1st OSM VNF Day - Kickoff:
The Importance of VNF Onboarding for NFV Realization
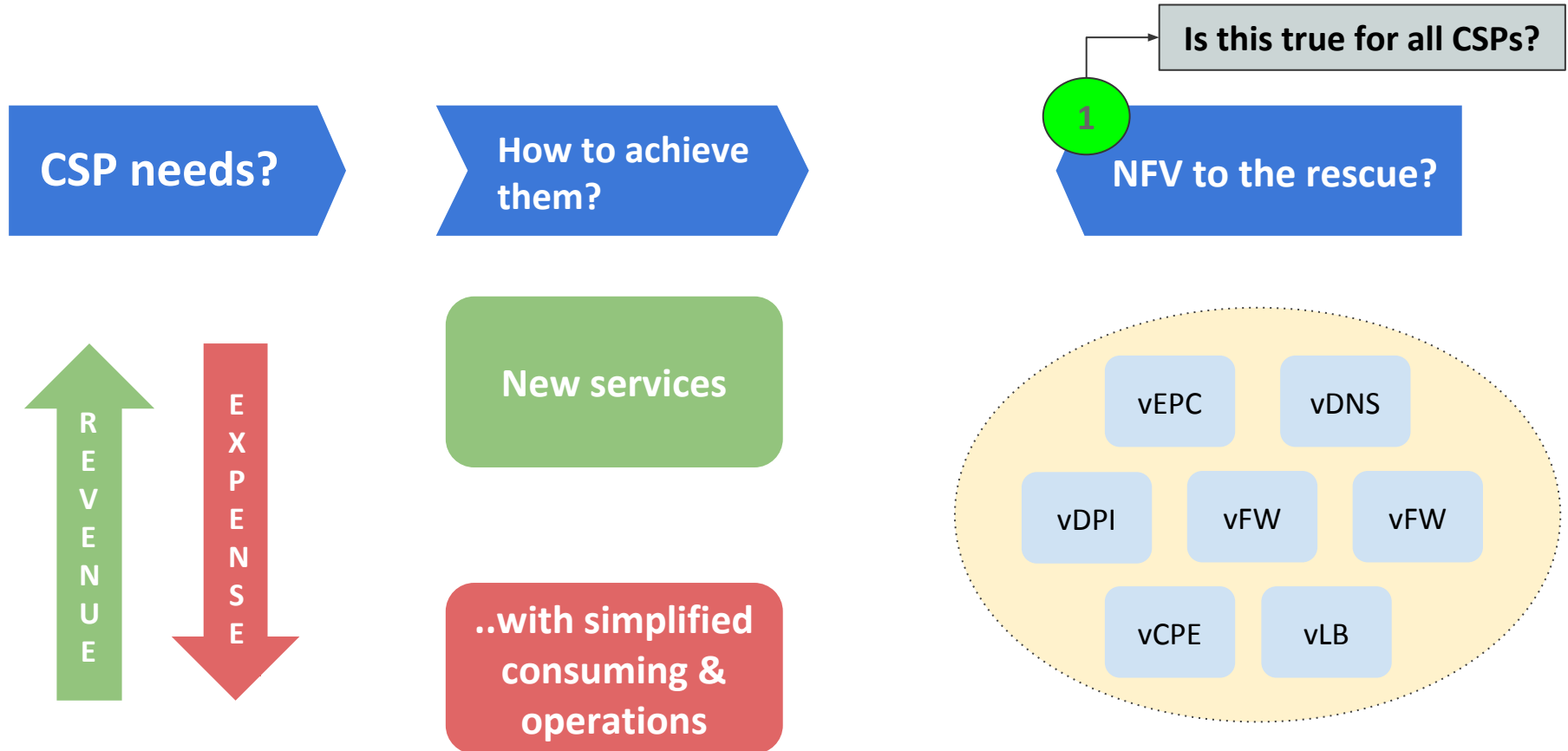
Gianpietro Lavado
OSM VNF Onboarding TF Chair /
Senior Solutions Architect @ Whitestack

Welcome!

