

# Overview of KPSN

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Chair, KPSN Management Board



# KPSN Partnership



Fire & Rescue



Councils



Police



Schools



Libraries



Museums



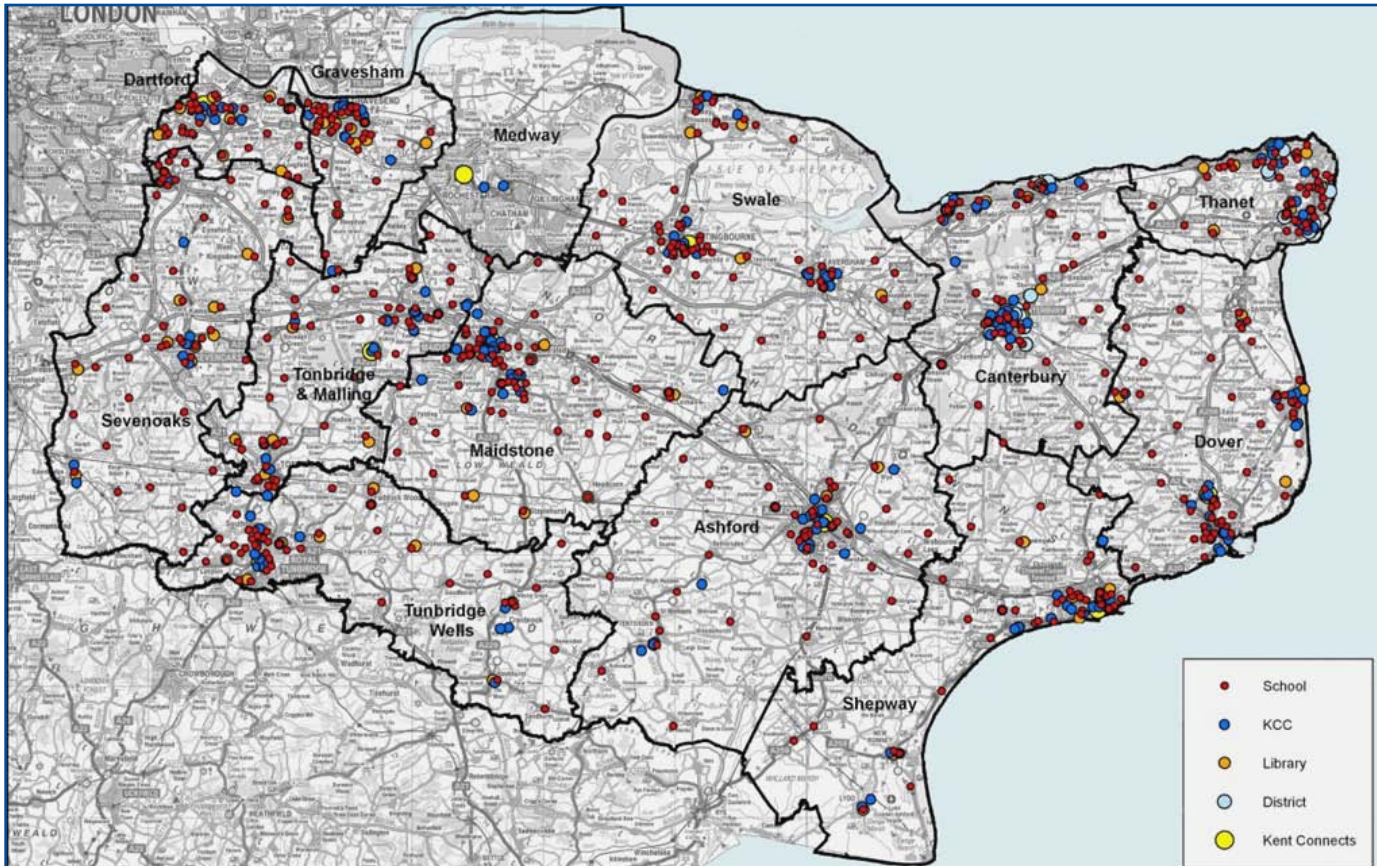
## Kent Public Sector Network



# Public Sector Networks

- How can we deliver ever more broadband capacity and reliability - despite government cuts?
- Are separate connections into the same building a good use of public funds?
- The Welsh Public Sector Network combines health, police, local government and schools over the same infrastructure.
- How can we ensure security of data?
- How should agencies collaborate to save each other cost?

