



Modelling, VNF Guidelines & SDK

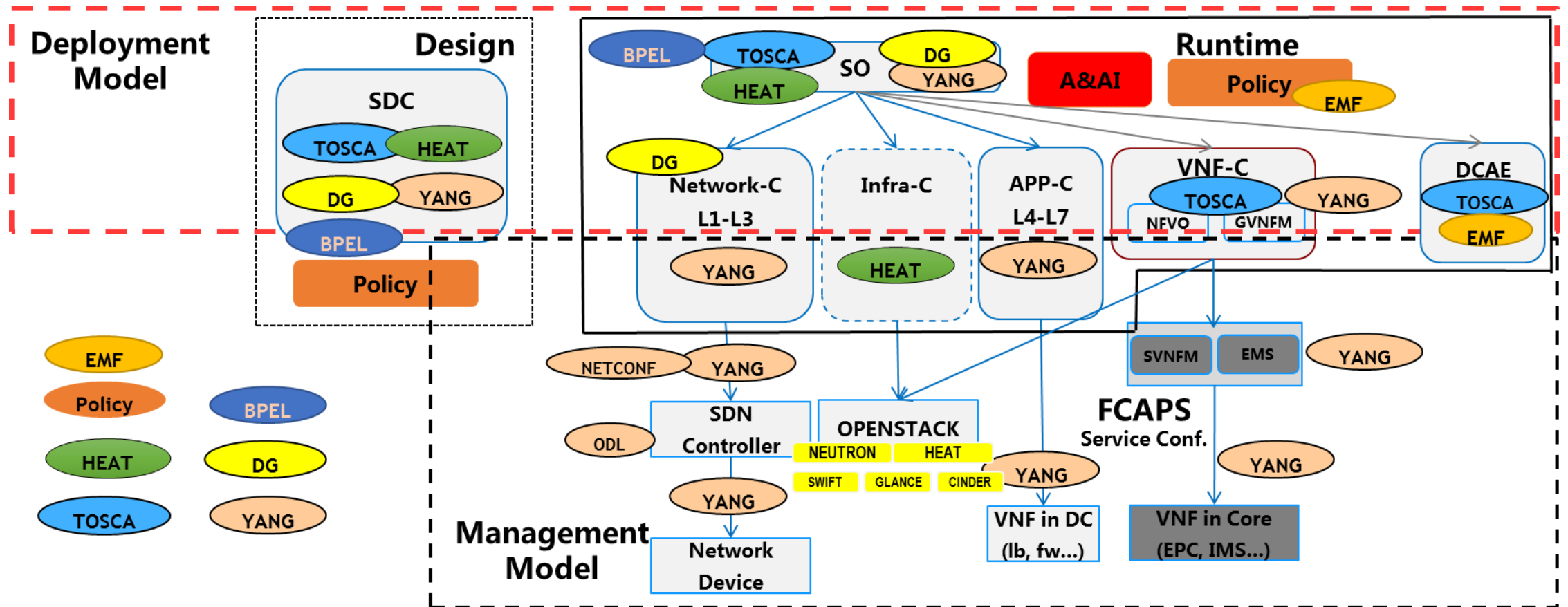
ONAP Mini-Summit Session on “Modelling + VNF Guidelines & SDK” @ ONS 2017