Timing	Session	Partner Company	Name	Abstract summary
13:00-13:30	Keynote / Kick-off	Whitestack	Gianpietro Lavado	Keynote: The Importance of VNF Onboarding to NFV Realization
13:30 – 14:00	VNF Day Session #1	Canonical	Marcin Bednarz	Virtualised and Containerised Network Functions in OSM
14:00 – 14:30	VNF Day Session #2	Fortinet	Ali Bidabadi,	With numerous challenges in the area of security VNFs (and VNFs in general), Fortinet has worked to enhance the performance of its security VNFs by taking advantage of cutting-edge technologies.
14:30 – 15:00 including Q&A	VNF Day Session #3	Intel	Intel Network Builders	This session will provide an overview of the Intel® Network Builders University and the value of cutting edge technical training in the network transformation landscape.
14:50 – 15:10	Coffee Break			
15:10 – 15:40	VNF Day Session #4	A10	Saurabh Sureka	Interoperability, performance & business flexibility are the key requirements from VNF's deployed across Multi-Clouds.
15:40 - 16:10	VNF Day Session #5	VMware	Vanessa Little	Are we realizing the promise of NFV?
16:10 - 16:20	Panel Set Up			
16:20 – 17:00	VNF Day Panel	All Presenters		With 5G winds at our backs, it seems like we all need to go faster than ever to virtualize, containerize or even go grounds up cloud-native. In this panel we will explore workloads and deployment types that require different approaches, and looking at each partners own experience at meeting market needs.

Why are we here?

CSP needs?

How to achieve them?

New services

..with simplified consuming & operations

REVENUE

EXPENSE

Is this true for all CSPs?

1

NFV to the rescue?

vEPC
vDNS
vDPI
vFW
vFW
vCPE
vLB

There are still a couple of challenges perceived by some CSPs, which believe in virtualization, but prefer to rely on vertical "single vendor" deployments.
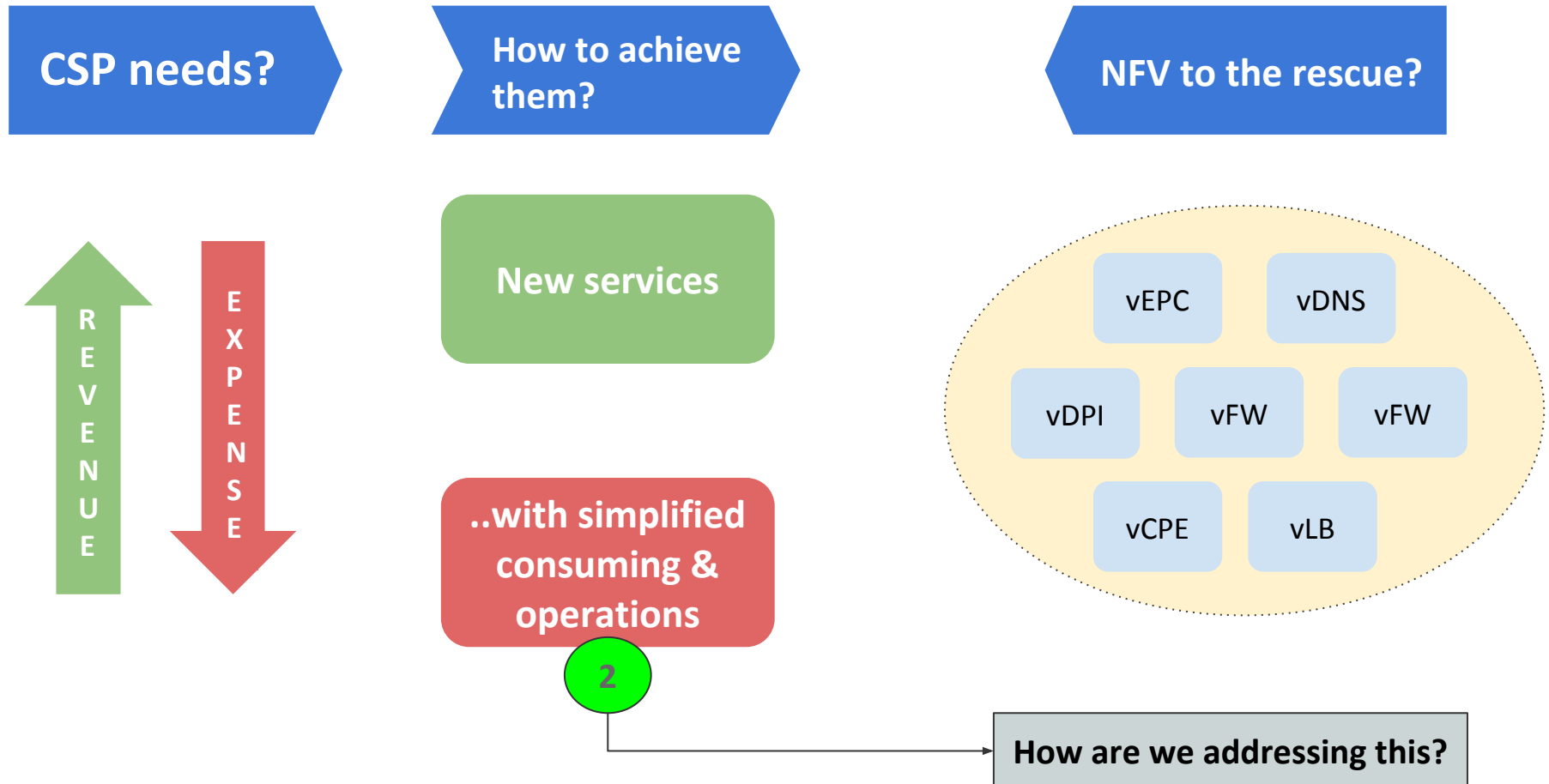
Do I need a NFV orchestrator at all?

