



# Welcome to the World of Standards



## INTRODUCTION & RELEASE 2 RESULTS

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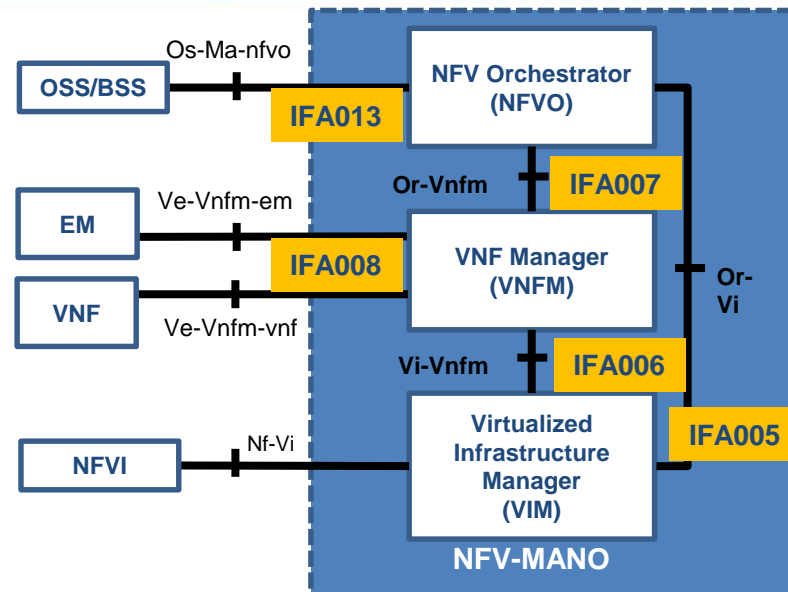
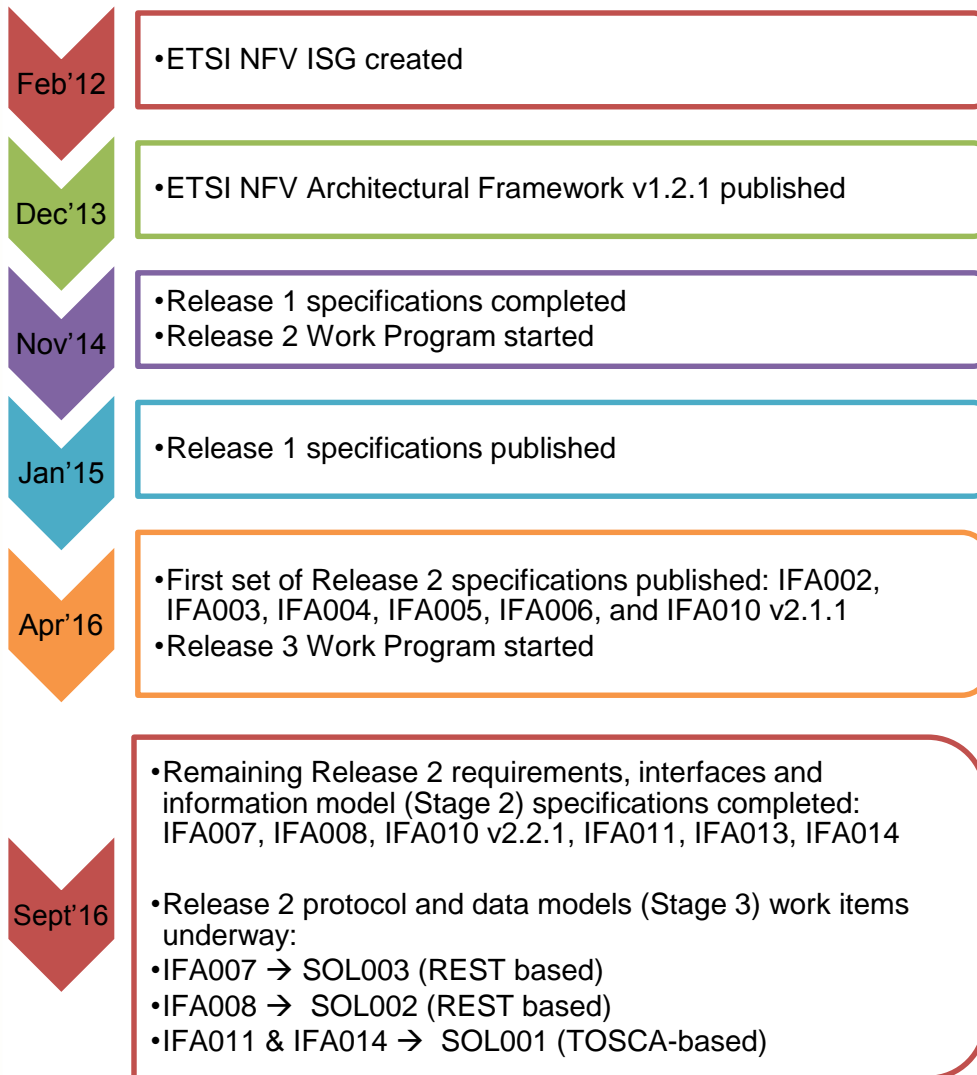


