Evolving Economic and Policy Mechanisms to Support Spectrum Sharing

ISART 2022: Panel on Economics of Spectrum Sharing
June 14, 2022

Carolyn A. Kahn
Chief Spectrum Economist
The MITRE Corporation
Introduction

Technological progress in electromagnetic spectrum sharing must be coupled with innovation in economic and policy mechanisms

- Spectrum repurposing is stipulated via executive and legislative mandates
  - Examples: CSEA, Spectrum Pipeline Act, MOBILE NOW
- Continuous repurposing of spectrum from government to commercial users is unsustainable
- Spectrum sharing offers a more flexible and sustainable approach
- Must be supported by a more agile economic and policy model
More Agile Economic and Policy Mechanisms

- **Continuous Regulatory Improvement**
  - Implement a more agile and iterative process that is more responsive to change*
  - Seek to realize benefits of faster timelines, increased quality and performance, improved efficiency, and reduced risk
  - Establish continual improvement cycle of planning, small-scale implementation, analysis of results, identification of gaps, and refinement to address the challenges and close the gaps**

- **Economic Innovation**
  - Increase the fungibility, or exchangeability, of spectrum access
  - More fully reimburse costs of repurposing
  - Modernize spectrum access
  - Stimulate innovation through incentives
  - Support secondary use and leasing

---


Considerations

- Implement agile policy development and spectrum IT modernization to accelerate international and U.S. spectrum regulatory processes
- Increase fungibility of spectrum access by more fully reimbursing costs of repurposing spectrum and supporting secondary use and leasing
- Economic and policy mechanisms should foster a whole-of-nation approach to achieve shared national objectives to optimize spectrum sharing solutions

Shorter-term opportunities:

- Implement continuous regulatory improvement, build robust databases and acceptable methods, and modernize infrastructure
- Reform the Spectrum Relocation Fund and support shorter-term transactions on a voluntary basis
- Develop and clearly articulate shared national objectives