

Neutral Host & Infra Sharing

Project Group Charter

This Project Group Charter establishes the objectives, scope, intellectual property rights policies and agreements applicable to the Project described below (the “Project”). Only Participants whose Authorized Representative executes, or otherwise agrees to, this Project Group Charter are permitted to participate in this Project Group in accordance with the TIP Bylaws.

TIP Board of Directors Approval Date: January 10, 2024

Charter Effective Date: January 10, 2024

1. PROJECT GROUP NAME

Neutral Host & Infra Sharing Project Group

2. OBJECTIVES

The Neutral Host & Infra Sharing Project Group has as its underpinnings the powerful economics of shared passive and active infrastructure that lowers both CapEx and OpEx across the ecosystem to the mutual benefit of its key stakeholders. These stakeholders include, among others, the Mobile Network Operators (MNOs) who join with Neutral Host Operators (NHOs) to deliver subscriber services on behalf of the MNOs and to whom business alignment is vital.

This is particularly the case with in-building solutions where quality of service often suffers as in-building deployments are typically reserved for the largest buildings and often with outdated technology. Additionally, in urban outdoor settings, the lack of passive infra and street furniture constrain connectivity and edge solutions that can be optimally addressed through shared and active neutral host networks.

The Neutral Host & Infra Sharing Project Group has as its principal objective the set of actions required to realize the untapped potential of neutral host economics. This objective directly aligns with and supports TIP’s mission of lowering network costs through innovative solutions to extend connectivity worldwide.

Specific objectives that will drive the activities of this Project Group include but are not limited to:

1. Assessment of current tech architectures and the development of roadmaps to capture important segment needs and requirements and extending to vendor blueprints, certification, and badging.
2. Establishment of analytical methods, business models and initiatives that spur innovation and action across the ecosystem and its stakeholders.
3. Assessment and development of operational methods and procedures to reduce or eliminate friction in business processes and promote scalability. Development of methods that can be customized for regional or country requirements.
4. Analysis of key vertical segment requirements leading to strategies to address unmet needs and opportunities.
5. Characterization of the neutral host ecosystem and value chain at the regional and country level to inform ecosystem development, to identify barriers to success and to drive business model innovations.
6. Creation of documents, case studies, blogs, and white papers that promote awareness of the neutral host sector and advocate for further expansion and growth.
7. Representation and advocacy for the neutral host model and solutions at industry events and from time to time in regulatory and business forums.
8. Establishment of TIP’s Neutral Host & Infra Sharing Project Group as a recognized voice of the neutral host community worldwide.

3. PROJECT GROUP SCOPE

The scope of this Project Group is In-building Solutions (IBS) and Outdoor Densification and Edge Solutions operating with a neutral host business model. The focus on these sectors envelopes both passive and active network components.

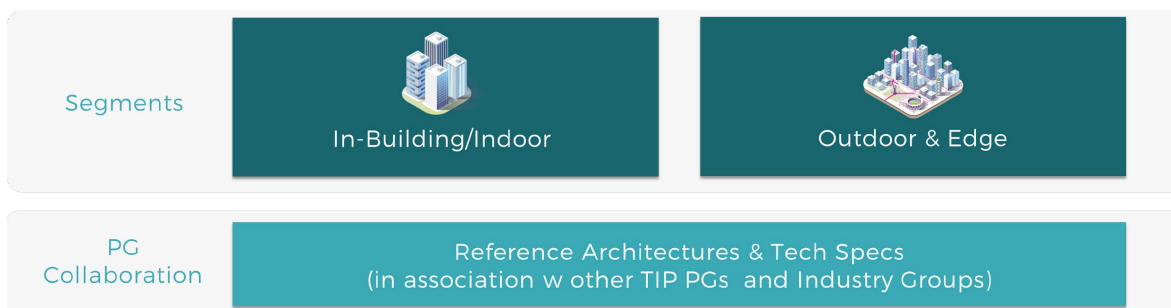


Figure 1. Neutral Host & Infra Sharing PG Structure.

Eighty percent of originating and terminating traffic occurs in-building. Shortcomings abound worldwide in coverage, capacity, and capital to address this in-building gap. The Project Group will address this longstanding challenge through innovative neutral host business models, tech architectures, and solutions.

In the case of Outdoor Densification and Edge Solutions, the Project Group will focus on shared passive and active infra to accelerate network deployments in complex, dense and often historical urban areas that lack sufficient infra, both passive and active.

The Project Group, working with a broad set of stakeholders, including public sector entities, will focus on innovative business models, collaborations, and tech architectures to accelerate neutral host connectivity solutions. For many municipalities, neutral host connectivity solutions will serve as a gateway to Smart City applications and use cases.

The problem set of the Neutral Host & Infra Sharing PG encompasses a broad set of stakeholders requiring engagement and collaboration. Significant variations exist in the neutral host ecosystem at the regional and often country level. Ecosystem and solution development will focus on the primary stakeholders captured in Figure 2.

