

4th ATCF

Justification for Investments in NRENs

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Why Am I Here?

Chair

(Committee for Resource Allocation, GSDC)

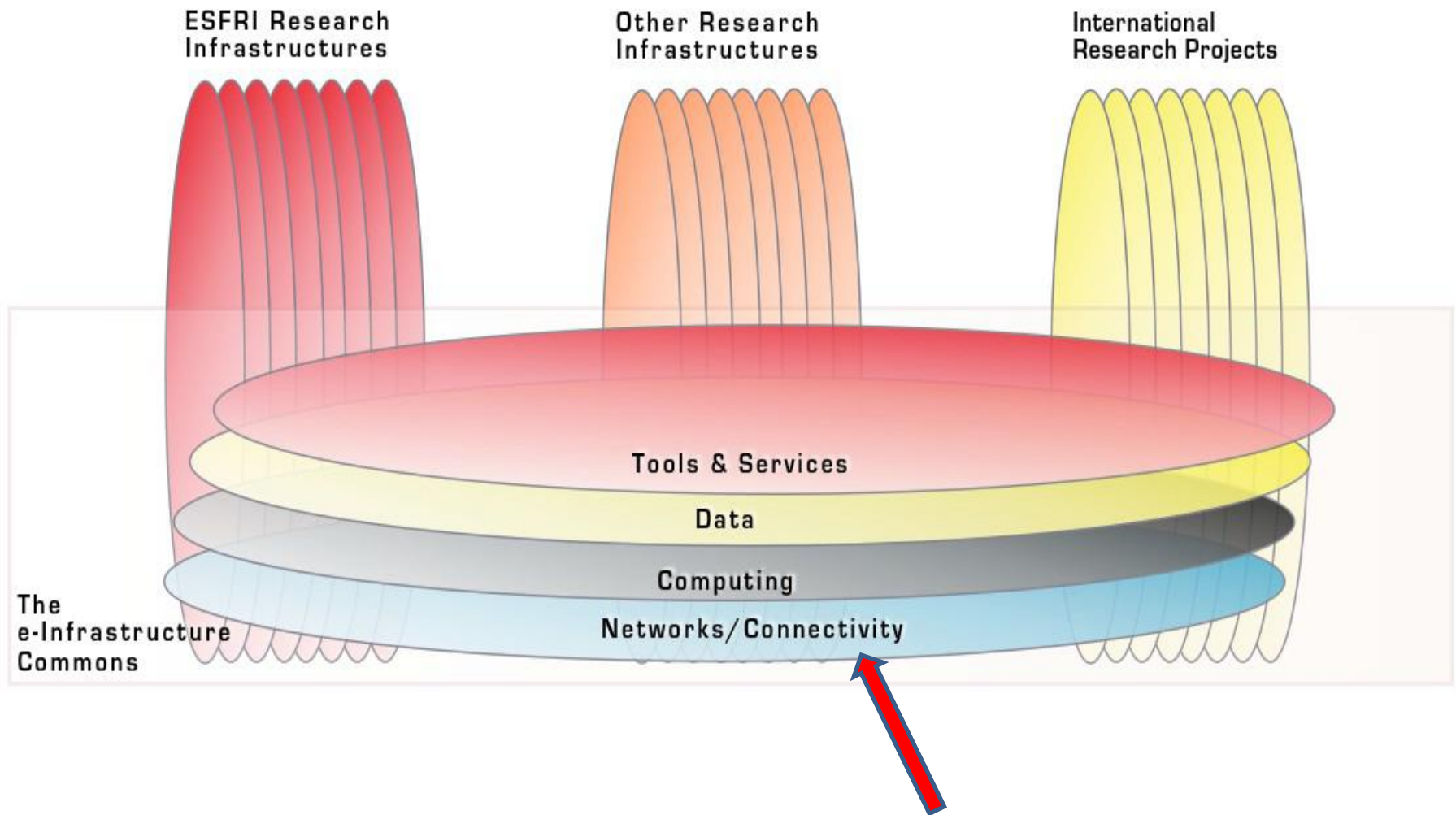
Chair

(Policy Advisory Committee, KREONet)

National Research & Education Network (NREN)

Who should supply?

e-Infrastructure Commons



Rivalry in Consumption

high

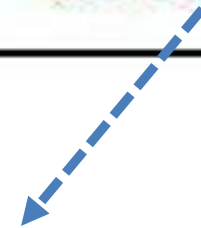
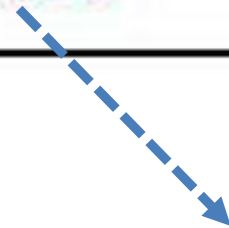
low

Excludability

high

low

high	private goods (well-functioning market)	club goods (market failure)
low	common resources (market failure)	public goods (market failure)



NREN

What could be the threats?

