Test and Integration

This Project Group Charter establishes the objectives, scope, intellectual property rights policies and agreements applicable to the Deliverables identified in this Project Group Charter. Only Participants whose Authorized Representative executes this Project Group Charter are permitted to participate in this Project Group in accordance with the TIP Bylaws.

TIP Board of Directors Approval Date: March 03, 2021

1. PROJECT GROUP NAME

Test and Integration

2. OBJECTIVES

Several of TIP’s Project Groups (PGs) are developing architectural and other requirements for products and services that are intended to solve various technical challenges for telecommunication infrastructure with respect to specified use cases (“TIP Solutions”). There is a need to assess the commercial viability of such products and services being developed based on these TIP Solutions (hereafter “TIP-based Products”) in terms of both performance and interoperability.

The primary purpose of this PG is to facilitate the testing of such TIP-based Products in end-to-end environments to evaluate the maturity of the technology toward commercial readiness. This PG will accomplish this objective by developing test materials, as described below, in collaboration with other PGs facilitating the testing of TIP-based Products in end-to-end configurations and assessing the results of these tests to improve and further develop the test materials. The results of the tests will be shared with the relevant PGs to enable such PGs to improve or refine their TIP Solutions, as may be appropriate based on the test results.

2.1 PROJECT GROUP GOALS
1. Define and review test cases, test architecture and requirements around test suites for Deliverables developed by other TIP Project Groups in end-to-end architecture (collectively “Test Materials”).

2. Drive toward the approval and publication of a Blueprint or Test Materials in support of one or more Project Groups.

3. Upon request by the Technical Committee (TC) (or other administrative committee as identified by the TC) review test suites developed within this Project Group other PGs to ensure consistency across TIP Solutions.

4. Interact with the Technical Committee (TC) (or other administrative committee as identified by the TC) to report out on the status of TIP testing and integration projects and discuss broader TIP testing and integration strategy.

5. Define and evaluate Badge Criteria documentation for each Test and Integration project, inclusive of self-certification. The Badge Criteria document may be a standalone document or part of a broader Deliverable.

6. Identify and document settings used during test and integration projects and/or events to accelerate deployment of TIP technologies in the field.

7. Coordinate the testing of TIP-Solutions in TIP community labs, or other TIP-authorized labs, collate and release test related Deliverables as defined below either independently or in conjunction with other Project Groups.

3. PROJECT GROUP SCOPE

This Project Group is focused on supporting the testing and integration strategy for TIP Project Groups. This Project Group will not draft or inform the creation of interface specifications. In addition, the development of software is outside of the proposed Scope for this Project Group. Any change in Scope will require a re-charter of this Project Group.

4. PROJECT GROUP DELIVERABLES

Intellectual Property Rights for each type of Deliverable are governed by a different policy or agreement, in each case approved by the TIP Board of Directors. The applicable policies or agreements are specified in the table below along with any procedures for approval and/or release of each Deliverable the Project Group intends to develop. All such policies and agreements may be found with TIP’s Organizational Documents at https://telecominfraproject.com/organizational-documents/ unless otherwise identified and attached to this PG Charter.

<table>
<thead>
<tr>
<th>Deliverable</th>
<th>IPR Treatment</th>
<th>Approval Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>White papers, use case and/or case study</td>
<td>Document IPR Policy</td>
<td>Versions by consensus of the Project Group; final approval by the Technical Committee</td>
</tr>
<tr>
<td>Test Material, as defined above</td>
<td>Document IPR Policy and/or E&amp;F License attached hereto as Exhibit 1.</td>
<td>Consensus driven approval in the Project Group (Test and Integration and/or relevant PG); final approval by the Technical Committee if the Project Group chooses to publish as a final Deliverable</td>
</tr>
<tr>
<td>Collated Test reports from testing activities, e.g. Lab exit report for a TIP Community Lab or a TIP approved Lab</td>
<td>Document IPR Policy</td>
<td>Consensus driven approval in the Project Group (Test and Integration and/or relevant PG) after initial drafting in a lab or testing activity; final approval by the Technical Committee if the Project Group chooses to publish as a final Deliverable</td>
</tr>
<tr>
<td>Configuration Details, Operational Guidelines, Blueprint or Playbook</td>
<td>Document IPR Policy and/or E&amp;F License attached hereto as Exhibit 1</td>
<td>Consensus driven approval in the Project Group (Test and Integration and/or relevant PG) after initial drafting in a lab or testing activity; final approval by the Technical Committee if the Project Group chooses to publish as a final Deliverable</td>
</tr>
<tr>
<td>Badge Criteria Document</td>
<td>Document IPR Policy</td>
<td>Versions by consensus of the Project Group; final approval by the Technical Committee</td>
</tr>
</tbody>
</table>

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. ¹ [If not checked, the remainder of Section 5 should be left blank]

PATENT LICENSING

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

___ 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.

FINAL SPECIFICATION COPYRIGHT LICENSING

Each PG Contributor as defined in the TIP IPR Policy agrees that to the extent that its Contributions are incorporated into the Final Specification it hereby grants TIP a copyright license in its included Contributions to release those included Contributions as incorporated into the Final Specification under the terms indicated below.

[Check one box]

- Option 1 as set forth in the TIP Supplemental Copyright Policy.
- Option 2 as set forth in the TIP Supplemental Copyright Policy.
- Creative Commons Copyright Attribution 4. See http://creativecommons.org/licenses/by/4.0/legalcode.
- Full Release of Copyright into the public domain.