- What's the value of orchestrating NS / VNFs beyond VMs and container lifecycle management?

Will my NFV MANO be compatible with any VNFs?

- Will automation of configuration, monitoring, scaling, healing, updating, and other operations work with any VNF?

The value of Day1/2 automation of multiple VNFs, from a generic NFV MANO platform, is yet to be widely demonstrated!

Why are we here?

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2

vEPC

vDNS

vDPI

vFW

vFW

vCPE

vLB

How are we addressing this?

Both VNF and MANO vendors have an important role here!

VNF Vendors need to address:

- Creation of a consumable VNF function, agnostic to NFVI/VIM.
- A simplified license model.
- As cloud-friendly as possible (towards cloud-native)
- Simplified API for configuration and monitoring.

MANO Vendors need to address:

- A complete model for providing NFVI/VIM agnosticism.
- Adaptability for automating operations for different kinds of APIs for configuration and monitoring.

VNF Onboarding efforts tackle both challenges!

We need to achieve <u>completely onboarded VNFs</u>, to <u>fulfill the NFV vision and provide value to CSPs.</u>

VNF Package 1
(unique)

Open Source MANO

2 →

Network Service Instance

VNF1   VNF2

3 ↔

1. Instantiate Network Services/Slices, making VNFs manageable **("Day 0")**

2. Initialize VNFs so they provide the expected service **("Day 1")**

3. Operate the service: monitoring, reconfigurations and (closed-loop) actions **("Day 2")**

1 ↓ *(instantiation with optional parameters)*

1 ↑

openstack   vmware vCloud   aws
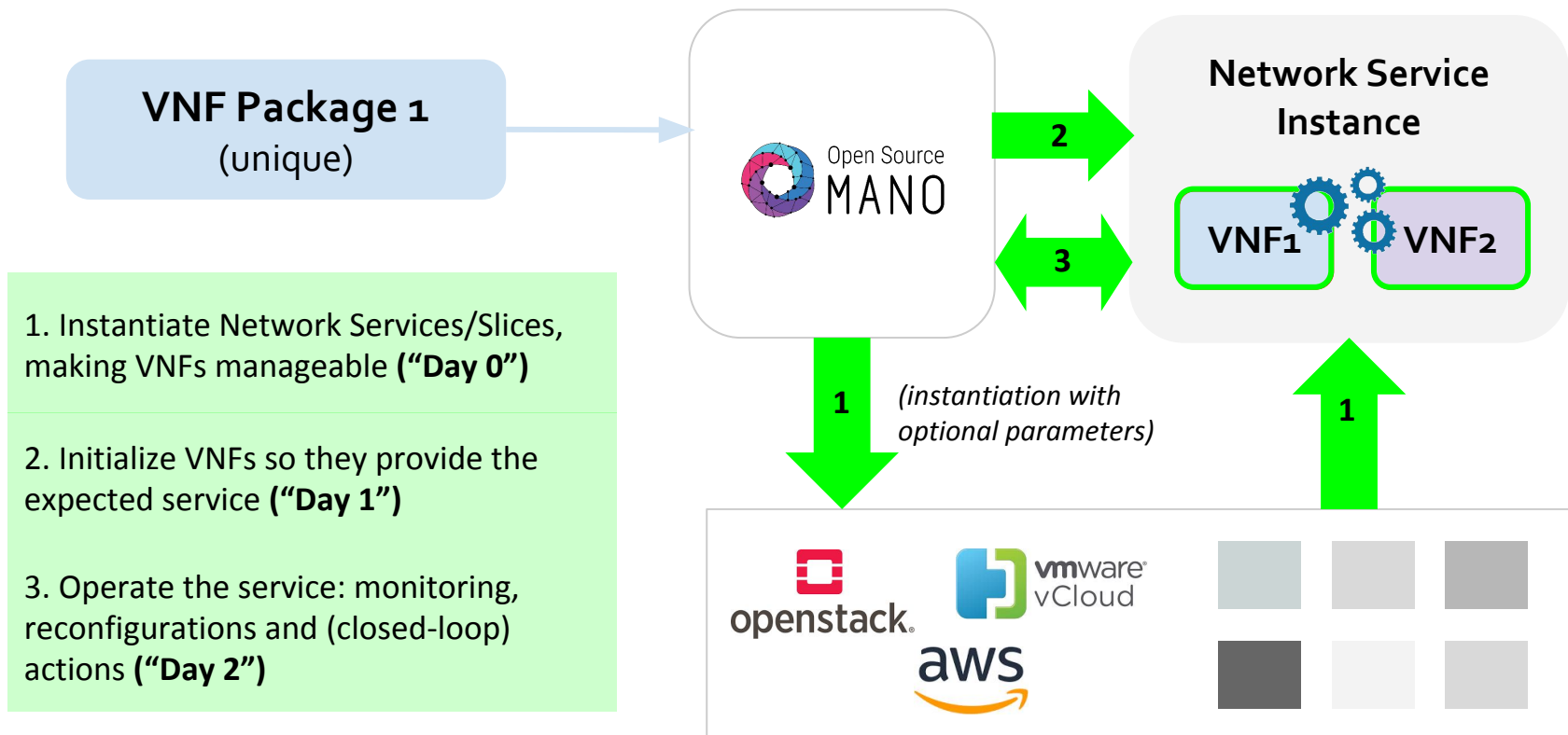
VNF Onboarding TF: Introduction