- ❖ If Funding Bodies **THINK** services that NRENs provide are available on the commercial market
 - => Explain the need for NRENs vs commercial ISPs
- ❖ If NRENs are **THOUGHT** to distort the market as they receive government subsidies
 - => Explain the need for national/international funding
- ❖ Commercial ISPs **EVOLVE** to be able to offer identical services to the NRENs
 - => Explain uniqueness of NRENs concerning their user basis, relation with ISP market and regulatory issues

What is the need for NRENs when commercial ISPs exist?

- ❖ Affordable access to necessary facilities
 - Commercial ISPs do not satisfy the requirements of our demanding users at an economically justifiable price
- ❖ 'The NREN Club' model
 - NRENs have a history of collaborating globally on finding solutions in a way that would be difficult for commercial ISPs

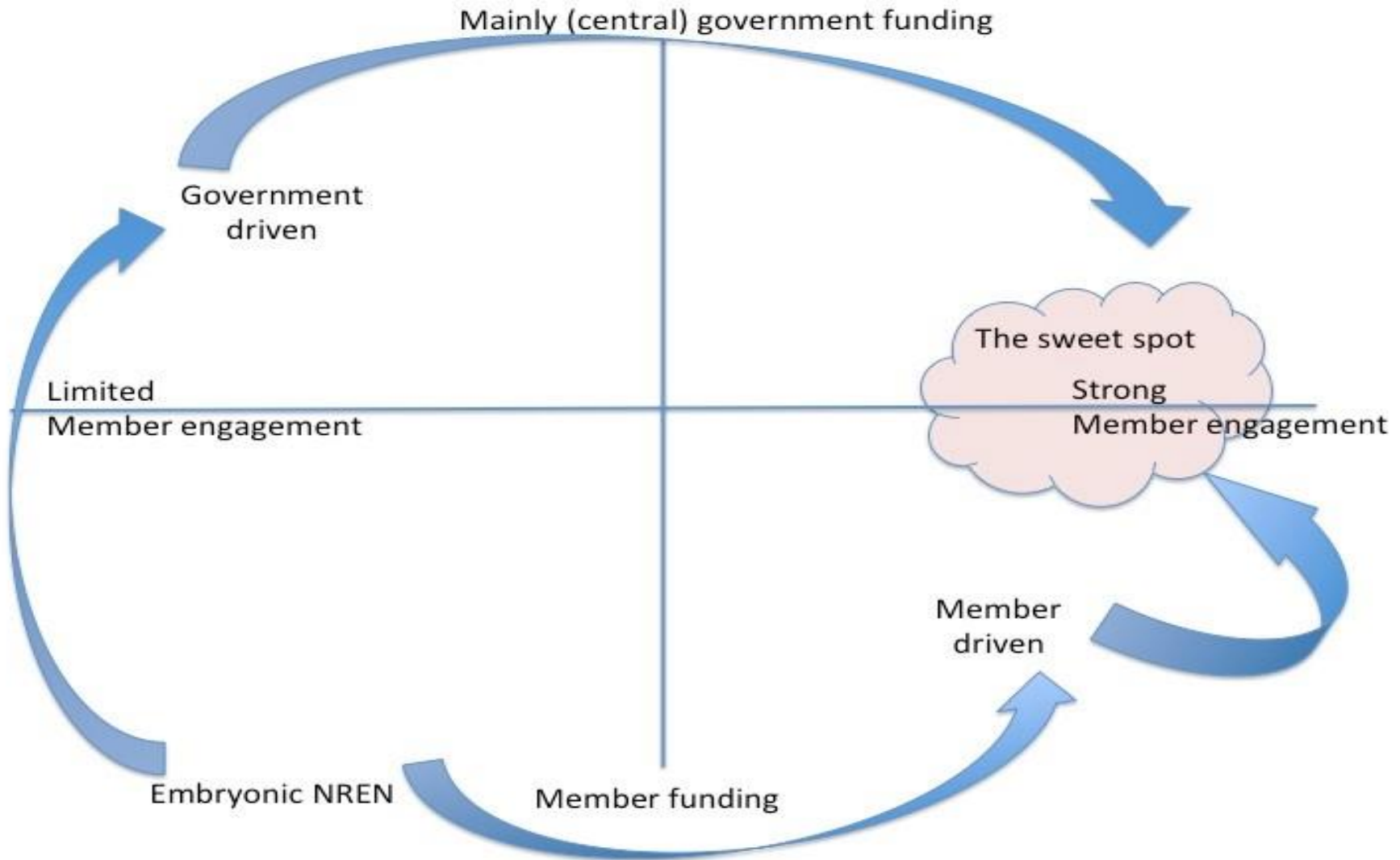
What is the need for NRENs when commercial ISPs exist?

- Support high-demand e-science projects/ applications
- CERN LHC, eVLBI, bioengineering, meteorology, earth/atmosphere observation etc.
- Grid computing and Virtual Organisations, High Performance Computing

Tier Centers

- Strong Demand of high bandwidth Research Network
- LHCOPN, ESnet, KREONet, GLORIAD, etc
- Most Research Traffics occur with HEP applications

The Question of Funding Model



NREN between South and North Korea?



Thank You!

