

K-GENI & KR-US Meta Operations Federations



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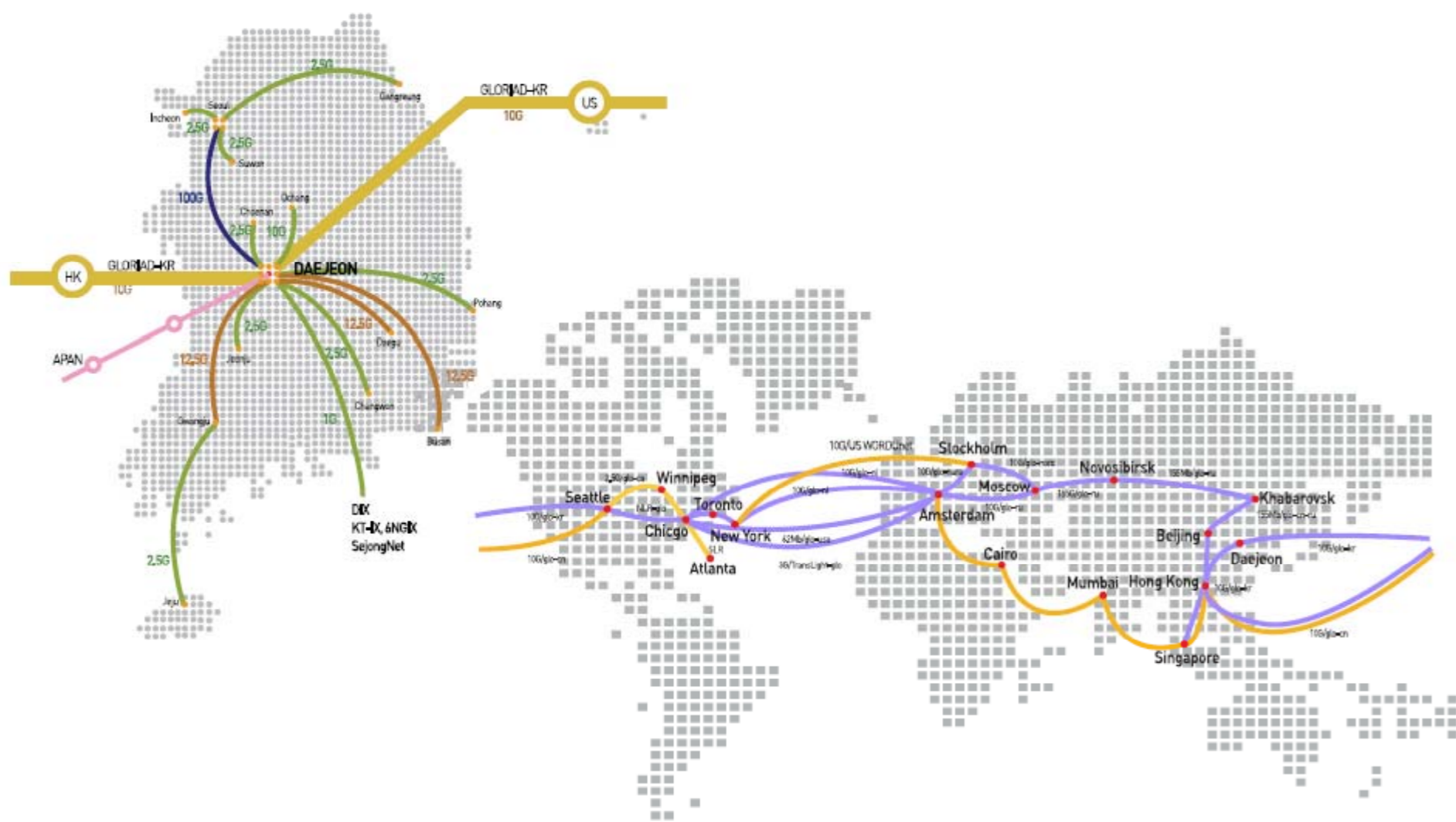


