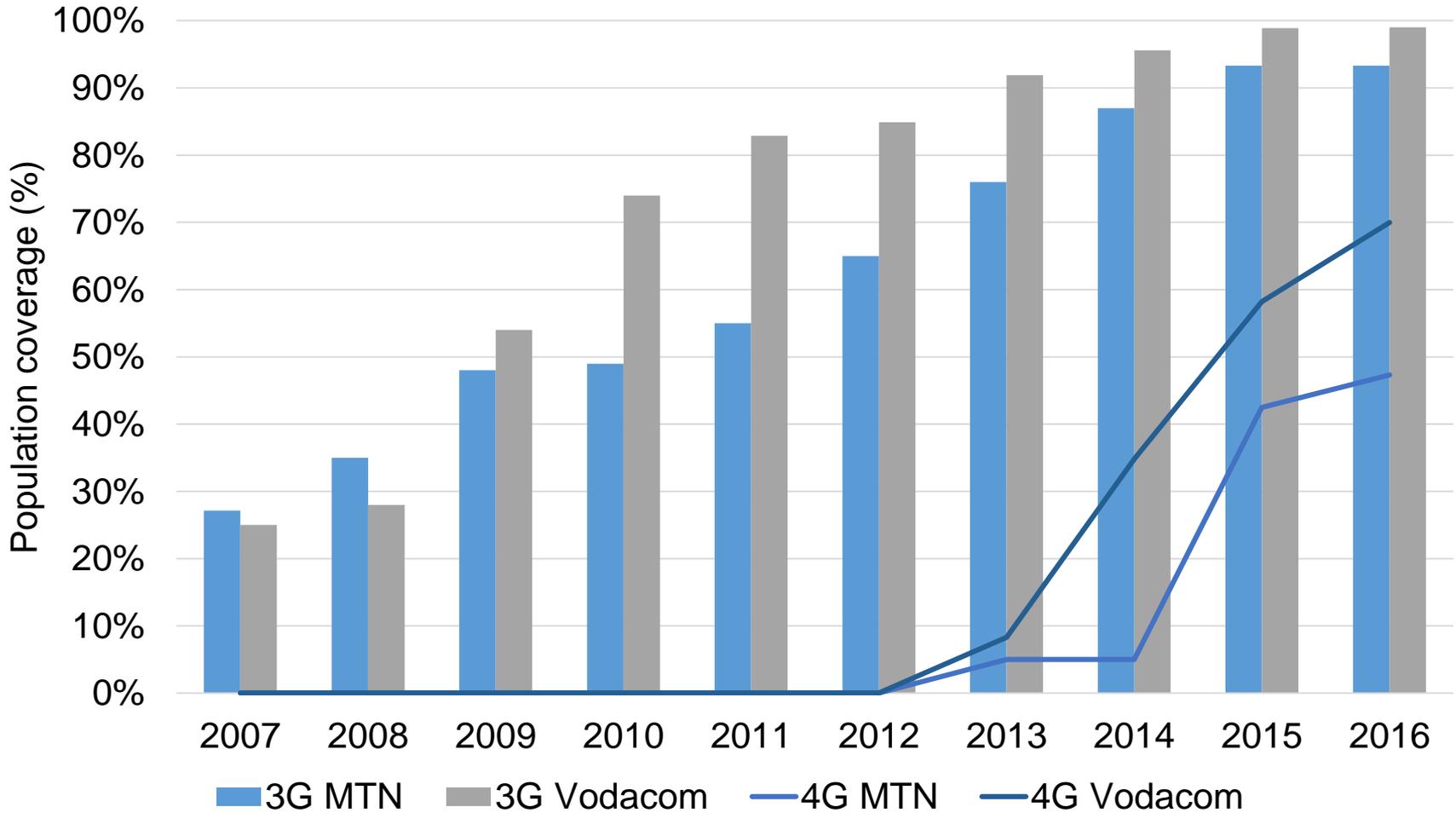
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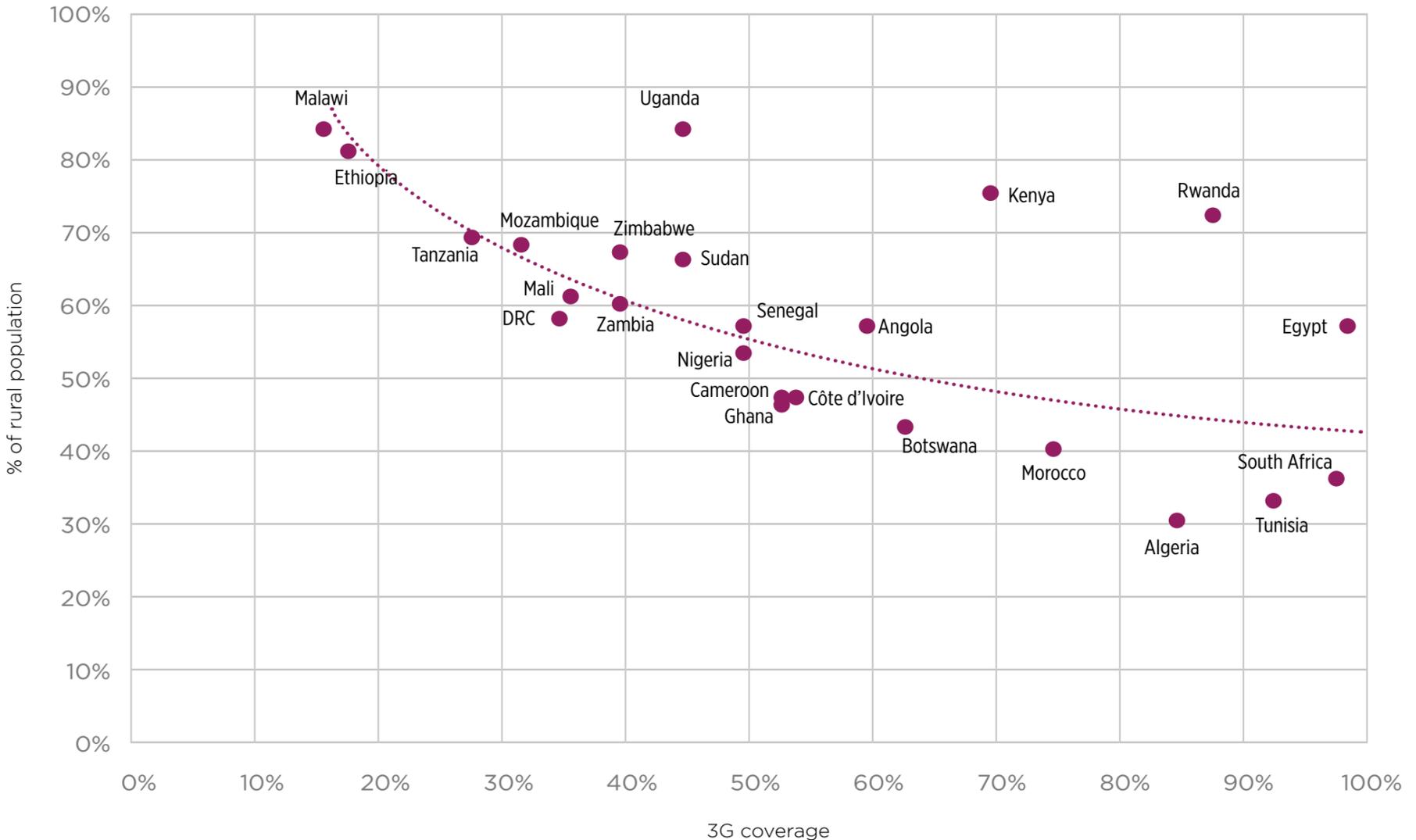
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