TIP Technical Committee Charter

Board of Directors approval date: June 26, 2024
Effective Date: July 23, 2024

This version supersedes all previous versions of the Technical Committee Charter.

This Charter (the "Charter") sets forth the purpose, scope, responsibilities, duties, composition, and procedures of the Technical Committee ("TC") of the Telecom Infra Project ("TIP").

Capitalized terms not defined in this Charter have the meaning set forth in TIP's Organizational Documents.

PURPOSE

The TC is an Administrative Committee of TIP, as that term is defined in the TIP Bylaws, whose purpose is to assist the TIP Board of Directors ("Board") in fulfilling oversight responsibilities with respect to technical matters. The TC is a strategic committee, composed of recognized industry experts, focusing on identifying industry problems, technology disruptions, and developing a long-term technology roadmap for TIP. Additionally, the TC provides guidance to promote technical excellence within the TIP Project Groups, TIP projects, and larger TIP community, fulfils the duties and responsibilities regarding Project Group oversight, approval of certain technical publications, and the provision of recommended actions for consideration by the Board.

SCOPE

The TC is tasked with developing a long-term technology roadmap for TIP, identifying areas of focus to best serve the TIP community and the broader telecommunications ecosystem, improving the Project Groups' ("PG") effectiveness, and leveraging synergies across the different TIP PGs as well as other industry initiatives in the telecom space.

STRUCTURE and GOVERNANCE

TC Structure:

The TC shall comprise at least seven and up to thirteen individuals, including at least one representative of a Sponsor Participant. The TC includes a TC Steering Committee ("SC"), as set out below, as well as one or more sub-committees, each focused on a distinct technology topic.

In addition to the TC members, the TC also includes the TIP Chief Technology Officer ("CTO") and a TIP Staff representative acting as the TC Facilitator. Neither the TIP CTO nor the TC Facilitator have voting rights within the TC, and participate solely in advisory and administrative capacities.

The TC will have at least one and up to three designated Chairs/Co-Chairs, to oversee and guide TC activities. TC Chair/Co-Chairs are appointed from existing TC members by the Board, serve one-year terms, and may be re-appointed for successive terms. Any TC member may apply to be a TC Chair/Co-Chair by providing notice to the TIP CTO.

TC Steering Committee

The TC SC is responsible for:
- Establishing TC subcommittees in relevant technology segments, and informing the Board of their creation
- Appointing/Approving/Replacing subcommittee Leads/Co-Leads
- Ensuring that TIP is engaged with relevant industry stakeholders

The TC SC is comprised of the TC Chair/Co-Chairs, TC Facilitator, TIP CTO or its equivalent, if one is present within TIP, and up to 2 additional TC members.

TC Subcommittees

Each TC Subcommittee will have its own charter document, describing its scope, deliverables, timelines, membership criteria, governance, and other aspects necessary for its efficient operation. A form of a Subcommittee Charter is attached as Appendix A to this TC Charter.

Each subcommittee comprises a Lead/Co-Leads, selected/appointed from current TC members possessing deep and relevant subject matter experience. Optionally, a subcommittee may also include individuals representing TIP Participants who have knowledge, experience, and available time to meaningfully contribute to the subcommittee's work.

The subcommittee and relevant PG Co-Chairs and/or PG Subgroup Co-Leads work collaboratively to implement the strategic technology roadmap approved by the TC and TIP Board, engaging with TIP Leadership and Staff, e.g. CTO, TPMs, to provide input and feedback.

DUTIES and RESPONSIBILITIES

Project Group Oversight / Strategic Direction:

- The TC identifies technology segments important and essential to advance TIP's mission, and defines initiatives for activity within TIP's Project Groups
- The TC develops, publishes, and maintains the criteria used to initiate new Project Group activities within TIP, making agreed TC recommendations to the TIP Board for approval.

- The TC reviews new and revisions to existing Project Group Charters, and recommends for Board approval those Project Group Charters that align with TIP's long-term technology strategy.
- The TC reviews progress reports from the Project Groups to ensure that Deliverables and milestones are on-track, and provides an executive summary of Project Group status to the TIP Board on a quarterly basis, or such other cadence as set by the TIP Board.

Project Group Technical Oversight:

The TC is an advisory and approval body, providing technical oversight and direction to the Project Groups, working with the Project Group Chairs and sub-group leadership to best prepare the group to deliver meaningful results. The TC is not involved in the day-to-day activities of TIP Project Groups, e.g. contributing technology or commenting on draft PG Deliverables, roadmaps, etc.

TC Delegation of Final Deliverable Approval:

In the past, the TC had delegated authority from the Board to approve, adopt and release Final Deliverables that are not Specifications or Software (as those terms are defined in the TIP IPR Policy). Upon the Effective Date of this Charter, approval, adoption, and release of Final Deliverables that are not Specifications or Software is delegated by the TC to the PG Co-Chairs and/or the Test and Validation Council, as set forth in Appendix B.

