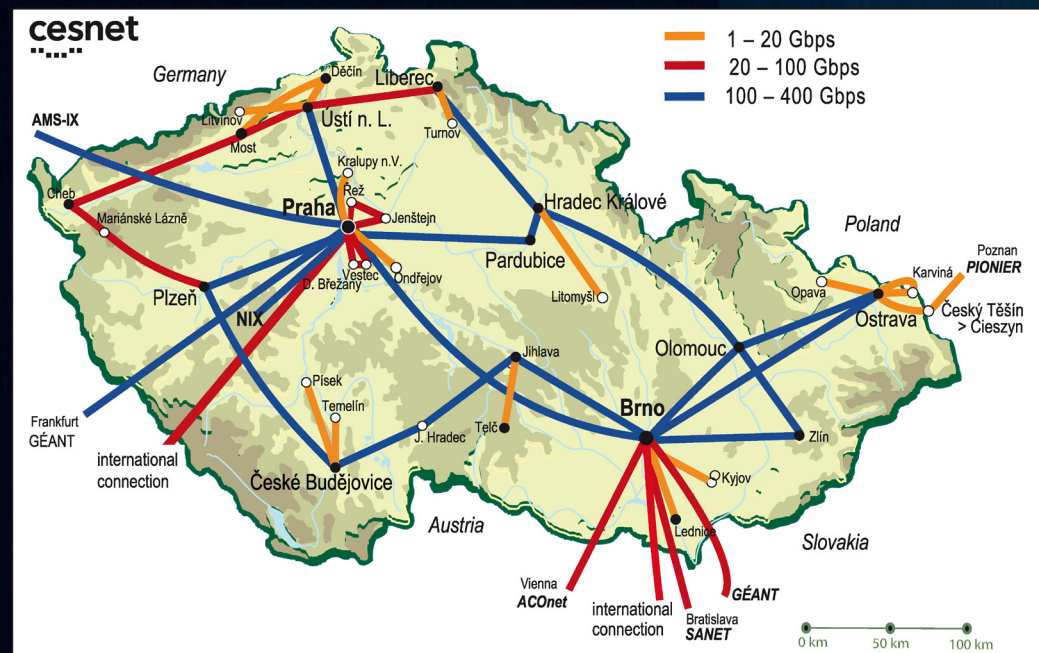


Czech Light™ Crossborder Time and Frequency connection on shared fibre



Current topology

HW for QKD
Ostrava – Cieszyn

White rabbit for T&F
Ostrava – Cieszyn

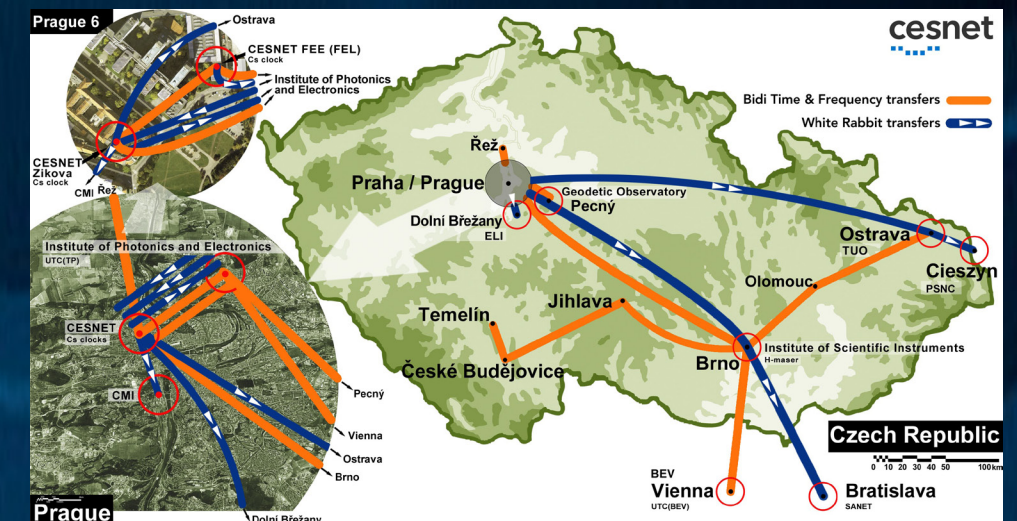


We are NREN. **Shared fibre.** That is our issue, as dedicated fibre for research and innovative applications is costly. We lease the fibres and lighting as a service, which allows us more efficiency.

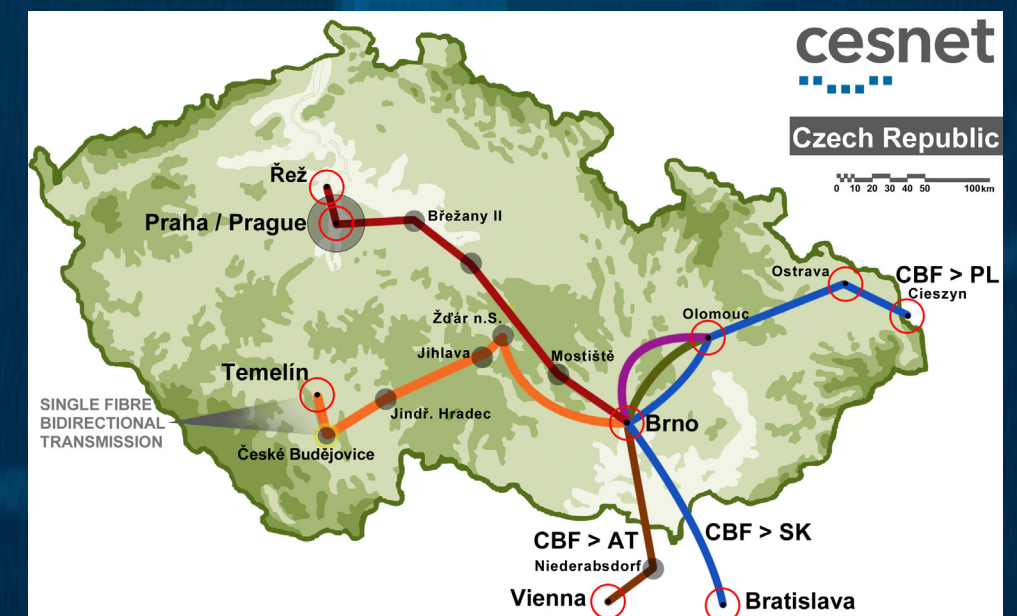
Shared costs. Our strategy is to utilize the fibre for common data transmission together with novel applications like Time and Frequency transmissions. With the further potential for Sensing, QKD transmissions, and later on for some more. Why not? The spectrum is large. All together. **Synergy.**

We have developed own open line technology: **Czech Light™** family of devices to light the networks, and it brings the possibility to access deployed devices without extra costs that would be needed with commercial systems. T&F transmissions, QKD, Sensing etc. And potentially, far more applications in unpredictable fast developing future of research.

The benefit is, we are able to deal with Czech Light™ cross border after many years of cooperation with neighbouring countries. Austria, Slovakia and Poland.



Open line system, for us 500 km currently utilized and operational as shared crossborder fibre, included to 5830 km infrastructure



The main Time and Frequency transfers infrastructure in the CR and crossborders