Venue: SDN World Congress, Monday: 9:00-10:40 AM

- Introduction & Release 2 Thinh Nguyenphu
- MANO concept & VNF lifecycle mgt. Bruno Chatras
- Summary of Testing Landscape Pierre Lynch
- The challenges of the NFV Security Igor Faynberg
- Software Update Process Stefan Arntzen

Q&A during each topic

# Key Milestones and Release 2



- Acceleration Specifications
  - IFA002
  - IFA003
  - IFA004
- Functional Requirements
  - IFA010
- VNF Package, includes VNFD
  - IFA011
- Network Service Template
  - IFA014
- NFV Information Model Report
  - IFA015





## More information:

NFV Technology Page (information)

<http://www.etsi.org/nfv>

NFV Portal (working area)

<http://portal.etsi.org/nfv>

NFV Proofs of Concept (information)

<http://www.etsi.org/nfv-poc>

NFV Plugtest (information & registration)

<http://www.etsi.org/nfvplugtest>

Open Area:

Drafts <http://docbox.etsi.org/ISG/NFV/Open/Drafts/>

Issue tracker [http://nfvwiki.etsi.org/index.php?title=NFV\\_Issue\\_Tracker](http://nfvwiki.etsi.org/index.php?title=NFV_Issue_Tracker)

ANY  
QUESTIONS  
?





**ADDITIONAL SLIDES**

Release 2 Doc #ID

# Network Functions Virtualisation (NFV): Release 2



Doc #ID	Description
<a href="#">ETSI GS NFV-IFA 002</a>	Acceleration Technologies; VNF Interfaces Specification
<a href="#">ETSI GS NFV-IFA 003</a>	Acceleration Technologies; vSwitch Benchmarking and Acceleration Specification
<a href="#">ETSI GS NFV-IFA 004</a>	Acceleration Technologies; Management aspects Specification
<a href="#">ETSI GS NFV-IFA 005</a>	Management and Orchestration; Or-Vi reference point - Interface and Information Model Specification
<a href="#">ETSI GS NFV-IFA 006</a>	Management and Orchestration; Vi-Vnfm reference point - Interface and Information Model Specification
<a href="#">ETSI GS NFV-IFA 007</a>	Management and Orchestration; Or-Vnfm reference point - Interface and Information Model Specification
<a href="#">ETSI GS NFV-IFA 008</a>	Management and Orchestration; Ve-Vnfm reference point - Interface and Information Model Specification
<a href="#">ETSI GS NFV-IFA 010 V2.2.1</a>	Management and Orchestration; Functional requirements specification
<a href="#">ETSI GS NFV-IFA 011</a>	Management and Orchestration; VNF Packaging Specification
<a href="#">ETSI GS NFV-IFA 013</a>	Management and Orchestration; Os-Ma-Nfvo reference point - Interface and Information Model Specification
<a href="#">ETSI GS NFV-IFA 014</a>	Management and Orchestration Network Service Templates Specification
<a href="#">ETSI GS NFV-IFA 015</a>	Management and Orchestration; Report on NFV Information Model
<a href="#">DGS/NFV-SOL001</a>	Protocols and Data Models; NFV Descriptors based on TOSCA
<a href="#">DGS/NFV-SOL002</a>	Protocols and Data Models; RESTful protocols specifications for the Ve-Vnfm Reference Point
<a href="#">DGS/NFV-SOL003</a>	Protocols and Data Models; RESTful protocols specifications for the Or-Vnfm Reference Point



## **ADDITIONAL SLIDES**

Published work & Current Work  
Program



# Published Work



GS (version)	Description
NFV 001 (v1.1.1)	NFV Use Cases
NFV 002 (v1.2.1)	NFV Architectural Framework
NFV 002 (v1.1.1)	NFV Architectural Framework
NFV 003 (v1.1.1)	Terminology for Main Concepts in NFV
NFV 003 (v1.2.1)	Terminology for Main Concepts in NFV
NFV 004 (v1.1.1)	NFV Virtualisation Requirements
NFV-EVE 003 (v1.1.1)	NFVI Node Arch report
NFV-EVE 004 (v1.1.1)	Virtualisation technologies Report
NFV-EVE 005 (v1.1.1)	SDN usage in NFV Report
NFV-IFA 001 (v1.1.1)	Acceleration - UCs report
NFV-IFA 002 (v2.1.1)	Acceleration - VNF Interface Spec
NFV-IFA 003 (v2.1.1)	Acceleration - Switching Aspects Spec
NFV-IFA 004 (v2.1.1)	Acceleration - Mgmt aspects Spec
NFV-IFA 005 (v2.1.1)	Or-Vi ref point Spec
NFV-IFA 006 (v2.1.1)	Vi-Vnfm ref point Spec
NFV-IFA 009 (v1.1.1)	MANO architectural options report
NFV-IFA 010 (v2.1.1)	MANO Functional Rqmts Spec
NFV-INF 001 (v1.1.1)	Infrastructure Overview
NFV-INF 003 (v1.1.1)	Infrastructure Compute Domain
NFV-INF 004 (v1.1.1)	Infrastructure Hypervisor Domain
NFV-INF 005 (v1.1.1)	Infrastructure Network Domain
NFV-INF 007 (v1.1.1)	Meth. to desc. Interfaces and Abstractions
NFV-INF 010 (v1.1.1)	NFV Service Quality Metrics
NFV-MAN 001 (v1.1.1)	Management and Orchestration