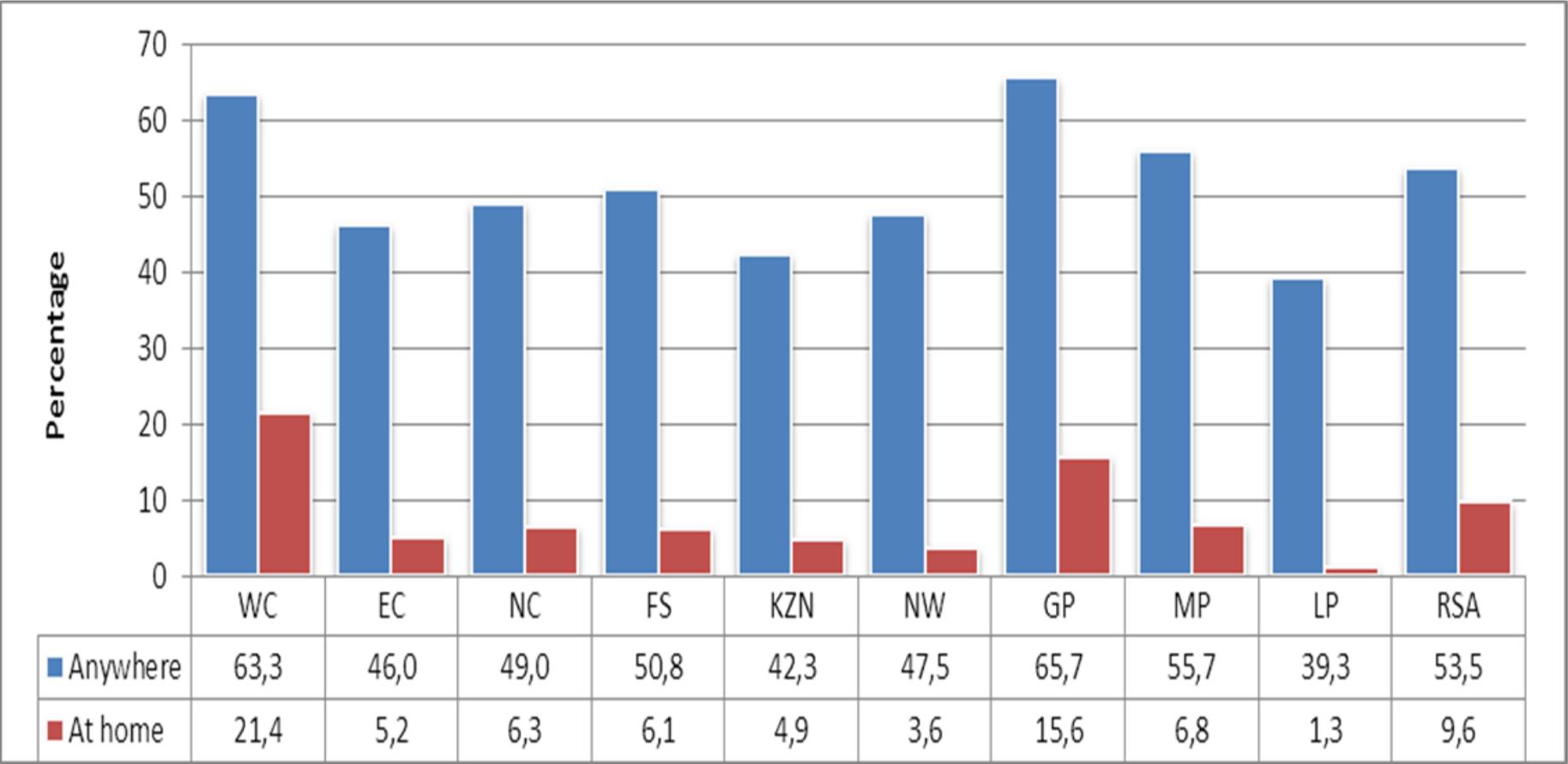
The ECA Amendment Bill seeks to reduce infrastructure based competition; by reducing competition **cost to communicate will go up**, and quality will likely go down



