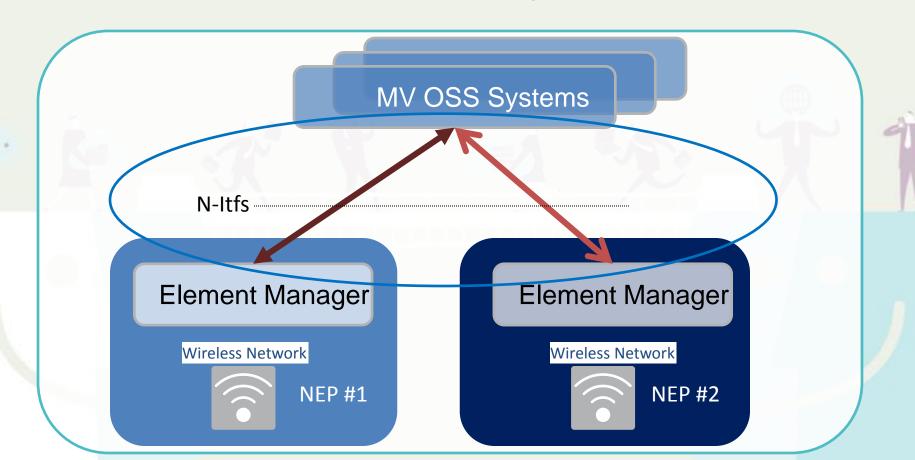
Update on OSSii (OSS Interoperability Initiative)

NGMN Meeting Singapore, 27/28th January 2015

> Anil Dua, Ericsson Juha Roysko, Nokia Mathias Gabrysch, Huawei (version 1.0)

OSS paradigm



What is OSSii

An initiative by **Ericsson, Huawei and Nokia** to enable interoperability between their, and 3 party OSS systems for **reducing integration costs and promoting competition**

A **commitment** to **offer licensing of their existing OSS interfaces** for the purpose of development, manufacture and sale off functionality,

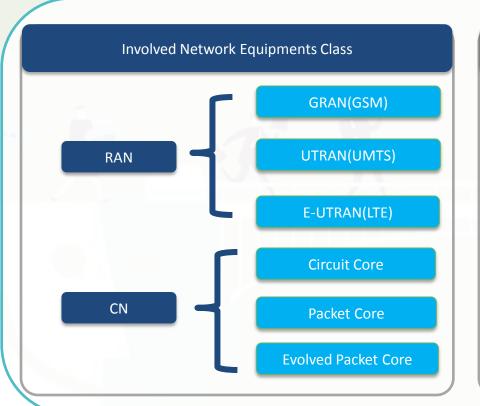
- 1) to one another,
- 2) to 3rd parties subject to reciprocity (NEPs) or
- 3) to 3rd parties on fair and reasonable terms (ISVs without own OSS interfaces)

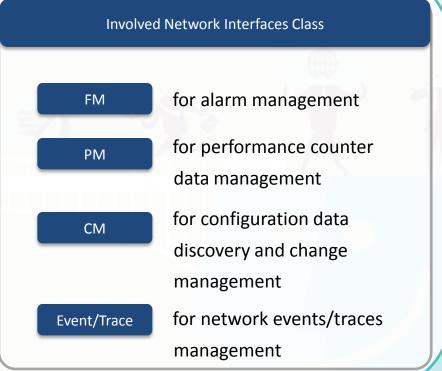
A **complementary to standardization**, enabling interoperability by using the vendors' existing interfaces

An "initiative" instead of an industry body, forum or organization

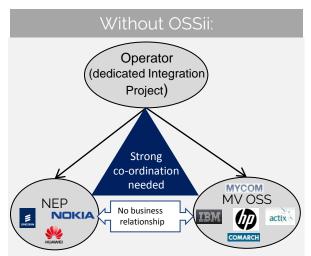
The MoU made public available through a web portal

