ONAP ETSI-Alignment Status

• VNF and PNF Onboarding/Design and Distribution

- VNF and PNF package onboarding conforms to SOL001 v2.5.1 and SOL004 v2.5.1
- VNF package distribution conforms to SOL003 v2.5.1 package management APIs
- ONAP Catalog Manager conforms to SOL005/SOL003 v2.5.1 package management APIs for distributing ETSI packages that follow SOL001/SOL004/SOL007 v2.5.1

NSD Generation and Distribution, Conforming to SOL001/SOL007/SOL005

- NS package onboarding is a future consideration in ONAP
- NS package is generated by ONAP, by conforming to SOL001 and SOL007
- NS package distribution conforms to SOL005 package management APIs

• VNF, PNF and NS Orchestration Support

- Implemented SO NFVO, conforming to ETSI SOL005/SOL003, a component handles NS and VNF orchestration and invokes VNFM thru SOL003 Adapter
- Implemented SOL003 Adapter, conforming to ETSI SOL003, an adapter between ONAP orchestrator and VNFM
- In ONAP, there is another NFVO, called VFC, which conforms to ETSI SOL005/SOL003 APIs
- Currently, PNF orchestration is ONAP-specific

- ETSI IFA011 v4.2.1 incorporated into ONAP Information Model
 - Corresponding draft SOL001 v4.2.1 support designed; Will be updated when SOL001 v4.3.1 is published
 - Plan to incorporate ETSI IFA011 v4.3.1 changes into the ONAP IM when IFA011 v4.3.1 is published

ETSI VNFD Models and ONAP Ecosystem Incompatibility & Current ONAP Implementation Limitation

- ETSI VNF/VDU does not map well to ONAP VNF/vf-module (a sub-structure of VNF). Simple mapping does not support scaling. Fully functional mapping would require complex policy interpretation.
- Closed-loop (scaling, healing) functions that leverage existing ONAP components require the vf-module level model
- The vf-module deduction based on the VNFD policies<scaling_aspects>properties>aspect was considered, but due to its complexity, its implementation is on hold. The current ONAP ETSI-Alignment supports VNF, not vf-module, by leveraging SVNFM, without closed loop support

Additional concerns from ONAP

- For CNF, the purpose of SVNFM is questioned → a G-VNFM concept was considered, which can map SOL004/SOL001/SOL002/SOL003 into native formats/APIs
- Some VNFD attributes/properties are duplicated in cloud native artifacts, which can lead to loss of synchronization between the VNFD and the artifacts

