



WIFI

This Project Group Charter establishes the scope, intellectual property and copyright terms used to develop the materials identified in this Project Group.

Only Participants that execute this Working Group Charter will be bound by its terms and be permitted to participate in this Project Group and shall be considered “Contributors” in the Project Group as defined in the **Telecom Infra Project IPR Policy document**.

TIP Board of Directors Approval Date: 02/20/2019

1. PROJECT GROUP NAME

WIFI

2. PURPOSE

With the total number of WiFi enabled devices approaching ten billion, WiFi is an established access technology. The increased proliferation and dominance of WiFi has paved the way for its applicability to a diverse range of use cases with equally diverse requirements, including high-definition video delivery requiring high data throughputs, IoT applications requiring power efficiency and AR/VR applications requiring ultra-low latency.

The purpose of the project group is to foster collaboration, exploration and standardization among organizations deploying WiFi, infrastructure vendors and service providers. The project group will work on improving WiFi internet connectivity and pursue opportunities to deploy innovative technology, monetization methods, and business models for WiFi networks. The emphasis will be on bringing solutions to the market in the shortest possible time frame, leveraging the collective leadership, expertise and influence of project group members.

Specifically, the project group focus will cover the following three key streams:

- **Managed WiFi:** As more and more operators provide managed WiFi services to home and SMB customers, there is value in

standardizing the stack. The project group will define protocols and APIs for interoperability between APs and WACs and NMSs in order to make it easier for operators to build custom solutions and mix and match vendors.

- **Mobile Data Offload and AAA:** solve challenges in distributing certificates, configuration, and measuring effectiveness; define deployment guidelines and best practices.
- **WiFi-based Backhaul:** WiFi-based backhaul and lasthaul (PtP, PtMP and mesh) networks have proven to be extremely cost effective. However market fragmentation, lack of interoperability and quality of service have limited their use within operators' networks. The project group will work on removing blockers to large scale adoption through building an ecosystem, testing and qualification frameworks and developing technologies such as spectrum coordination to enhance quality of service.

3. PROJECT GROUP SCOPE

The WiFi Group will foster collaboration among various members to create projects and deploy pilots in the following areas:

- **WiFi monetization:** develop methods, standards, APIs, business cases, etc. which make it easier for operators to monetize WiFi networks
- **Technology:** Develop hardware and/or software, methods, and standards that will make WiFi deployments less expensive and easier to manage and operate
- **Interoperability:** Develop software, methods, standards, APIs that allow for operators/system integrators to build custom solutions, mix WiFi vendors, and interoperability with cellular mobile networks for access and backhaul/lasthaul
- **Coordination:** Coordinate with other relevant bodies and organizations concerned with WiFi networks, technology and standards

4. PROJECT GROUP DELIVERABLES

The vision for the project group is to build an active ecosystem for WiFi network and solution vendors, operators and other interested parties that will work together to deploy innovative WiFi solutions. To accomplish this, the deliverables of the group shall be:

- Specifications, RFIs and RFPs
- Standards, methods, and APIs
- Prototypes
- Hackathons
- Field trials

which demonstrate one or more of the Project Group Scope areas listed above.

5. PATENT LICENSING

The patent license for all Contributions, Draft Specifications and Final Specifications within this Project Group shall be:

[Check one box]

- RAND License Option**, as set forth in Section 5.2.1 of the Telecom Infra Project IPR Policy.
- Royalty-free License Option**, as set forth in Section 5.2.2 of the Telecom Infra Project IPR Policy.

6. FINAL DELIVERABLE COPYRIGHT LICENSING

Project Group agrees to grant the following copyright license for the Final Specification:

[Check one box]

- Creative Commons Copyright Attribution 4**, Each Project Group Contributor agrees that its Contributions are subject to the Creative Commons Attribution 4.0 International license - <http://creativecommons.org/licenses/by/4.0/legalcode>.
- Full Release of Copyright into the public domain**, Each Project Group Contributor agrees to release its Contributions to the public domain and waive all copyrights associated with them.

7. INITIAL PROJECT CHAMPIONS

Deutsche Telekom, Facebook, Cell-C, Fon, Arista Networks, Cambium Networks, Edge-Core Networks, Ruckus Networks, Plume

8. CHAIR AND(OR) CO-CHAIR OF PROJECT GROUP

Chair

Fritz-Joachim Westphal , Deutsche Telekom

Co-Chair

Paul Monte & Vish Ponnampalam, Facebook

9. PARTICIPATION CRITERIA

The expectations for group members are:

For Operators:

- To actively participate in group meetings
- To assign technical resources to support the needs of the project group
- To share their real requirements
- To publicly endorse the agreed to specifications, standards, APIs, etc.
- To conduct field trials or/and deployments and share the results of those activities

For Vendors:

- To actively participate in group meetings
- To assign technical resources to support the needs of the project group
- To provide open interfaces based on the agreed to specifications, standards, APIs, etc.
- To produce prototypes complying with the agreed to specifications, standards, APIs, etc.
- To support lab testing, field trials and/or deployments
- To publicly endorse the agreed to specifications, standards, APIs, etc.