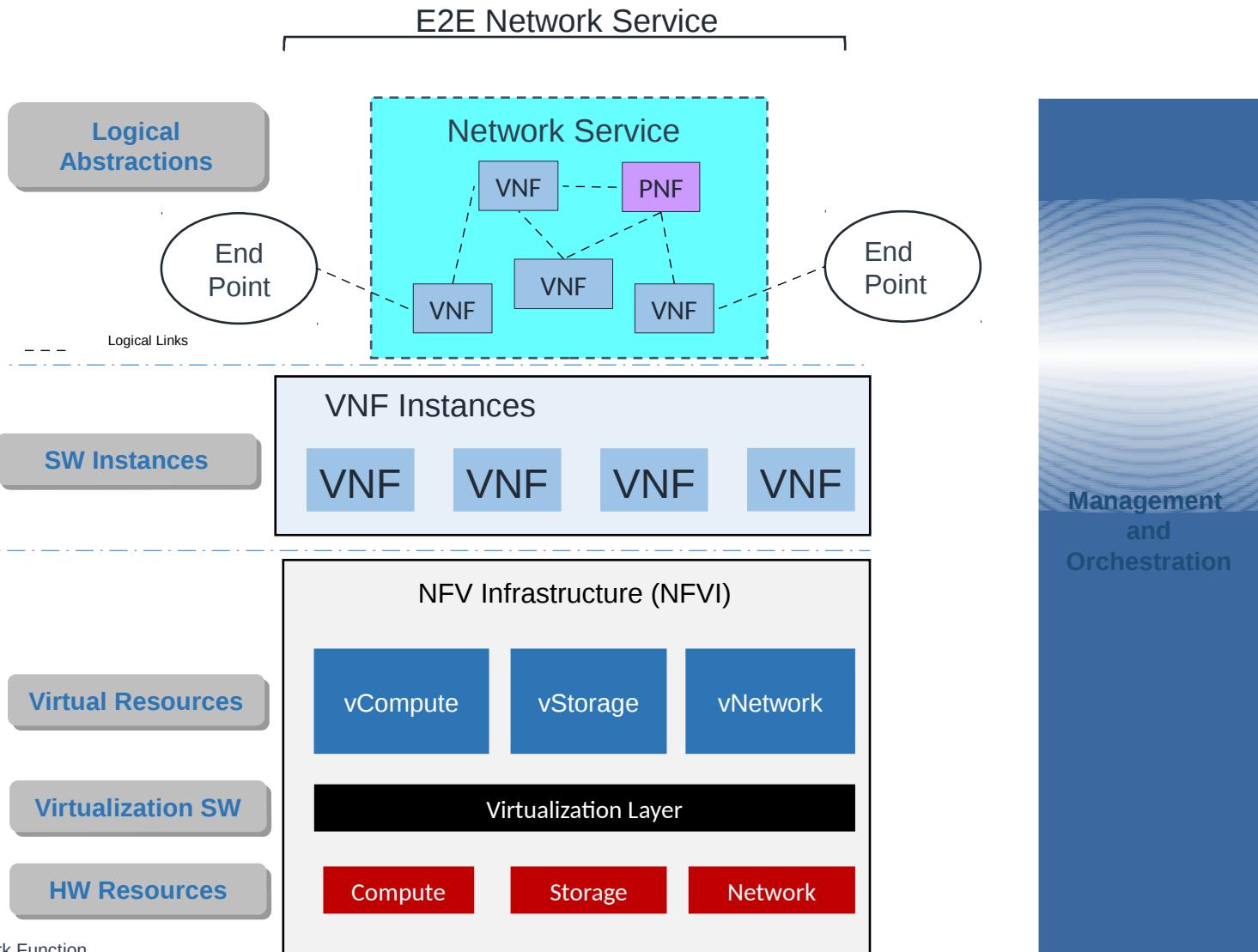


