Jakarta release - functional requirements proposed list

Template Cut & Paste for your Use Case/Requirement)

R10 PRESENTATION:

ITEM	DETAILS
Presentation	
Recording mp4	
Audio only	

Key Contacts - ("WHO")

Executive Summary - (Give a short description of your Use Case, the "Executive 2 min elevator pitch", this describes the "**WHAT**")

Business Impact - (This is the Business Impact which describes why this use case is important from a business perspective, this describes the "**WHY**").

Business Markets - (This is the marketing analysis, which can include but not limited to applicable markets, domains, marketing projections, this can describe the "**WHERE**").

Funding/Financial Impacts - (The Funding requirements and Financial impacts can describe the financial savings, or CAPEX, OPEX impacts for a Use Case).

Organization Mgmt, Sales Strategies - (It is suggested that you use the following wording): *There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.* (This would typically describe the "**WHO**", but because use cases are all deployed with ONAP itself, these two areas come with the actual ONAP deployment and uses the organizational management and sales strategies of a particular service provider's ONAP deployment)

DMaaP Enhancement for Kohn Release

R10 PRESENTATION:

ITEM	DETAILS
Presentation	
Recording mp4	
Audio only	

Key Contacts - Fiachra Corcoran

Executive Summary - Migration of DMaaP Message Router Clients to use (Strimzi) Kafka native (or Strimzi Kakfa Bridge REst interface) for platform wide messaging.

Business Impact - Remove/replace the legacy kafka implementation with a more robust and fully supported kafka deployment model.

Business Markets - All operators, service providers and application developers that are using ONAP.

Funding/Financial Impacts - Reduction in maintenance of unsupported legacy components which in turn provides significant OPEX savings.

Application Service Descriptor (ASD) onboarding package IM / DM

R10 PRESENTATION:

ITEM	DETAILS
Presentation	ONAP_ASD_techn...d_Model v1.pdf
Recording mp4	
Audio only	

Key Contacts Marian Darula , **@Nguyenphu, Thinh, Byung-Woo Jun**

Executive Summary -

In today, many complex applications are consisting in a mixed, complex workload, that is described in many Kubernetes resources, e.g. to be run on a certain cluster, etc. In order to deploy the application, the orchestration task would be requiring dealing with different abstract layers of resources, different templates system mapping, and application packaging. Another challenge is to keep up with changes in the cloud infrastructures features enhancement mapping into abstract resource template.

The proposal focuses on following main parts:

1. Packaging, in a single, well defined bundle, cloud applications, to enable distribution, provisioning and installation.
2. Application metadata and cloud-native tooling.
3. Leverages existing Kubernetes ecosystem and continuously growing set of extensions, plugins, and tools.

See Application Service Descriptor (ASD) and packaging Proposals for CNF for more details.

As a part of this requirement the definition of IM and DM for ASD shall be done.

Business Impact - Unified modelling and packaging of cloud native network functions (CNFs) relying on cloud native artefacts with simple descriptor additions. It will significantly simplify modelling and packaging of CNFs.

Business Markets - All operators, service providers and application developers that are using ONAP for CNF deployment.

Funding/Financial Impacts - Due to significant simplification of modelling and packaging of CNFs there will be OPEX cost savings.

Organization Mgmt, Sales Strategies - *There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider*. (This would typically describe the "**WHO**", but because use cases are all deployed with ONAP itself, these two areas come with the actual ONAP deployment and uses the organizational management and sales strategies of a particular service provider's ONAP deployment)

Control Loop in TOSCA LCM Improvement

ITEM	DETAILS
Presentation	
Recording mp4	
Audio only	

Key Contacts - **Zu Qiang (Ericsson) Liam Fallon**

Executive Summary - CLAMP (Control Loop Automation Management Platform) functionalities, recently moved to Policy project , want to provide a Control Loop Lifecycle management architecture. A control Loop is a key concept for Automation and assurance Use Cases and remain a top priority for ONAP as an automation platform. This requirement wants to improve Control Loop LCM architecture focusing on an abstract CL management logic, isolating CL logic vs ONAP component logic, providing a common CL Design time catalogue with a generic CL definition, and elaborate API to integrate with other design systems as well as 3PP component integration. PoCs have been progressed in ONAP Rel G and H in this area, CL LCM redesign has reached a relevant viable set of features and it is ready to be moved in Rel I to mainstream as part of the Policy framework.

Business Impact - Deployment and orchestration of automation and control loop use cases across CNFs, VNFs and PNFs in a model driven way simplifies the network management. Enables operators and service providers to manage the Life Cycle of a Network Service. Assuring continuity of operation of services is crucial for production and carrier grade environments. The actualization or upgrades of software and in consequence required changes in the service model is a natural part of service instance life cycle. Without the support of ONAP service update with schema change, service life cycle management by ONAP can be very difficult which can impact the quality and continuity of services.

Business Markets - All operators and service providers that are using ONAP for automation and assurance.

