

Spectrum licensing best practice

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Licensing Terms and Conditions

LICENCE TERMS & CONDITIONS CAN SUPPORT NETWORK EVOLUTION & INVESTMENT

License duration of 15 to 20 years

Remove service and technology restrictions

Use coverage obligations with caution and target them

Avoid restrictive and onerous conditions

Use annual fees to recoup costs – not maximise revenues

RENEWAL PROCESS SHOULD AVOID RISKING INVESTMENT & SERVICE CONTINUITY

Establish a license-renewal process inc consultation 3-4 years in advance

A presumption of renewal (unless terms breached) supports service continuity and investment

Renewal should be predictable and avoid introducing new terms which jeopardize Roll out



Licensing Challenges

What spectrum will be available and when:

 To plan what spectrum operators need to invest in over the near-to-long term to meet rapidly growing data demand (this should encompass coverage & capacity bands, existing and future bands)

Regulatory certainty:

e.g. allocation methodologies, renewal procedure, projects and programme

Licensing regime:

e.g. refarming, resource pricing, spectrum sharing

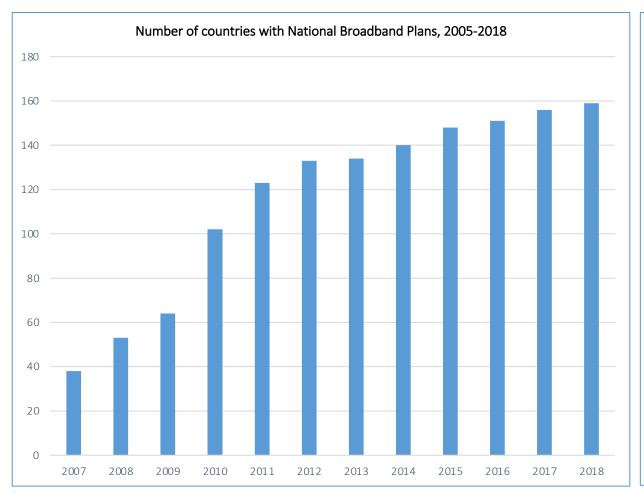
Harmonised future spectrum:

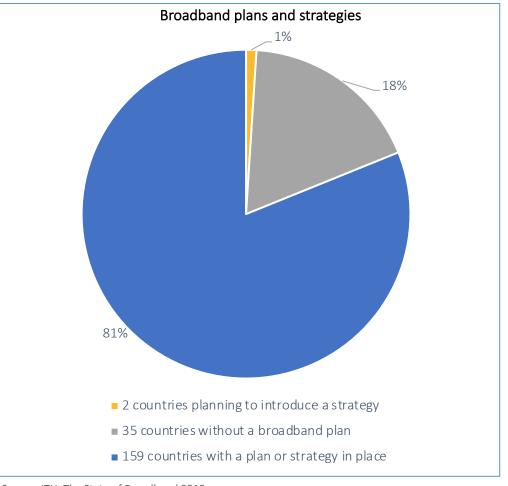
To reduce equipment costs, limit interference and enable roaming





Spectrum Roadmaps





Source: ITU

Source: ITU, The State of Broadband 2018



Spectrum Roadmap: How to plan?

Spectrum Availability

- Ranges:

 Coverage &
 capacity
 bands, existing
 and future
 bands
- Timing: Invest in over the near-to-long term

Regulatory Certainty

- Allocation methodologies
- License duration
- Renewal procedure
- Projects and programme

Licensing Regime

- Refarming
- ResourcePricing
- Spectrum
 sharing and
 secondary
 market
- TechnologyNeutrality

Harmonised Future Spectrum

- International band plans
- Releasebefore needed
- Reduces costs, interference and enable roaming

Follow best practice

- Research international cases
- Reach for support of experts
- Promote
 consultations
 and debates
 with interested
 parties



Impacts of higher spectrum prices



Network Coverage



Network Quality



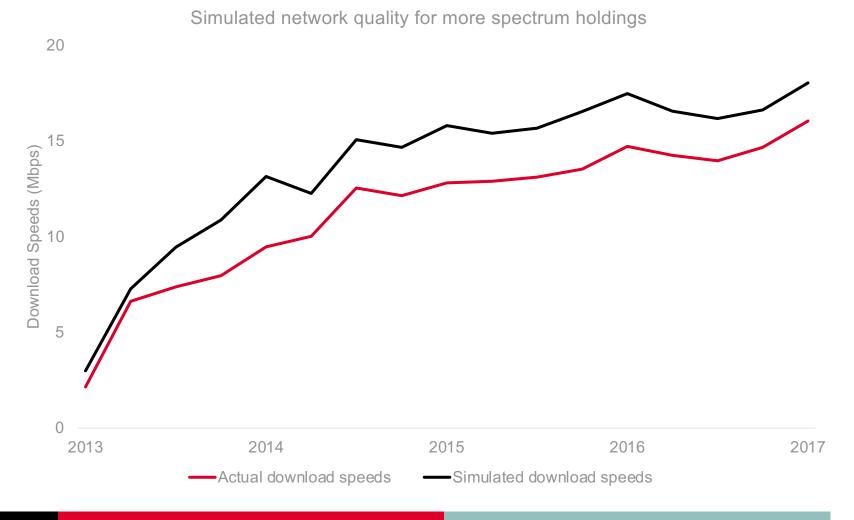
Consumer Prices

Analysis based on 229 operators in 64 countries (34 high income and 30 low & middle income) from 2010-2017



Spectrum holding impact on quality

- Amount of spectrum impacts network quality
- Compare actual with simulated download speeds if more spectrum released to operators with 20 MHz less than median
- Speeds would have been 2.5Mbps faster (15% increase) over the period if spectrum holdings had been at average levels





In summary, Spectrum should be made available:



AT THE RIGHT TIME

The earlier the better

Use a spectrum roadmap



UNDER THE RIGHT CONDITIONS

Technology Neutrality is very important



IN SUFFICIENT QUANTITY

Capacity crush in cities will define the commercial offering of an operator



Work with the operators to understand how much is needed



AT THE RIGHT PRICE

Auctions should determine the price



GSMA Studies





https://www.gsma.com/spectrum





Africa Awards Spectrum Report from GSMAi

We are delighted to invite you to participate in our webinar entitled, 'Spectrum Award Policies to Expand Mobile Connectivity'.

Coinciding with the launch of GSMA's new report on spectrum availability and pricing for Africa, this 1 hour 45 minute event will discuss evolving spectrum best practice to drive investment in high quality, affordable, mobile broadband services.



Online event Invitations to follow



Wednesday 4 November, 2020 English
Thrusday 5 November, 2020 French
10:00-11:45 GMT.