
SPECTRUM
SUPPORTING FAIR AND TRANSPARENT REGULATION

Why spectrum roadmaps are so important

Keys to the Success of Digital Societies

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Spectrum Roadmap: Why It Matters

A spectrum roadmap is essential to ensure there is enough spectrum to meet surging demand for mobile services

- Increasing pace of mobile technology evolution and the decreasing cycle time for new technology demand increased agility in spectrum management and planning framework
- Balance the time to relocate by the incumbents against the costs of delaying the introduction of new technologies – trade-offs
- Allocate spectrum for new uses in advance of the technology becoming available so that operators have time for planning, capital expenditure and implementation

A spectrum roadmap helps

- Government forecasts future trends and manage its work and risks;
- Industry with increased certainty about the government's future allocation plans and management of radio spectrum.

Key Themes

Key themes for a spectrum roadmap

- Emerging challenges and opportunities to radio spectrum management framework and approach, at least 3 – 5 years into the future
- Identify future technological trends and drivers, and assess their impact on spectrum policy and planning
- Spectrum management work projects and programme planned to address the identified challenges and opportunities
- A roadmap is an evolving document, to be reviewed and updated regularly (annual review is recommended)

Key Challenges

Some key challenges to address

- 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

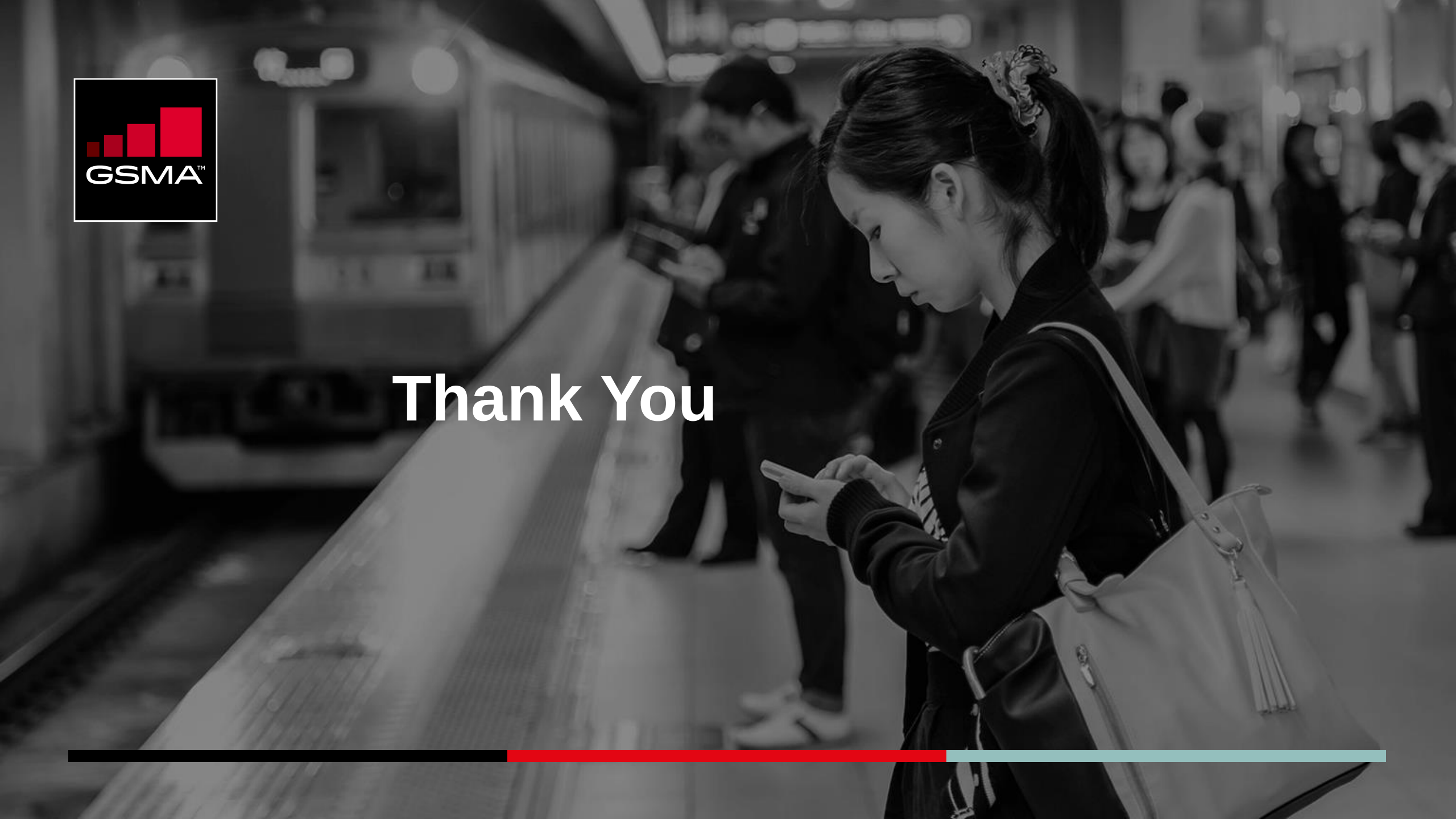
Spectrum Roadmap Examples

- **Australia**
  - A Five-year Spectrum Outlook 2017 –- 2021 is under public consultation until 18th of December 2017
  - Outline the ACMA's assessment of the demand for different parts of the radio spectrum;
  - http://www.acma.gov.au/Industry/Spectrum/Spectrum-projects/5-Year-Spectrum-Outlook

- **New Zealand**
  - Released its Radio Spectrum Five Year Outlook 2017 –- 2021
  - Stimulated the discussion about the uses of radio spectrum;
  - To update and refine the radio spectrum management framework to make it more responsive and effective;
  - https://www.rsm.govt.nz/online-services-resources/publications/annual-reports-and-business-plans

What would the spectrum roadmap for Kenya look like ?

- Emerging challenges and opportunities to radio spectrum management framework and approach in the future for Kenya ?
- Identify future technological trends and drivers in Kenya , and assess their impact on spectrum policy and planning
- Spectrum management work projects and programme planned to address the identified challenges and opportunities
- What spectrum will be available and when ?
- Regulatory certainty (allocation methodologies, renewal procedure, projects and programme)
- Licensing regime (re-farming, resource pricing, spectrum sharing)
- Options for harmonised future spectrum



Thank You