

Status Report:

Bi-Directional Sharing Subcommittee

For Discussion at CSMAC Meeting

28 March 2014

NTIA Questions Addressed

1. What methods can be used to allow federal agency access of non-federal bands, particularly for large, intermittent exercises and emergency use?
2. Would federal users be expected to pay for temporary spectrum access?
3. Would such access only be available if the nonfederal licensee does not have an immediate, short-term or long-term need to operate in the spectrum and location in question?
4. What band and location combinations can support large federal exercises or emergency use?

Overview: Conclusions

Areas of Agreement:

- Payment not required for certain temporary access by federal users; depends on nature of commercial spectrum, presence of incumbents, impact on incumbent operations, time period.
- Taxonomy of potential methods for Federal access to non-Federal spectrum.
- Approaches to evaluate whether access only available if the non-federal licensee does not have need to operate on spectrum.
- Options: NTIA-FCC statement of principles for Federal/non-Federal sharing; modification to existing FCC or NTIA rules.

Areas of Non-consensus:

- Implementation of sharing principles in open proceedings;
- Inclusion in policy statement of include guiding principles and key factors needed to facilitate sharing arrangements.

Summary of Options

- **NTIA & FCC Joint statement of principles to encourage sharing between Federal and non-Federal users**
 - Policy statement that it is the policy of the FCC and NTIA to encourage sharing of non-Federal spectrum by Federal operations, particularly in cases that match relatively light commercial use with projected heavy use by Federal operations on an intermittent, supplemental basis.
 - [Policy statement would include guiding principles.]
- **Modifications to existing NTIA or FCC rules**
 - Possible modifications to Sec. 2.103 rules to apply more broadly beyond public safety scenarios.
 - Potential updates to FCC secondary leasing regulations to broaden eligibility to Federal entities.
- **[Implementation of Sharing Principles in Open Proceedings.**
 - Review existing proceedings to determine which ones may benefit from consideration of the joint sharing principles
 - Incorporation into future service rules the joint spectrum sharing principles.]

[Bracketed text] indicates open issues/issue of non-consensus.

Q1: Methods: Federal Access to Non-Federal Bands?

Potential Methods:

- 1. Federal access to non-federal communications network**
- 2. Secondary Easements by Federal Agency for use of “unused commercially licensed spectrum”**
 - Secondary market agreement; license condition on spectrum assigned by license; regulatory allocation and rule change; Federal unlicensed use in unlicensed bands.
- 3. License rights by Federal Agency of spectrum by incumbent – protected from interference**
 - Voluntary by incumbents:
 - Lease/Short Term Access or arrangements for Long Term Access.
 - Involuntary by incumbents

Considerations/Taxonomy for Q1

- Time period
- Size of area
- Demographics of area
- How much spectrum is needed
- Best band for the intended purpose
- Nature of Federal access
- Nature of use

Q2: Federal Users Paying for Temporary Access?

Outline of Approach:

- Access to Exclusive Licensed Spectrum
 - Temporary, no planned or existing incumbent operations and/or no constraints on incumbents - **Recommend No payments, No rights**
 - Temporary, potential impact on incumbents (**Options: secondary markets, regulatory framework**)
 - Permanent options?
- Access to Shared Licensed Spectrum/Existing Shared Spectrum
 - Temporary, no impact on sharing or incumbent operations – **Recommend No Payments**
 - Temporary, no impact on secondary market opportunities (**Engage in secondary market arrangements**)
 - Permanent options?
- Access to Unlicensed Bands
 - Temporary Basis – Consistent with Technical Rules for Band - **Recommend No Payments** (No rights for any user to expect to operate without interference.)
 - Permanent Options?

Q3: Access only if nonfederal licensee does not have need to operate in the spectrum?

Considerations to determine if conflict exists between Federal and non-Federal operations or whether options are available for mutually beneficial sharing arrangements.

- **Geographically restricted operations:** Federal use may be restricted to geographically remote locations/areas of low population density.
- **Temporal sharing:** Cases where Federal or non-Federal operations are limited by time (scheduling, database, sensing capabilities)
- **Secondary market mechanisms:** Can provide financial incentives to non-Federal entities, provide flexibility for spectrum to be made available based on actual needs
- **Service provider relationships:** Federal users' contracting with commercial provider for service.

Q4: Band, Location Combinations to Support Large Federal Exercises/Emergency Use?

- Based on discussions with NTIA, the Subcommittee is not responding to this question, as there need be too many uninformed assumptions at this point regarding both federal and non-federal operations to contribute.