

Janet and the PSN

Bob Day Chief Technology Officer Bob.Day@ja.net

Janet6 programme components



- upgrade of UK national backbone
 - tuned to data-intensive research
 - supporting the UK's "e-infrastructure"
 - 10-15 year fibre leases and equipment
 - in-house operation (Janet NOC)
 - replacing current backbone
- upgrades to regional networks
 - tuned to education and research
 - systematic review across the UK
 - aligned to procurement cycles
 - I. in-house operation by Janet NOC
 - 2. use a public-sector shared-service network

(training and skills)
(software service wrap
HPC storage
networks



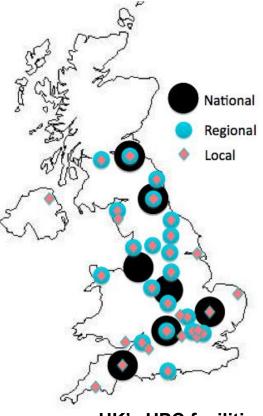


Roll-out of the Janet6 Backbone



Janet6 network infrastructure

July 2012	business case signed off
Sept 2012	all procurements complete
May 2013	all acceptances complete
June 2013	switched on
June 2013 by July 2013	switched on regional networks migrated



UK's HPC facilities Source: BIS



Janet's PSN positioning



UK National Backbone

SuperJanet5 \rightarrow Janet6

procurement via OJEU

Regional Networks

review/realign alongside regional/devolved PSNs/PSN frameworks

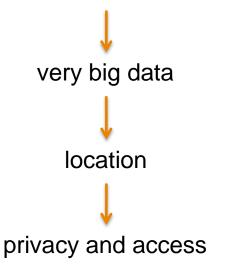
- UK national backbone
 - "outside" PSN special-purpose part of UK's e-infrastructure
- regional access networks
 - treat within the context of the PSN
 - trial use of PSN Connectivity Framework for "IL0" circuits
 - working with CO & GPS on re-procurement a "Janet" Lot??
- Janet is not a provider in the PSN market
 - operates in this market under Cabinet Office scrutiny

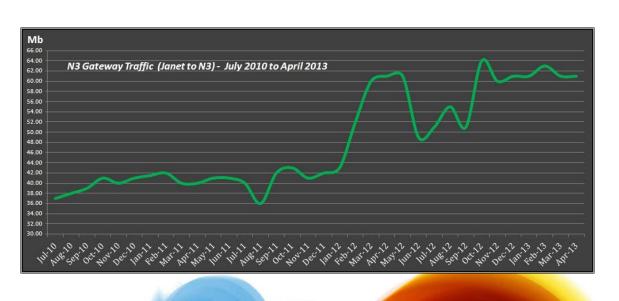




Health/HE interworking post-N3?

- Janet/N3 gateway: challenges to date
 - physical connectivity
 - information governance
- the future?
 - 100,000 genomes
 - Health Informatics Centres of Excellence
 - mobility

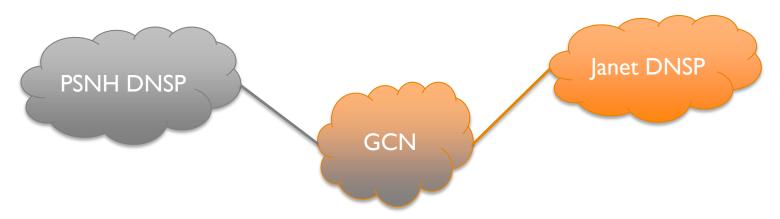




traffic doppes ... to 60 Mbit/s 3 years' operation ...

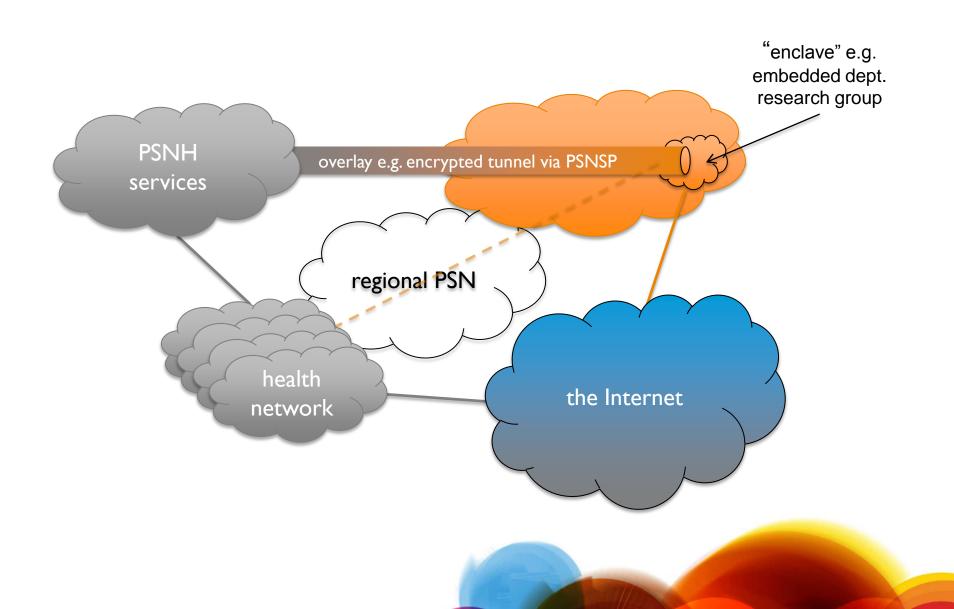


PSNH/Janet connectivity – the standard model? janet



- trialling Janet as a PSN DNSP experiences
 - need to separate from Janet core function
 - ahead-of-market bandwidth and connectivity services
 - it's technically and operationally feasible
 - compliance is too expensive
 - cost in (Janet) regional networks
 - opportunity cost and risk for service providers
 - it risks distorting the PSN market
 - Janet's (state-funded) power and UK reach

Preferred engagement – transactional



janet

Observations

janet

- PSN for Health model appears to be good news
 - devolution of connectivity
 - opportunity to gateway in standardised PSN context
- engagement strategy doesn't formally include HE
 - core focus on health / public health / social care
 - education and research are core to the UK as well!
 - but Malcolm is on the PSNH User Council ...
- should continue to work to solve information access
 - in the PSN context and over the Internet
 - meeting the big data and e-infrastructure challenges
 - developing tools and practical codes for their use





Janet and the PSN