



**Polish Optical Internet : Technologies, Services and
Applications
PIONIER 9 & 10 April 2003**

**SERENATE - A Preliminary View
of the Future**



Dai Davies : General Manager
dai.davies@dante.org.uk
www.dante.net



About SERENATE..

- **Major Strategic Study**
- **Users: TERENA, DANTE, CTI**
- **Economic and Technical Strands**
- **5+ Year View “end-to-end”**





SERENATE - Technology

- **Switching/Routing**
- **Transmission Trends**
 - **Speed**
 - **Technology**
 - **D.I.Y Transmission**
- **Control and Resource Management**





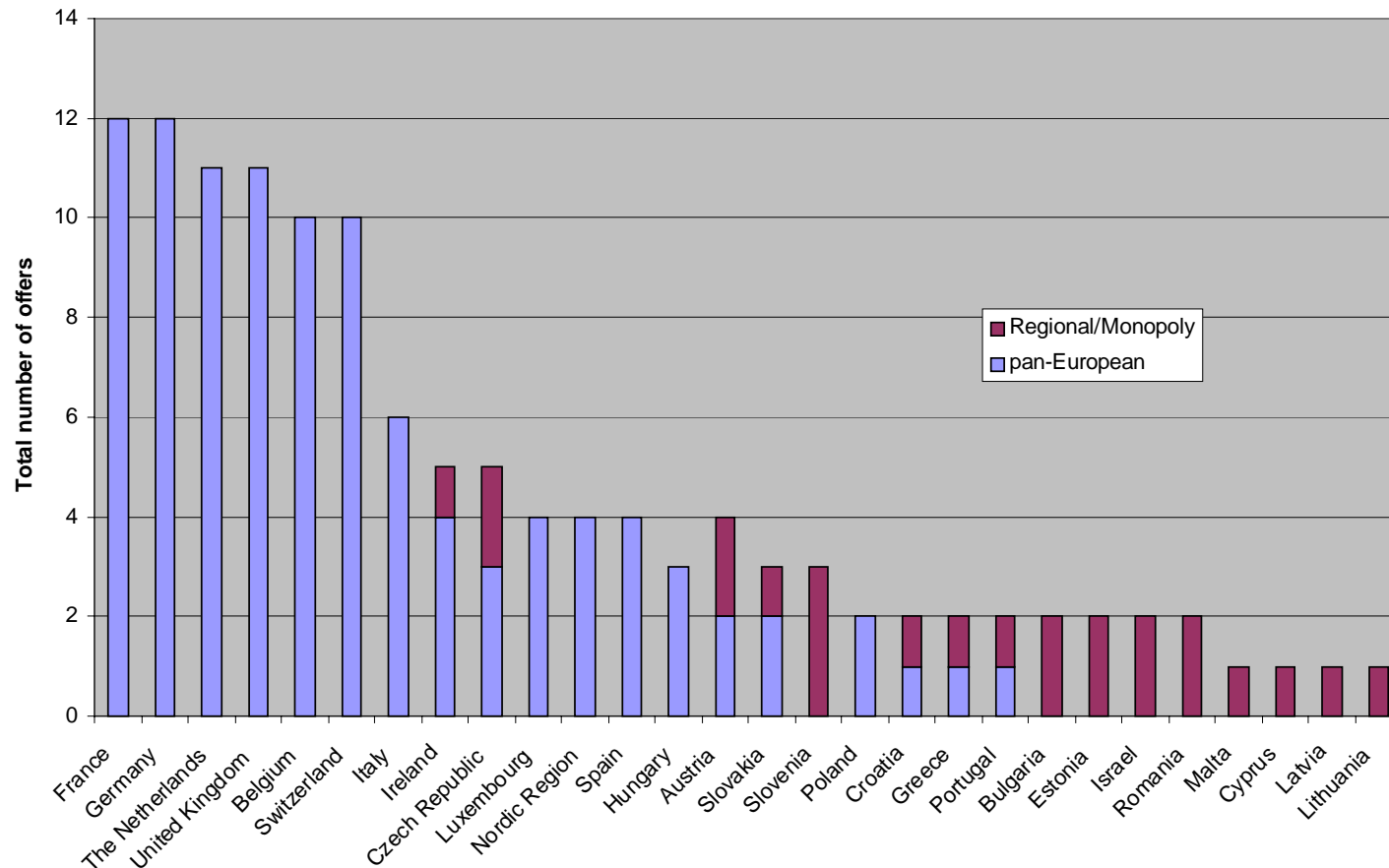
SERENATE - Economics/Market

- **Availability/Price**
- **Reality**
- **Digital Divide**
- **Future Predictions**