TC Membership and Participation Expectations:

- TC members are expected to be active, contributing regularly to discussions and decisions of matters before the TC pursuant to this Charter.
- Members of the TC must be employed by a TIP Participant in good standing (the member's organization has met its fiduciary duty and is not in violation of any TIP policies).
- Nominees must have deep technical expertise in at least one of the TIP focus areas which is required to support the work of TIP and the Project Groups.
- Nominees must be sponsored by a current TC Member or TIP Director. The Board evaluates and approves new TC members based on the TC's recommendation.
- TC members who are no longer able to fulfil the role of a TC member shall inform the TC and open their TC seat. TC members not fulfilling the duties laid out in this Charter can be removed from the TC by majority vote.
- A TC member may appoint another individual, employed or affiliated with the same employer as the appointing TC member, to act as an alternate in its place should the TC member be unable to attend a TC meeting. The alternate will have the same rights, privileges and obligations as the TC member. A TC member wishing to appoint an alternate must notify TIP's CTO and/or TC Facilitator at least 7 days, or as soon as is reasonably feasible, prior to the meeting(s) the alternate will attend. A person

appointed as an alternate must also meet the Membership Criteria described in this Charter.

● TIP's CTO, or its equivalent, or their delegate, acts as the liaison between the TC and TIP's PGs. The CTO is not required to be an employee of a TIP Participant, and does not have voting power on the TC.

Decision-Making Process, Meeting Frequency and Reporting[1]:

● The TC meets monthly, or at such other cadence as the TC agrees.
● TC Subcommittees each determine the frequency and length of their meetings, based on the scope and timeline described in the subcommittee charter
● The TC Facilitator facilitates TC meetings, and is responsible at a minimum for publishing meeting agenda, materials for consideration, and recording/circulating TC meeting minutes.
● Decisions within the TC and each individual subcommittee are made by consensus of the body's members, where consensus is defined as a lack of sustained objection to the action being considered. If consensus can not be reached, decisions are made by majority vote of those members in attendance in a meeting where a quorum (greater than 50% of relevant body's members) is present. Decisions made via electronic voting require unanimity of all of the relevant body's members.
● Voting may be performed in person during meetings or via electronic voting. Each member has one vote.
● The TC reports its activities to the Board at least quarterly.

Review of the Charter

The TC will annually review and assess the adequacy of this Charter and recommend any changes to the Board for consideration.

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[1] Appendix B contains a decision-making matrix indicating roles and responsibilities amongst the Board, TC, TVC, PG and TIP Leadership Team.

TELECOM INFRA PROJECT

Appendix A
Form of TC Subcommittee Charter

<Subcommittee Name>

TC Approval Date:
Effective Date:

This Charter (the "Charter") sets forth the purpose, scope, responsibilities, duties, composition, and procedures of the <Name> Subcommittee of the TIP TC.

Capitalized terms not defined in this Charter have the meaning set forth in TIP's Organizational Documents

PURPOSE & SCOPE

<<Include brief (1-2 paragraphs) description of the purpose and scope of the subcommittee.>>

Deliverables & Timelines

<<Include list, description, expected timeline/milestones for the subcommittee's activities>>

Membership Criteria

<<Include membership criteria, other than being member of the TC. If non-TC members will be invited to provide input, include that here.>>

Telecom Infra Project

Appendix B
Decision-Making Table

	Board	TC	TVC	PG	TIP LT
Focus Areas (2+ years)	D	R		I, P	A
Focus Areas (<2 years)	K	D		I, P	A, R
Technology Roadmap	K	D		P	A, R
Final Deliverable Approval					
UCD		I, R, K		D	K
TRD/dTRD		K	I	D	
Test Plan		K	D	I, R	A, I
Success Criteria / ACD			D	I, R	
Blueprint / MVS		K	I	D	
Publications (technical papers, blogs, etc)		K		D, P	A, I, P
PG Formation (incl Charter approval)	D	R, P		I, P	A, I
PG Graduation	D	R, P		I, P	A, I, R, P
PG Re-Charter	D	R, P, I		I, R	A, I, P
PG Subgroup Formation	K	K		D	A, I, P, R
Subcommittee/ Subcouncil Formation	K	R, D, P	R, D, P		A, I, P, R
PG Co-Chair	D, I	R, I		I, P	A, I, P
PG Subgroup Co-Lead	K	K		D	A, I, P
TC Co-Chair	D, R, I	R, P, I			A, I, P

TC Subcomm Co-Leads	K, I	D, P, I			A, I
TVC Subcouncil appt	K, I		K, I, R		D

Definition of Roles:

Recommender - Responsible for making a detailed recommendation for approval.

Decider - Approves/Denies action, whether recommended by other party or sui generis

Knower - Informed of decision. Has Veto power

Inputter - May provide feedback, input into a recommended action

Agree - Ensures alignment with legal/regulatory and organizational requirements

Performer - Enacts the decided course of action