



# Concepts in spectrum planning

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**Australian Communications and Media Authority**

**RadioComms Connect 2011**

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## Spectrum Management .....

*‘Radiofrequency management is done by experts who meld years of experience with a curious blend of regulations, electronics, politics and not a little bit of larceny. They justify requirements, horse-trade, coerce, bluff and gamble with an intuition that cannot be taught other than by long experience’*

Vice Admiral Jon L. Boyes

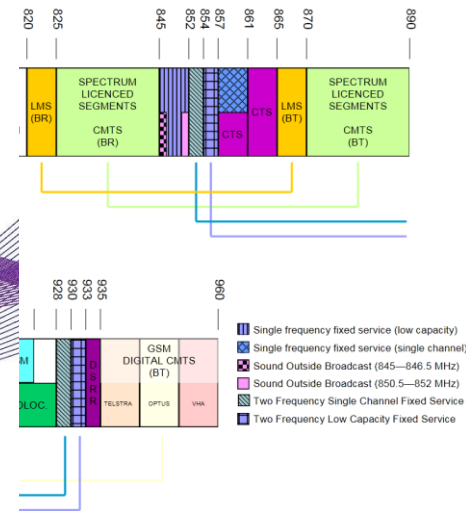
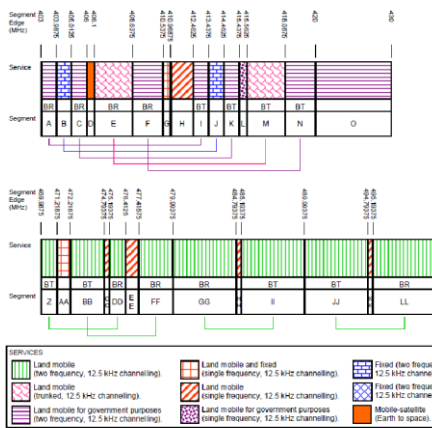


## Five-year spectrum outlook 2011-2015

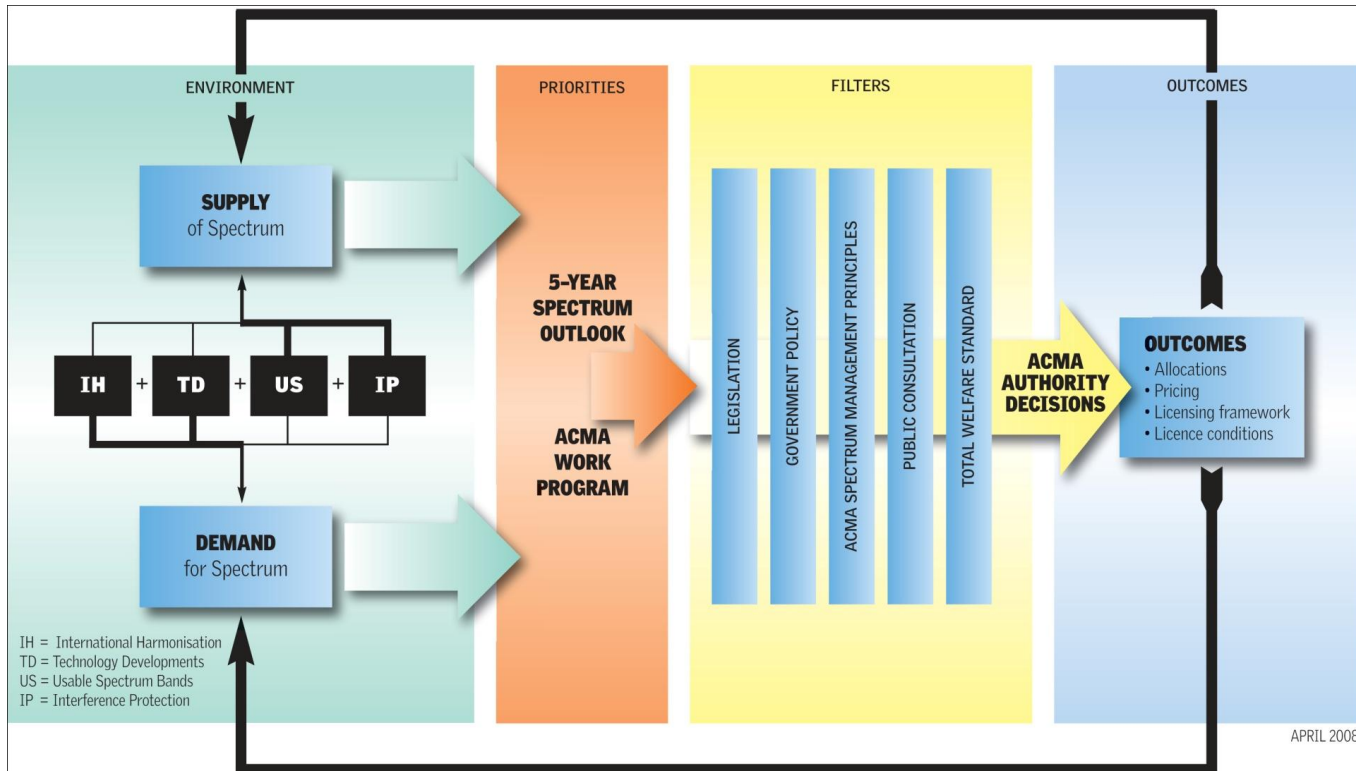
The ACMA's spectrum demand analysis and indicative work programs for the next five years