# 1100 Locations



- Urban Concentrations.
- Coastal areas expensive.
- 180 village locations present distance costs.
- Opportunities to share broadband services.

## 10 Networks in Kent – 2007

- KCC wide area network – BT metro VPN
- Schools network (KCN) – BT Ethernet fibre
- District Councils – separate Internet links and KCC
- Fire & Rescue – 64 x ADSL connections plus 3 fibre
- Tertiary Education - BT Wavestream managed WDM
- Police – private leased lines
- Health – N3 plus Community of Interest Networks
- Ministry of Justice – Courts, prisons .....
- Department of Work and Pensions .....
- Ambulance service ....

## 2010

- KPSN – 389 sites
- KPSN – 597 sites
- KPSN – 8 of 12
- KPSN – 6 sites
- KPSN – in design
- In discussion
- Early discussion
- No contact
- Early exchanges
- No contact



# Kent Public Service Network January 2010

Upgraded  
Links

JANET

JANET

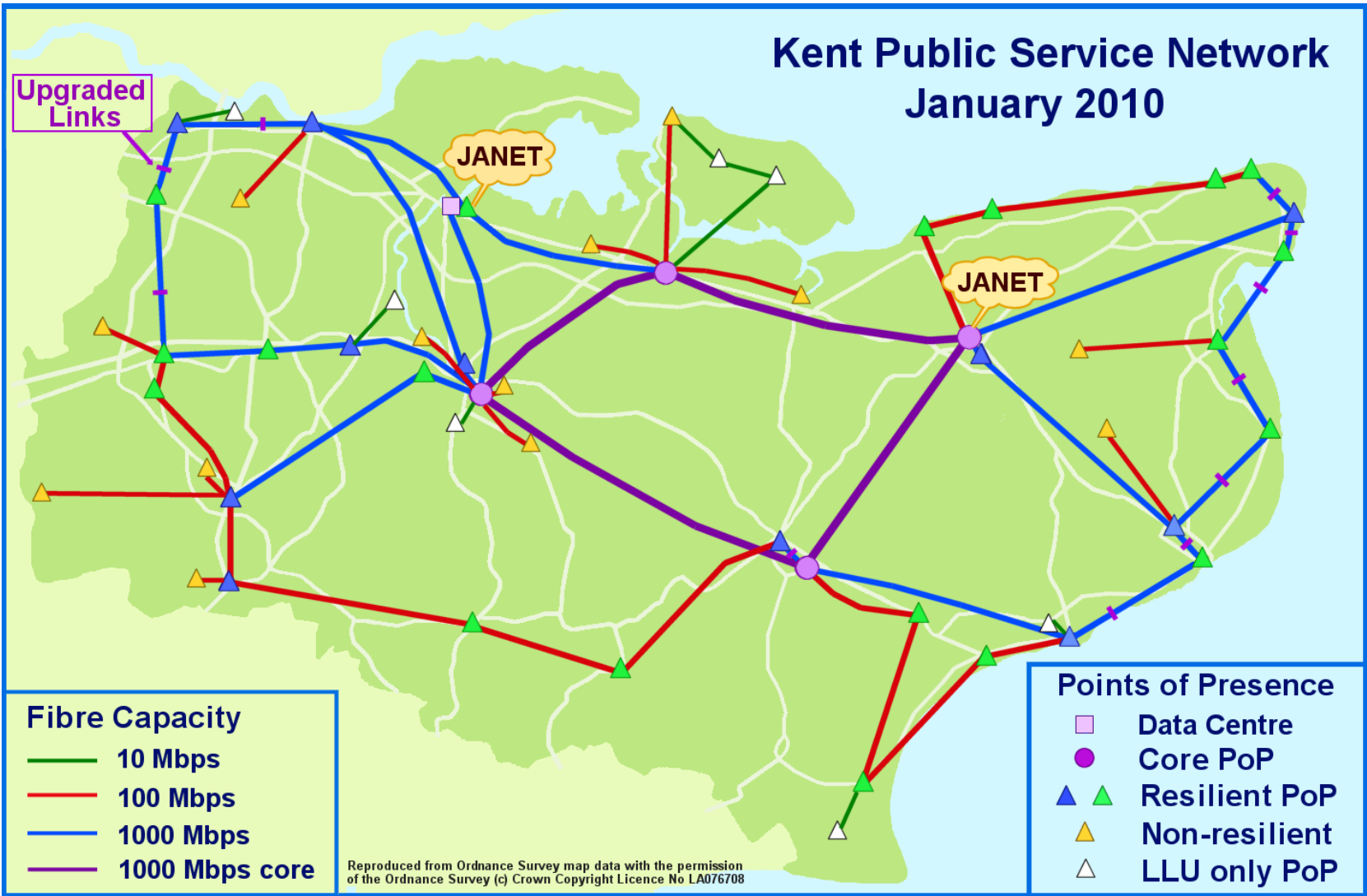
## Fibre Capacity

- 10 Mbps
- 100 Mbps
- 1000 Mbps
- 1000 Mbps core

## Points of Presence

- Data Centre
- Core PoP
- Resilient PoP
- Non-resilient
- LLU only PoP

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# KPSN SuperCore

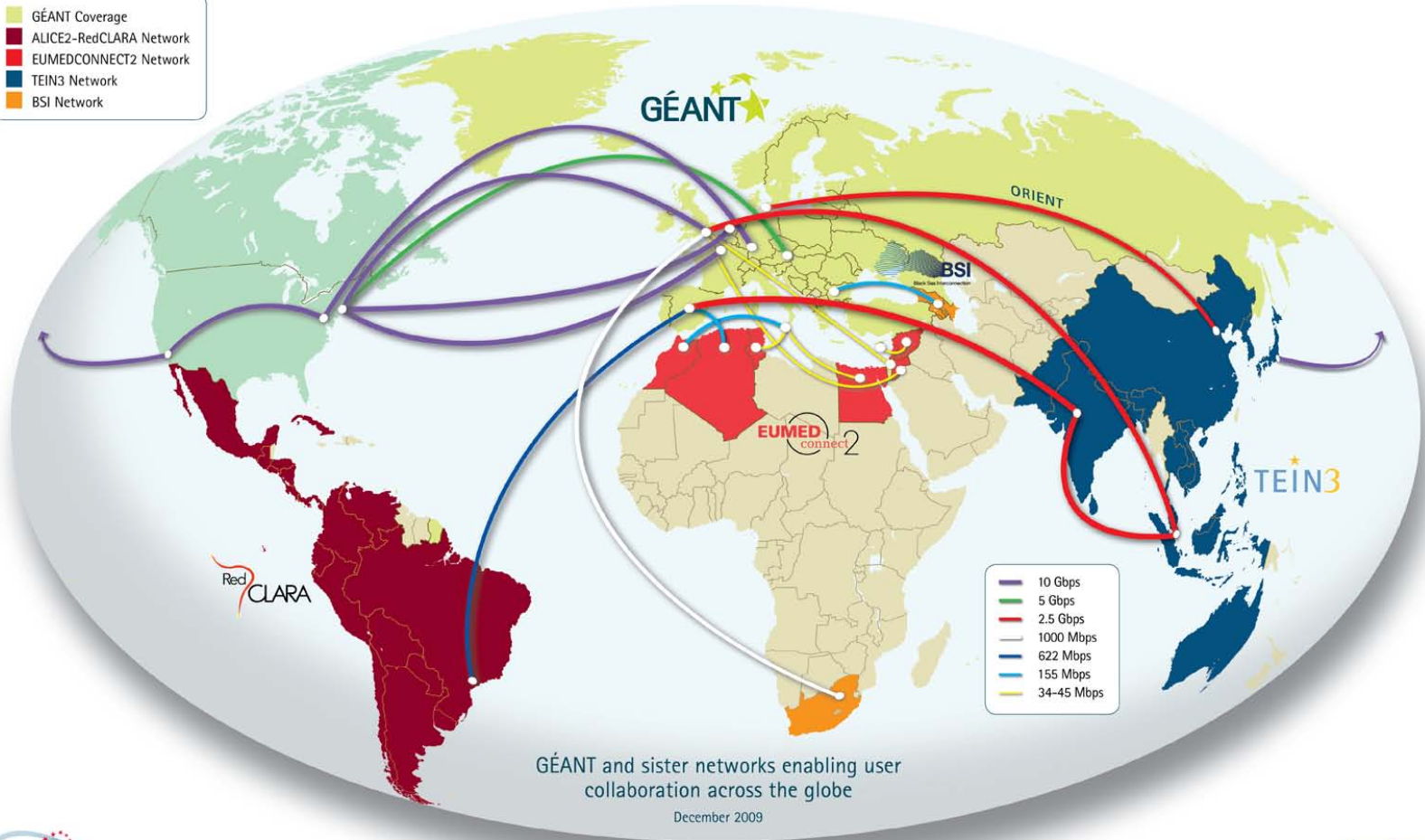
- Upgrade to 10 Gbps central core:  
required for both existing traffic and tertiary education.
- SC PoPs in data centre removes access circuits.
- Improved resilience for ‘Collector Arcs’ using separate PoPs.
- Resilient connections for data centres
  - Canterbury: University of Kent and CCC University
  - Medway: K&M RDC and Universities at Medway
  - Maidstone: EIS and Sessions House
  - Sittingbourne and Ashford.

## KPSN – Benefits to Partners

- KPSN has the high reliability inherent in a resilient network: 99.97% availability over the past 36 months.
- Reductions of up to 40% in Partner costs, or up to ten times the capacity for the same cost.
- Less sensitive to financial shocks that affect individual Partners.
- A wide range of technologies available – local loop unbundling, wireless and fibre.
- Shared services and support across Partners: Back office services, data centres, videoconferencing.

