# FELIX Project

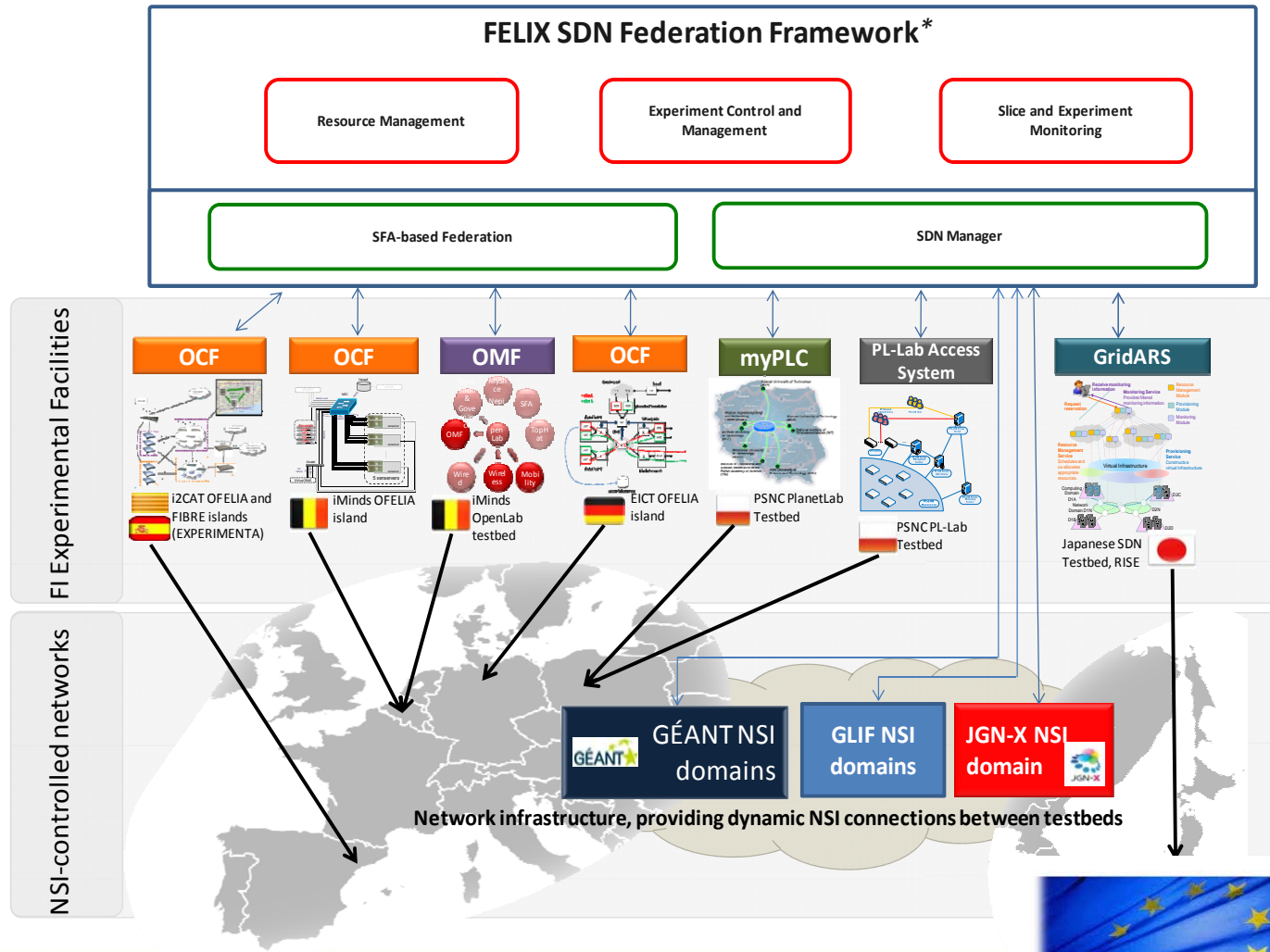**FE**derated Test-beds for **L**arge-scale **I**nfrastructure e**X**periments

**Colaboration project between EU and Japan**

**Objective: to create a common framework for Future Internet experimental research**

➢Create an integrated Europe-Japan SDN test-bed

➢Introduce new APIs and logic for globally distributed heterogeneous SDN and IT islands, enabling them to interchange resources information, share overall resource pools, and provide dynamic network interconnectivity between and within islands

➢**Utilize functionality of OpenFlow and NSI for creation of Federated SDN Services**

➢Facilitate Europe-Japan collaboration on new standards for infrastructure management (both IT and network resources)

# FELIX Architecture

# Issues with inter-domain OpenFlow (and NSI)

- On-demand / Advance reservation
  - NSI supports advance reservation. OFC may be able to support.
  - Is advance reservation better than on-demand?
    - By advance reservation, future resource availability can be guaranteed. Is this useful?
- Pro-active management
  - OF is sometimes used to support pro-active network configuration
    - Plug in a device at any RJ45, connect the device to a certain slice according to MAC address, etc.
    - How can we support such functionality in an inter-domain OF with NSI?
  - In the first place, what is the purpose to use OF?
    - For network researches?
    - Service for general users? For what purpose?