



The NHS-HE Forum

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NHS Network Futures – (1)

Current Context

As N3 moves into the contract extension periods, the NHS organisation structure is in flux, and as the Public Services Network (PSN) continues to evolve, there is a need for a clear direction to be provided on the future of wide area network provision.

The following points can be clarified:

1. N3 (and its successor) will continue to be the core backbone network for the NHS and will continue to host critical national and regional IT services.
2. N3 (and its successor) will continue to operate under the model that ensures appropriate security is built into applications rather than assuming that the underlying network will provide it.
3. Access to N3 (and its successor) will be provided through:
 - Direct connections
 - Aggregators
 - Regional networks
 - Gateways

NHS Network Futures – (2)

- Major networks such as PSN, GSI and Janet will be connected to N3 through secure gateways or interconnections.
- The NHS Technology Office and the N3 Programme are working closely with the PSN Programme to ensure that the NHS information governance model is supported by PSN.
- As a result, the following headline statements (on next slide) have been agreed.

PSN/Heath Primary Objective Agreements

1. PSN purpose is to **drive down the cost** and enable different ways of delivering public services across **traditional boundaries**;
2. Another PSN goal is to enable the interconnection of government networks, thereby providing the **effect of a single network** for the delivery of all public services; This can be achieved by defining technical standards for interconnection which **accommodate the different security and technical regimes** of the connecting networks
3. PSN provides the mechanisms by which infrastructure can be shared, **where there is an approved local business case**.
4. **Each department will determine the most appropriate technical and security design in line with their business needs**
5. **PSN will not procure networks on behalf of departments**, however it will provide vehicles through which networks and other PSN compliant services can be obtained.
6. The **scope of PSN has been expanded** to include all telecommunications including mobile services. In the medium to longer term, PSN will provide higher level services such as **voice, mobile voice and data, video conferencing, email, sms**, etc.

Looking forward- Service Enhancements

- Eduroam
 - Investigating an option to deploy Eduroam access on NHS wireless networks with a view to provide greater access to Eduroam users (academic and health)
- Session initiated in JANET
 - Enable staff to access electronic information services in the NHS whilst at a JANET connected site (e.g. PAS,PACS images etc)
- Video Conference Service
 - Solution required to connect the NHS N3 and JANET central Video Conference Services to support joint VC across the Gateway rather than using expensive ISDN or variable quality Internet routes
- Federated Access
 - Solution required to create a federated identity framework between JANET and NHS (N3) to allow Service Providers in either domain to trust identities

Caveat: All dependent on the bidirectional Information Governance process being fully agreed and signed off

A wide range of real user scenarios need to be considered;

- **Simple Use Of Shared Facilities**
 - Council staff resident/semi resident in acute or PCT premises
 - Commissioned third party services on NHS premises.
 - NHS staff/functions resident/semi resident in CC premises
 - CHT staff resident in respite care sites, schools etc.
- **Joint Teams Across Agencies & Jointly Operated And Occupied Buildings / Facilities**
 - MASH (Multi Agency Specialist Hubs) e.g. SureStart
- **NHS shared occupancy**
 - e.g. PCT & GP on same site or multiple GP's on same site.
 - N3 does this already but it can still be incorporated into these solutions.
- **Integration of GP network into a CoIN.**
 - Securely separate GP traffic within network.

JANET Phase 2 Governance – IST / OST (1)

What does N3 Governance mean for JANET

- Defining a mechanism to manage risk to N3 and connecting organisations, in this case, Academia.
- Ensuring that a set of baseline requirements are understood and appropriate controls are implemented and maintained
- Defining an appropriate incident management process

What are we doing

- Stakeholder meetings with JANET to raise awareness of the N3 Governance process and understand JANET requirements
- Ensuring that the Governance piece is applied across all JANET P2 secondary investigation work streams
- Looking for opportunities to use the established BAU process and not to reinvent the wheel
- Ensure the Governance process (IGT & IGSoC) is repeatable for all JANET connectivity requirements

JANET Phase 2 Governance – IST / OST (2)