Funding/Financial Impacts - CL LCM wants to reduce operational expense and its abstraction will provide an added value with multiple integration points.

Organization Mgmt, Sales Strategies - (It is suggested that you use the following wording): *There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.* (This would typically describe the "**WHO**", but because use cases are all deployed with ONAP itself, these two areas come with the actual ONAP deployment and uses the organizational management and sales strategies of a particular service provider's ONAP deployment)

PM Data Collection Control: Subscription update

ITEM	DETAILS
Presentation	
Recording mp4	
Audio only	

Key Contacts - Mark Scott, Zu Qiang (Ericsson)

Executive Summary - PM data collection control provides network operators with a dynamic and more efficient way to configure performance measurement collection on a selected subset of PNFs/VNFs in the network and complements the existing PM data collection and processing capabilities in ONAP/DCAE. An initial version has been delivered in Rel 6 then enhanced in Rel 7/Rel 8/Rel 9. Planned enhancements for Rel 10 intend to improve the (PMSH) subscription management API.

Business Impact - PM control is a critical business function because it is vital to enable the PM data collection in ONAP.

Business Markets - All operators and service providers that want to use ONAP for PM data collection.

Funding/Financial Impacts - PM data collection control can provide OPEX savings for operators due to increased automation of a critical function.

Organization Mgmt, Sales Strategies -*There is no additional organizational management or sales strategies for this requirement outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.*

ONAP CNF orchestration - Jakarta Enhancements

R10 PRESENTATION:

ITEM	DETAILS

Presentation	REQ-890_-_CNFO...ta_Req_Sub.pdf
Recording mp4	
Audio only	

Key Contacts - **Lukasz Rajewski Seshu Kumar Mudiganti**

Executive Summary - Provide CNF orchestration support through the integration of K8s adapter in ONAP SO

- Support for provisioning CNFs using an external K8s Manager
- Support the Helm based orchestration
- leverage the existing functionality of Multi cloud in SO
- Bring in the advantages of the K8s orchestrator
- Set stage for the Cloud Native scenarios

Business Impact - Enables operators and service providers to orchestrate CNFs based services along with the VNFs and PNFs

Business Markets - All operators and service providers that are intended to use the CNFs along with PNFs / VNFs

Funding/Financial Impacts - Reduction in the footprint of the ONAP for CNF support

Organization Mgmt, Sales Strategies - There is no additional organizational management or sales strategies for this requirement outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider

5G OOF SON Use Case

R10 PRESENTATION:

ITEM	DETAILS

Presentation	ONAP_OOF_SON_R...1107_v1.0.pptx
Recording mp4	
Audio only	

Key Contacts - **N.K. Shankaranarayanan** , **krishna moorthy**

Executive Summary - SON (Self-Organizing Networks) functionality is an essential part of existing 4G mobility networks, and will be even more critical for 5G. SON enables automation to improve network performance and efficiency, improve user experience, and reduce operational expenses and complexity. The objective of the OOF-SON use case is to develop an ONAP-based SON platform using the ONAP Optimization Framework (OOF). We have taken a phased approach since SON is complex, and SON for 5G is still evolving. We started with the Physical Cell Identity (PCI) optimization SON use case in Casablanca, then added some centralized Automated Neighbor Relations (ANR) aspects in Dublin. In Frankfurt, we addressed some enhancements such as basic CM-notify handling (as preparation for O-RAN alignment), adaptive SON, etc. In Guilin, we introduced use of AI/ML by onboarding an offline-trained ML-model to ONAP which will provide additional inputs to PCI optimization based on historical PM data, and stabilized the functionality in Honolulu. In Istanbul, we aligned FM messages with relevant standards, and converged on new 3GPP NRM-based yang models to leverage CPS for RAN configuration. In Jakarta, we will further align with O-RAN O1 VES message formats, and include A1-based SON actions in addition to the O1-based actions we have used till now.

Business Impact - SON is an essential feature in mobility networks, and relevant to every operator. Any ONAP-based network deployment for 5G will benefit from an ONAP-based SON solution, which provides a disaggregation of SON functions into modules aligned with the ONAP architecture. Operators and vendors will both benefit from the ability of vendors to bring best-in-class solutions to each module, while leveraging the benefits of a community-supported open platform. This will enable faster development of innovative solutions. The approach taken could very well be evolved to address SON use cases whose scope extends beyond just the RAN.

Business Markets - SON for 5G is relevant to all 5G operators and markets.

Funding/Financial Impacts - SON functions reduce Opex since the automated self-organizing functions are an efficient approach to continuously optimize network configurations to improve performance and respond to network conditions.

Organization Mgmt, Sales Strategies - There are no additional organizational management or sales strategies for this beyond whatever is required for ONAP deployment to support 5G.