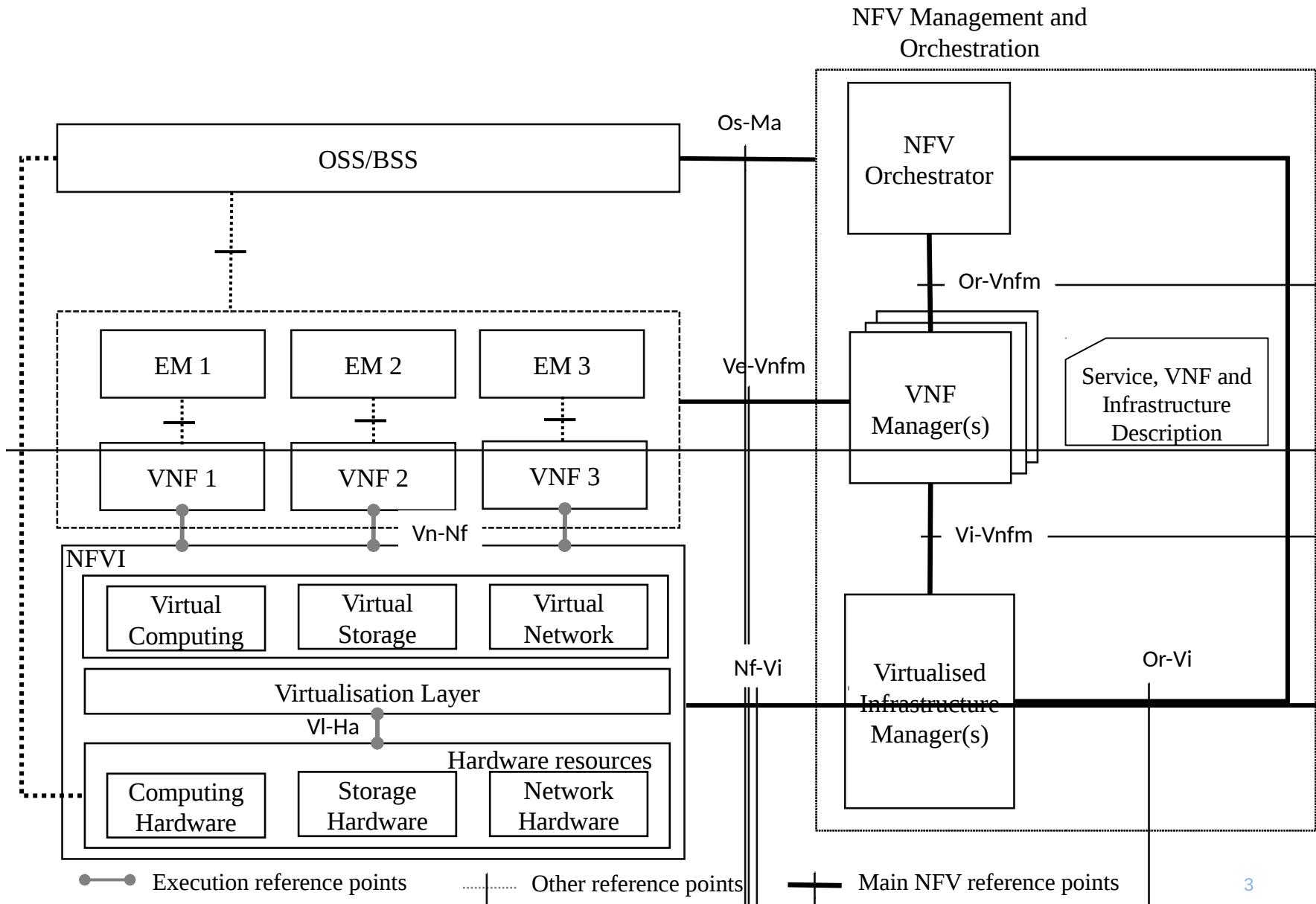
NFV Trends and OPS work?