Reducing infrastructure competition will likely reduce coverage in SA, **again increasing the costs to communicate** (and SA has among the highest levels of internet coverage in Africa)



At the same time, internet access in South Africa is abysmal – though the problem is not so much coverage – it is access and use (and this is linked to the cost to communicate)

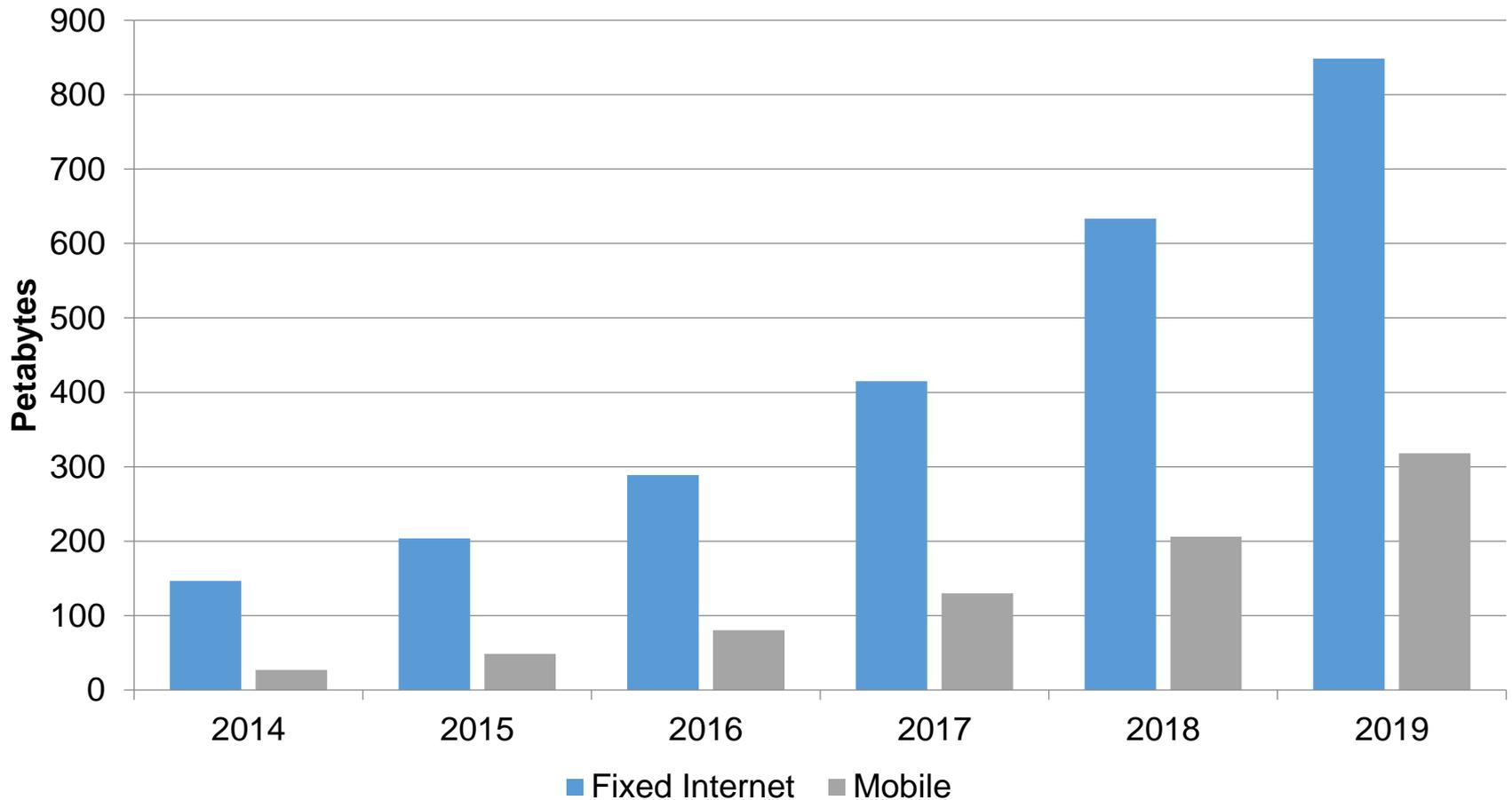


There may be other explanations low uptake in South Africa

Barrier	Lack of awareness and locally relevant content	Lack of digital skills and literacy	High cost of devices and services (Affordability)
Algeria	51%	23%	12%
Cameroon	43%	28%	27%
Congo, Democratic Republic	45%	28%	21%
Côte d'Ivoire	35%	30%	17%
Egypt	72%	39%	55%
Ethiopia	18%	62%	9%
Kenya	46%	37%	25%
Morocco	49%	51%	33%
Mozambique	34%	27%	39%
Nigeria	53%	32%	24%
Sierra Leone	21%	60%	54%
South Africa	57%	24%	46%
Tanzania	20%	45%	43%

