



**OPEN**

Compute Project

## Telco Project Charter

# 1 Revision History

Revision	Date	Name	Description
	21 Dec 2015	Amber Graner	Created Doc used Server Charter as place holders
	16 Mar 2016	Bill Carter	Draft of charter specific to the Telco WG
	18 Mar 2016	Craig White	Expanded overview, added management scope
	21 Mar 2016	Amber Graner	Updated terms, membership information and requirements
	21 Mar 2016	Bill Carter	Added revision release 0.5, 0.9, and 1.0 to this history table. Added sections "in scope..." and "out of scope..." and "key focus areas..."
	5 Apr 2016	Craig White	Incorporate community review
	17 Jun 2016	Craig White	Incorporate feedback from mail list and meetup
0.5	6 Jul 2016	Craig White	Released to project members for comment
0.9	TBD	TBD	Final Submission to Incubation Committee
1.0	TBD	TBD	Approved by Incubation Committee

# 2 Table of Contents

- 1 Revision History ..... 2
- 3 Overview ..... 4
- 4 Charter & Scope ..... 4
  - 4.1 In Scope Technology Categories ..... 4
  - 4.2 Out of Scope Technology Categories ..... 5
  - 4.3 Key Project Focus Areas ..... 5
  - 4.4 Environmental, Electrical, Mechanical, and Spatial Considerations ..... 5
  - 4.5 Manageability and Debug ..... 6
- 5 Community Organization ..... 6
  - 5.1 Project ..... 6
  - 5.2 Participation ..... 6
  - 5.3 Project Chairperson ..... 7
  - 5.4 Meetings ..... 7
- 6 Specification Submission and Acceptance ..... 7
- 7 Legal and Patent Policy ..... 8

## 3 Overview

The Telecom Industry would like to apply the Open Compute Project (OCP) model to create Telecom optimized hardware. Telecommunication Service providers are seeking more than simply datacenter solutions. They require solutions that encompass the entire Telco service delivery from the Datacenter to the Network edge.

The OCP Telco Project will enable participants from telecom companies and carriers as well as sub systems, software, board and semiconductor suppliers to transition from existing proprietary solutions to OCP solutions which provide open systems free of proprietary, single supplier lock in.

As telecom services move to the cloud, handle more data, and bring connectivity to the world, it must be done in an efficient, economical, and sustainable way. Hardware designs must be created in an open, transparent and collaborative environment to create an evolving set of commoditized products, optimized for these challenges.

In response, Telecommunications Service Providers and carriers, and the hardware and software suppliers, are working together to create products that can provide innovations to meet changing needs and expectations.

## 4 Charter & Scope

The OCP Telco Project shall collaborate with all chartered OCP Projects to ensure broad adoption of OCP Products into the telecom market. Whenever possible, the Telco Project shall avoid duplication of efforts underway or chartered by the other OCP Projects and workgroups.

Whenever possible, the Telco Project shall utilize products and specifications that achieve OCP Accepted™ and OCP Inspired™ classification.

The Telco Project shall be a community for sharing “proven and new” designs from both the Telecom Service Providers and the suppliers, including uniform management software. In some respect, a “makers” community of cloud hardware and management software for telecom and carriers.

### 4.1 In Scope Technology Categories

When OCP Accepted™ and OCP Inspired™ products are not sufficient nor deliver the technology needed by and for deployment into telecom and carrier data centers or infrastructure, the Telco Project shall promote the creation of such products and specifications.

The scope of this project includes any and all Telco/Carrier products that meet the following conditions, categories, or usages:

- a) Are compatible (e.g. tested) with OCP Accepted™ products and specifications
- b) Derived from OCP Accepted™ products and specifications
- c) Supplement or compliment OCP Accepted™ and OCP Inspired™ products and specifications
- d) Create and enable consistent management software

- e) When targeted for deployment out of the traditional Data Center or Central Office, shall not be limited to a 19" or OpenRack form factor
- f) ...

## 4.2 Out of Scope Technology Categories

The Telco project shall not cover nor address:

- Standards creation (such as those produced or administered by IEEE, PCI SIG, DTMF, etc.), unless such standard is supported by OCP Accepted™ and OCP Inspired™ products.
- Products and/or work items already covered in existing or emerging OCP Projects such as server, storage, networking and other OCP projects.
- *[Feedback from project needed]*

## 4.3 Key Project Focus Areas

- Reliability and Safety needs for the Telecom & Carrier Data Center
- Extended environmental needs for the Telecom & Carrier Data Center
- Low Latency, Multi-tenet Hardware to support Network Function Virtualization
- Access Layer Hardware
- Mobile Network Edge Computing Hardware
- Consistent Hardware Management software across the entire Carrier network
- Computing functionality for both wired and wireless networks
- Transportation and IOT based communications (e.g. High speed trains, airborne or shipborne equipment)
- Any type of computing that pushes data center functions into the Telco network that may evolve in the future, and that may not be part of today's network topologies
- *[Feedback from project needed]*

## 4.4 Environmental, Electrical, Mechanical, and Spatial Considerations

OCP recognizes that telecommunications service providers and carriers install IT equipment in a wide variety of buildings, geographies, climates, & seismic areas of which local & national authorities place unique requirements on that IT equipment. These requirements are potentially different and unique from that of the scale out cloud data center. For example, unique requirements have been documented in the Telcordia **NEBS** (Network Equipment-Building System) Documents. The NEBS standards and other international industry documents (e.g. ETSI, et al) are the most common set of safety, spatial and environmental design guidelines applied to telecommunications equipment. These are industry requirements, but not a legal requirement.