MARCH 2011

Figure 1: 400 MHz narrowband services diagram, February 2011

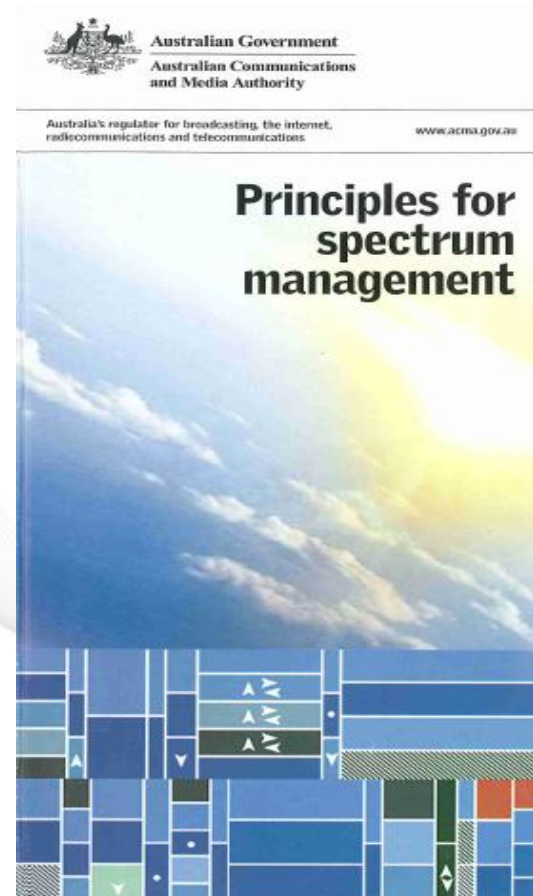


# Spectrum Management Decision Framework

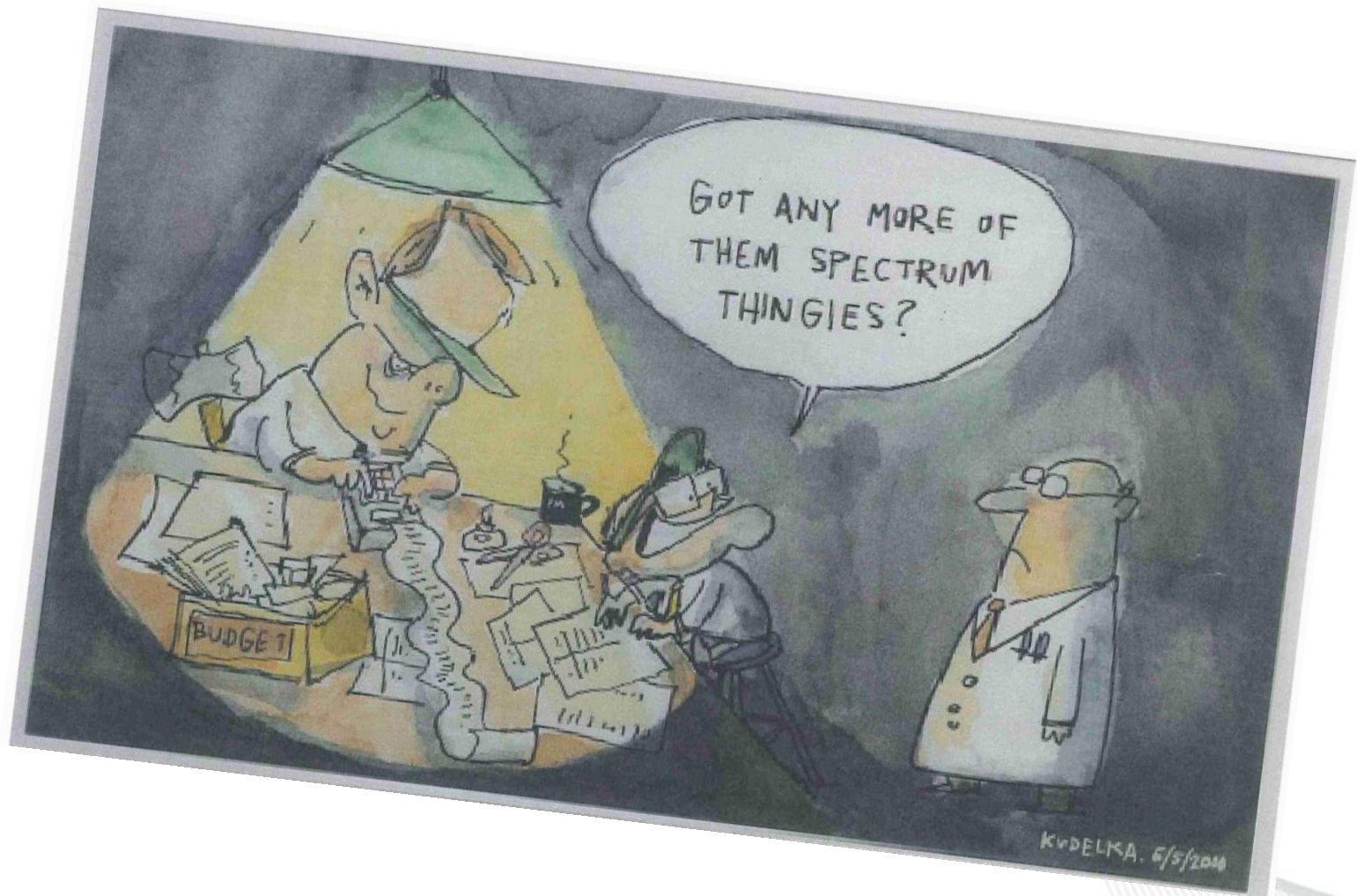


## Principles for Spectrum Management

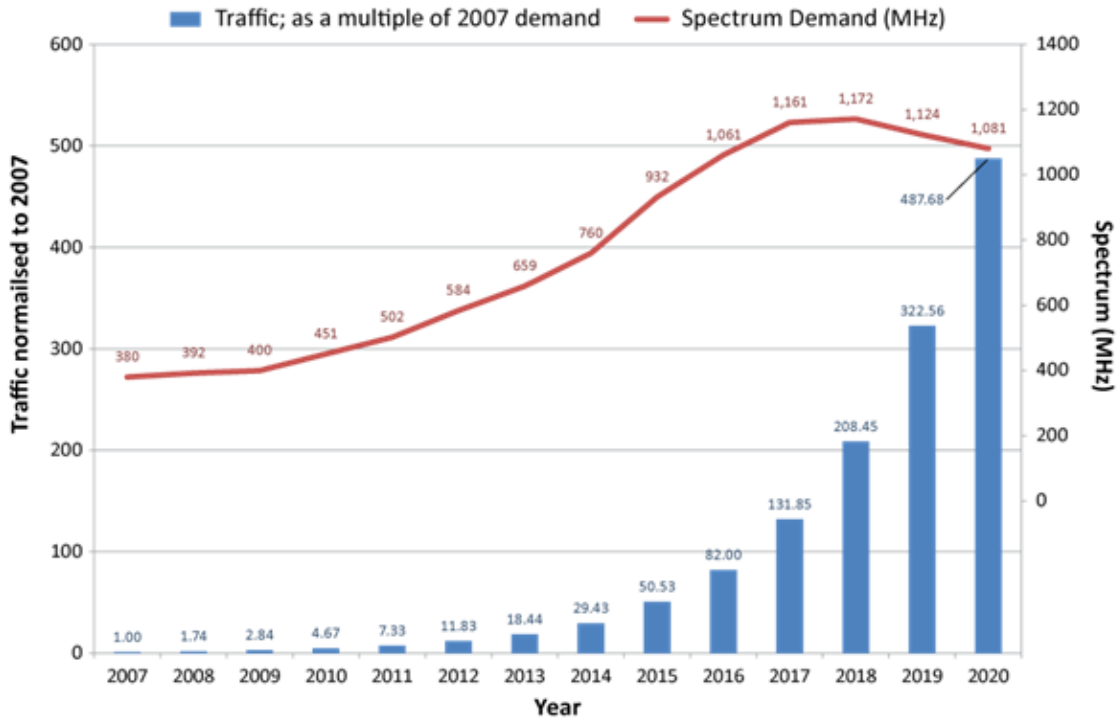
- > Allocate spectrum to the highest value use or uses
- > Enable and encourage spectrum to move to its highest value use or uses
- > Use the least cost and least restrictive approach to achieving policy objectives
- > To the extent possible, promote both certainty and flexibility
- > Balance the cost of interference and the benefits of greater spectrum utilisation



## Politicians view of spectrum?



# Mobile data traffic growth



Source: Towards 2020—Future spectrum requirements for mobile broadband May 2011

# New spectrum licence bands

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## ACMA media release 50/2011 – 27 May

27 May 2011

### ACMA moves ahead with auction of spectrum in the 700 MHz (digital dividend) and 2.5 GHz bands

The Australian Communications and Media Authority today announced the first formal steps toward a joint auction of new spectrum licences in the 700 MHz (digital dividend) and 2.5 GHz bands.