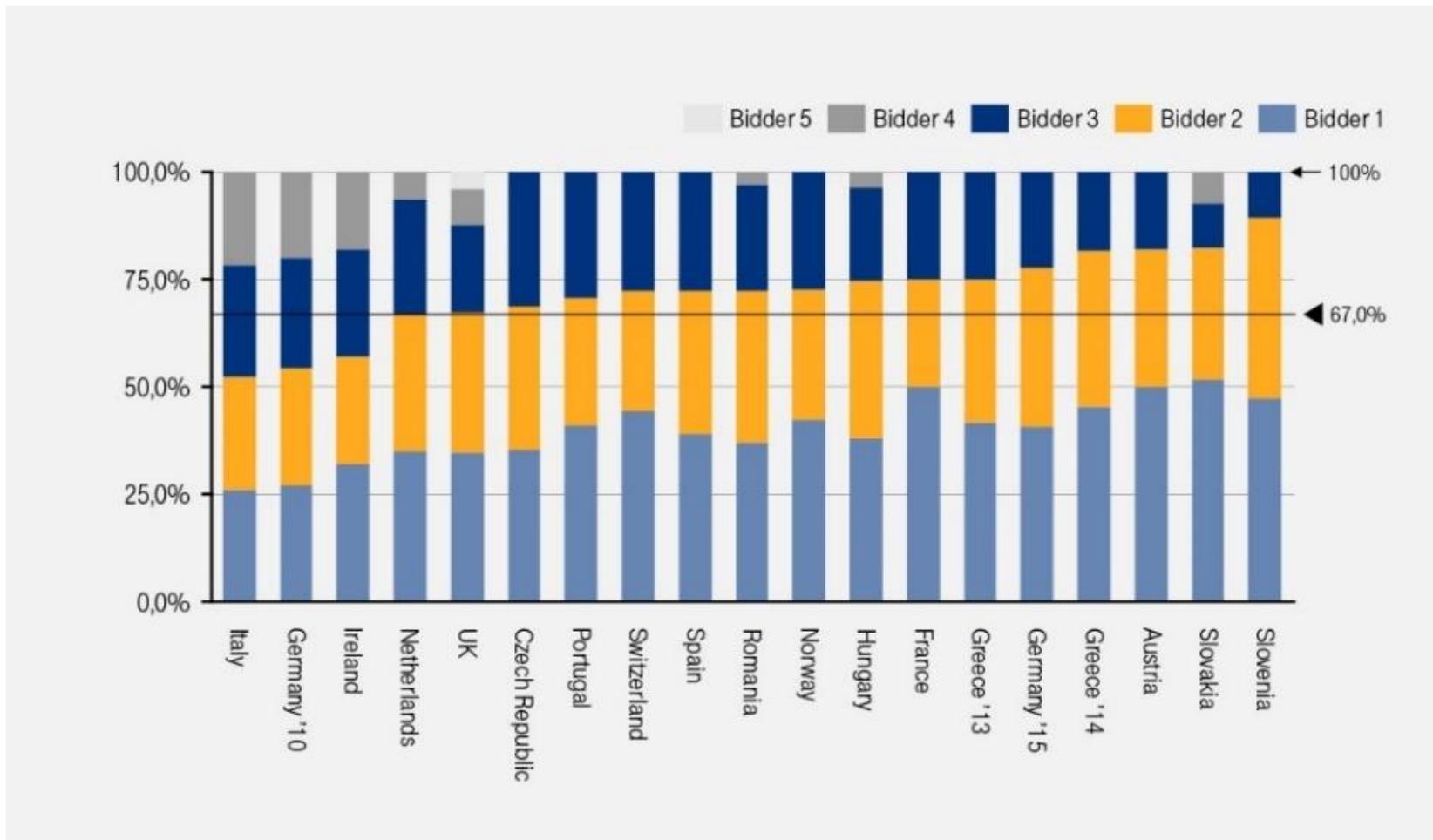
Awareness is low in SA

The Amendment Bill will reduce competition among fixed-line providers (single trenching, adequately served) **raising the costs to communicate** – and fixed lines carry the bulk of SA’s internet traffic

