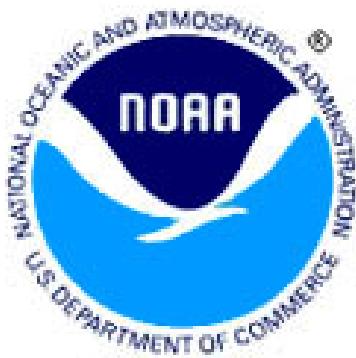


Spectrum Requirements for Ground-Based Passive Sensors



Presented By:

David Franc

Office of Radio Frequency Management

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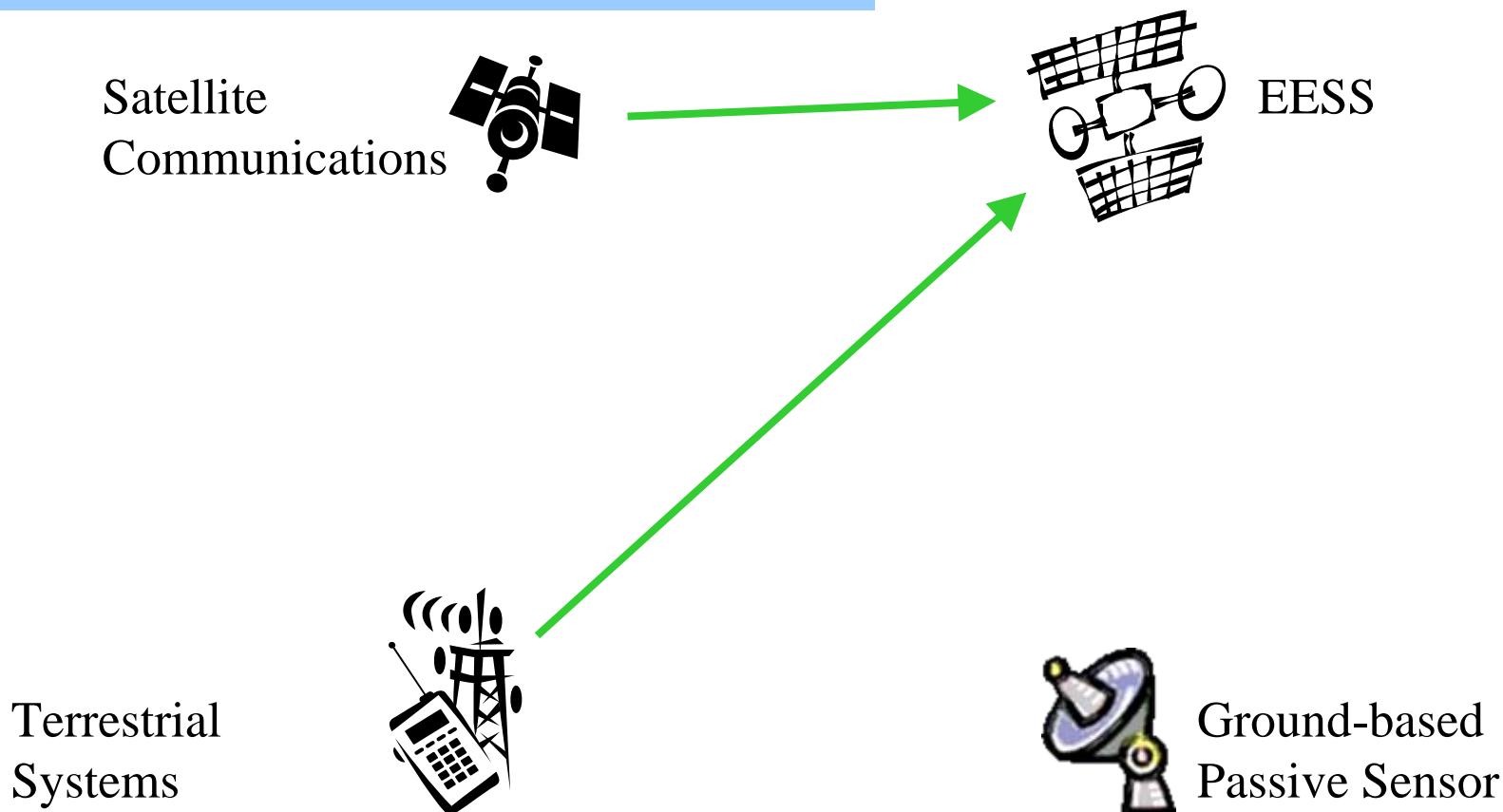
Purpose

