



Australian Government



Australian
Communications
and Media Authority



International Training Program 2014

Spectrum management and demand forecasting

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General Manager

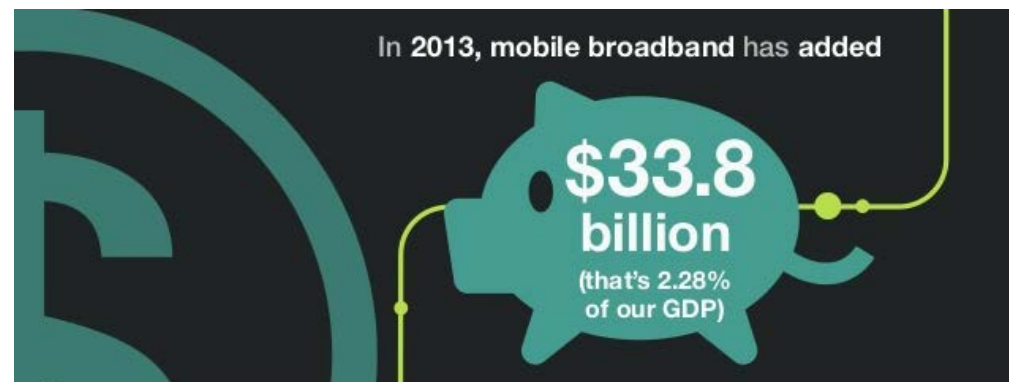
Communications Infrastructure Division

Spectrum management today

- > Scarce resource, growing demand and use
- > Spectrum decisions ripple through society
- > Management needs future and current focus
 - > Informed by many factors

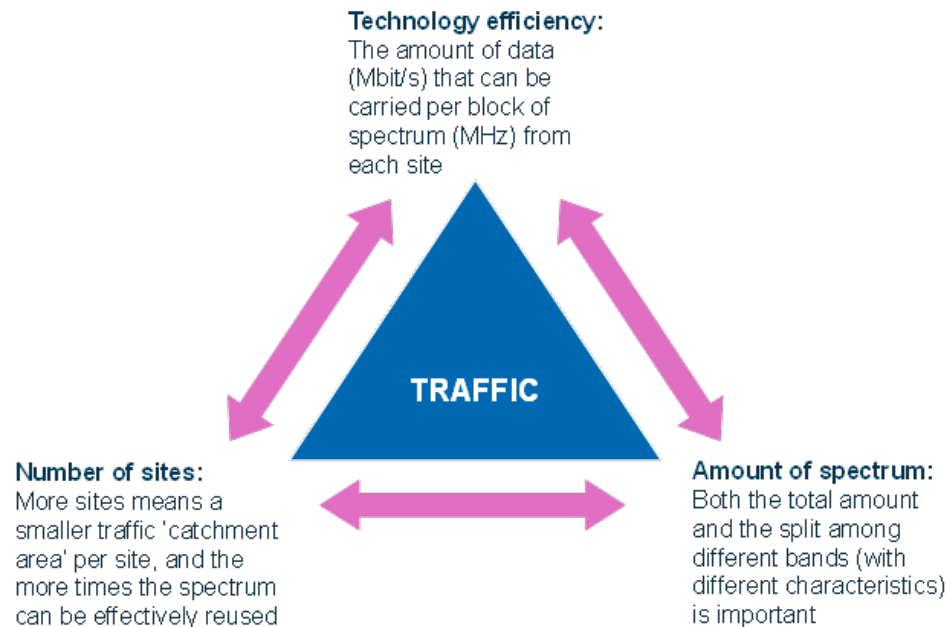
Drivers for change

- > Global agenda
- > Government efficiency and evidence-based decision making
- > Spectrum-hungry technology
- > Big money in spectrum