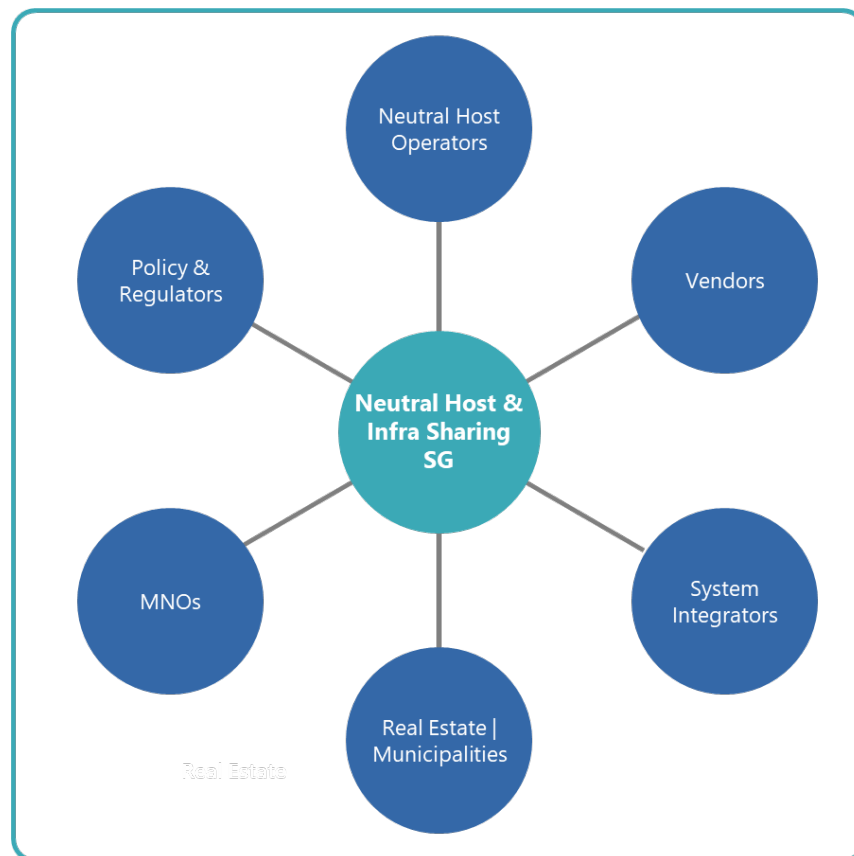


Figure 2 . Neutral Host & Infra Sharing PG Stakeholders.

Separate subgroups within the Project Group will be created to address specific areas of need and to provide a focal point to accelerate effort, and each Subgroup will have its own Charter describing Subgroup leadership, Deliverables, Release Roadmap, membership criteria, etc., as appropriate. A preliminary view of subgroups includes:

- Emerging and Next Gen Architectures
- Ecosystem and Business Models
- Public Sector and Municipal CIOs

The Neutral Host & Infra Sharing PG will benefit from collaboration with existing TIP project groups to leverage various deliverables such as reference designs, blueprints, requirements, or test cases, in part or on whole.

In addition, the Project Group may also work with other industry consortia in the creation of certain deliverables. All work will be accomplished in conformance with TIP Bylaws to promote group sharing across TIP members in these areas of collaboration.

4. PROJECT GROUP DELIVERABLES

The table below captures the initial set of deliverables under consideration by the PG Co-Chairs.

Deliverable	IPR Treatment	Approval Procedures
Neutral Host CBRS White Paper (Non-technical)	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Neutral Host ecosystem template customizable to region and country	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Neutral Host business model template customizable to region, country, and NHO	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Neutral Host tech architectures and roadmaps	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Neutral Host methods and procedures playbook, customizable to region and country	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Neutral Host case studies, white papers, blogs, that are to be defined	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee
Edotco Market Trial of In-building solutions	Document IPR Policy	Versions by consensus of the PG. Final approval by Technical Committee

5. FOR DELIVERABLES WHICH ARE SPECIFICATIONS

_____ Check if the PG is developing Specifications as defined in the TIP IPR Policy. All such Specifications must be listed in the table set forth in Section 4 and the IPR Treatment must reference this Section 5.

6. PROJECT GROUP LEADERSHIP

The group will have at least one and up to four designated Chairs/Co-Chairs to oversee and guide general project group activities. Additionally, individual sub-group chairs will be established to guide the activities of defined sub-group reporting upwards into the general Neutral Host and Infra Sharing Project Group.

7. PARTICIPATION CRITERIA

Eligible to Sponsors and General Participants who are in good standing within TIP.

8. CHARTER UPDATE

This Project Group Charter will be updated to reflect any changes as set forth in the Project Group Charter Revision Policy which may be accessed [here](#).

9. COLLABORATION AND COOPERATION

The Neutral Host & Infra Sharing PG will collaborate with various industry associations to promote common interests. These collaborations may include, among others, the City Telcom Association, GSMA, the Small Cell Forum, and the Wireless Infrastructure Association (WIA). PG Leadership will work with TIP staff to put appropriate legal frameworks in place for these collaborations.

10. PG PROCEDURES

The Neutral Host and Infra Sharing PG complies with and follows the TIP PG Procedures, as may be amended or revised from time-to-time.