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K-GENI, KREONET and GLORIAD

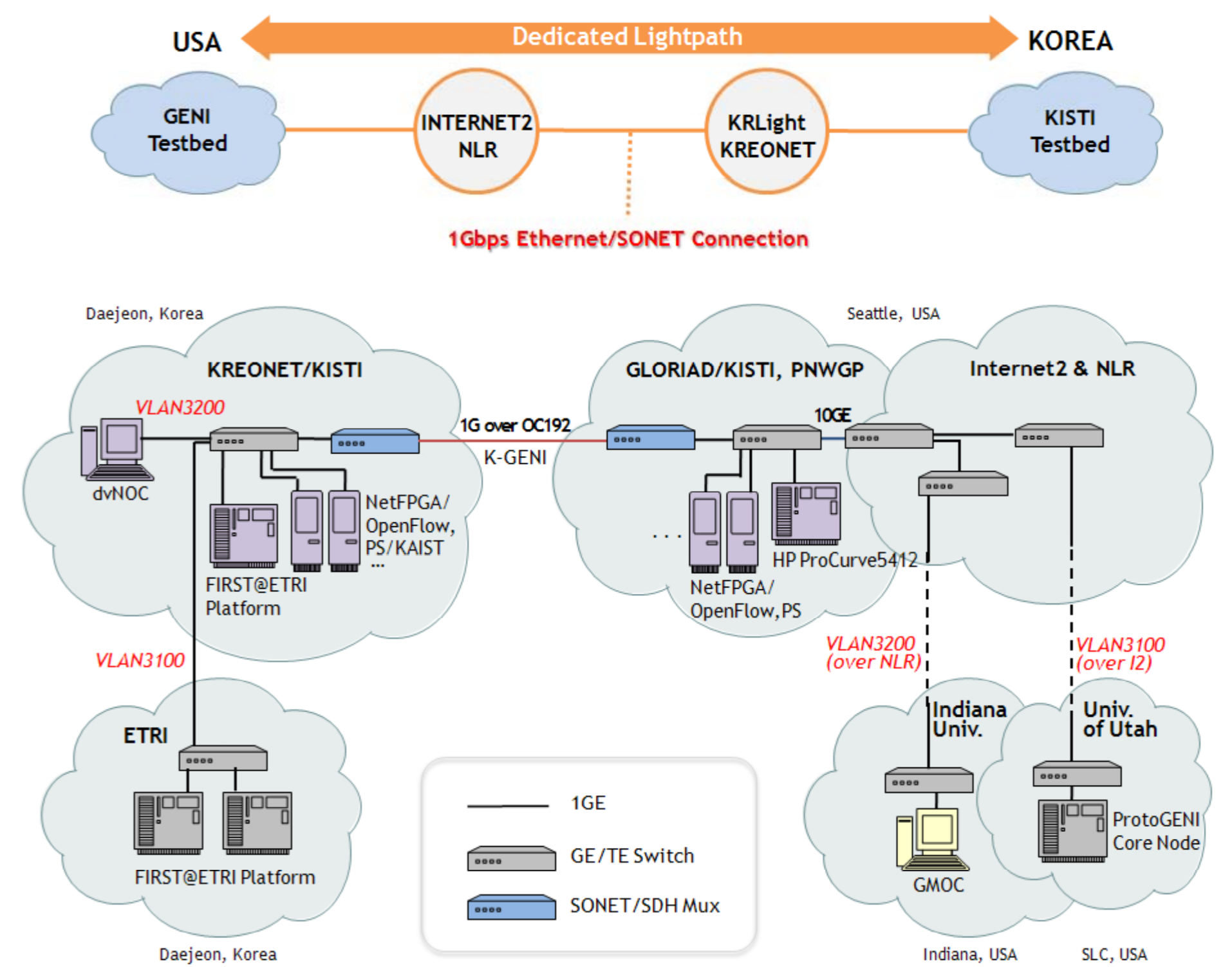
K-GENI : Establishment of Operational Linkage between GENI and ETRI/KISTI-Korea for International Federation (GENI Spiral-2)

- KREONET provides high performance network infrastructure for various science technologies, Supercomputing, e-Science applications.
- GLORIAD (Global Ring Network for Advanced Applications Development) is the first round-the-world high-performance networks jointly established by Korea, United States, China, Russia, Canada, the Netherlands and the 5 Nordic Countries.