# GÉANT At the Heart of Global Research Networking

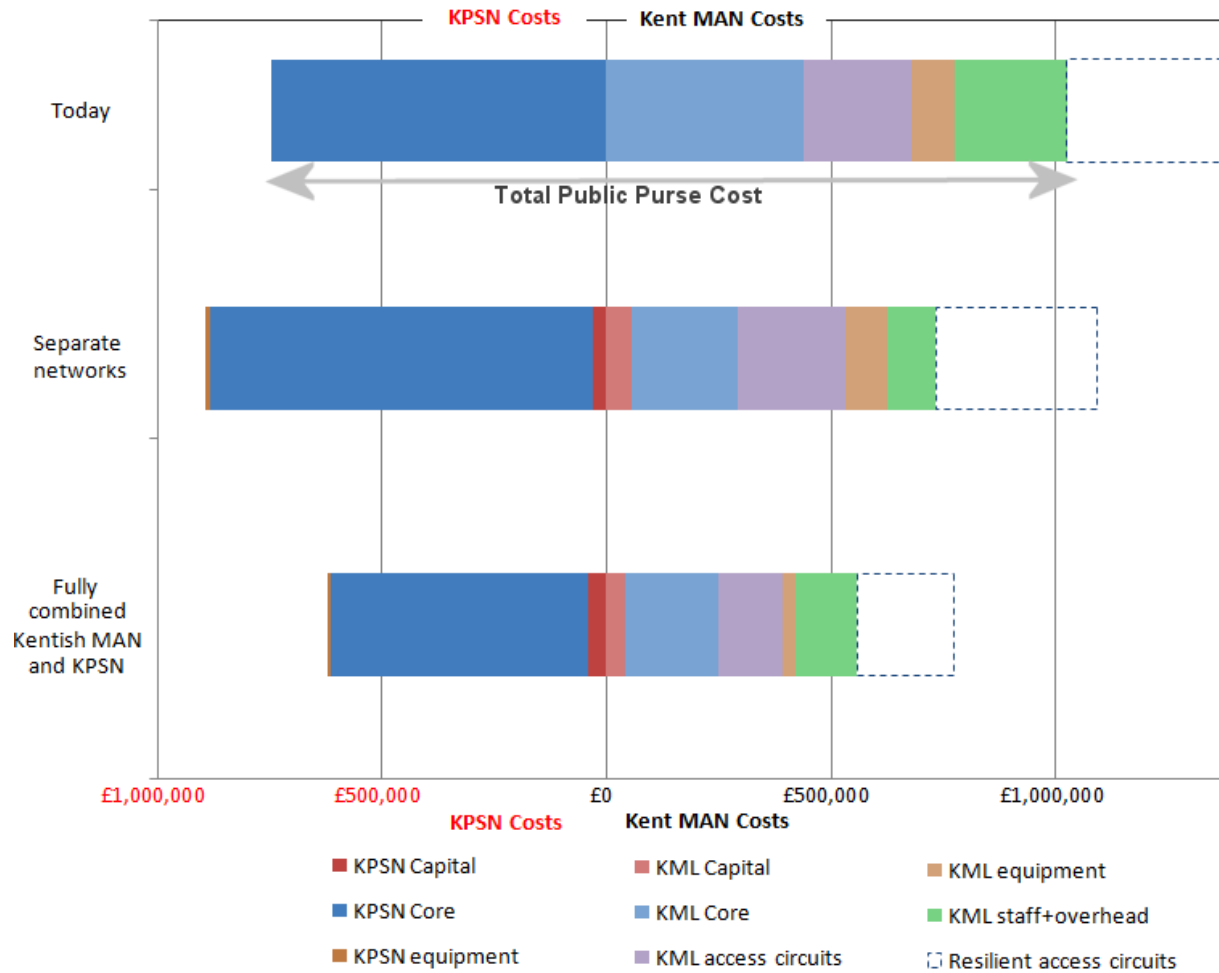
-  GÉANT Coverage
-  ALICE2-RedCLARA Network
-  EUMEDCONNECT2 Network
-  TEIN3 Network
-  BSI Network



## KPSN – Saving to the Public Purse

- KPSN local connection points reduce edge costs (low distance costs)
  - Lowest-cost fibre connections (BT EAD local access) to 1 Gbps
  - Dual resilient connections to critical sites affordable
  - Local Loop Unbundling (LLU) up to 12 Mbps, symmetric.
- Need to balance the backbone cost against the edge saving.
- However backbone cost is shared across 1100 sites
- As more Partners join, the backbone and core costs will fall for all sites.
- A single procurement each cycle against 10 previously!

## Kent networking cost projections



# KPSN – Wider Community Benefits

- Connecting museums, libraries, youth clubs to the same network makes a consistent e-Safety message easier to deliver.
- Students can move between schools, FE and HE more easily.
- Enabling broadband in rural villages enables their children and young people to learn better with home Internet access.
- Rural enterprises do not need to move to gain broadband access.
- Children in hospital can continue education – Padua Ward.

# UNISYS

## Kent Public Service Network