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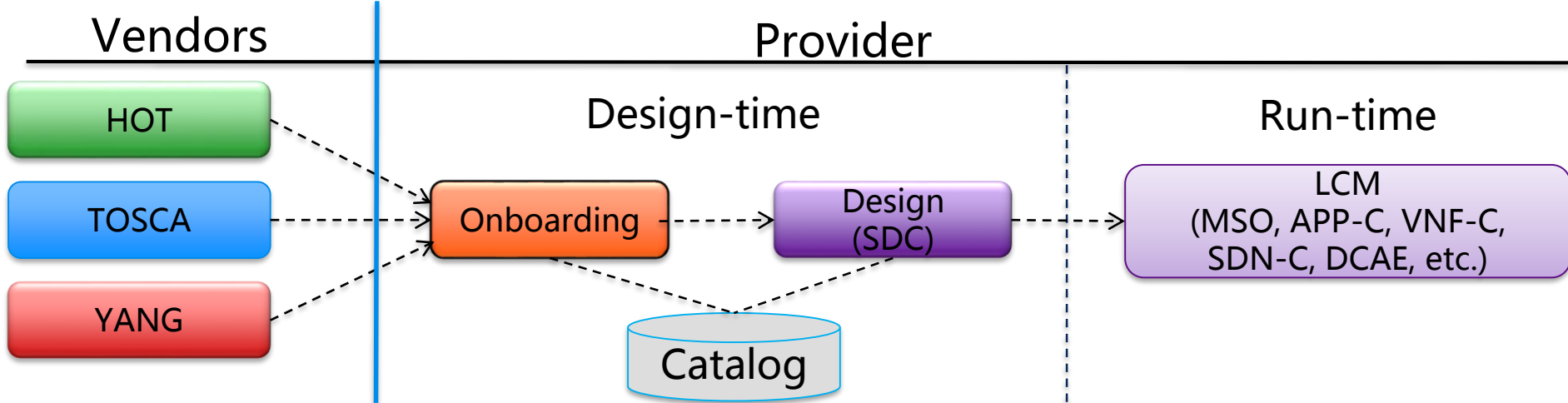
Modelling

... enabling the model driven network automation

Landscape of Data Modelling Distribution in SDN/NFV



VNF Modelling



Different DMs are used for VNF templates. We will be working together on supporting HEAT, TOSCA and YANG VNF modeling.

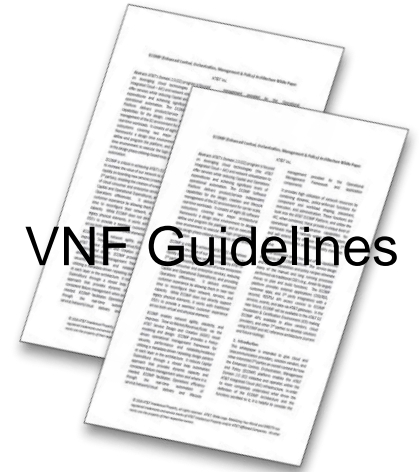


VNF Guidelines & SDK

... enabling the multivendor environment for VNFs

ONAP VNF Guidelines

ONAP Requirements and Guidelines				
VNF Guidelines for Network Cloud and ONAP				Future ONAP Subject Documents
VNF Cloud Readiness Requirements for ONAP	VNF Management Requirements for ONAP	VNF Template Requirements for ONAP (HEAT & TOSCA)	Future VNF Requirements Documents	Future Requirements Documents



VNF Guidelines for Network Cloud and ONAP

Describes VNF environment and overview of requirements

VNF Cloud Readiness Requirements for ONAP

Cloud readiness requirements for VNFs (Design, Resiliency, Security, and DevOps)

VNF Management Requirements for ONAP

Requirements for how VNFs interact and utilize ONAP

VNF Heat Template Requirements for ONAP

Provides recommendations and standards for building Heat templates compatible with ONAP

VNF Tosca Template Requirements for ONAP

Provides recommendations and standards for building TOSCA templates compatible with ONAP

VNF Lifecycle Stages

VNF Provider:

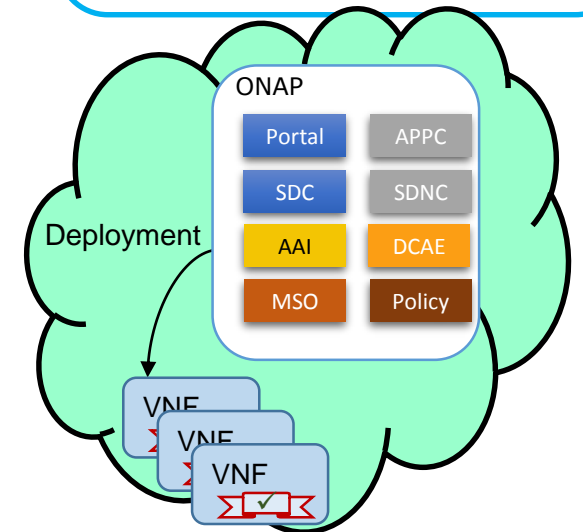
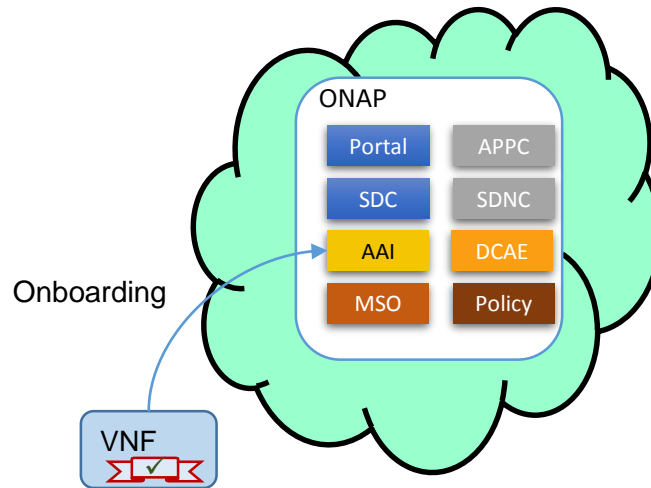
- Design
- Develop
- Test (certify)
- Integrate
- VNF Package
- Deliver

VNF @ Service Provider Design-time :

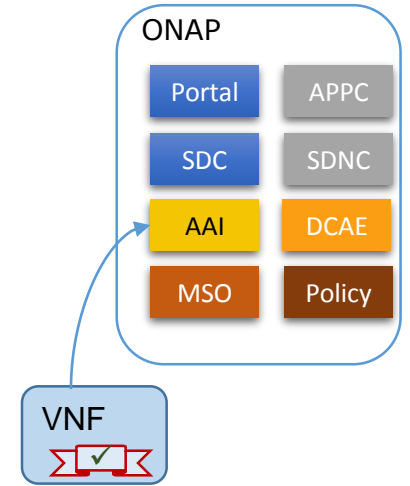
