Wireless Innovation Forum
Project Proposal Form

This form is used to describe a project for submissions to the Forum's Project Approval Committee. Please fill in and submit to pac@lists.winnforum.org.

Project Name	**Highly Dynamic Spectrum Sharing**
Champion	**Andrew Clegg (Google)**
Committee	**Wireless Innovation Committee**
Group within committee (if applicable)	**Midband Sharing**
PAC Representative (assigned by PAC Chair)	**N/A**
Proposed Disposition Date	**N/A**
Proposal Number (assigned by Forum office)	**N/A**

Positioning

Please provide a positioning statement for the project's output. This statement will be used to define the project and promote it throughout the advanced wireless community.

Please answer each of the questions starting with the word provided in boldface.

For *government and industry stakeholders, including regulators,* **who** *want to share spectrum on a much more dynamic basis than has been done in CBRS or 6 GHz, to include sharing with airborne incumbents, and those who may want to inform demonstration projects in additional bands (e.g., the U.S. 3.1 GHz band),* **the** *work products developed by this international multi-stakeholder group will be reports and recommendations* **that** *analyze the problem and look at simplification or adaptation of existing centralized spectrum management frameworks, to include associated radio equipment and devices, and potentially new, decentralized frameworks to support the identified requirements.*

Unlike *reports and recommendations developed in other associations,* **these work products** *can leverage the SAS and AFC system administrators and the WInnForum members' subject matter expertise in developing centralized spectrum and possible de-centralized management systems to examine the requirements for highly dynamic sharing.*

Project Scope

This project will occur in two stages:

1. Analyze the problem
   a. Includes looking at, but not limited to, the 3.1 GHz band (3.1-3.45 GHz)
   b. Highly dynamic sharing in time, space (including geography), and spectrum compared to existing solutions, with "highly dynamic" to be defined
   c. Includes further understanding of the incumbents that need to be protected, such as protection of airborne assets and their protection criteria.
   d. Need to also assess requirements for robustness, reliability, and security
2. Look at frameworks to support the identified requirements, to include:
   a. simplification or adaption of existing frameworks (e.g., CBRS/SAS and AFC), to include associated radio equipment and devices
   b. other, more real-time frameworks for decentralized spectrum management

Topics that could be evaluated during this project include:
1. Incumbent informing versus sensing
   i. What would be "informed" to the sharing framework
   ii. Would there be feedback from the incumbent to the informing system
   iii. What would be the end-to-end requirements and potential architecture solutions for interference reduction response time when incumbent conditions or needs change.

2. Propagation Models

Opining on whether the U.S. 3.1 GHz or other bands should be shared is NOT in scope. This is only looking at **IF** a highly dynamic band is shared what parts of the sharing frameworks could be used.

Project Plan

Committed contributors are Forum members who plan to make significant contributions to the creation of the work product. All persons listed here should have reviewed and approved this project proposal before it is submitted.

Committed contributors and the organization each represents. Note: Participation by non-members must be in accordance with Forum Policy 014 available at: http://www.wirelessinnovation.org/page/Policies_and_Procedures	**Andy Clegg, Google (acting chair)** **(Other contributors: members)** • **CommScope** • **Federated Wireless** • **Nokia** • **Sony** • **WISPA** • **Others to be named** **(Other contributors: non-members)** **TBD**
Interim milestones (Date(s) and description(s))	**Initial deliverables February 2025**
Group ballot date	**TBD**
Committee ballot date	**TBD**
Plenary ballot date	**TBD**
Does this project have the potential to create a work product that contains Intellectual Property	**YES: the project must be managed following the rules established in Forum Policy 007 available at:** http://www.wirelessinnovation.org/page/Policies_and_Procedures
Does this project have the potential to encroach upon information that is restricted or controlled by national export regulations	**YES: the project must be managed following the rules established in the Forum Policy 009 available at:** http://www.wirelessinnovation.org/page/Policies_and_Procedures
Forum resources required	__**X**_ teleconference services __**X**_ meeting space at general meetings __**X**_ email reflector ___ wiki page

	__**X**_ document repository __**X**_ editor ___ graphics designer ___ other (please specify)

Interactions with other groups inside or outside the Forum

Please provide group names and a brief explanation for any interactions listed in the table..

This project overlaps with another group's scope.	**Potentially the 6G Work Group**
Success depends on output from another group.	**No**
Results of this project are a critical input to another group.	**No**
Results of this project would be of specific interest to a specific market vertical (public safety, tactical radio, white space, etc.)	**The output of this project crosses market verticals**

For the interactions listed in the table, please provide an interaction plan (if one is appropriate) and state whether this plan has been approved by the leaders of the other groups.

Risks and Costs

What could prevent you from completing this project successfully and on schedule?
*Please list both technical and program risks, **and provide a risk mitigation plan for each item**.*

Lack of active contributions may inhibit the ability to complete the project in a timely manner. This can be mitigated by actively promoting the project and seeking contributions both internally and externally.

Lack of consensus on specific items may rathole discussion. This can be mitigated by staff and project leaders in working to build consensus following standard practices and table items that are too contentious.

What is the time window when the project must be completed to provide the expected benefits?

First deliverable in the February 2025.

Will performing this project require delaying or eliminating other Forum activities, particularly those approved in the Forum's Operations Plan?

No

Other information

Please provide any other information you feel will assist the PAC in evaluating this proposal.