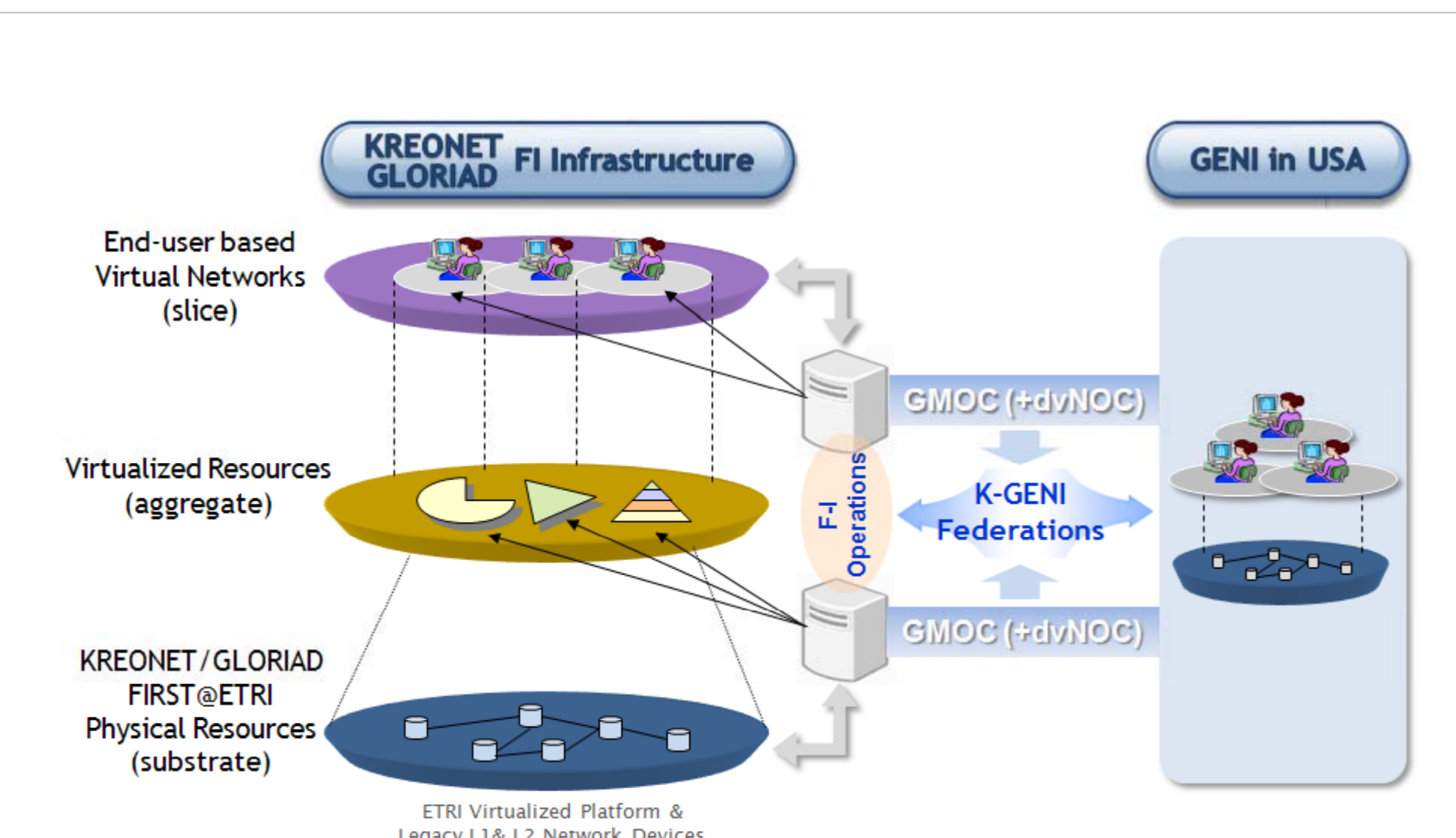


KR-US International FI Networks on K-GENI

- Korea-USA Future Internet connectivity
 - End-to-end dedicated lightpath provisioning
 - Allocate 1Gbps Ethernet over SONET resources
- Two VLAN slices over KREONET, GLORIAD, Internet2, and NLR
 - Gmoc Federation Experiments: KISTI/ETRI – Indiana University (VLAN3100 over NLR)
 - ProtoGENI Federation Researches: ETRI – University of Utah (VLAN3200 over I2)



DEMO@GEC8 Gmoc based Meta Operations Federations between Korea and GENI



K-GENI Federations between Korea and USA

- Gmoc-KR, dvNOC deployment in Korea
- Acquiring Future Internet resources from Korea
- Monitoring substrates, aggregates, and slices
- Operational data federations based on K-GENI
- User-oriented virtual network management guaranteeing end-to-end principle

Federated Meta Operations based on Gmoc

- Data acquisition from KISTI/ETRI and GENI
- Storing data into each resource repository
- Data exchanges using APIs provided by Gmoc
- Federating data: topology, identifiers, schemas, etc.
- Creating federated user-oriented views/interfaces