Beginning 2019, the OSM
Leadership Group proposed to
the community the creation of
the VNF Onboarding Task Force,
a group in charge of the
**coordination and support of
activities related to VNF
onboarding in OSM.**

- As first action, a Chair was
  elected for 2 years.
- The task force is expected to
  be permanent.

VNF Onboarding TF: Short term goals

Open Source **MANO**

We are shaping the Open Source MANO VNF Onboarding Task Force team!

VNF ONB TF

VNF Vendors

Operators

Research Institutions

Integrators

Developers

Others

MAIN DELIVERABLES

✓ **VNF Onboarding Guidelines Document**

Contributions to OSM to simplify onboarding

Onboarded VNF Catalogue

VNF 1	INFO	VNF PKG	Image
VNF 2	INFO	VNF PKG	
VNF 3	INFO	VNF PKG	Image
VNF 4	INFO		
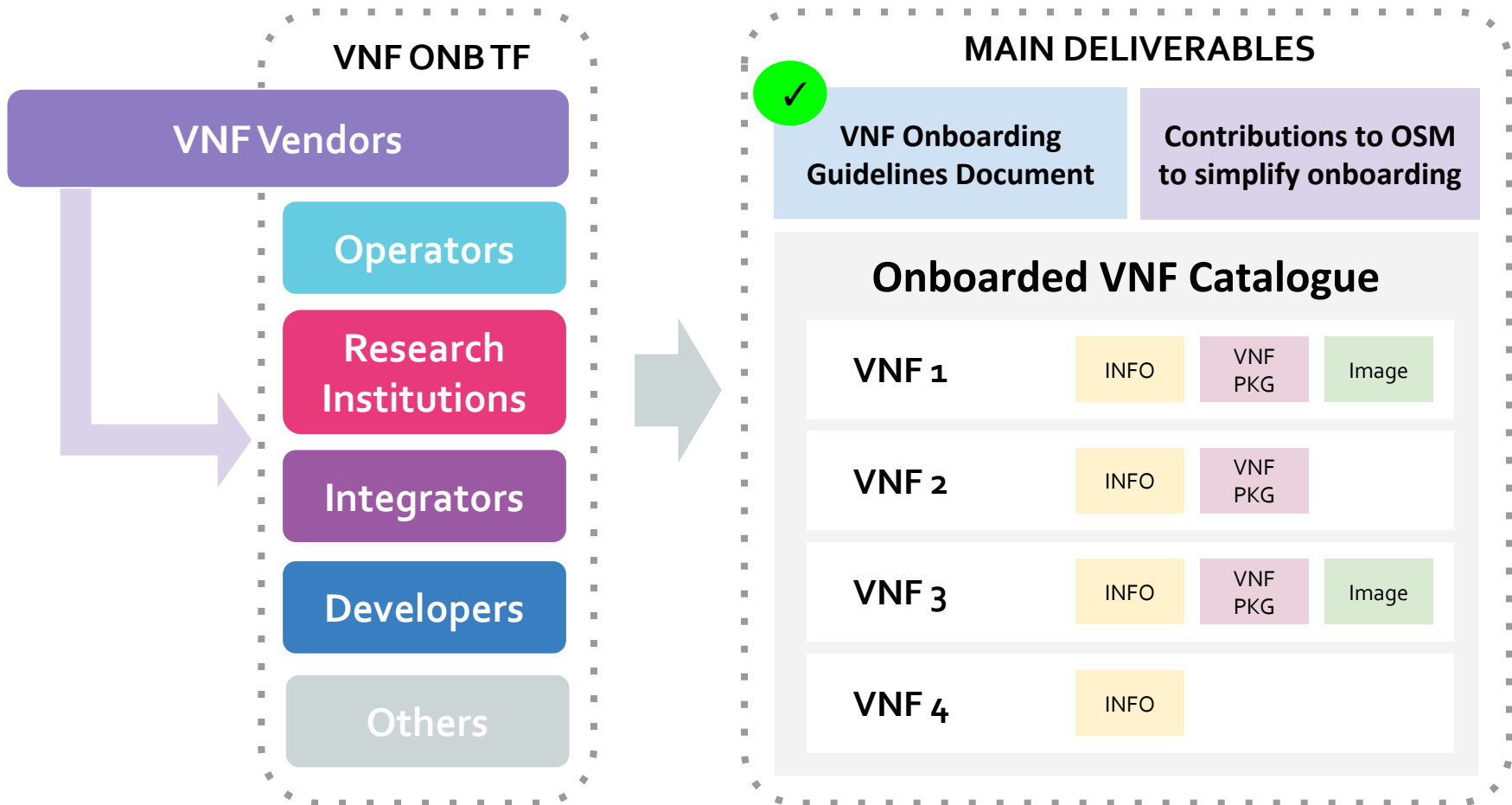
VNFs in OSM Ecosystem are expected to be first!

