

# Closing the Loop- Next Phase Catalyst Project Charter

\* indicates that this field is required

<b>Project Name*</b>	Closing the Loop- Next Phase
<b>IPR Mode*</b>	RAND <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">Explanations of each mode is available at <a href="http://www.tmforum.org/IPRPolicy/11525/home.html">http://www.tmforum.org/IPRPolicy/11525/home.html</a></div>
<b>Project Start Date*</b>	February, 2015
<b>Project End Date*</b>	June, 2015
<b>Type of Project*</b>	Catalyst Project
<b>Strategic Program</b>	Agile Business & IT
<b>Previous Project Charter</b>	<a href="https://collab.tmforum.org/sf/docman/do/listDocuments/projects.dd14nfvsonpm/docman.root?RequestFrom=FullView">https://collab.tmforum.org/sf/docman/do/listDocuments/projects.dd14nfvsonpm/docman.root?RequestFrom=FullView</a>
<b>Project Workspace Link</b>	<a href="http://www.tmforum.org/community/projects/dd14nfvsonpm/default.aspx">http://www.tmforum.org/community/projects/dd14nfvsonpm/default.aspx</a>
<b>Project Sponsor*</b>	Massimo Banzi, Pekka Olli
<b>Project Team Lead*</b>	Yuval Stein
<b>TM Forum Staff Support</b>	

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## Project Overview

The Catalyst project will demonstrate a practical implementation of a closed loop functionality, used to heal and optimize a converged network running on both traditional and virtualized infrastructures, relying on both network and services inputs. The focus will be on Agile IT

contribution to the efficiency of services leveraging it even further to customer experience level. Several standards, recommendations and interfaces will be used to support the integration, including TM Forum PM & PIE and 3GPP PM /CM. The catalyst is also related to recent TM Forum & ETSI NFV work and to NGMN recommendations.

In this new phase of the catalyst, the participating management systems use service level information and customer experience data to analyze the direct impact of scaling, healing and optimization on services and customers. This is demonstrated at two levels, either through direct management commands or through a higher level policy modification.

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## User Stories (Use Cases)

The catalyst is focusing on three main user stories as described below.

### **Use Case #1 - NFV: Scaling Policy Modifications**

Benefits: Minimizing time to repair thus saving Operational costs, Increasing Service Quality and Customer satisfaction

Main theme: Policy Modifications based on both Network and Customer usage inputs, Network Scaling

Detailed description:

- Analysis of VM utilization data by PM indicates that BM-SC3 is underutilizing allocated VM during weekend.
- The Policy Manager investigates historical VM resource consumption of BM-SC3 during the weekends obtained from PM
- The Policy Manager extracts existing Policies for Scaleup of BM-SC from NFV Orchestrator.
- The Policy Manager creates instance level Policy for BM-SC3 which overrides the type level policy and sends it to NFV Orchestrator
- Effect of the changed Policy is monitored using the data from PM sources

### **Use Case #2 - A Mobile Access Service Problem**

Benefits: Minimizing time to repair thus saving Operational costs, Increasing Service Quality and Customer satisfaction

Main theme: Closed loop in a hybrid network based on both Network and Customer usage inputs, Network scaling

Detailed description:

- The VNF reports an increase Dropped Calls Rate on the vMME Links.
- The Orchestrator reports an increased Dropped Calls Rate on the Backhaul Service (Internal service)
- On the SDH Routes (Transport Service), there is a decrease on Route Availability KPI.
- Probe data is received for Mobile Access Service records
- The Service Assurance system uses the configuration info to aggregate the KPIs and the probe data and calculate Mobile Access Service level KQIs.
- CEM Analytics UI presents all the data for the Mobile Access Service as collected from the different areas. Presenting a clear Customer Experience degradation.

### **Use Case #3 - OTT Problem and Resolution at Corporate level**

Benefits: Minimizing time to repair thus saving operation costs, Increasing Service Quality and Customer satisfaction

Main theme: Closed loop in a hybrid network based on both Network and Customer alerts, Network Scaling

Detailed description:

- The End-to-End CEM reports an alarm event to the policy manager on a social App (e.g. Socialcase) Health degradation at Corporate level
- The Policy Manager runs root cause analysis on the Socialcast service via exchanges with the Service Performance Management system
- The automated RCA provides 2 recommendations:
  - Increase buffer size of certain routers of the IP backhaul
  - Scale out of vMME (S1 KPIs at eNodeB level detect abnormal ranges)
- The policy layer triggers 2 actions:
  - One to the orchestrator for vMME scale out
  - One to the CM system for parameter change on IP routers for buffer size increase

- Both Orchestrator and CM are notifying the Policy Control that recommendations have been successfully executed
- End-to-End CEM detects normal Socialcast Health KQI few minutes after those changes and notify the Policy Manager for audit purpose

## Dependencies

Add in other projects and Framework dependencies this project will have. Please enter if your project will require INPUT FROM or produce OUTPUT TO the named projects/Framework. In the COMMENTS column describe the nature of the input or output

Project Name	INPUT FROM or OUTPUT TO	COMMENTS (describe nature of Input/Output)	Project Contact

## Participants

This section identifies the human resources and skills required by the project to successfully deliver the items listed in this charter. Unless otherwise noted, the level of commitment of all project participants is Best Effort.

At the time the charter is written, the individuals listed below are considered tentative participants. When the charter is approved, the tentative participants will be notified and they can “join” the project in the online community. From that point forward the project resources will be maintained and viewable in real time.

