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Creating opportunities for deployment: Challenges to and solutions for regulatory frameworks

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Typical challenges to a regulator

- Due processes to be followed
 - generating internal interest
 - motivating, taking into account government policy
 - due processes take time!
 - ICASA started in 2010
- Embedded stakeholder interests
 - Large operators (arguments that nothing more is needed beyond LTE)
 - Large incumbent communities (e.g. broadcasting)



Make your life easier: stick to solid principles

- Only regulate what's absolute necessary
 - Protect incumbents by eliminating harmful interference
 - Allow incumbents to also share in the benefits
 - Mandate interoperation – by mandating standards – only if really beneficial (try not to exclude products from the market)
 - Minimise cost of spectrum use to the operator
 - Once a level playing field is in place, leave the rest to the market



What are the market opportunities?

- About half of population (total about 50 m) without affordable broadband access – especially in rural areas
- In rural areas there is generally no broadband connectivity for:
 - Schools
 - Clinics and hospitals
 - Government and provincial offices
 - Enterprises
- Because of lack of broadband there is also no internet cafes



What are the spectrum opportunities?

- 224 MHz of spectrum between 470 and 694 MHz
- In rural areas only a small fraction – not more than about 32 MHz at any particular location – is used
- There is great scope for TVWS networks in SA (guess elsewhere as well)



Once a regulatory framework is in place, what could happen in SA?

- TVWS space, with free or low cost spectrum will provide great scope for rollout
 - About 200 network licensees exist
 - Although they can use licence exempt spectrum at 2.4 GHz, 5.15-5.35 GHz, 4.7-5.725 GHz, 5.725-5.8 GHz, they require other spectrum
 - Must be below 1GHz (for more favourable propagation in rural areas)
 - Must not cost a lot
- Many of the network operators would add TVWS technologies to their portfolio
- Rollout could happen at a very rapid pace
- Networks consisting of 5.8 GHz, TVWS and WiFi could be very effective
- Through internet cafes and access at WiFi hotspots at other locations (shops, government offices, hospitals, clinics and schools) members could get broadband access



Next step for ICASA

- We would love to have a regulatory framework in place in 2017!

Thank you!





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Thank you!