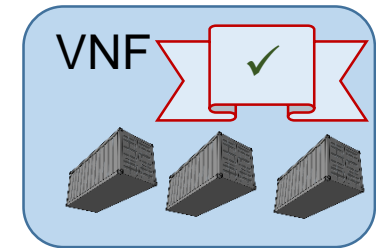
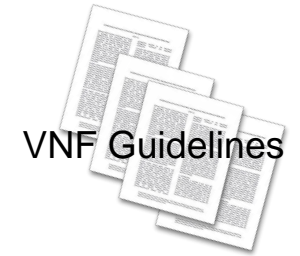
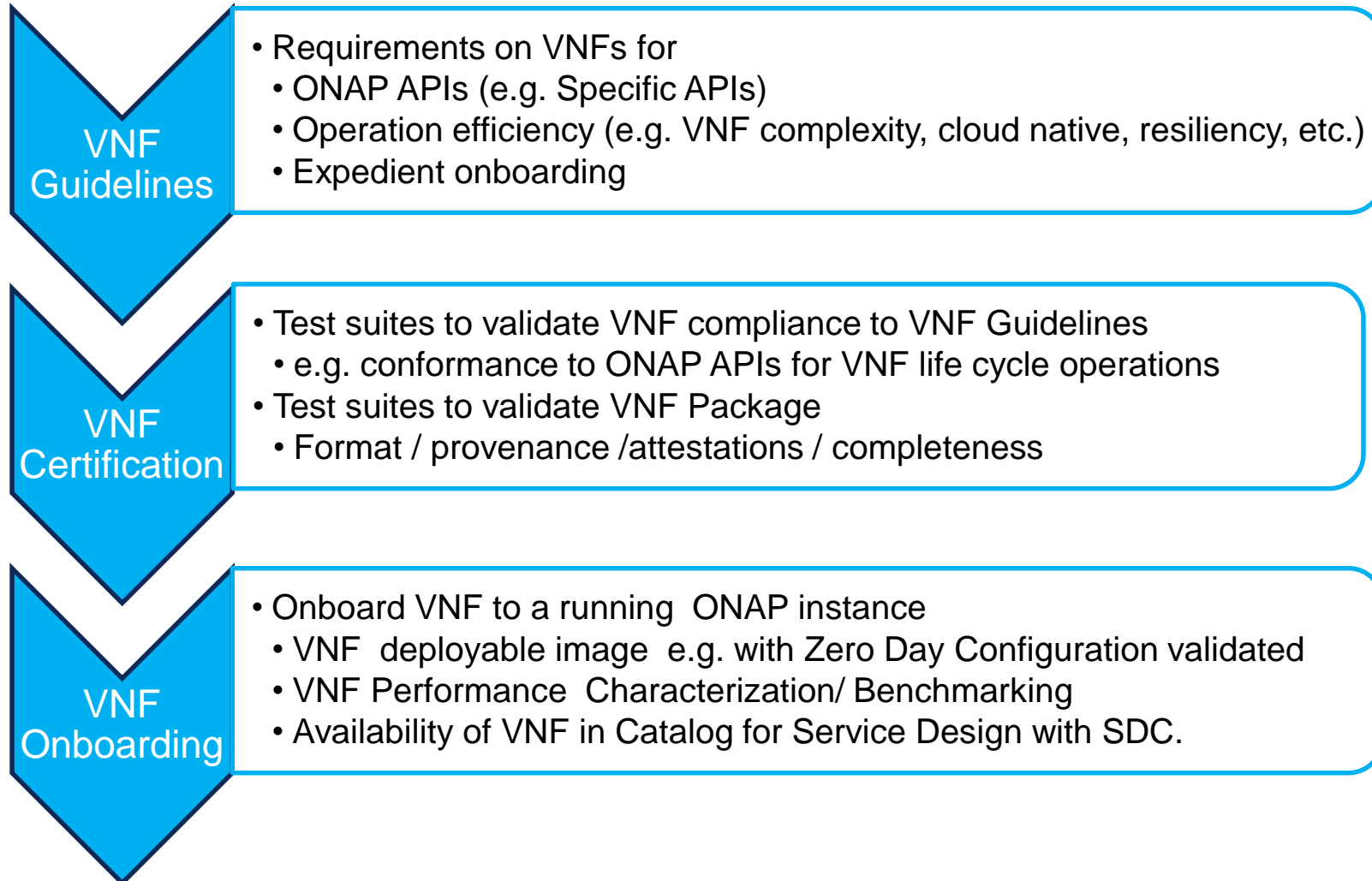
- Select
- Order
- Enrichment & Design
- Validate & Certify
- On-board
- VNF Package Validation
- End of Life