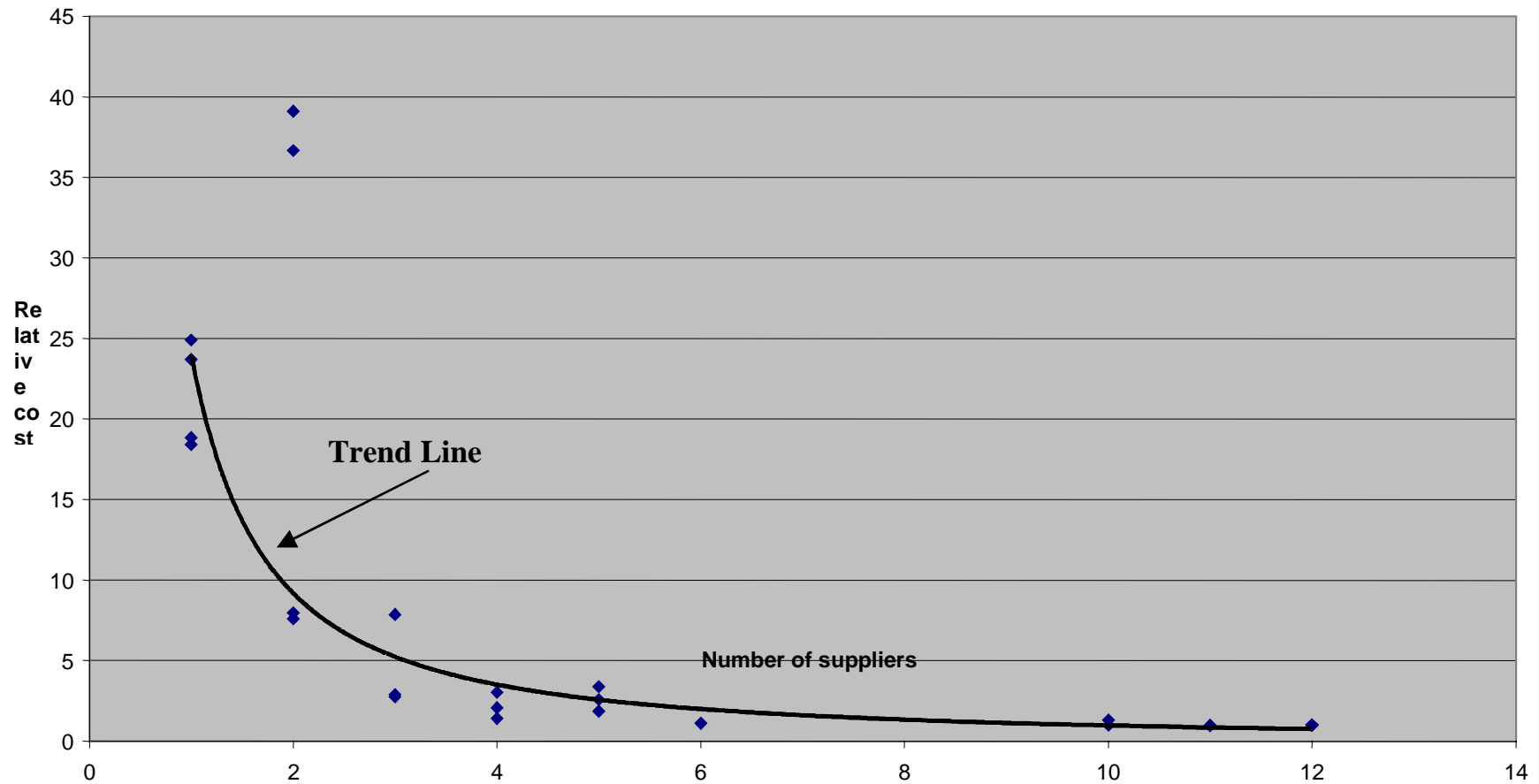
Graph of International Suppliers per Country (GÉANT Tender Data)

Potential International Suppliers





Relative Cost of Connectivity Compared with Number of Suppliers





D.I.Y. Transmission

- **Access to Dark Fibres**
- **“Nothing in Line” Solution**
- **Cost Effective?**





GÉANT Technology Options

- **Switching and Routing**
- **Transmission Trends**
 - **Speed**
 - **Technology**
 - **D.I.Y**
- **Control and Resource Management**





Conclusions

- **Transmission Capacity Not a Problem**
- **Cost and Availability Variable**
- **D.I.Y. Transmission Attractive**
- **Control and Management a Wasteland**

