

Creating a High-Performance Baltic Ring from Shared Spectrum

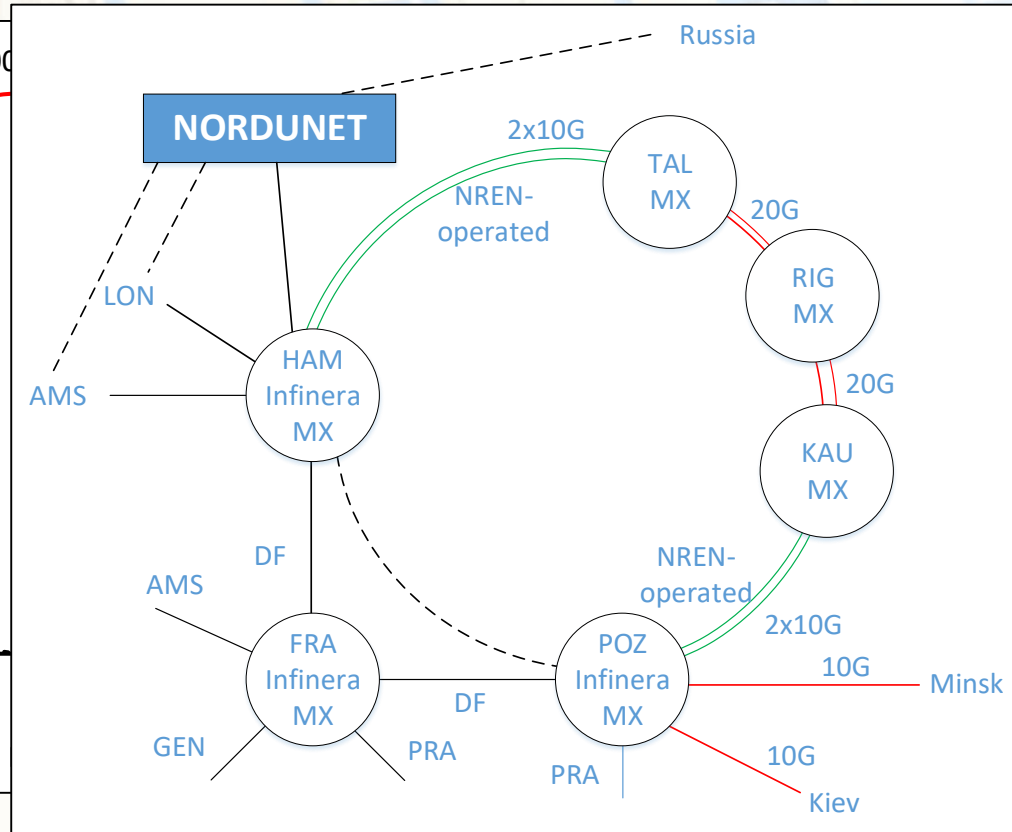
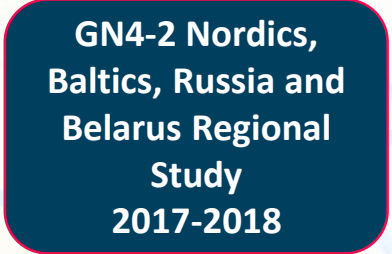
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TNC19