What is the Scope of OSSii

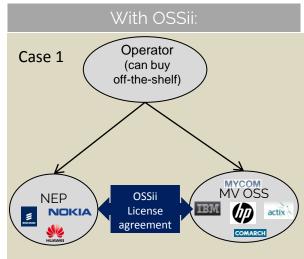




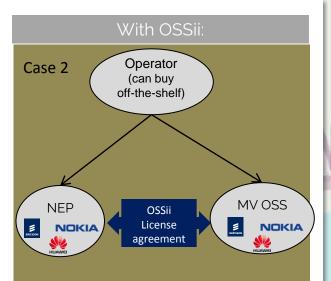
OSSii speeds up time to market



- According to Supplier agreements
- Operator needs to "moderate" between NEP and MV OSS Vendor
- No pre-integration possible
- Each case is treated as a seperated project



- No co-ordination by the operator needed
- Operator can buy "off-the-shelf"
- Pre-integration/testing possible



- No co-ordination needed by the operator
- NEPs exchange NBI info between each other
- Operator can buy "off-the-shelf"
- Pre-integration/testing possible

Major Benefits for Operators

- Remote Testing Services are provided by all 3 vendors
- Lifecycle management is provided for the interfaces under OSSii
- Pre-verified OSS products for the new network releases



Higher integration efficiency Speed up time to market Lower integration costs

Major Benefits for 3rd Parties

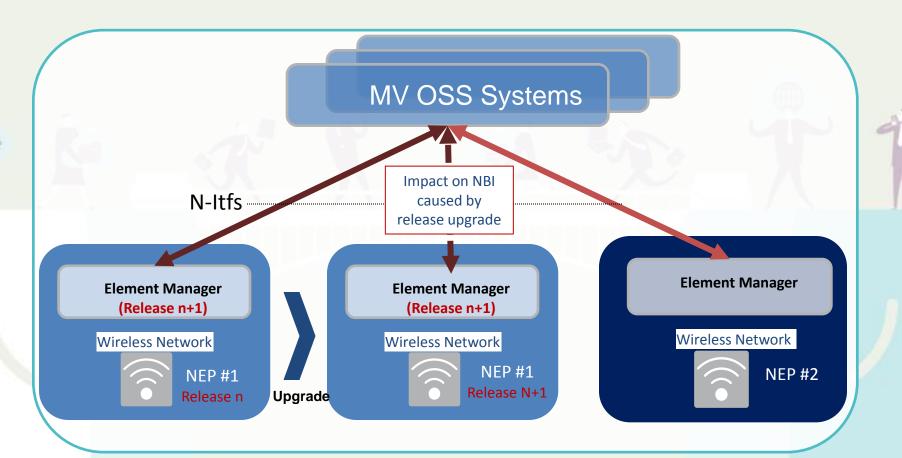
- Remote Testing Services are provided by all 3 vendors
- Lifecycle management is provided for the interfaces under OSSii
- Visibility of vendor roadmaps and changes in advance
- Pre-verified OSS products the new network releases

Possibility to develop and sell a "off-the-shelf product"