CCVPN support for Intent-based networking and closed-loop - Jakarta Enhancements

R10 PRESENTATION:

ITEM	DETAILS

Presentation	ONAP_CCVPN_Jaka...posal-v0.2.pptx
Recording mp4	
Audio only	

Key Contacts - **Henry Yu LIN MENG**

Executive Summary - We would like to enhance the CCVPN use-case to support Intent-based networking. Intent separates "what"(description of the desired outcome) from "how"(actual network configurations), and can be used to enable the full network automation. We will make CCVPN offer an Intent NBI that can be used to enable the closed-loop automation of the transport network.

Business Impact - Driven by use-cases such as IoT and 5G, the complexity of today's transport network grows abruptly. Intent-Based Networking (IBN) is an emerging technology that aims to effectively manage network complexity and also aims for closed-loop automation.

Business Markets - Intent Based Networking (IBN) is an essential feature of future networking. Any operators who would like to deploy ONAP-based network automation solution would most likely require ONAP to support IBN.

Funding/Financial Impacts - Intent CCVPN provides service automation, assurance, and the optimal use of network resources. Thus, it helps reduce OPEX for a service provider.

Organization Mgmt, Sales Strategies - There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.

Smart Intent Guarantee based on Closed-loop in R10

R10 PRESENTATION:

ITEM	DETAILS
Presentation	ONAP R10 - IBN ...ents Review.pdf

Recording mp4	
Audio only	

Key Contacts - Dong Wang(China Telecom) **Henry Yu**(Huawei) **Keguang He**(CMCC)

Executive Summary - Intent-based network (IBN) is a self-driving network that uses decoupling network control logic and closed-loop orchestration techniques to automate application intents. An IBN is an intelligent network, which can automatically convert, verify, deploy, configure, and optimize itself to achieve target network state according to the intent of the operators, and can automatically solve abnormal events to ensure the network reliability. In R10, a Feature of intent guarantee based on closed-loop is proposed to support the use cases of both CCVPN and E2E Slicing.

Business Impact - It is a challenging problem to guarantee the users' intents in run-time. The REQ of intent-based network provides a scenario of users' intent guarantee and interacting.

Business Markets - This REQ provides a novel solution to support the SLA service.
1. A users' intent instance is proposed to monitor and analysis the network in run-time to satisfy the users' SLA service.
2. The users' intents are updated in run-time based on the network situation and the interaction with users.

Funding/Financial Impacts - This function will provide more SLA services to increase the income of operators based on the current networks with few investments.

Organization Mgmt, Sales Strategies - *There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.*

Network Services without Perception for Users based on IBN

R10 PRESENTATION:

ITEM	DETAILS
Presentation	ONAP R10 - IBN ...ents Review.pdf
Recording mp4	
Audio only	

Key Contacts - Dong Wang(China Telecom) **Henry Yu**(Huawei) **Keguang He**(CMCC)

Executive Summary - Intent-based network (IBN) is a self-driving network that uses decoupling network control logic and closed-loop orchestration techniques to automate application intents. An IBN is an intelligent network, which can automatically convert, verify, deploy, configure, and optimize itself to achieve target network state according to the intent of the operators, and can automatically solve abnormal events to ensure the network reliability. In R10, a Specification of network service without perception for users is proposed in UUI to support the use cases of both CCVPN and E2E Slicing.

Business Impact - It is a challenging problem to acquire the users' intents and provide the satisfied network service in run-time. The REQ of intent-based network provides a scenario of users' intent guarantee and interacting.

Business Markets - This REQ provides a novel solution to support the SLA service.
1. A users' intent instance is proposed to monitor and analysis the network in run-time to satisfy the users' SLA service.
2. The users' intents are updated in run-time based on the network situation and the interaction with users.
3. Multiple network services, like CCVPN and E2E Slicing, can provide satisfied services for users based on their intents. Users will not need to select the network services by hand.

Funding/Financial Impacts - This function will provide more SLA services to increase the income of operators based on the current networks with few investments.

Organization Mgmt, Sales Strategies - *There is no additional organizational management or sales strategies for this use case outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.*

A1 Policy Function Extensions (ORAN/ONAP/3GPP Harmonization)

ITEM	DETAILS
Presentation	TBD
Recording mp4	
Audio only	

Key Contacts - **John Keeney, Zu Qiang (Ericsson)**

Executive Summary - This feature requirement enhances A1 Policy Management for the O-RAN A1 interface capabilities provided in Rel 6, 7, 8 & 9. Work will continue by extending & evolving support for using A1 Policies to manage 5G RAN elements by providing intent based policies for optimization of the RAN network performance. Planned enhancements for Rel 10 include support of new A1 interface versions to align with new versions & improvements to O-RAN alliance specifications.

Business Impact - Continuing the convergence between ONAP and ORAN for A1 interface to used by all service providers and avoid duplicate development efforts.

Business Markets - Enhanced A1 capabilities will be usable by any service provider deploying and using ONAP.

Funding/Financial Impacts - A1 interface provides a flexible way for the operator to manage wide area RAN network optimization, reducing capex investment needs.

Organization Mgmt, Sales Strategies - *There are no additional organizational management or sales strategies for this requirement outside of a service providers "normal" ONAP deployment and its attendant organizational resources from a service provider.*