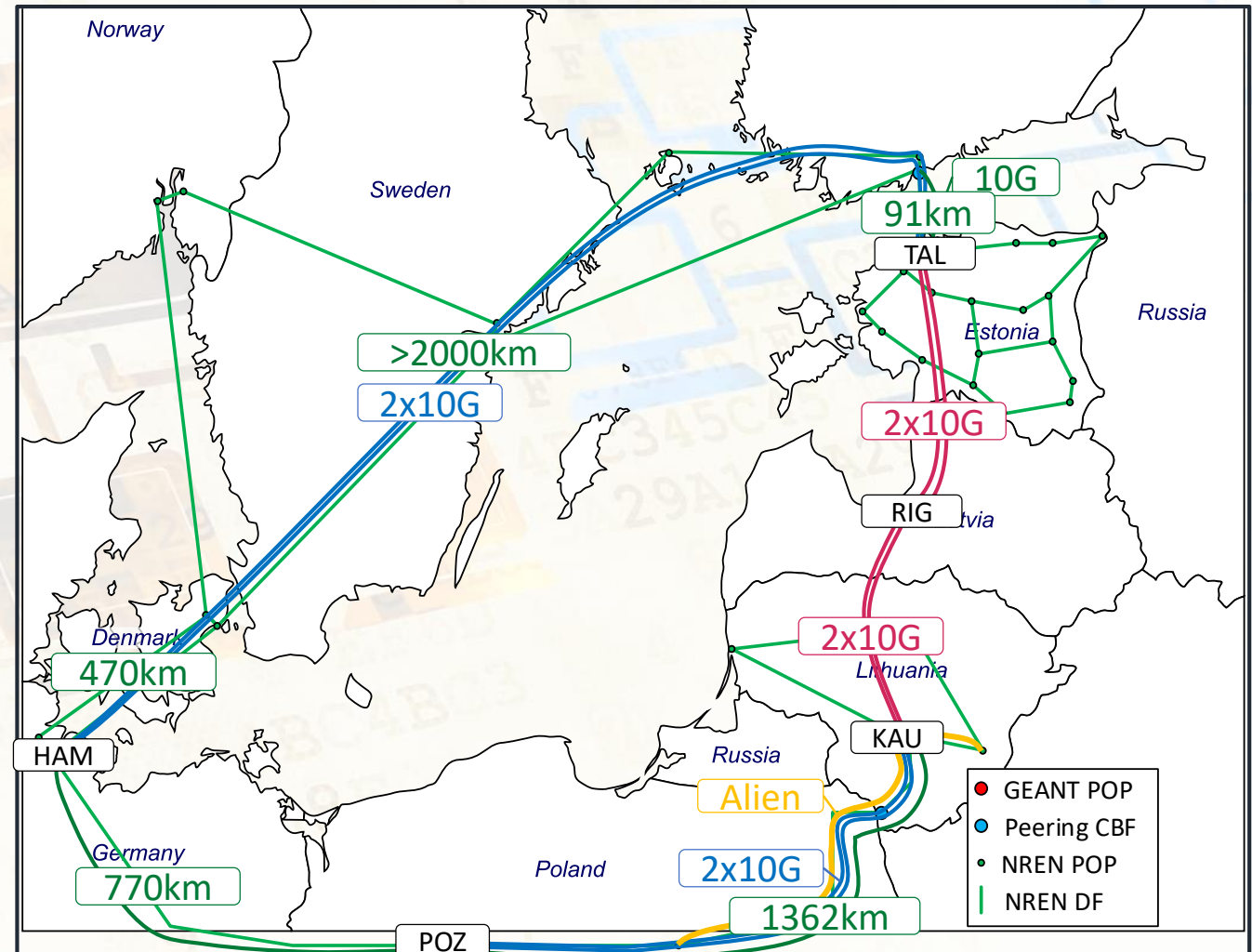
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Overview of the region