* THIS SECTION 5 IS NOT APPLICABLE FOR ANY OTHER TYPE OF DELIVERABLE

6. INITIAL PROJECT CHAMPIONS

- Facebook
- Telefónica
- Vodafone

7. PROJECT GROUP LEADERSHIP

- Co-chair: Christophe Chevalier, Facebook
- Secretary: TIP appointed team lead

8. PROJECT GROUP LEADERSHIP

Eligible to Sponsors and General Participants who have elected to be Full Participants and are in good standing.

9. CHARTER UPDATE

This Charter will be updated to reflect any changes as set forth in the Project Group Charter Revision Policy which may be accessed at https://cdn.brandfolder.io/D8DI1557/as/q7rnyo-fv487k-2j33tl/Project_Group_Charter_Revision_Policy - Telecom_Infra_Project.pdf.
10. COLLABORATION AND COOPERATION
This PG will collaborate with other PGs, the TC, and TIP Administrative Committees as described above. All collaborations will be limited to those TIP Participants who are participants in all applicable PGs and/or committees involved in the collaboration.

11. PROJECT GROUP PROCEDURES
The applicable Project Group Procedures for this Testing and Integration PG may be accessed at https://cdn.brandfolder.io/D8DI15S7/as/7q3mckwvmjg57k9bj9r949/Telecom_Infra_Project_-_PG_Processes.pdf
EXHIBIT 1 TO TEST AND VALIDATION PG CHARTER

Form of TIP Evaluation and Feedback License (E&F License)

This Evaluation and Feedback License (“License”) is between the Telecom Infra Project, Inc. (“TIP”) and the entity that exercises the grant of rights under this License (hereafter “You”).

The Test Materials identified below are being licensed to You solely for testing and evaluation purposes as set forth in this License. Such testing and evaluation is permissible only by:

(i) TIP Project Groups and their respective Contributors (as defined in the TIP Bylaws) to aid in the development of TIP Final Specifications, Software (as those terms are defined in the TIP IPR Policy) and other deliverables developed by the Project Group (“TIP Solutions”);

(ii) CL Participants utilizing a TIP Community Lab, or other authorized TIP lab, to test or evaluate TIP Solutions or as otherwise necessary to carry out the objectives of a Community Lab Project;

(iii) entities in connection with their own internal lab-based testing to the extent necessary to develop products or services that are promoted by TIP or for evaluating TIP Solutions using the Test Materials to provide Feedback (as defined below), and not for marketing, certification, or any commercial purpose; and

(iv) entities conducting a TIP Field Trial as defined in the TIP’s applicable policies or agreements.

Except for TIP Field Trials which may be performed on a commercial network according to a Field Trial Description authorized by TIP in writing, any commercial use of the Test Materials, in whole or in part, including any distribution, regardless of whether fees or royalties are charged in connection with the distribution, is expressly prohibited and is not within the scope of this License.

In consideration for this License, TIP requests that You provide TIP, its Project Groups, or its Community Labs, as applicable, commentary about the results of your use of the Test Materials under this License (“Results”). Also, at Your sole discretion, You and individuals authorized by You may also provide detailed technical findings regarding the results of your evaluation and any suggestions, input, or other feedback you may have based on Your testing or evaluation which you expect may be incorporated into any TIP project (“Feedback”). You agree that TIP, its Project Groups, and its Community Labs, as applicable, are free to reproduce, modify, use, distribute, display, publish, and further sublicense (through multiple tiers of sublicensees) Your Results and Feedback including any intellectual property or proprietary rights embodied in such Feedback without restriction and without any compensation or accounting to You.
Disclaimer. THE TEST MATERIALS ARE PROVIDED “AS IS” AND WITHOUT ANY WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED. WITHOUT LIMITATION, THERE IS NO WARRANTY OF NON-INFRINGEMENT, NO WARRANTY OF MERCHANTABILITY, NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND NO WARRANTY OF ACCURACY. ALL WARRANTIES ARE EXPRESSLY DISCLAIMED. YOU ASSUME THE FULL RISK OF USING THE TEST MATERIALS.

Limitation of Liability. UNDER NO CIRCUMSTANCES WILL A PARTY BE LIABLE TO ANY OTHER PARTY UNDER ANY CONTRACT, STRICT LIABILITY, NEGLIGENCE OR OTHER LEGAL OR EQUITABLE THEORY, FOR (A) ANY INCIDENTAL INDIRECT, SPECIAL, EXEMPLARY, PUNITIVE, OR CONSEQUENTIAL DAMAGES OR FOR ANY COMMERCIAL OR ECONOMIC LOSSES, WITHOUT LIMITATION, INCLUDING AS A RESULT OF INFRINGEMENT OR PRODUCT LIABILITY CLAIMS, LOST PROFITS, SAVINGS OR REVENUES OF ANY KIND IN CONNECTION WITH THE TEST MATERIALS LICENSED HEREUNDER, REGARDLESS OF WHETHER SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND IRRESPECTIVE OF WHETHER SUCH DAMAGES WERE FORESEEABLE OR (B) ANY AMOUNTS IN EXCESS OF [$1000]. MULTIPLE CLAIMS WILL NOT EXPAND THESE LIMITATIONS. THIS SECTION WILL BE GIVEN FULL EFFECT EVEN IF ANY REMEDY SPECIFIED IN THIS LICENSE IS DEEMED TO HAVE FAILED OF ITS ESSENTIAL PURPOSE.

Test Materials: <<List all applicable test materials being made available pursuant to this license>>
ACCEPTANCE

__________________________
Contact Name

__________________________
Contact Title

__________________________
Email Address

__________________________
Telephone Number (Include Country Code)

__________________________
Company Name

__________________________
Company Address, City, State, Country, Postal Code

__________________________
Company Web Page URL

__________________________
Primary services or products the company provides

__________________________  ______________
Signature                    Date

__________________________
Signed by (print name)