NFV Phase2 진화 방향 및 산업화 전략

신명기, ETRI

2014. 10.1

SDN/NFV 창립총회세미나
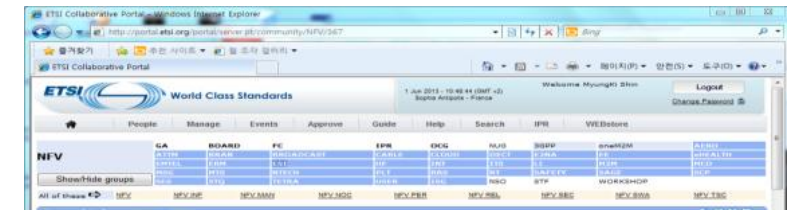
ETSI NFV ISG

http://portal.etsi.org/portal/
server.pt/community/NFV/367

- ETSI 산하 ISG 결성 (2012.12)
  - Network-operator-driven ISG
    - 13 Founding Member
    - 226 Member companies (37 network operators)
    - 1170 members in the NFV mailing list
    - ETSI 멤버쉽 기반
    - 공동협력 (ONF, IETF, etc.)
      예, ONF- OF규격확장, IETF- SFC WG

- One-Year Milestone (Phase1, ~2014)
  - NFV Use Cases, NFV Requirements, NFV Architectural Framework, NFV Terminology, NFV ISG PoC Framework

- NFV Phase2 (2015.2~)