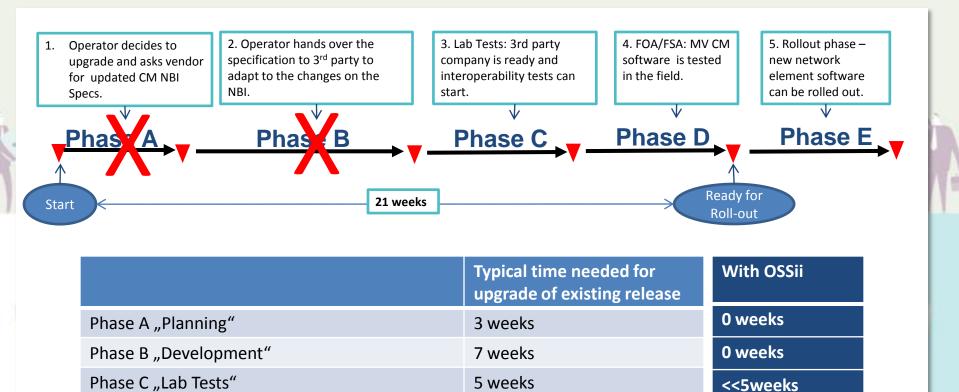
Optimize R&D resource planning

Speed up time to market

Operator challenge - Reduce t-t-m for upgrade



Real Example - Reduce t-t-m for upgrade

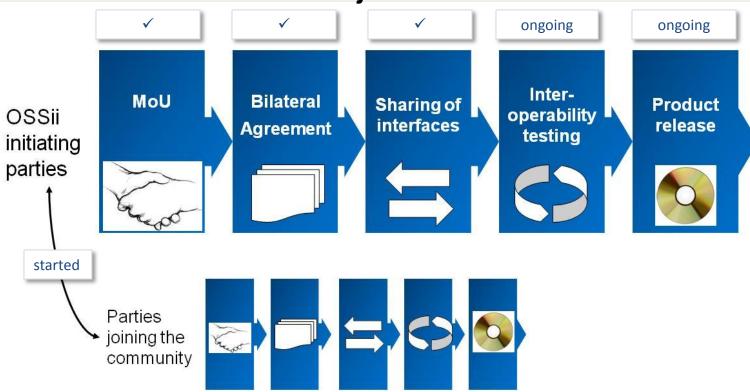


6 weeks

< 6 weeks

Phase D "FOA (Firstoffice/site application)"

How to join OSSii



What has been achieved so far (Status Jan 2015)

2014:

Feb: Bi-lateral agreement was signed between the initiating parties for PM,FM and CM

Feb: Bi-lateral agreement was signed between the initiating parties for PM and FM

May: Bi-lateral agreement was signed between the initiating parties for Trace/Events

June: Bi-lateral agreement was signed between the initiating parties for CM and Trace/Events

June: Exchange of interface documentation done between the initiating parties

July: Set-up of portals to share interface documentation done between the initiating parties

Oct-January 2015: Interoperability Tests Nokia-E///, Huawei-Nokia, Huawei-E///

2013:

MoU was signed on May 8th, 2013 by all the parties (Nokia, E///,Huawei)

Anti-trust external analysis done by all parties. Law-firms did not find OSSii in conflict with competition law Q&A published on May 13th, 2013

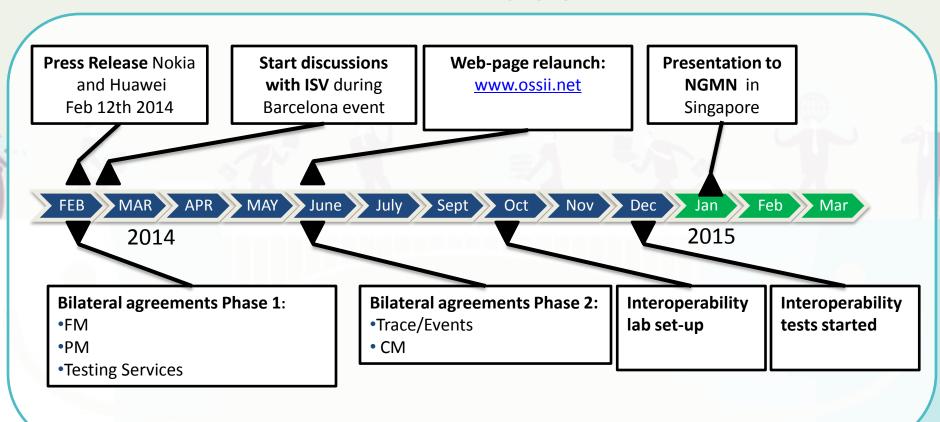
Seperate Press releases were published on May 13th, 2013 by each party

Portal: www.ossii.net went online on May 13th, 2013

Press Conference/Q&A Session held during TMF in Nice, May 14th-16th 2013

All signing parties will be present and answer questions to interested companies and parties.

Timeline OSSii



3rd Party Vendor Progress

- Big interest from major 3rd party players
- Detailed discussions ongoing with >10
 3rd parties
- First agreements are expected soon

Thanks for your attention!



What OSSii tries to solve

OSS Service Readiness OSS Service Fullfillment OSS Service Assurance

Complex integration - cost efficiency and reusability is low

Domain management

Domain management

Network

Scope:

- OSS north bound radio and core: FM PM CM event/trace interfaces including updates/upgrades, and one earlier release
- Related interface and interoperability testing specifications
- Interoperability testing services