THE WHY, THE WHAT AND THE HOW OF ETSI NFV

Diego R. López (Telefónica) – Chair, ETSI NFV ISG
Useful Things

Communication needs standards
  - Think of human language itself
  - Multi-vendor, multi-operator, multi-national, multi-...
  - In despite of recent moves through one-ended implementations

Approaches like NFV are changing the standards landscape
  - Aligning with new practices like open-source
  - Providing new architectural options
  - And new ways of applying standards to planning and procurement

“Everything needs to change, so everything can stay the same”
The Software Network Concepts

- **NFV**: Separate functionality from capacity
  - Increase network elasticity
  - Address heterogeneity

- **SDN**: Decouple the control and forwarding functions
  - Gain programmability
  - Abstract infrastructure
The ETSI NFV Recipe

- NFV is shaped as an ETSI ISG
  - Open to ETSI members and non-members
  - Just bound by a cooperation agreement
  - Open membership with low fees to encourage involvement of smaller players from ICT industry

- The most numerous ISG ever
  - 312 organizations (127 ETSI members)

- Working under strict consensus rules
  - Voting only applied to elect officials

- Re-use what is available and do not duplicate existing efforts
  - Strong focus on the NFV delta

- All draft documents openly available
  - Publication implies general consensus and endorsement
Structure and Current Plans

- Review plans and terms every two years
- Structured around WGs
  - Evolution & Ecosystem, Interfaces & Architecture, Reliability, Security, Test & Experimentation & Open-Source
  - Coordinated by a Technical Steering Committee
- The work program
  - Derived from the discussion of feature proposals
  - And the outcomes of the previous one
- The deliverables
  - Reports and Guidelines, *informative*
  - Specifications, *normative*
- Working in Release 3
  - Release 1 -> Framework
  - Release 2 -> Interoperability
  - Release 3 -> Operativeness
- Access to open API definitions
  - Work in progress

![Diagram showing stages and releases]

- Feature Proposals
- Previous Work Program Outcome
- Reports and Guidelines
ETSI NFV PoCs

- **Look for practical results**
  - Demonstrate and disseminate NFV capabilities
  - Explore technology options
  - Facilitate gap analysis
  - Contribute to guide the future ISG activity

- **Lightweight process**
  - Few (objective) requirements to file a PoC proposal
  - Run PoC project
  - Openly report results to the community

- **> 40 multi-vendor PoCs:**
  - > 120 organisations
  - 100% key NFV use cases demonstrated
  - ALL architectural elements under study
ETSI NFV Plugtests

- Built on the PoC Framework key achievements
  - Consistent testing and feedback
  - Quality and relevance of specs
  - Alignment of implementations and specs

- Scoped interoperability test events
  - Usually, part of series, until technology maturity is reached
  - Open to any organization with an implementation to test

- Non commercial, strive for anonymity
  - Neutral and collaborative environment
  - Only statistical aggregated data are published
  - Detailed results are private to each participant

- First Plugtest run in January 2017
- A second one on its way
The Collaboration Game

Participating in the NFV ISG
- It is easy, productive, costless, and fun!

Reviewing the specs and applying them
- Architectures, requirements, protocols, data models, and profiles
- Avoid reinventing the wheel
- Facilitate adoption
- Practical feedback from implementers is extremely valuable
- Remember: drafts are publicly available

Participating in PoCs and Plugtests
- Wider community feedback in both directions
- Strong direct technical interaction
- Extend visibility

<Your preferred way here>
- Happy to discuss any idea