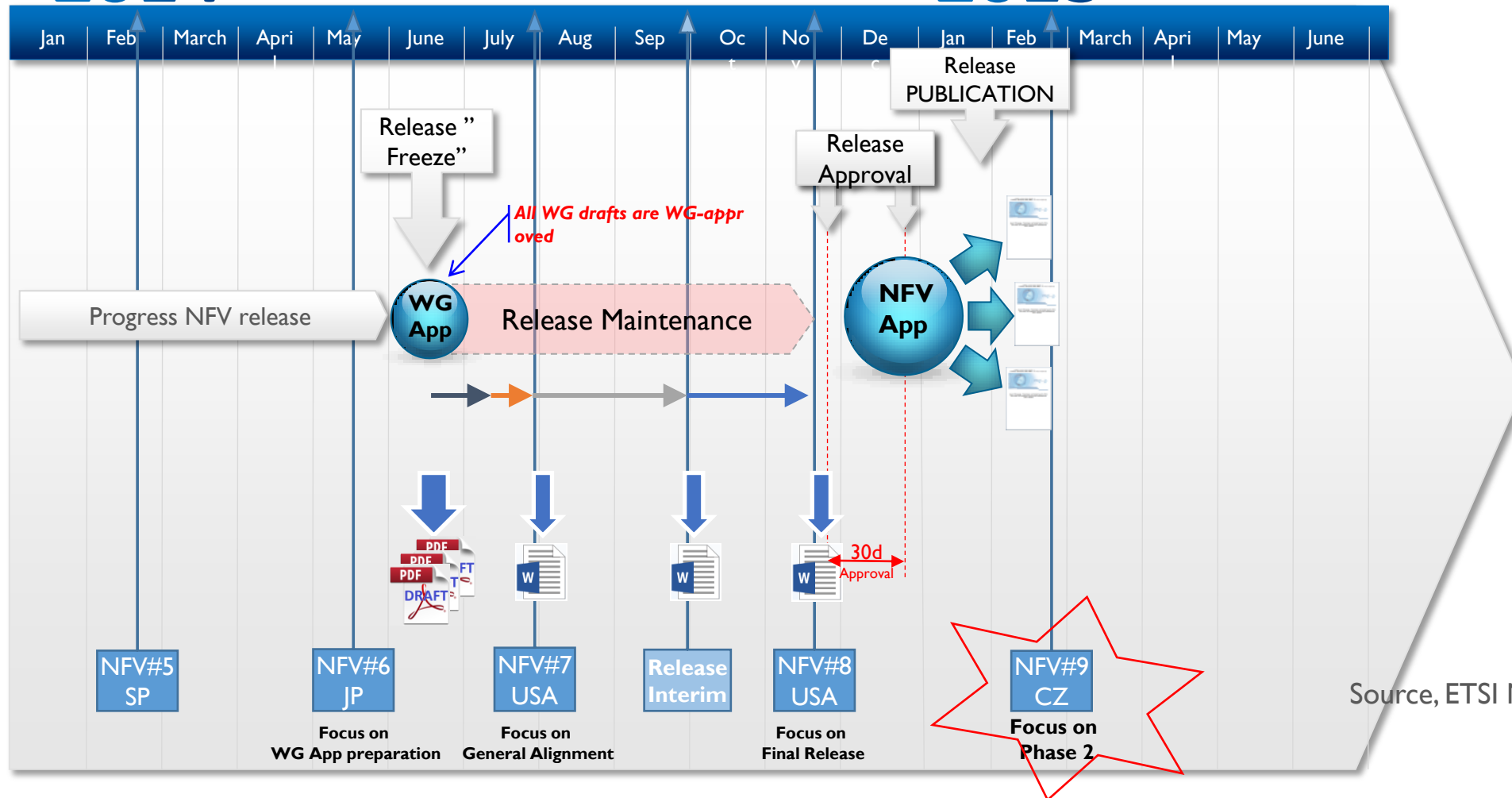# ETSI NFV ISG (작업일정)
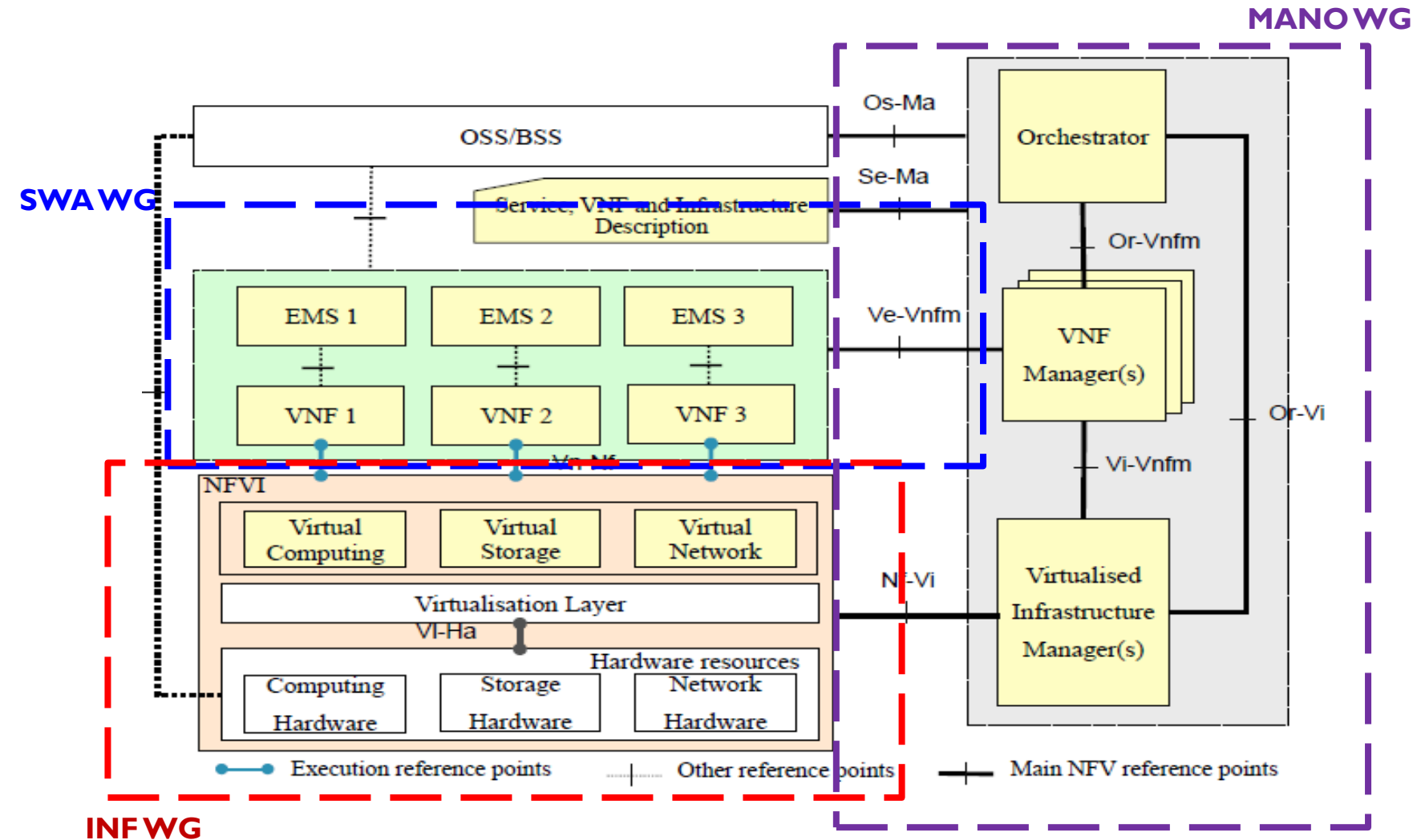