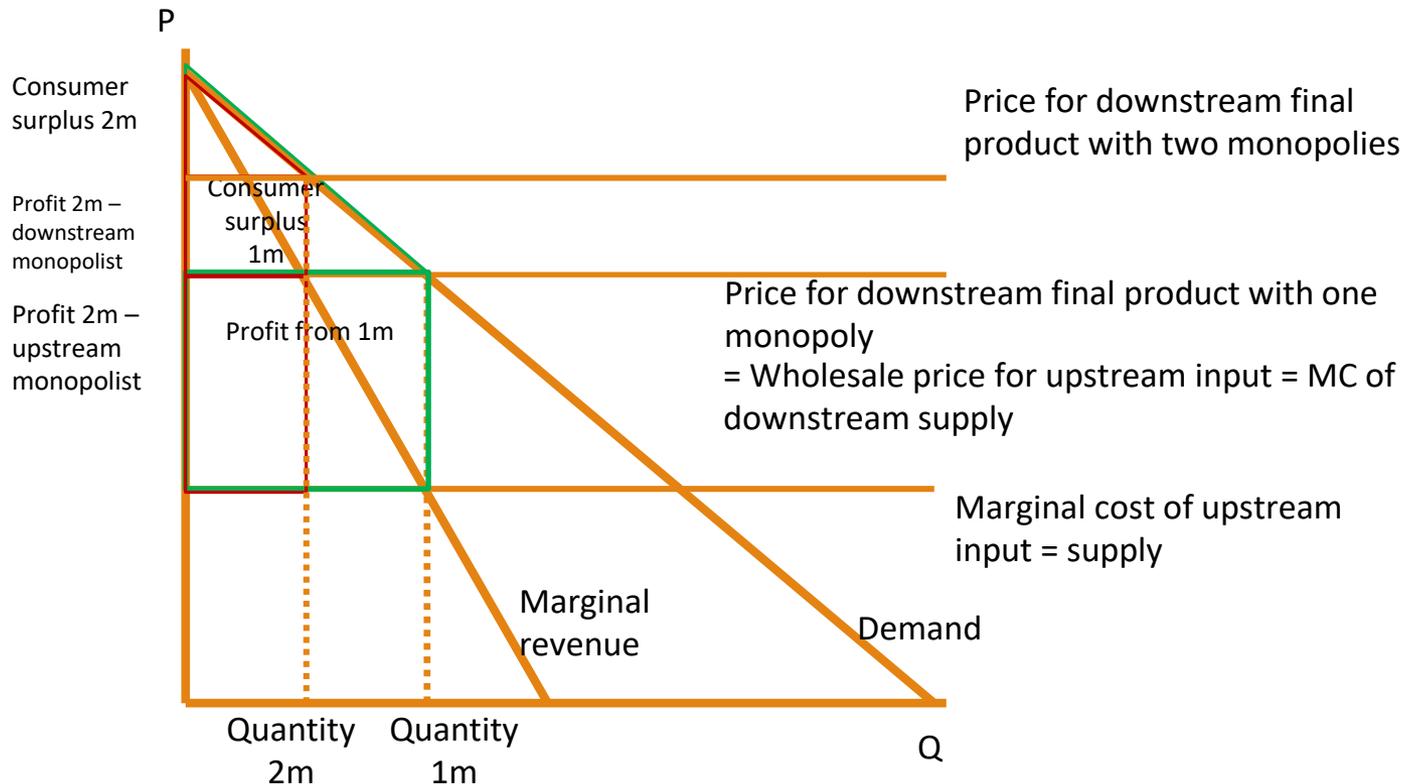


Source: Cisco VNI

Creating a 7th wireless operator in SA is unlikely to be efficient: most countries have assigned spectrum to 3 operators, and at most 4 operators – all via auctions



Adding an additional intermediary in the value chain (most of the WOAN's