Benoit Claise
Mehmet Ersue

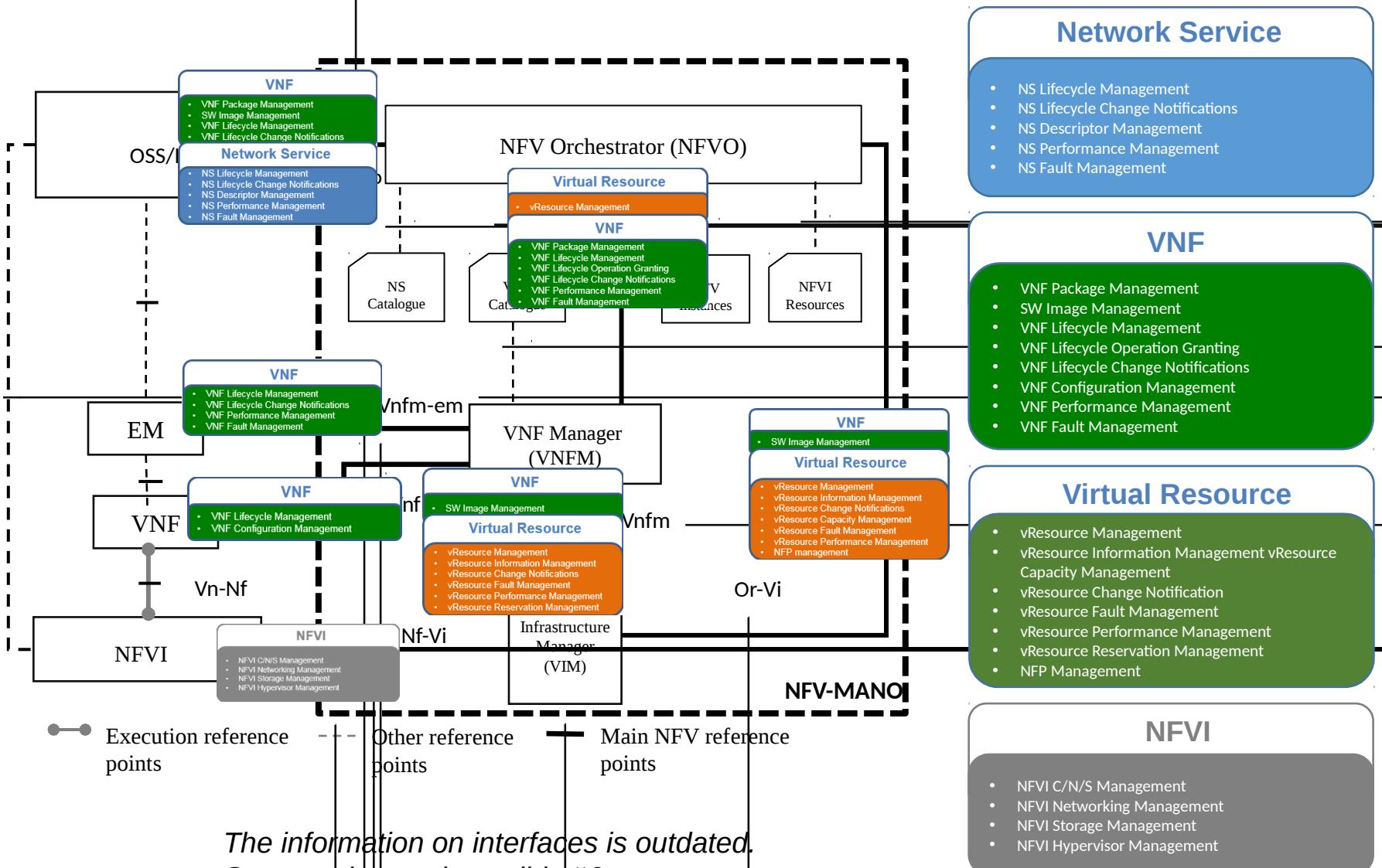
Network Functions Virtualisation: A Layered view