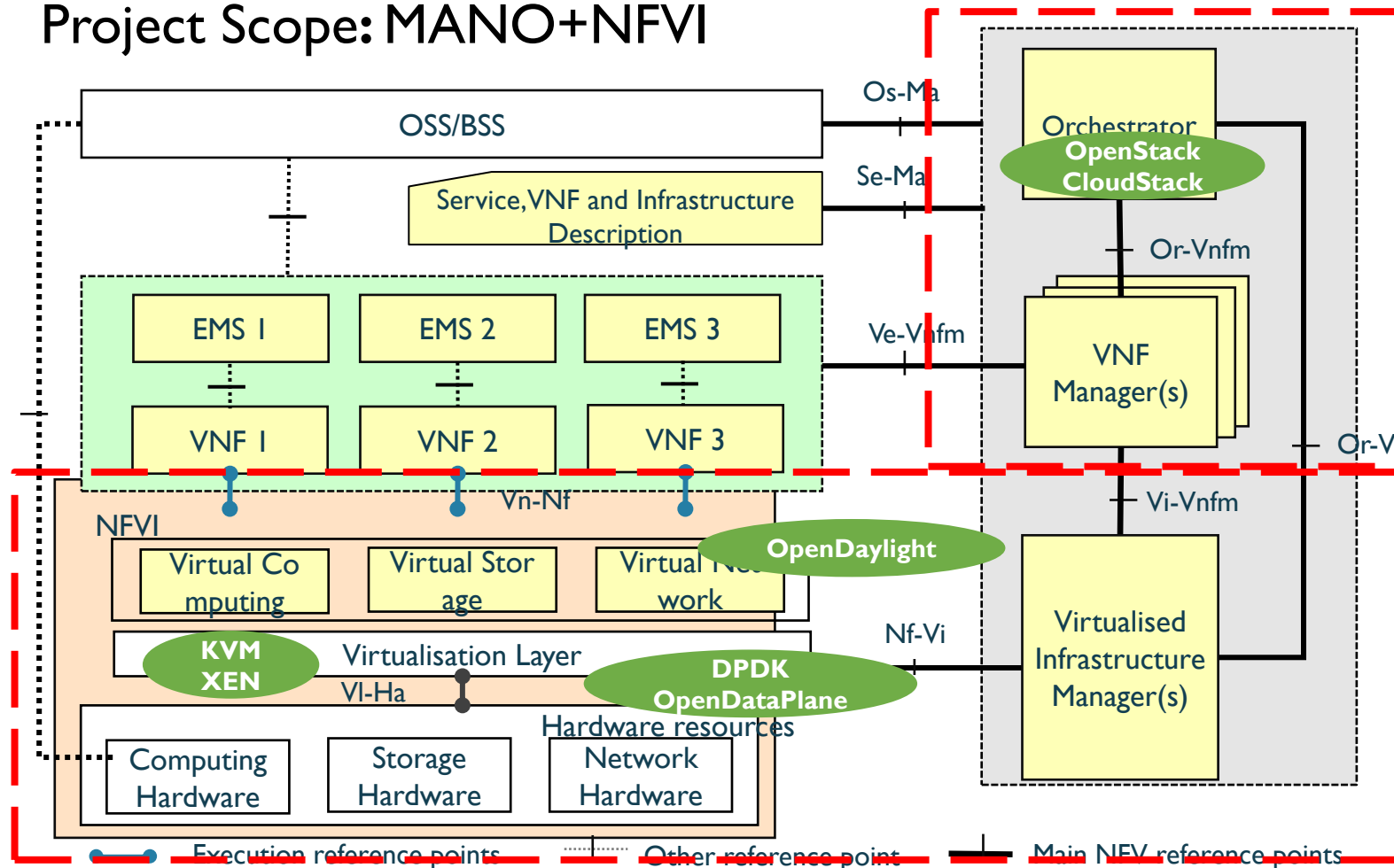Source, ETSI NFV ISG, Meeting, 2014

NFV Phase-1 프레임워크

Source, ETSI ISG, NFV Architectural Framework, 2014

NFV의 오픈이슈 목록

- 성능
- PoC (Proof of Concepts)
- 킬러 서비스/적용 분야
- 멀티-벤더간 상호호환 / 표준
- 오픈소스 및 소프트웨어 (SWA, OPN; Open Platform for NFV)
- 보안 (Security)
- SDN Automation 및 통합

Open Platform for NFV (OPN)