VNF @ Service Provider Run-time:

- Assemble
- Assign
- Service Configure
- Deploy (instantiate, rebuild)
- Operate (stop, restart, etc.)
- Modify / Query
- Monitor
- Test & Heal
- Scale
- Terminate



VNF Guidelines, Certification & on-boarding



VNF validation and onboarding tools & process

A process and associated tools providing an efficient & seamless self-service experience to validate and incubate VNFs against the ONAP architecture based on the ONAP VNF Guidelines.



Incubate

To accomplish a seamless onboarding, it is necessary to allow any VNF provider to understand what is required as early on as possible.



Validate

To ensure compliance with the ONAP guidelines, the process allows a blended approach of automation & manual validation of VNFs.



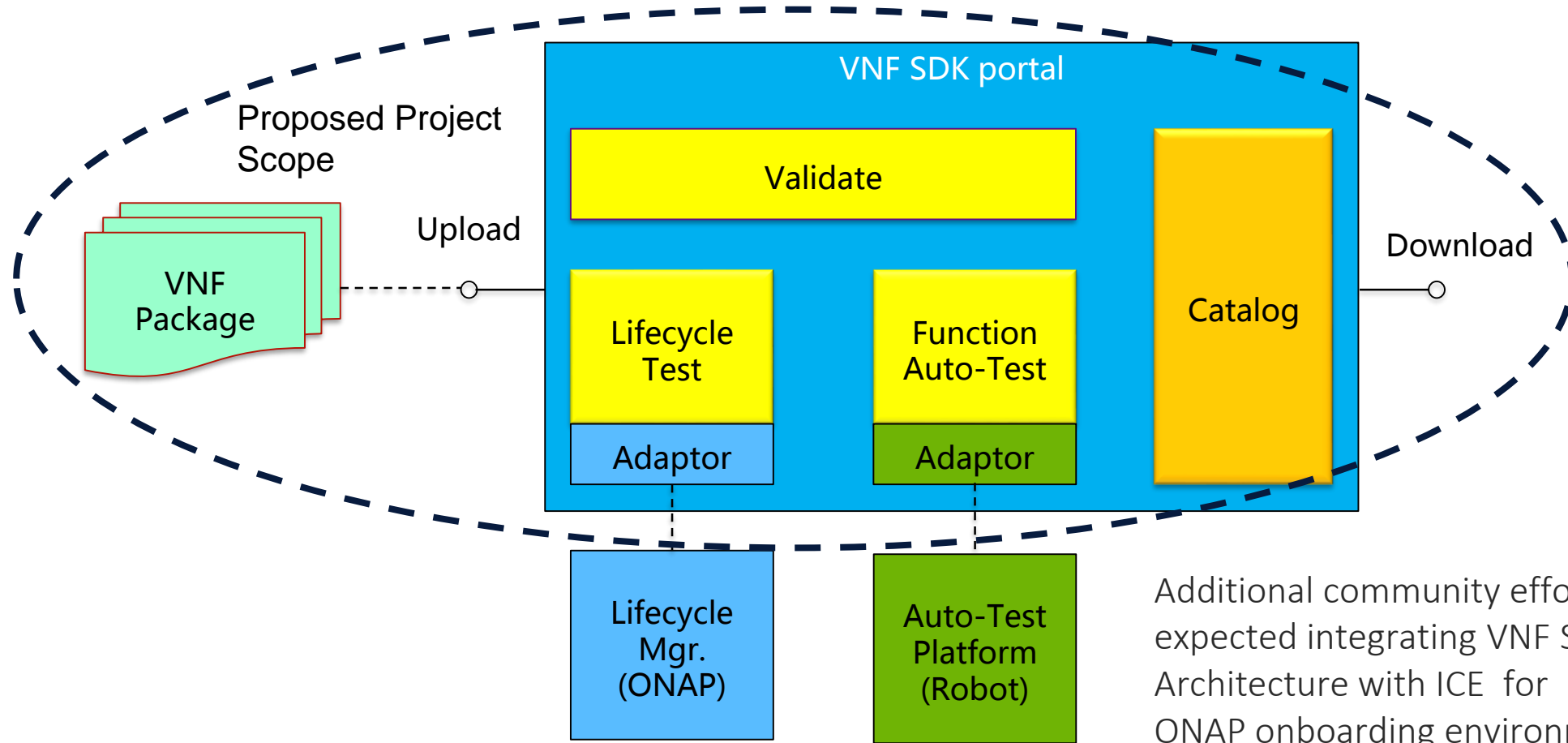
Collaborate

To enable broad collaboration, which is essential for the validation & incubation of VNFs, such capabilities are continuously built out.

Open-Sourced in 2017

The D2 ICE process and associated tools will be contributed to **ONAP** in its entirety in 2H 2017. Various aspects and tools will be gradually released over the course of the year. Additional community efforts are also expected integrating VNF SDK Architecture for unified ONAP onboarding environment

Integrating VNF SDK Architecture for ONAP



Additional community efforts are also expected integrating VNF SDK Architecture with ICE for unified ONAP onboarding environment

VNF Guidelines & SDK ... Looking forward

- Evolve the VNF Guidelines in ONAP
 - Additional requirements, multi-VIM, YANG etc.
 - Reference VNFs
- Develop the VNF Certification Program
 - Test suites based on VNF Guidelines
 - Test suites to facilitate VNF Packaging & onboarding
- Align industry modelling work on VNFs with other industry bodies
 - ETSI, TMF, OASIS, ONF, OPNFV etc.
- Ongoing discussion ... Community Input welcome