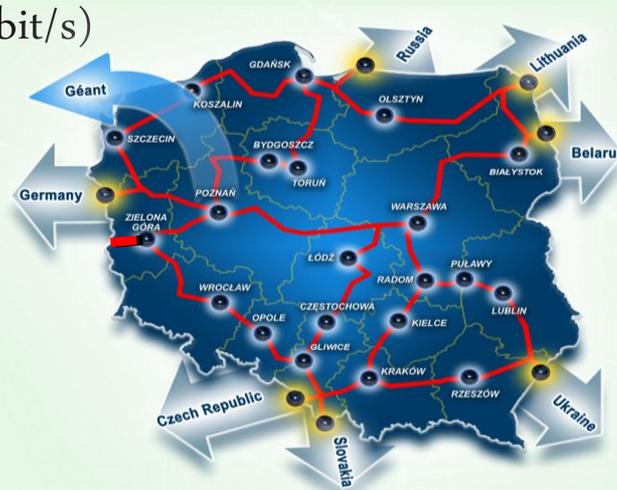




Poznan Supercomputing and Networking Center
Expression of interest on NEM Summit 2014

PSNC Networked Multimedia research

- PSNC has a complete laboratory and equipment for **Ultra High Definition (4K) and 3D network streaming**. The laboratory integrates cutting-edge technologies as well as many new prototype devices. **The lab will be upgraded to 8K (UHD-2) in 2014/2015**
- PSNC is an operator of PIONIER (10/40/100Gbit/s) **Research and Educational Network** in Poland connected to other European networks such as GEANT, GLIF, HPDMNet
- PSNC is also a supercomputing center



4K 3D Research fields

UHD 3D Visualization

— Visualization and presentation

- UHD 4K 3D screening system
- 16K tiled-display-wall (SAGE-based)
- Full HD videoconferencing infrastructure
- **8K 3D professional 6-meter-wide wall display (2015)**

— Cluster-powered off-line and on-line rendering

— Network visualization

— Scientific access to UHD visualization infrastructure possible via VISIONAIR project (FP7)

- VR, Synthetic Environment, UHD-NET; 25 partners; Free access, reimbursement; Trans-National Access

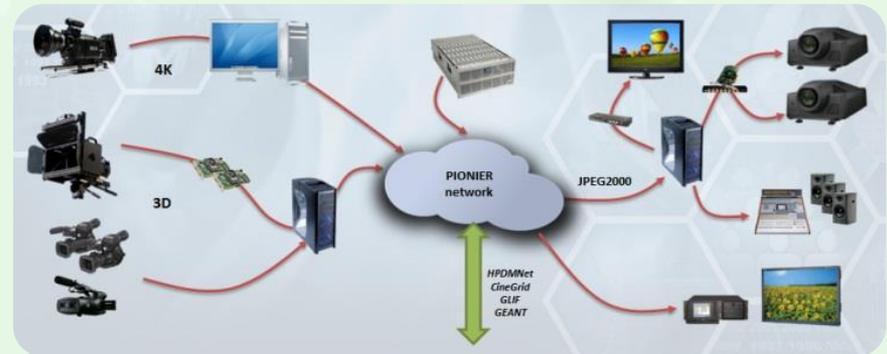
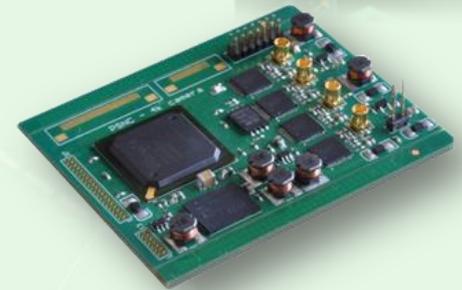
- ***<http://www.infra-visionair.eu>***



4K 3D Research fields

Software development

- **Multimedia and streaming** (4K, 8K, 3D, compressed/uncompressed)
- **Novel network protocols**, services and applications
- **Future Internet**
- **Scientific visualisation**
- **Electronics development**
- **Telemedicine, videoconferencing**
- **HPC**
- **E-administration**
- **Other**



Experiments and Demonstrations

• Streaming 4K & 4K 3D

- Colchester,GB (HPDMNET), Vilnius,LT (TNC2010, ICT2013), Geneve,CH (GLIF2010,HPDMNet), Prague, CZ (TNC2011)
- Amsterdam,NL (Cinegrid), Poznan, PL (Future Internet Week), Barcelona, Spain (I2CAT, HPDMNet), Zagreb, Croatia (CARNet)
- Kortrijk, BE (FIA 2013 Dublin), Cardiff, UK (Univ. Of Bristol, medical applications), Amsterdam, NL (VISIONAIR) – 40G demo
- Maastricht, NL (TNC2013) – 40G demo,
- Chicago, US (US Ignite)– 4K 3D uncompressed streaming