The OCP Telco Project shall neither embrace nor discourage such requirements. Product contributions and corresponding specifications and collateral shall define these unique features or requirements. For example, a contributed product may support a subset of the NEBS requirements. Those requirements shall be solely determined by the contributor (design source) and the supplier partners. Further ruggedization/reliability requirements above and beyond what contributors have provided may be added to OCP Telco contributions by consumers who may use the modifications privately or choose to contribute back to the community for wider proliferation

To promote wide adoption of OCP products and specifications, the project may document desired features and/or requirements.

## 4.5 Service Providers & Integrators

[Assure that OCP service providers worldwide can meet the delivery needs of the telecom and carrier companies]

## 4.6 Manageability and Debug

Dealing at scale requires rock-solid management solutions. Telecommunication Service providers will require scalable and consistent tools to ensure service levels are maintained while consolidating operational silos and reducing “swivel chair” methods of operations. The OCP Telco Project shall promote the use of existing OCP management interfaces, protocols, commands, and debug interfaces as appropriate. As experience is gained using these tools, contributions of modifications and improvements to these tools may be submitted to improve upon existing submissions.

# 5 Community Organization

## 5.1 Project

The OCP Telco Project, or Telco Project, is made up of participants who are committed to moving the project forward between meetings. Those who are interested in the OCP Telco Project are encouraged to actively participate which includes but not limited to attending online project meetings, engineering workshops, provide thought leadership, advice, feedback on shared specifications and designs and more.

## 5.2 Participation

To participate in the OCP Telco Project one does not need to be an OCP Member. However, to contribute a specification or vote in the project lead elections one must be a member of Open Compute Project

The most common way to participate in the project is to subscribe to the mail list. Mail list subscription is maintained at: <http://lists.opencompute.org/mailman/listinfo/ocp-telcos>

While membership in the Open Compute Project is not required to subscribe to the mailing list or to participate in the project, Open Compute Project membership is encouraged. Individual memberships are available, see <http://opencompute.org/community/get-involved/tiered-membership/individual-ocp-community-membership/>

## 5.3 Project Leadership

The OCP Telco Project chairperson (aka project lead) will be elected by the active participants of the OCP Telco Project, OCP Board Members and OCP Foundation Employees. The chairperson responsibilities include but are not limited to: facilitate the flow of information, determine consensus, commit documents, liaison with the Foundation, schedule meetings, maintenance of project wiki pages, and plan sessions for Engineering Workshops.

The first Telco Project Incubation Committee (IC) Representative will be appointed by the Foundation and its representatives. The initial appointment will last until the next full IC election. The IC committee representative will act as a liaison to the Project. The IC liaison will assure that submissions ready for IC review are properly considered for acceptance.

## 5.4 Meetings

The OCP Telco Project will have at a minimum a monthly online meeting. Exact times and dates will be determined based on community feedback and documented on the Telcom WIKI page and OCP Event Calendar.

# 6 Specification Submission and Acceptance

The goal of any work activity within the project is eventual product submission to the foundation and it is expected that a product submission meet one of two product classification: OCP Accepted™ or OCP Inspired™.

These product classifications and the process to achieve the classification are documented in OCP Specifications, Designs and Product Submissions Classifications and Flow.

The Telco Project covers all hardware and software within scope and is the first place where specifications are socialized and reviewed. After review within the project, the specification is forwarded to the Incubation Committee (IC) for formal vote on adoption. The Project Lead and the IC representative can also determine if the submission is better suited being submitted in conjunction with another OCP Project. (E.g. Server, Storage, Networking, Open Rack, Hardware Management, HP, C&I or Data Center)

All specifications under consideration will be posted to the Telco Project WIKI and designated as “SPECIFICATIONS UNDER REVIEW”.

An extreme situation is the case of a confidential submission, in which no vote will be taken. The project chair and the IC Representative liaison will provide feedback on the specifications. Upon agreement

between the chair and the liaison, the specification will move to the IC. It is the submitter's responsibility to ensure that appropriate legal procedures for handling confidential information are met.

Product Specifications that have been accepted shall be posted to the projects wiki website.

Revisions and addendums to existing specifications are typical for hardware projects with ongoing corrections and improvements. These will be treated formally as addendums to the existing specification. The chair and the IC liaison determine whether the changes are minor enough to approve directly or whether the changes should be sent through the full IC voting process.

## 7 Legal and Patent Policy

All specifications and work in the OCP Telco Project shall be covered under the OCP license and legal agreements as determined by the contributor