capacity will simply be sold to existing mobile operators) will **raise the costs to communicate**, due to having two margins from an additional intermediary



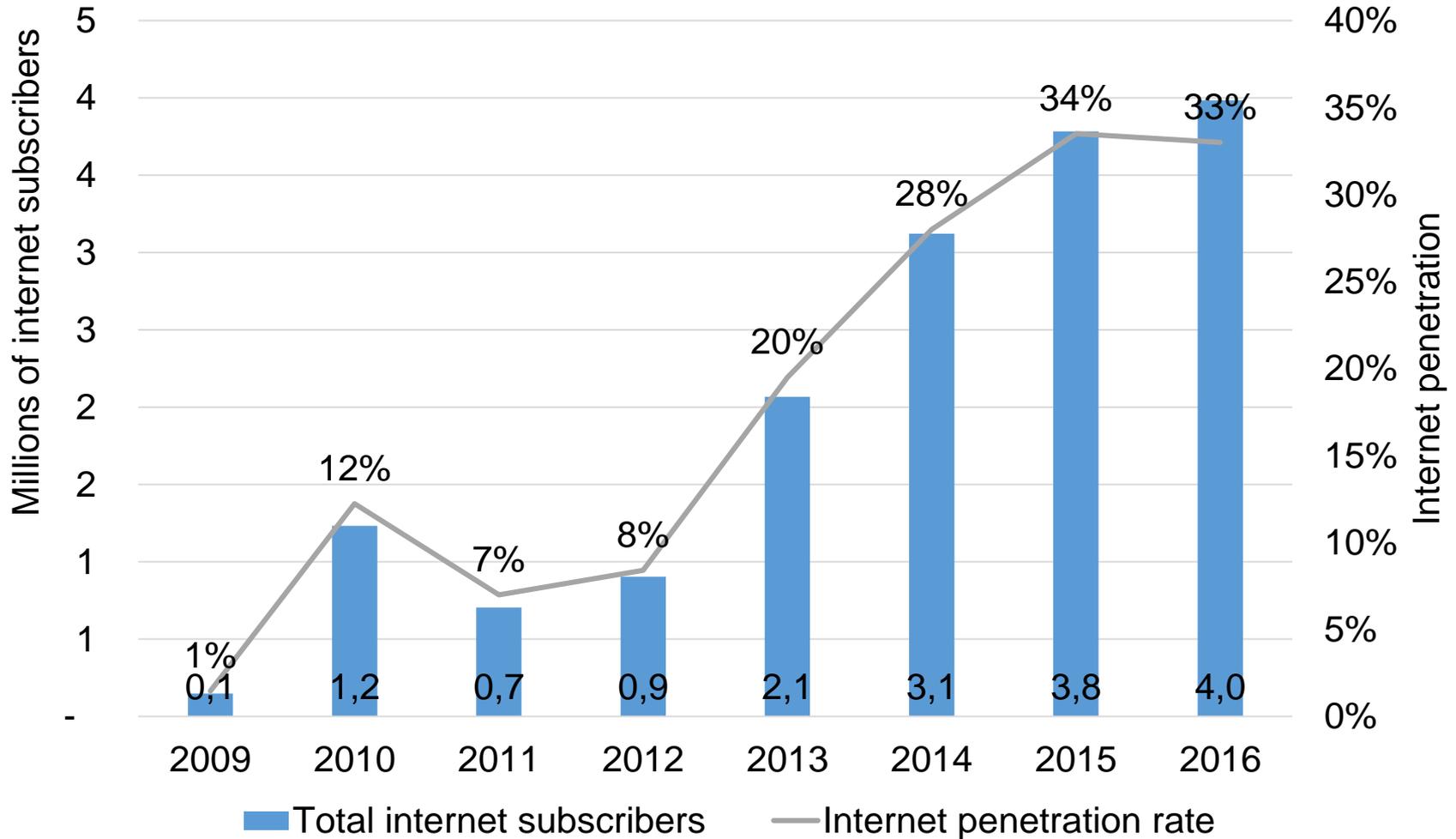
Allocating and assigning spectrum will reduce the costs to communicate – and spectrum is not all that scarce

