



SOLUTIONS INTEGRATION

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: 10/19/2016

1. PROJECT GROUP NAME

Solutions Integration

2. PURPOSE

- i. This Project Group will develop an open RAN architecture by defining open interfaces between internal components and mainly focusing on the lab activity with various companies for multi-vendor interoperability. The goal is to broaden the mobile ecosystem of related technology companies to drive a faster pace of innovation.
- ii. Construct End-to-End unbundled and integrated 4G Solution with the following objectives:
- iii. Resolution of technical barriers to rollout of carrier grade services with simpler, streamlined designs resulting in a lower total cost of ownership for service providers.
- iv. Migrate to 5G as solutions/components/technology become available

3. PROJECT GROUP SCOPE

- i. Definition of open interface and integration between o Cloud and remote sites
 - a. Cloud and remote sites
 - b. Baseband and RF
 - c. Layer 1 and Layer 2 and related optimization
 - d. Control plane and user plane
 - e. Applications, DPDK, MEC and eNB software stack
 - f. OAM/analytics and management server functions
- ii. Integration related to security – eNB security, secure tunnels to management and core (TLS/HTTPS/IPsec)

- iii. Integration with security engines provided by GPP platform (for PDCP)
- iv. Porting of software onto VMs
- v. Tying the entire end-to-end solution together

4. PROJECT GROUP DELIVERABLES

- i. Specifications for open interfaces between components listed in Project Group Scope
- ii. End-to-End solution in Lab
- iii. Early field trials

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

Aricent, BaiCells, Radisys

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

Chair

Dr Gi Wan Choi, Sk Telecom, giwan.choi@sk.com

9. PARTICIPATION CRITERIA

- i. Fit of the proposed contributions to the project group scope
- ii. Technical fit of the proposed contributions to the architectural framework of the project group
- iii. Commitment to contribute a non-proprietary open solution or open extension / API
- iv. Productive interaction with a system integrator