Project Scope: MANO+NFVI

Source, ETSI NFV ISG, Meeting, 2014 (Phase2, OPN discussion)

Example of Relevant Open Source Projects
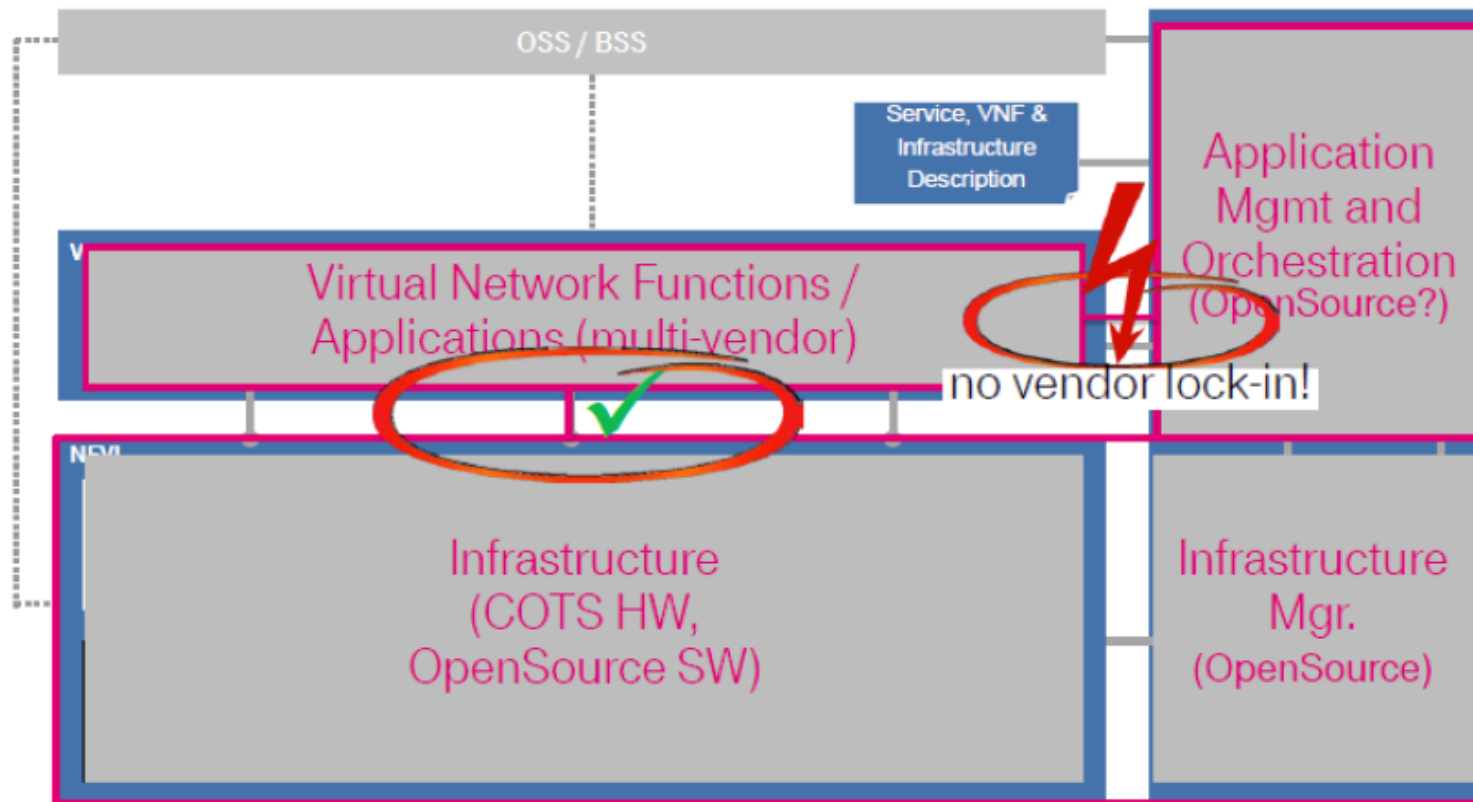
ETSI ISG NFV End-End Framework

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NFV Phase-2 작업분야(안)

- 목표
  - Ensure multi-vendor interoperability.
  - Enable automation and simplify network operations.
  - Address new use cases bringing new requirements.
  - Identify enhancements leveraging recent advances in virtualisation and cloud computing technologies.