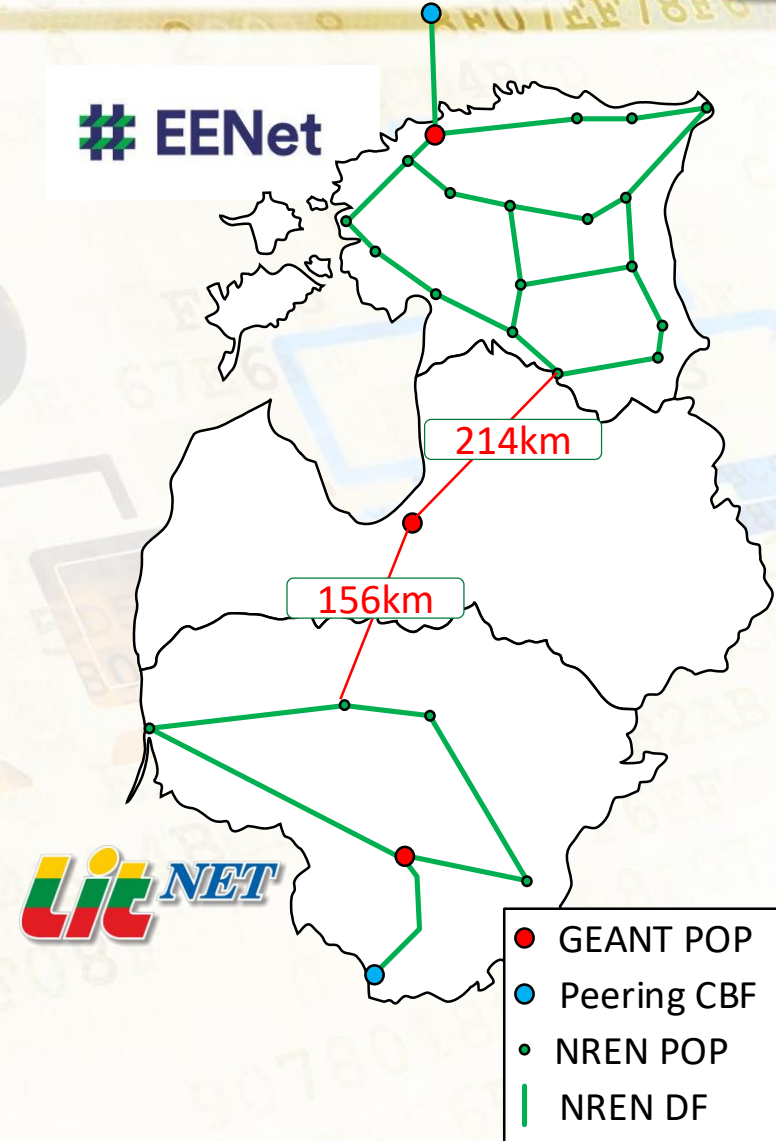
>4700 km of NREN International DF

- GEANT over CBF
- Leased lines
- Peerings
- Experimental

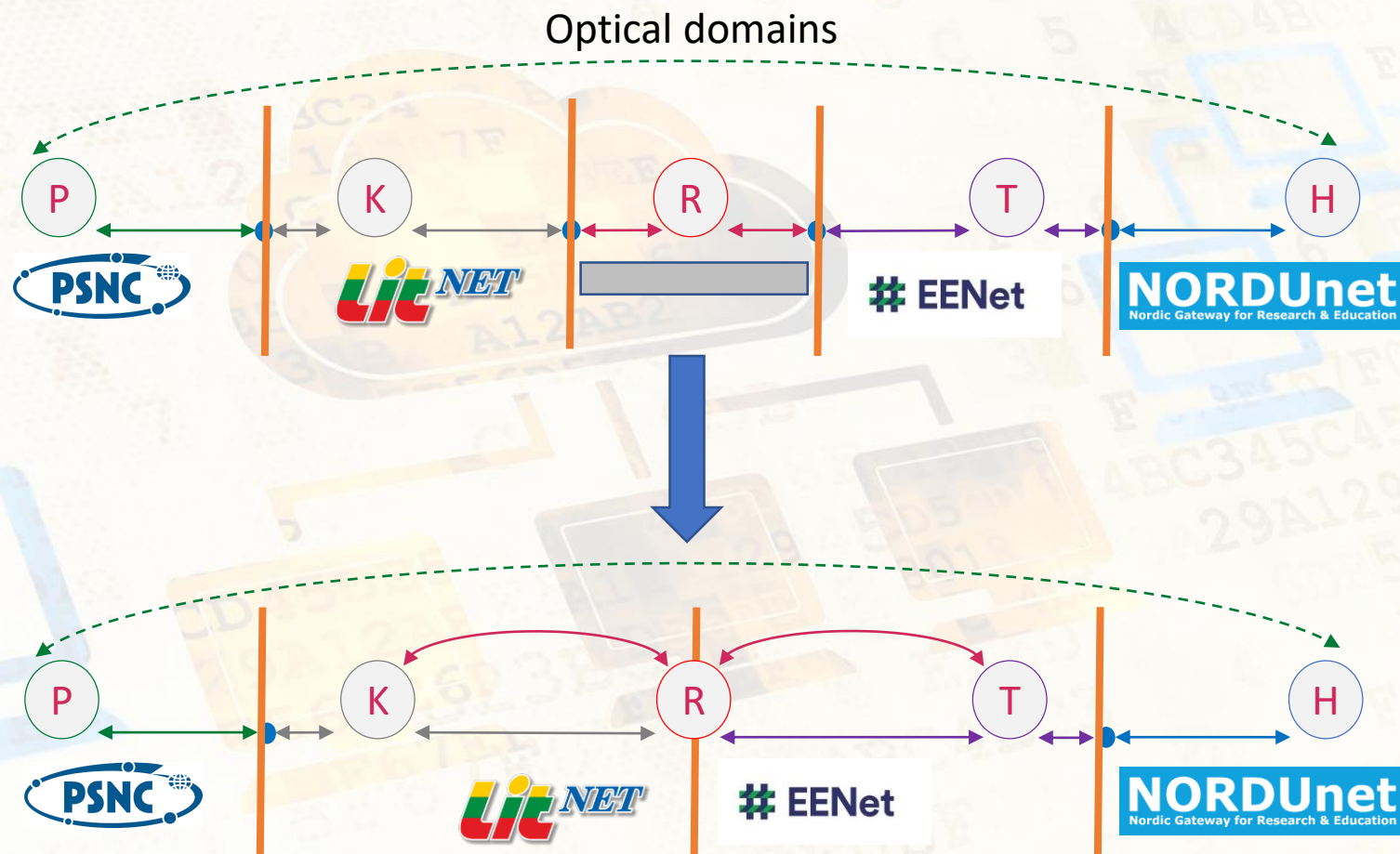


The Missing Bits

- Most obvious choice:
 - 370km required v.s. thousands already in place
- Opportunity to use GN4-3N IRU funds



EENET – LITNET proposal



P – Poznan; K – Kaunas; R – Riga; T – Tallinn; H – Helsinki

Spectrum Sharing Proposal



EENET

- Infinera XTM Series
- 50% of the contiguous portion of the C-Band

LITNET

- ECI Apollo
- 10 to 44 50 GHz channels

Minimum input power per channel	-5 dBm
Maximum output power per channel	-12 dBm
Minimum OSNR per channel	20 dB / 18dB

Challenges

- Missing commercial offers
- Future of NRENs
- Multi-domain management
- Monitoring information
- Signal discipline
- Standardization and common understanding

Concluding points



- Cross-border fibre connections enable closer collaboration with the neighbours
- Part of the service portfolio
- It helps to create a 'playground' before rolling out the spectrum service
- Opportunity for the smaller NRENs to be better NRENs by providing value to the community



Thank You
Questions?

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