The Role of Flexibility in Ensuring the Efficient Use of the Spectrum Resource by Exclusive Licensees

Incentives for More Efficient Use of the Radiofrequency Resource

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Overview of Discussion

- As communications services blur and services converge, allocation classifications make less sense.
- Question arises how to realize the highest and best use of spectrum - while protecting the rights of licensees?
- What protections must be afforded and how much flexibility is possible?

Need for Exclusive Licenses

- Interference concerns
- Financial stability (investor confidence)
- Regulatory certainty
- Ability to participate in secondary markets
- Regulatory flexibility

Evolution

- Traditional Model: Long Term Exclusive Licenses, with static technology, based on archaic, arbitrary radiofrequency allocations
  - Problems:
    - Lack of innovation
    - Inefficient use of spectrum resource
    - Inability to deploy services demanded by market (slow market response)
    - Outdated technical & service rules often impede ability to provide innovative services
    - Regulators make poor predictors of future technology and market choices

Evolution (cont'd)

- Interim Approach: Progressive regulators begin to recognize need for increased flexibility
  - Recognition spectrum being used inefficiently
    - need increased flexibility
      - Example is broadband radio service
  - Slow change at first
    - Begin to liberalize standards requirements
    - Technology neutrality appearing
      - Still a problem in some regions

Evolution (cont'd)

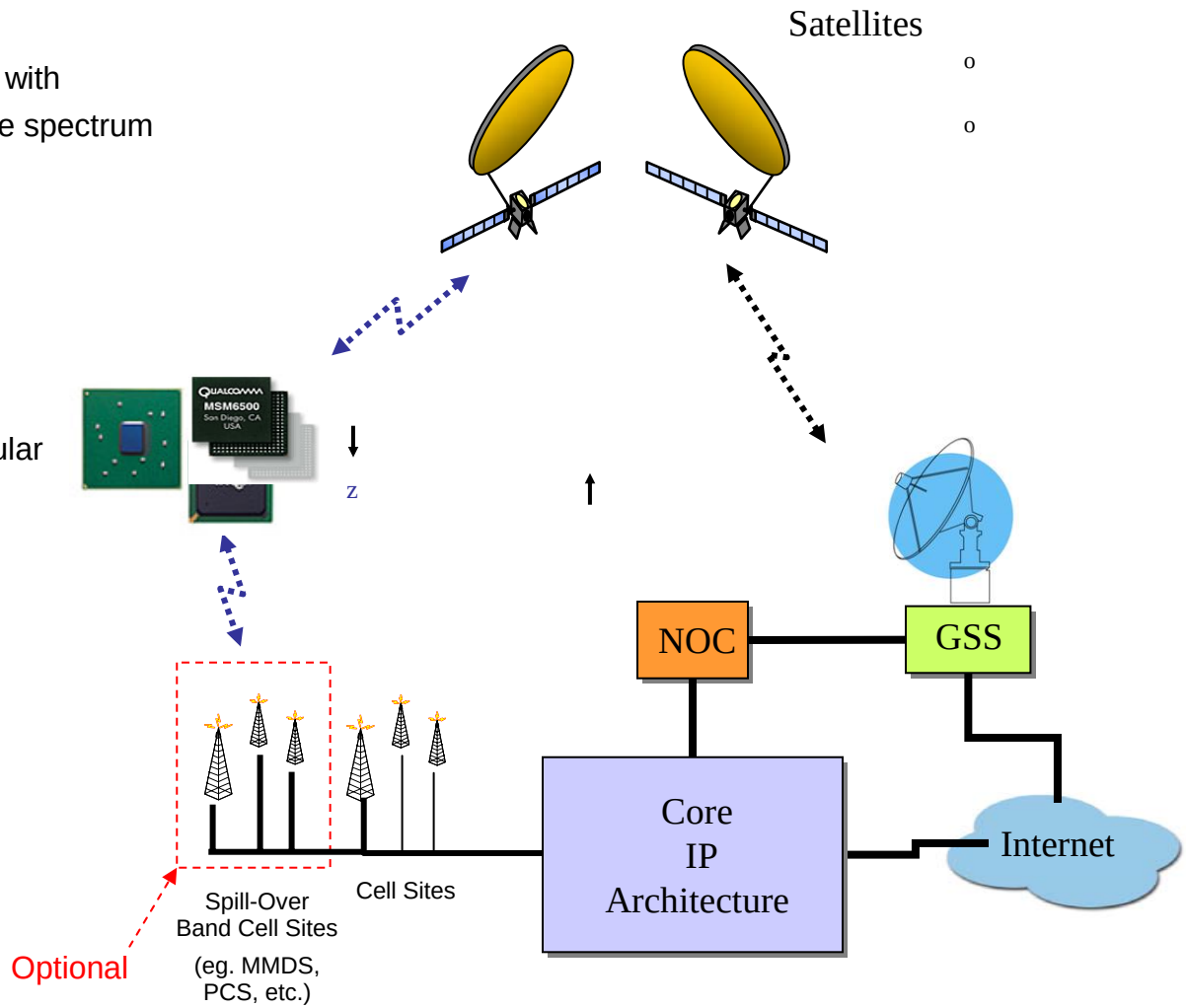
- Flexibility Approach: Recognition that increased flexibility increases spectrum efficiency and innovation.
  - Allowing licensees to offer any type of service
    - movement away from archaic allocations and strict usage requirements
    - Example is ATC
  - Increased use of secondary markets
  - Flexibility allows highest and best use of spectrum; use to evolve to market demands, and technological innovation.

Integrated Satellite-Terrestrial Network

Space Segment – Satellites can close link with standard terrestrial devices reusing satellite spectrum

Standard Chipsets Supporting Satellite Communications – Common chip for cellular and satellite

Cellular and Satellite Infrastructure Integrated into Same Core Architecture – Satellite as seamless network extension



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Where To Go From Here?

- Do changes in technology and societal needs mean the end to archaic radiofrequency allocations?
- If so, how do you address outstanding concerns, seen as interference?