Mobile Network Capacity Forecasting Model

- > Looks at the trade-off between three factors



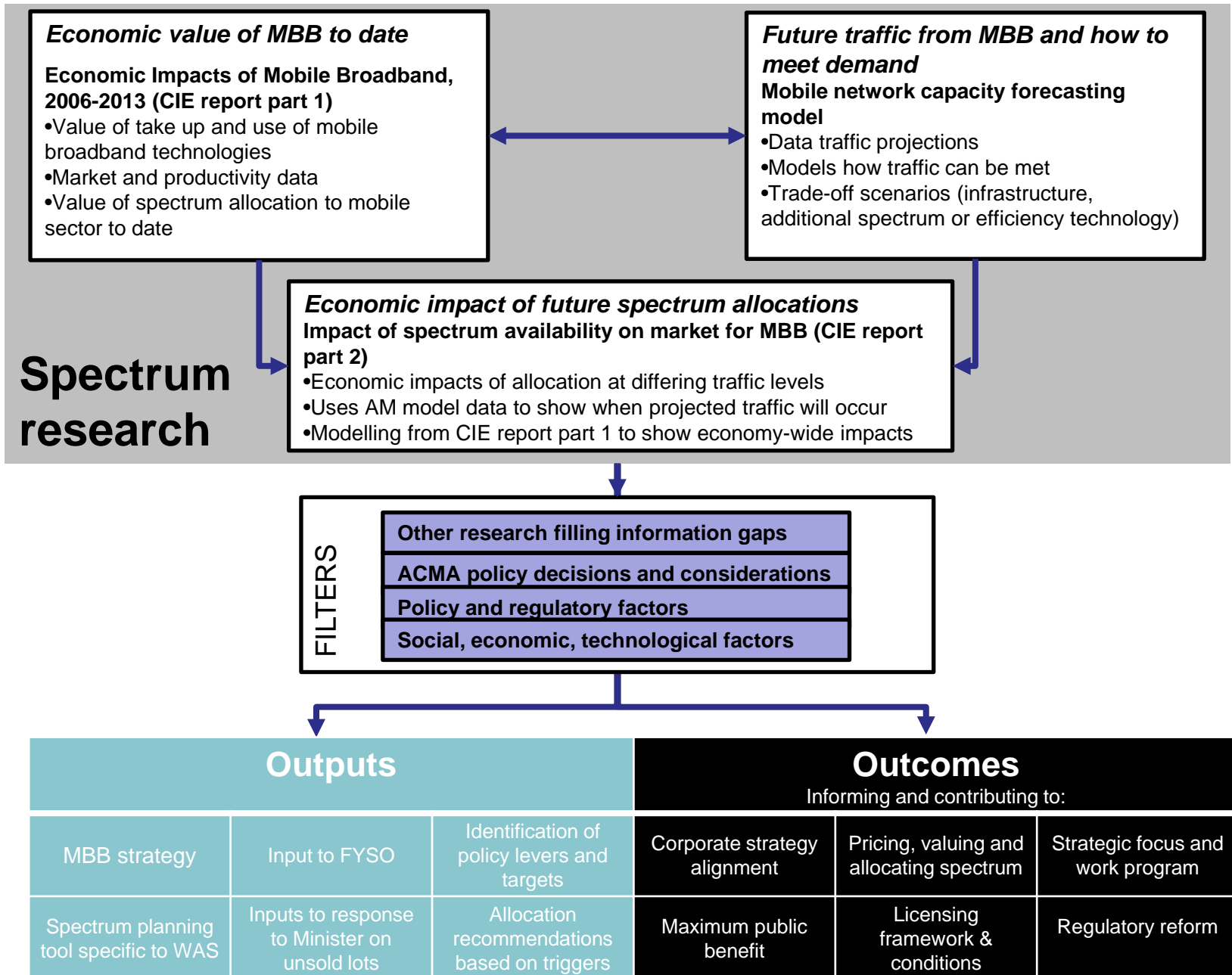
What has been the development process so far (1)?

- > Analysys Mason built a spreadsheet model to examine the spectrum requirements for the three cellular mobile operators in Australia – Optus, Telstra and Vodafone
- > Inputs such are subscriber numbers, assumptions about spectral device efficiency, roll out of new technologies (4G) etc from each carrier and the Australian Mobile Telecommunications Association.

What has been the development process so far (2)?

- > The Mobile Network Model has undergone changes and fine-tuning as a result of substantial internal and external stakeholder consultation
- > The model was peer reviewed as part of AM's Quality Assurance process.
- > The model was released for public consultation.
 - > Submissions closed on 27 June 2014.
 - > Submissions currently being considered by Analysys Mason
- > Potential model update scheduled for 2015

Spectrum demand forecasting toolkit



Why do we do research?

- > evidence to inform an ACMA mobile broadband strategy
- > to understand how spectrum is used
- > inform ACMA policy positions
- > evidence to support the ACMA's requirement to report on the future of the unsold lots
- > Spectrum management framework update

Spectrum management framework review

- > Reduce complexity
- > Improve flexibility
- > Promote consistency and harmonization
- > Ensure efficient allocation, use and management
- > Whole-of-economy approach to spectrum valuation