NFV Reference Architectural Framework



MANO Reference Architecture and Overview of Interfaces



Design-time vs. Runtime MANO constructs

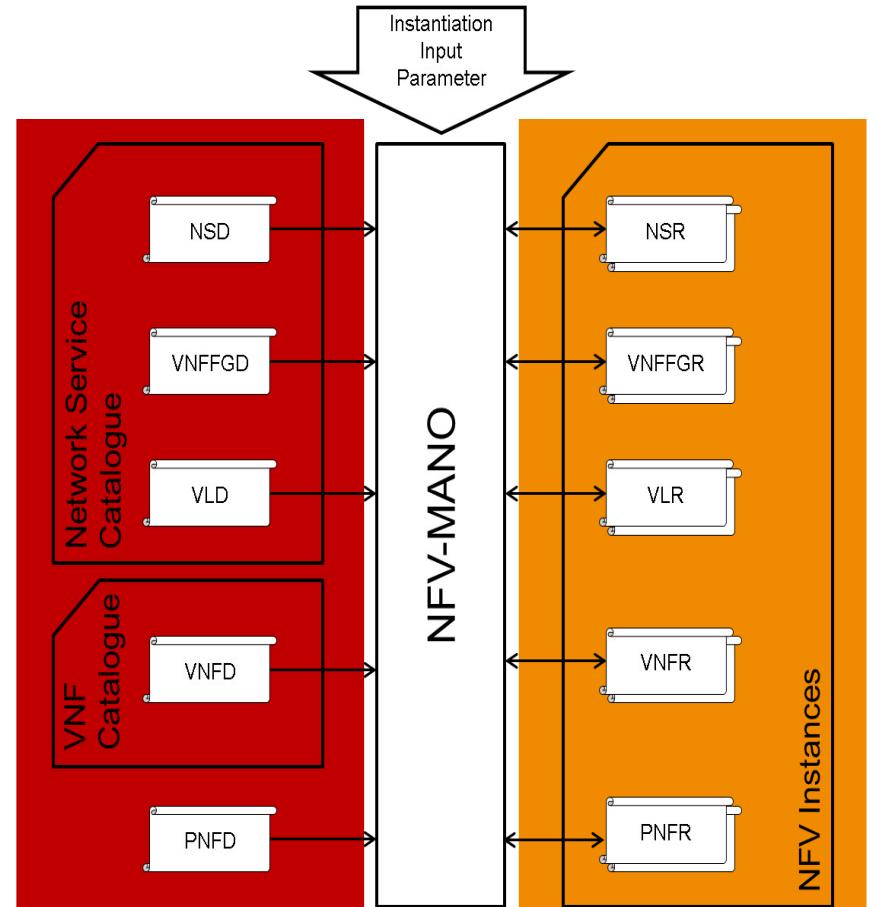


Descriptors associated to

- Network Service (NS)
- Virtual Network Function (VNF)
- Virtual Links (VL)
- VNF Forwarding Graph (VNFFG)
- Physical Network Function (PNF)