The ACMA's decision to sell spectrum in the digital dividend band and the 2.5 GHz band together in a single auction, scheduled for late 2012, reflects the strongly complementary nature of the two bands for advanced mobile telecommunications.

The reallocation of this spectrum, which includes the "digital dividend" freed up by switching off analog television, will help to address soaring demand for mobile broadband data.

The ACMA also released the terms of two draft recommendations it proposes to make to the Minister for Broadband, Communications and the Digital Economy about the reallocations, including details of the spectrum and key dates in the process. The terms are set out in an information paper, **Draft spectrum reallocations for the 700 MHz digital dividend and 2.5 GHz bands**.

'Several milestones have been reached in the allocation process,' said ACMA Chairman, Chris Chapman. 'These are important steps towards meeting the community's increasing demand for mobile broadband and opening the door to new services being delivered to the public.'

The terms of the draft recommendations provide a clear indication of the ACMA's intended approach to reallocating the spectrum. The ACMA will be writing to those who currently hold licences in the two bands, inviting their comments on the terms before it makes final recommendations to the Minister.

The upcoming spectrum auction is part of the ACMA's ongoing program to maximise public benefit through the efficient allocation and use of spectrum.

For more information or to arrange an interview please contact: Blake Murdoch, Media Officer, on (02) 9334 7817, 0411 504 687 or [media@acma.gov.au](mailto:media@acma.gov.au).

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The ACMA is Australia's regulator for broadcasting, the internet, radiocommunications and telecommunications. The ACMA's strategic intent is to make communications and media work in Australia's public interest. For more information: [www.acma.gov.au](http://www.acma.gov.au).

# Smart Infrastructure – Smart Grids – Smart Spectrum use?



## Current issues – Future Directions

- > 400 MHz band implementation
- > 900 MHz band review
- > Spectrum licence allocations
- > Expiring spectrum licences
- > Mobile broadband
- > Smart Infrastructure
- > The unknown



## Questions?

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