\* indicates that this is a required field or role.

Role	Name*	Company*	Confluence Username	Comments
Project Team Lead*	Yuval Stein	TEOCO	Yuval Stein	
Project Co-Team Lead				
Mentor				
Marketing/Product Lead*				
Technical Lead*				
Sponsor*	Massimo Banzi	Telecom Italia	Massimo Banzi	
Sponsor	Pekka Olli	TeliaSonera	Pekka Olli	
Participant	Vinay Devadatta	Wipro	Vinay Devadatta	
Participant	Anbu Ganesh	CanGo	Anbu Ganesh	
Participant	Anh Tuan Le	NetCracker	Anh Tuan Le	

### Role Descriptions & Responsibilities

#### Role Definition & Responsibilities

##### Project Team Lead:

- Ensure project is developed in line with TM Forum IPR policy
- Encourage all participants to take an active role in the project
- Ensure participants have a clear understanding of what they need to complete and when
- Drive the project team for on time delivery
- Lead the design, planning and execution validation activities
- Identify key companies required to position for industry adoption

##### Mentor:

- Aid the team to maintain focus on delivery
- Act as a source of expertise for the team
- Join project calls to assist with blockages
- Seek out expert resource to help as required
- Be a guide and link to the wider Program

##### Marketing/Product Lead (not TM Forum staff)

- Ensure all marketing deliverables are produced on time and to an appropriate marketing standard
- Ensure catalyst executes its own marketing activities pre & post event leveraging participant company marketing departments
- Ensure presentations and demonstrations are easily understood by different audiences and tailored appropriately

##### Technical Lead

- Ensure alignment between catalyst project and respective collaboration project.
- Ensure appropriate application of all relevant best practices and standards into catalyst project
- Provide technical leadership and guidance to

Reviewer				
Subject Matter Expert				
Workstream Lead				
Staff				

ensure quality demonstration of integrated working solution

- Ensure learnings and changes to Forum assets are captured and provided back to Collaborative team

**Sponsor:**

- Articulate the Industry User Story
- Act as a Champion for the team
- Review progress at six weekly intervals to ensure relevance
- Champion final deliverables at Nice/San Jose
- Drive Adoption in own organization by championing deliverables as beta versions of solutions to be developed

**Participant:**

- Develop collaborative solutions as in accordance with the developed charter and inline with Collaboration process
- Participate actively in team working meetings / sessions
- Complete tasks as agreed with the team or workstream leader

**Reviewer** (note this is only for projects with a large number of Champions- some may choose to provide their input via periodic reviews)

- Review all outputs from team and provide quality timely feedback ensuring output aligns with business and technology requirements of your organization
- Participate in validation activities, these may be online or face to face.
- Monitor Collaboration Events & Activities page for all latest review activities

**Subject Matter Expert:**

- Provide support and guidance to a project team in your particular area of expertise

## Project Workstreams and Deliverables

The project workstreams and deliverables for this project are introduced in the sections below.

If there are multiple workstreams within this project, copy and paste the table below to create multiple instances of the table and complete it for each.

### Workstream 1:

Workstream Leader:

#	Deliverable Name*	Deliverable Type*	Deliverable Description & Purpose*	Deliverable Start Date*	Planned Submission Date or Release Number*	Work Requests to be Implemented	Dependencies	Comments
1		The Catalyst Demo	The demo of the integrated systems, using several standard interfaces (TM Forum PM API, 3GPP PM/CM)		June 2015			

2		Developed Use Cases	A list of developed use cases, mapped to ETSI NFV work		June 2015			
3								

## Workstream n:

Workstream Leader:

#	Deliverable Name*	Deliverable Type*	Deliverable Description & Purpose*	Deliverable Start Date*	Planned Submission Date or Release Number*	Work Requests to be Implemented	Dependencies	Comments
1								
2								
3								

## Member Validation and Feedback Approach

In the agile model, once a team approved draft has been created, a team should perform at least one, preferably two, member-facing validating and feedback activities. These could be online or face to face. For example, DevOps testing.

If there are multiple activities within this project, copy and paste the table below to create multiple instances of the table and complete it for each activity.

<b>Activity Type</b>	
<b>Activity Description &amp; Purpose</b>	
<b>Planned Date</b>	
<b>Required Audience</b>	
<b>Dependencies</b>	
<b>Comments</b>	

## Project Tooling

Indicate the tooling required for project success.

Product	Key Functions	Needed for Project?
<b>Confluence Space</b>	Document creation and publishing	Provided by default
<b>JIRA Space</b>	Agile project management	
<b>GitHub</b>	Code repository	
<b>Trello</b>	Project Management	
<b>Other</b>		

# Liaison Relationships

Please indicate if this project has or plans to have a relationship with other External Standards Organizations (SDOs).

Name of Organization	Is this a New or Existing relationship?	Linkages and/or Scope of work	Contact person	Comments

# Charter History

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Version	Date	Comment
<b>Current Version (v. 4)</b>	<b>May 07, 2015 02:42</b>	<b>Yuval Stein</b>
v. 3	Apr 08, 2015 05:53	<b>Yuval Stein</b>
v. 2	Mar 16, 2015 13:24	<b>Jean-Pierre Dufresne</b>
v. 1	Mar 09, 2015 14:15	<b>Jean-Pierre Dufresne</b>

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