- Potential work item (안)
  - Interfaces and information models for interoperability
  - Operations and evolution
  - Testing
  - Architecture & evolution
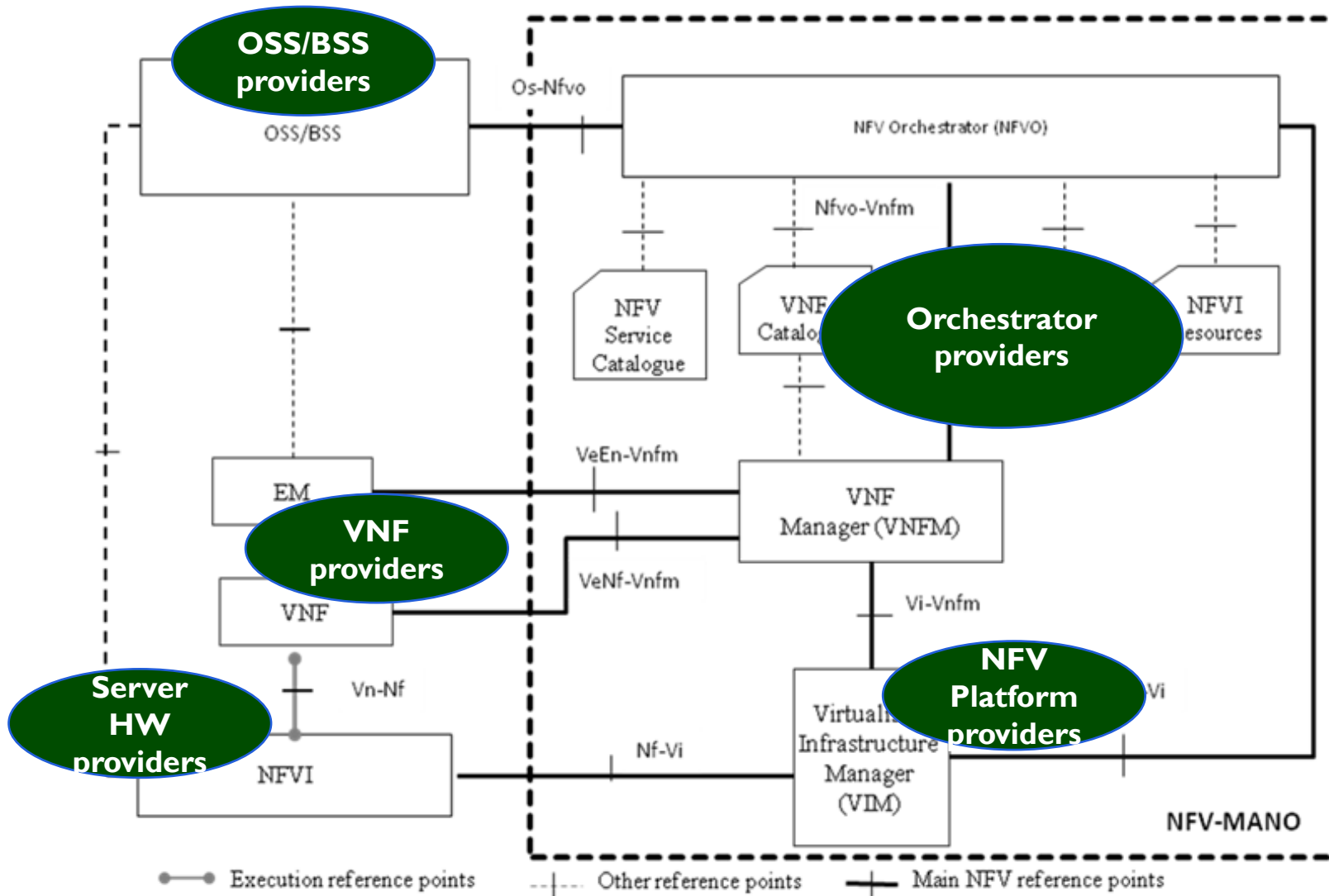 - Carrier grade and miscellaneous

NFV Phase-2 진화방향 (예)

Source, ETSI NFV ISG, Meeting, 2014

New opportunities for 3rd party

Source, ETSI NFV ISG, Meeting, 2014

NFV에 대한 산업화 전략

- 통신사 관점의 NFV 도입 걸림돌 제거
  (①성능, ②멀티벤더-표준, ③기술의 성숙도)

- 통신사가 관심있는 응용분야의 발굴 (DPI, 모바일코아, IoT, 보안, 5G..)
- NFV Phase-2 는 3rd party SW업체의 새로운 기회

- 오픈소스 vs. 벤더-specific 솔루션 Trade-off 분석

- NFV 활성화를 위해 국내 생태계 조성 필요
  (오픈 SW아키텍쳐/표준 기반의 통신사+제조사가 같이 가는 상생구조)