- Call for information on ground-based passive sensing applications

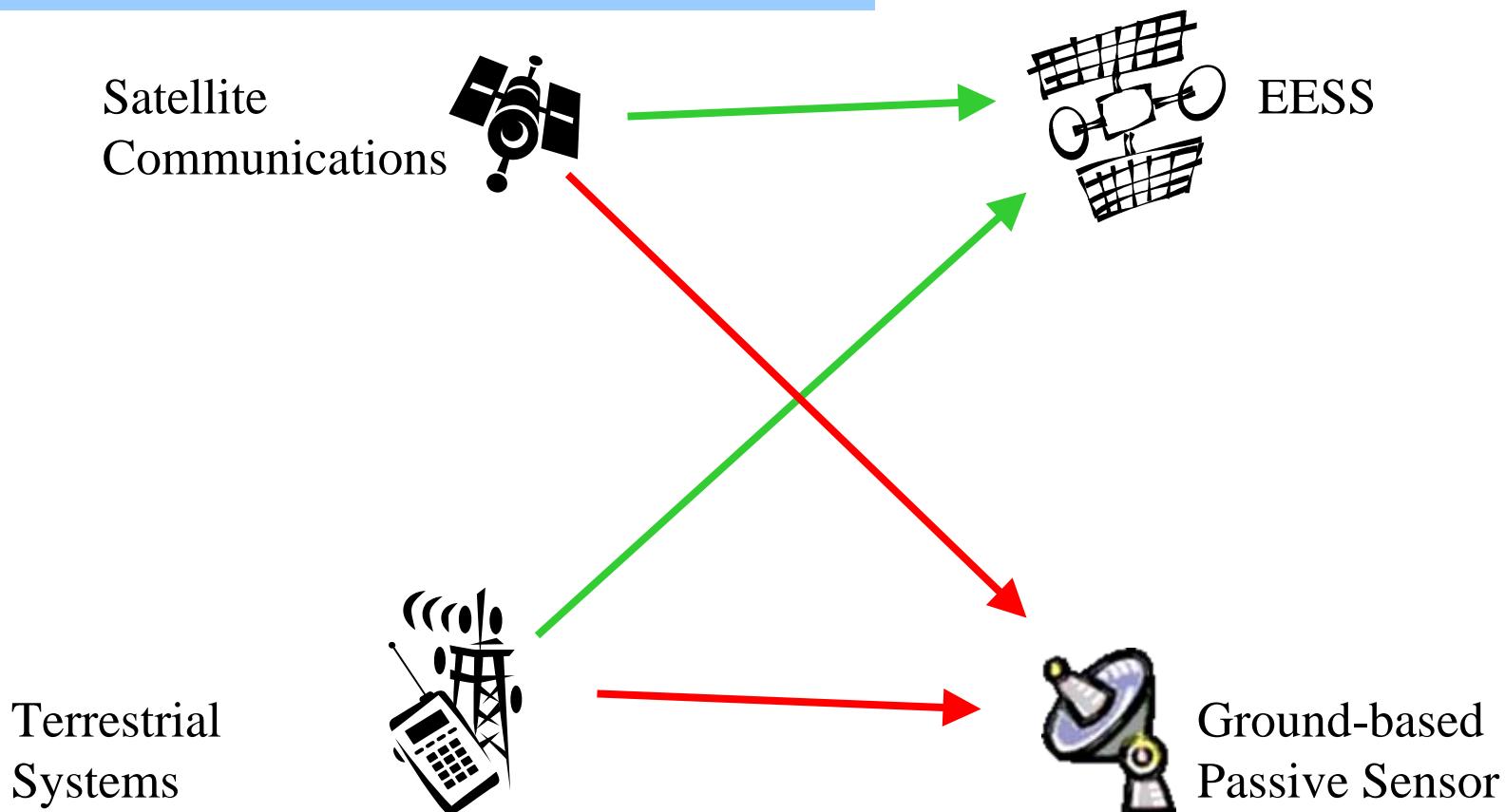
Ground Based Passive Sensing

- Radio Astronomy - well known ground-based passive sensing application
- Other scientific applications:
 - Not documented
 - Not previously considered in spectrum sharing studies
 - Spectrum regulatory status unclear

Sharing: Satellite-based Passive Sensors Documented and Studied



Sharing: Similar Systems -Different Geometry



Spectrum Issues for Ground-based Passive Sensing

- **Allocations:** Radio Regulations may allow operations under current EESS (passive) allocated bands
- **ITU-R Recommendations:** Ground-based applications not documented
- **Sharing Studies:** Ground-based applications have not been considered

Plan of Action

- Develop ITU-R Study Group 7 Question on ground-based passive sensing technical and operational characteristics
- Prepare ITU-R Recommendation(s) on technical and operational characteristics
- Confirm EESS (passive) allocations apply to ground-based applications

Documenting Ground Based Passive Sensing Applications

- Require:
 - System RF characteristics
 - Deployment
 - Typical installation description
 - Deployment density
 - Description of operations
 - Data availability/accuracy requirements

Contact Information

- **Contact:**
David Franc
DOC ORFM
Phone: 301-713-1853 ext 192
Email: david.franc@noaa.gov