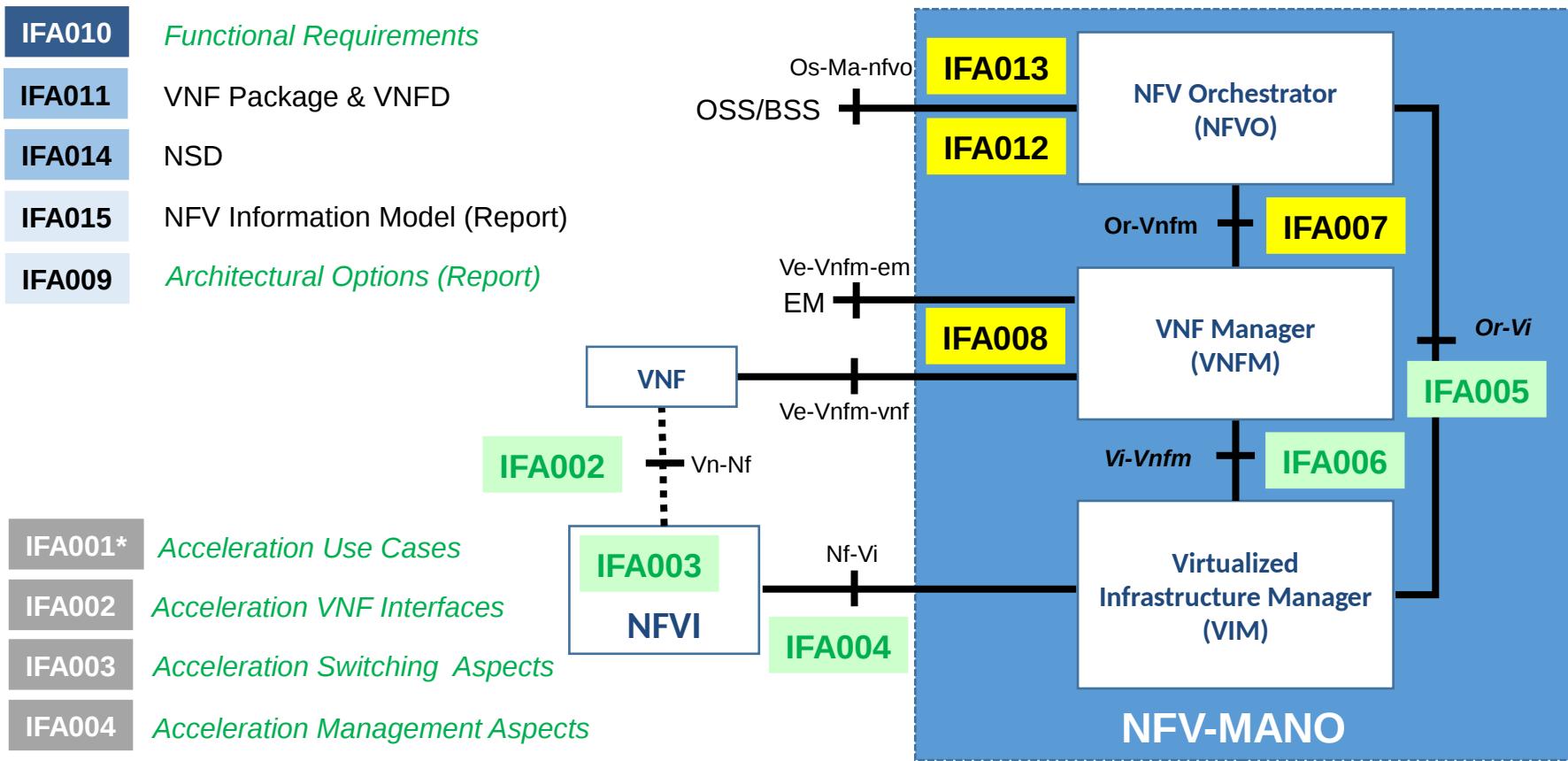
Static & Runtime

- **Design** = Descriptor (e.g. VNFD)
- **Runtime** = Record (e.g. VNFR)



Records stores the actual state of MANO constructs

ETSI NFV IFA WG Phase 2 Work Plan



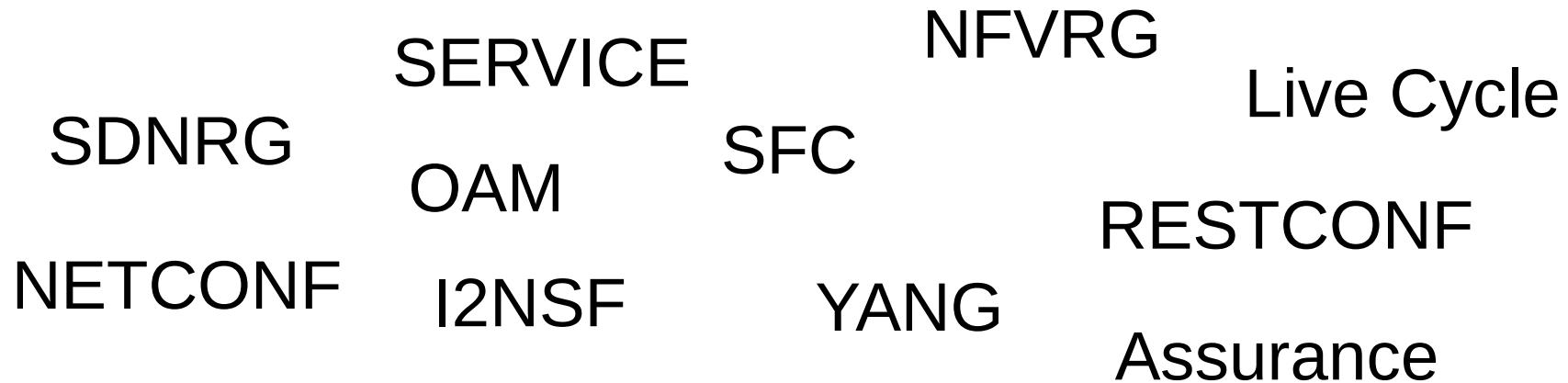
- Published ETSI NFV documents:

<http://www.etsi.org/technologies-clusters/technologies/nfv#Specifications>

- Draft GS documents: <http://docbox.etsi.org/ISG/NFV/Open/Drafts/>

- Issue tracker: http://nfvwiki.etsi.org/index.php?title=NFV_Issue_Tracker

Brainstorming Session



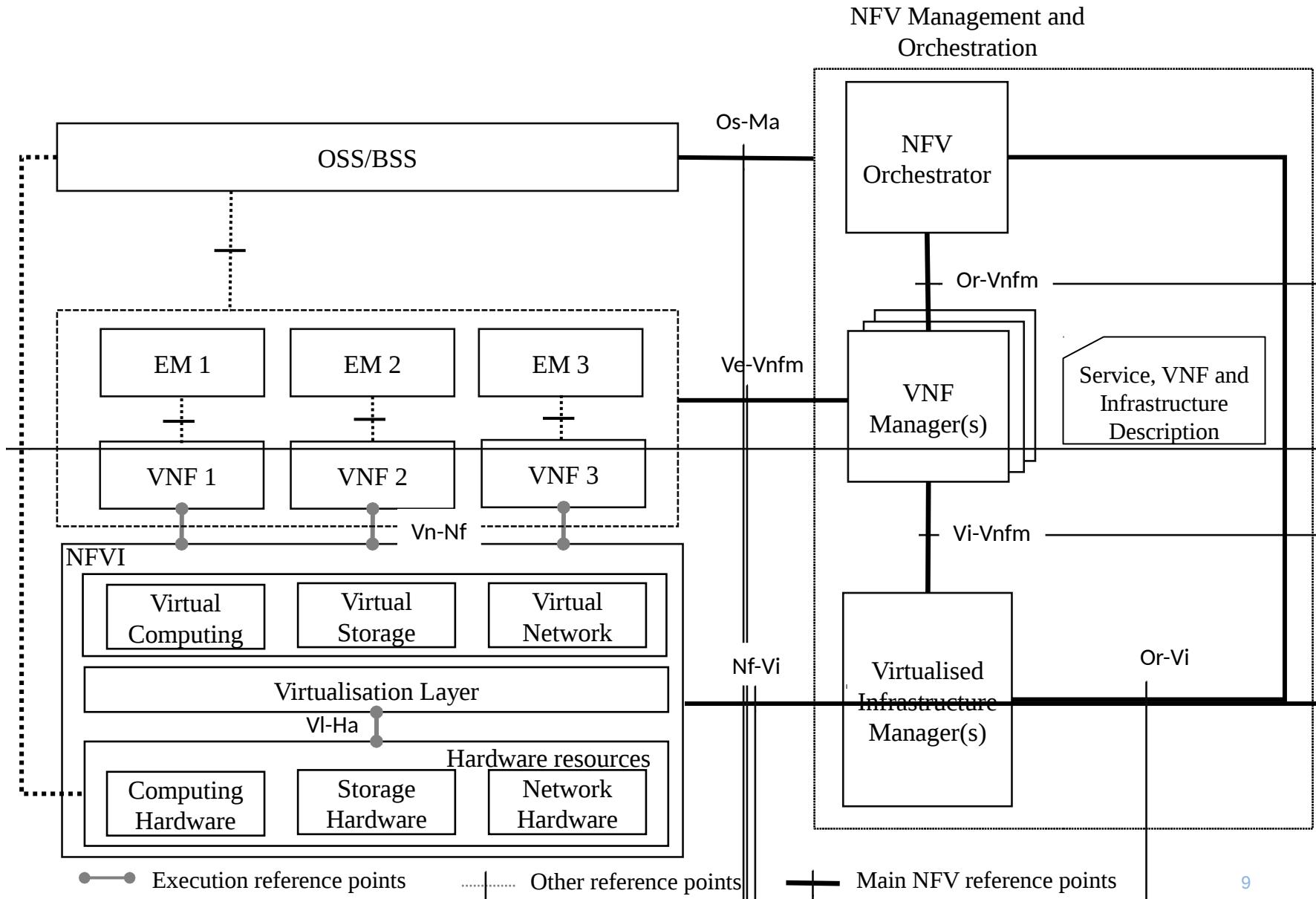
- What is the IETF doing?
- What should the IETF be doing?
- What should OPS be doing?
- Note: Working Group or Research Group?