Band	ITU position	ICASA proposal	Timeframe for assignment
450-470MHz	Identified for IMT, subject to a feasibility study	Propagation advantages mean band should be assigned to support SA Connect in rural areas	Migration by 2022
700MHz and 800MHz	Allocated for IMT; 800MHz+ assigned in most countries	To assign bands to mobile operators immediately	ITA on hold due to court process
750MHz	Allocated for IMT usage	To await relevant ITU-R report	TDD assignment possibly by 2018
850MHz	Allocated for IMT usage	Migrate Neotel's to free up 850MHz for LTE	Unclear
880MHz to 960MHz	Allocated for IMT usage	To harmonise GSM assignments to increase available spectrum	31 March 2020
2300MHz to 2400MHz	Identified for IMT usage	To await relevant ITU-R report, migrate WBS to 2380-2400MHz	Unclear
2500MHz to 2690MHz	Allocated for IMT usage and in most countries has already been assigned	To await relevant ITU-R report, migrate WBS out of the band, assign to mobile operators	ITA on hold due to court process
3400MHz to 3600MHz	Allocated for IMT usage	To await relevant ITU-R report, consider migration to unpaired TDD to increase capacity	TDD assignment possibly by 2018

... and **spectrum sharing and trading is a welcome intervention**; competition can be protected and enhanced through **efficient use of spectrum**, resulting in lower costs to communicate

Spectrum policy tool	Impact on competition	International experience
Set-asides for new entrants	Ensures new entrants can access spectrum Risk - entrants ineffective, spectrum sterilised	Canada set aside 60% of 50MHz – bought by new entrant – appears successful Ghana 2600MHz given to 3 small local players - ineffective
Auction	Various designs – key to encourage participation and discourage collusion Package clock favours entrants High reserve price discourages participation	Used widely internationally Nigeria, Senegal, Ghana – high reserve price led to low participation Possible to include universal service
Spectrum cap	Prevents consolidation of spectrum holdings and market power Can be overall or sub/above 1GHz etc.	Widespread E.g. India no operator may hold >50% in any band or >25% overall
Spectrum sharing / roaming	Encourages efficient use of spectrum Allows increased channel size & carrier agg Leverage for small players Should be monitored for competition effects	JVs which amount to core network sharing assessed carefully by regulators: UK, SA, Sweden, Denmark Roaming may be less problematic
Spectrum trading	Ensures spectrum efficiently used Lowers risk to small players bidding Should trigger competition investigation	Permitted in EU, US, Australia and NZ

An open access LTE monopoly in Rwanda has not helped internet penetration much, and does not foster 'services-based' competition, really only resellers