GS (version)	Description
NFV-PER 001 (v1.1.1)	NFV Performance & Portability Best Practises
NFV-PER 002 (v1.1.1)	NFV PoC Framework
NFV-PER 001 (v1.1.2)	NFV Performance & Portability Best Practises
NFV-PER 002 (v1.1.2)	NFV PoC Framework revision
NFV-REL 001 (v1.1.1)	Resiliency Requirements
NFV-REL 002 (v1.1.1)	Scalable Arch for Reliability Report
NFV-REL 003 (v1.1.1)	E2E reliability models report
NFV-REL 003 (v1.1.2)	E2E reliability models report
NFV-REL 004 (v1.1.1)	Active monitoring & failure detection report
NFV-REL 005 (v1.1.1)	Quality Accountability Framework
NFV-SEC 001 (v1.1.1)	Security Problem Statement
NFV-SEC 002 (v1.1.1)	Security features in mgmt software report
NFV-SEC 003 (v1.1.1)	Security and Trust Guidance
NFV-SEC 003 (v1.2.1)	Security and Trust Guidance
NFV-SEC 004 (v1.1.1)	Report on Lawful Interception Implications
NFV-SEC 006 (v1.1.1)	Sec & Regulation report
NFV-SEC 009 (v1.1.1)	UCs for multi-layer host admin
NFV-SEC 010 (v1.1.1)	Retained Data Report
NFV-SWA 001 (v1.1.1)	Virtual Network Function Architecture
NFV-TST 001 (v1.1.1)	Pre-deployment Validation report



# Current Work Program



RGR/NFV-001ed121 "NFV Use Cases revision"  
RGS/NFV-003ed211 "Terminology revision"  
DGS/NFV-EVE001 "Hypervisor Rqmts spec"  
DMI/NFV-EVE006 "NFV Industry Roadmap"  
DGS/NFV-EVE007 "NFVI Hw rqmts spec"  
DGR/NFV-EVE008 "Charging and Billing report"  
DGR/NFV-EVE009 "E2E Process Descriptions report"  
DGR/NFV-EVE010 "License Management report"  
RGS/NFV-IFA002ed221 "Acceleration - VNF Intface Spec"  
DGS/NFV-IFA012 "Os-Ma-Nfvo ref point Spec - svc mgmt & info model"  
DGR/NFV-IFA015 "Info Model Report"  
DGR/NFV-IFA016 "Papyrus Guidelines"  
DGR/NFV-IFA017 "UML Modeling Guidelines"  
DGS/NFV-IFA018 "Acceleration Interface Spec"  
DGS/NFV-IFA019 "Resource Mgmt Acceleration @ Nf-Vi - Spec"  
DGR/NFV-IFA020 "NFVO decomposition options report"  
DGR/NFV-IFA021 "MANO and automated deployment report"  
DGR/NFV-IFA022 "Multi-Site Services report"  
DGR/NFV-IFA023 "Policy Mgmt in MANO report"  
DGR/NFV-IFA024 "NFV IM External touchpoints"  
DGR/NFV-IFA025 "Real-time/ultra-low latency aspects report"  
DGS/NFV-IFA026 "Architecture enhancement for Sec Mgmt Spec"  
DGS/NFV-REL006 "SW Upgrade spec"  
DGR/NFV-REL007 "MANO resilience report"  
DGR/NFV-REL008 "Error Handling report"

DGS/NFV-SEC005 "Certificate mgmt report"  
DGS/NFV-SEC007 "NFV Attestation report"  
RGR/NFV-SEC009ed121 "UCs for multi-layer host admin"  
DGS/NFV-SEC011 "LI Architecture Report"  
DGS/NFV-SEC012 "Arch for sensitive components - Spec"  
DGS/NFV-SEC013 "Sec mgmt & Monitoring Spec"  
DGS/NFV-SOL001 "TOSCA-based NFV descriptors spec"  
DGS/NFV-SOL002 "Ve-Vnfm RESTful protocols spec"  
DGS/NFV-SOL003 "Or-Vnfm RESTful protocols spec"  
DMI/NFV-TST003 "Open Source Components for NFV"  
DGR/NFV-TST004 "NFVI\_PATH\_TEST report"  
DGR/NFV-TST005 "VNF\_snapshot\_report"  
DGR/NFV-TST006 "CICD & Devops report"  
DGR/NFV-TST007 "MANO lop Testing Guidelines"