MultiSDO Information Modelling Workshop

(Louisville, Colorado USA, January 13-14, 2016)

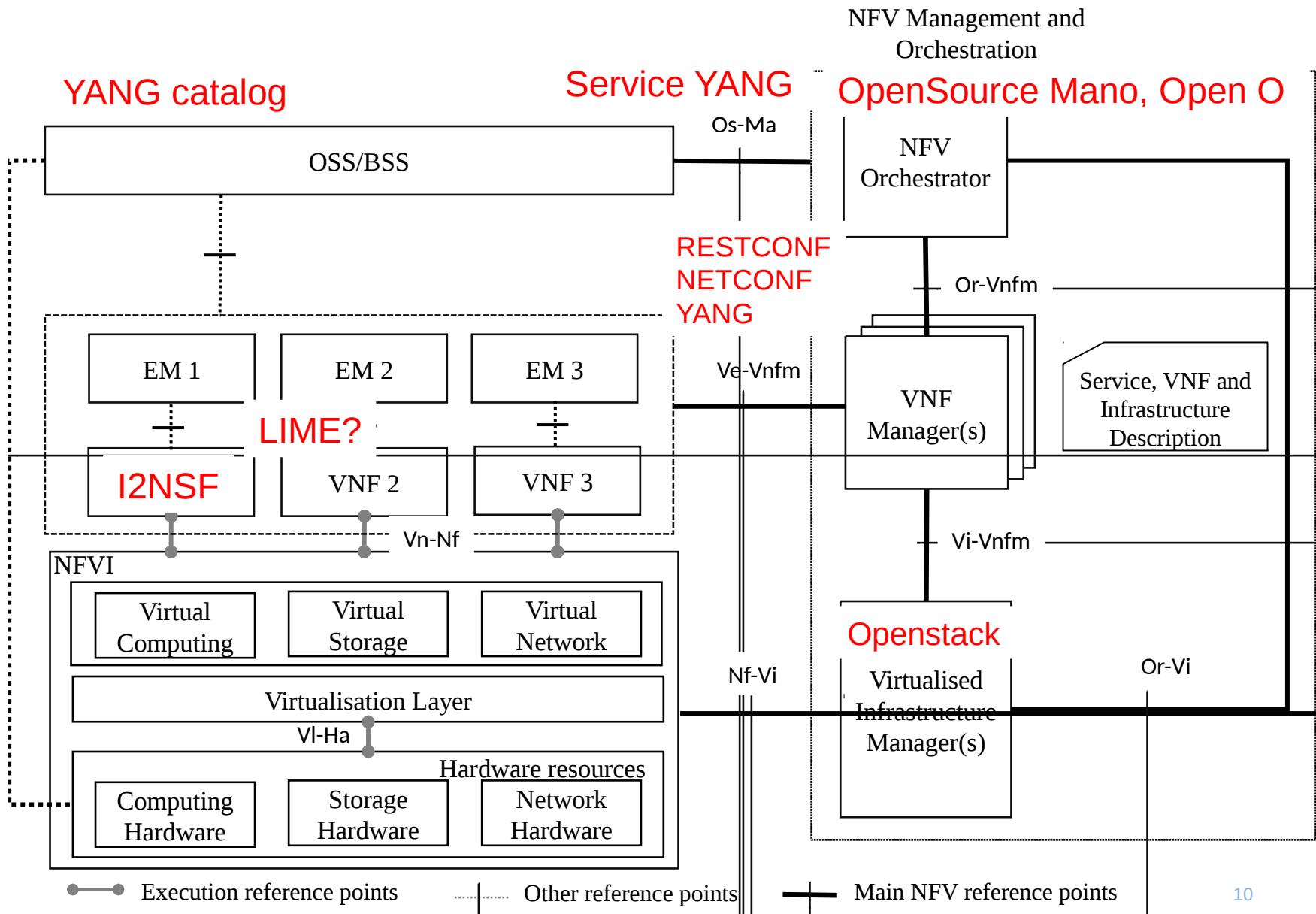
- Participating organizations named in alphabetical order:
3GPP, ATIS, Broadband Forum, DMTF, ETSI NFV, IETF, ITU-T SG15, MEF, OASIS/TOSCA, Open Cloud Connect, ONF, OpenDaylight, OPNFV and TM-Forum
- Useful information sharing across organizations concerning IM/DM affecting/affected by NFV,
- Collected a set of issues affecting “the ideal” IM/DM work outcome for NFV, agreed to meet again and share information on the progress of issue discussion.
- Presentations [here](#).

NFV Reference Architectural Framework



NFV Reference Architectural Framework

End to end service assurance?



Next steps for the OPS area?

- NFV taxonomy document (IETF focus)
- Alarm (draft-vallin-alarm-yang-module-00)
- <https://datatracker.ietf.org/doc/draft-irtf-nfvrg-gaps-network-virtualization>
/_ => similar doc for OPS?