The 'Red Compartida' in Mexico looks quite different to the proposed WOAN in SA

WOAN in Mexico	WOAN in SA
Competitive bidding for spectrum set-aside	Cooperation among operators
Commercial offtake agreements	Incumbents required to cooperate and take capacity
Infrastructure rival	Intended to reduce 'duplication of infrastructure', encourage services-based competition

Rather than a WOAN, what is needed **is open access (properly implemented) to reduce the costs to communicate**

Amendment Bill proposal	Targeted licensees	Suggested target licensees
Effective access to infrastructure	All	Market power**
Reference offers, quality, controls, etc.	All	
Transparency, non-discrimination	All	
Accounting separation	Deemed entities (vertically integrated)	
Cost-based pricing (wholesale rates)	WOAN, deemed entities	
Active infrastructure sharing	WOAN	
Network and population coverage	WOAN	

Additional ‘degrees of functional separation’, imposed on firms with market power**

Separate wholesale division, virtual separation, business separation, business separation with local incentives, business separation with separate governance arrangements, legal separation

* SMP; controls essential facility; **25% of total infrastructure**; spectrum assignment

** Measured using traditional revenue and / or subscriber market shares

The World Bank proposes universal service responses to specific problems

Instrument	Issue addressed	Means of addressing issue
Reverse auctions, output based aid	Though sustainable in the medium term, some projects are not initially attractive to investors	Reverse auctions: Award projects to operator that will deliver services for the lowest subsidy; Output-based Aid: Disbursement schedule tied to delivery of outputs rather than infrastructure
Introduce bottom-up projects	National operators usually don't design projects/products addressed for low income rural areas	Allow for community based initiatives to be financed
Institutional demand stimulation	Low demand in rural areas reduces attractiveness of supply	Create captive demand for service in rural and low-income areas by committing government agencies to pay.
License obligations	Lack of interest of entrants established in main cities to rollout nationwide	Include mandatory areas for coverage as part of licences
End-user subsidies	Low-income, rural households unable to afford telecommunications services	Target population given a subsidy to pay for services
Designated Universal Service Operator	Reaching high cost areas is a disadvantage for incumbents when they face aggressive competition in densely populated/low cost areas	An operator, usually the fixed line incumbent with national coverage of fixed networks, given universal service strategy for per-connection transfer from government
Access Deficit Charges (ADC)		Incumbent operators receive compensation for connections deemed as high cost

While there are clear institutional problems with universal service in SA, greater ministerial involvement, and a WOAN, is unlikely to be the solution

Amendment Bill	Acacia Economics comments
No change to universal service fund, Agency structure, except USA Minister approval	ITU success factors for universal service funds: <ul style="list-style-type: none"> • Autonomy and independence is a success factor of managing a USF • Not subject to political interference Greater clarity of roles needed to deal with institutional failure
Silent on private sector involvement	Pakistan, Nigeria, Ghana, Canada all involve the private sector on their USF boards. Consultation with stakeholders is an important means of achieving faster implementation.
ICASA must obtain ministerial approval for universal service obligations, and Minister to define USA	Universal service policy shapes competitive dynamics, and competitive dynamics can hinder or spur universal service End-user subsidies & least-cost auctions are least likely to distort competition Suggests greater (not less) ICASA independence in universal service
Primary intervention is WOAN	Best practice suggests that a flexible legal and regulatory framework should be employed to allow for new developments, changes in technology, etc. (implemented in Peru, Chile, Columbia and Ghana). A range of instruments should be allowed. Rather than focusing on one solution, universal service policy should: Have defined and measurable objectives, a fair and objective allocation process, focus on capacity building, sustainability, complementary services, transparency, reporting, digital inclusion and responsiveness.

Conclusions: The ECA Amendment Bill will raise the cost to communicate

- Spectrum sharing and trading (subject to competition rules) is a welcome reform that will enhance funds raised from auctions and make markets more efficient
- Key reforms to universal service regulation to make universal service more independent are missed (can shape competitive landscape)
- **WOAN will result in higher costs to communicate**, adding an additional intermediary (margin) into the value chain (90% of WOAN capacity will go to incumbent operators)
- Opportunity to simplify licensing framework is ignored (notification regime rather than invitation process is needed)
- Wide application of onerous regulations to non-SMP licensees will raise compliance costs, raising the costs to communicate
- Amendment Bill proposes **less rather than more competition** ('adequately served' requirement, single trenching, WOAN cooperation among competitors)
 - Puts a **limit on the sector's ability to create jobs**
- Reduction of regulatory independence runs counter to international best practice; rather, ICASA should be enabled to raise funds directly from regulated entities