VNF Onboarding TF: Guidelines!
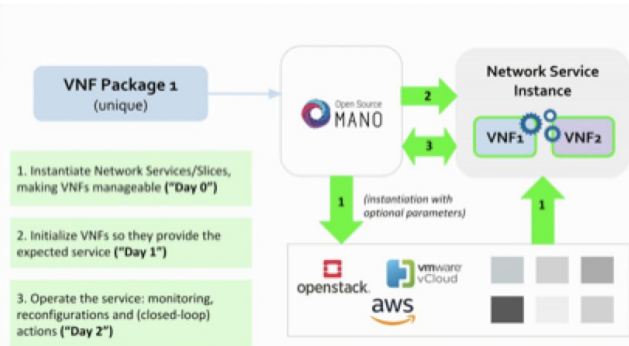
The first version of the VNF Onboarding Guidelines Document is ready and will be published right after the OSM#7 event.

Other relevant initiatives

There are other initiatives letting us to <u>further exercise VNF onboarding in OSM</u>!

OSM POC Framework - visibility to any use case

Continuous activity to give visibility to OSM use cases (approved by the OSM TSC)

Multi-vendor NFV Showcase – Multi-vendor automated NS demonstration

Lead by Whitestack, supported by Intel, OpenStack and ETSI NFV Plugtests Programme

2nd edition will happen around October 2019 (Preparation to start during June) 2019

4th NFV Plugtests – NFV Components interoperability tests under ETSI Standards

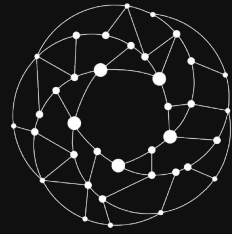3-7 June 2019 - ETSI, Sophia Antipolis (France)

NFV Interoperability

NFV API Conformance

MEC & MEC-in-NFV Interoperability (experimental)

Call for VNF Vendors: Challenge OSM !

Pick your favorite way of participating and challenge OSM to fully automate all the stages of VNF onboarding and <u>demonstrate the NFV value to CSPs!</u>

- **Participate in the VNF Onboarding TF:** Receive support from experts and get your VNF published in the new OSM VNF Catalogue
  - Visit: https://osm.etsi.org/wiki/index.php/VNF_TF
- **Participate in the other initiatives:**
  - **ETSI 4th NFV Plugtests:** contact the participating OSM distros (Whitestack / RIFT)
  - **OSM PoC Framework**: visit https://osm.etsi.org/wikipub/index.php/OSM_PoC_Framework
  - **2nd NFV Showcase:** contact info@whitestack.com

Thank you!