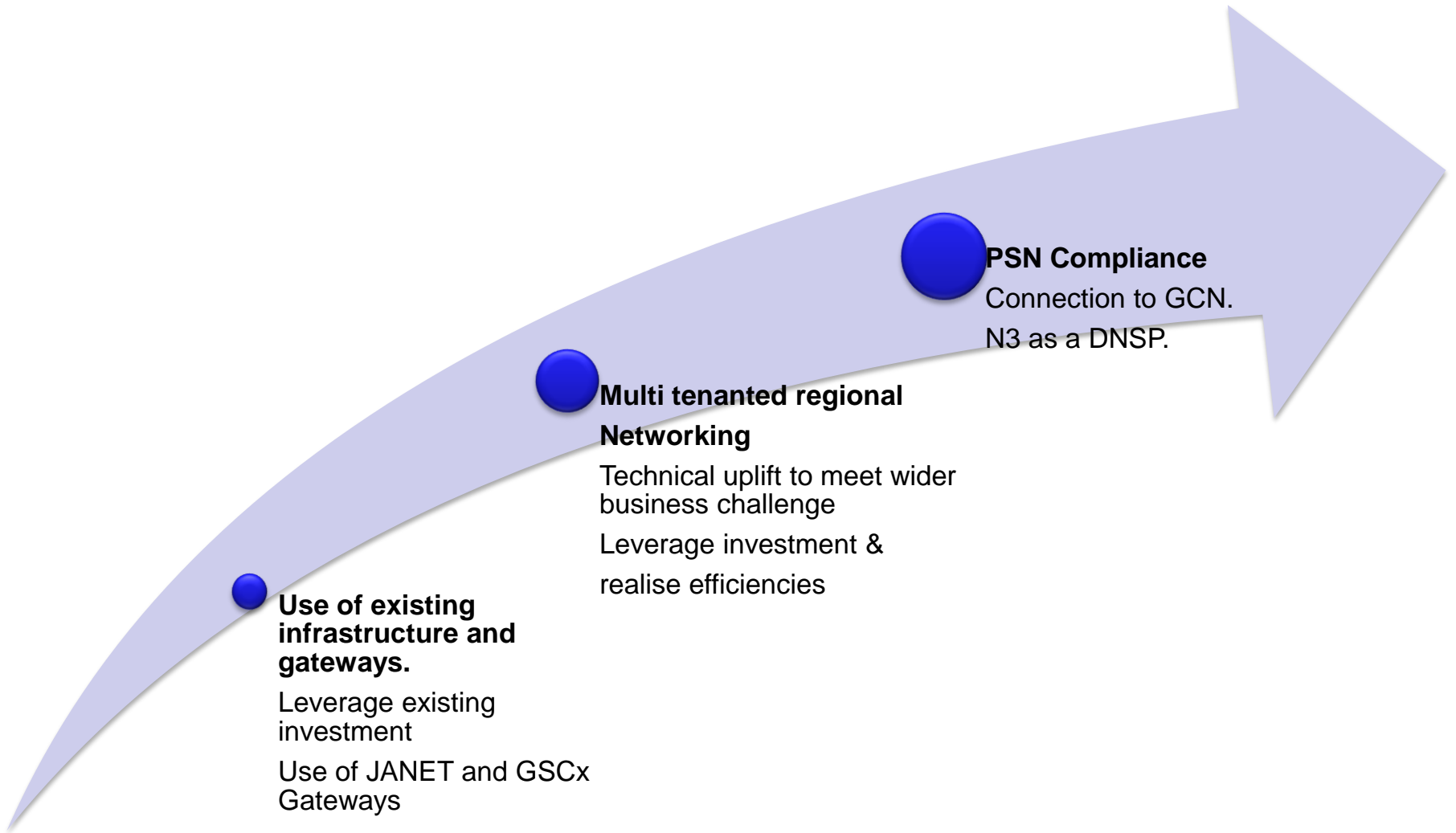
Key Challenges

- Formal joint project has been set up between NHS IST and JANET
- IGSoC (Information Governance Statement of Compliance) is currently one size fits all and will need amending to fit Academia
- An appropriate IGT (Information governance Tool kit) view needs to be indentified
- Who signs off the IG statement on behalf of JANET connected organisations?

Further Considerations for network Sharing opportunities

- Must be cost efficient for local organisations concerned by reducing the number of physical network connections required.
- Must be built to allow information sharing
 - Shared security policies
- Solutions should be deployable on both new networks & existing networks.
 - Leveraging best use of existing investment where possible.
 - Full recognition and acceptance of both infrastructures for governance rules
- Must allow simple management.
 - Simple, clear and well defined network management ideally via single helpdesk.
- Must be supported by robust local governance structure. e.g. MoU
- Remote access
 - Single platform allowing users access to correct network areas. e.g SSL

The N3 Approach

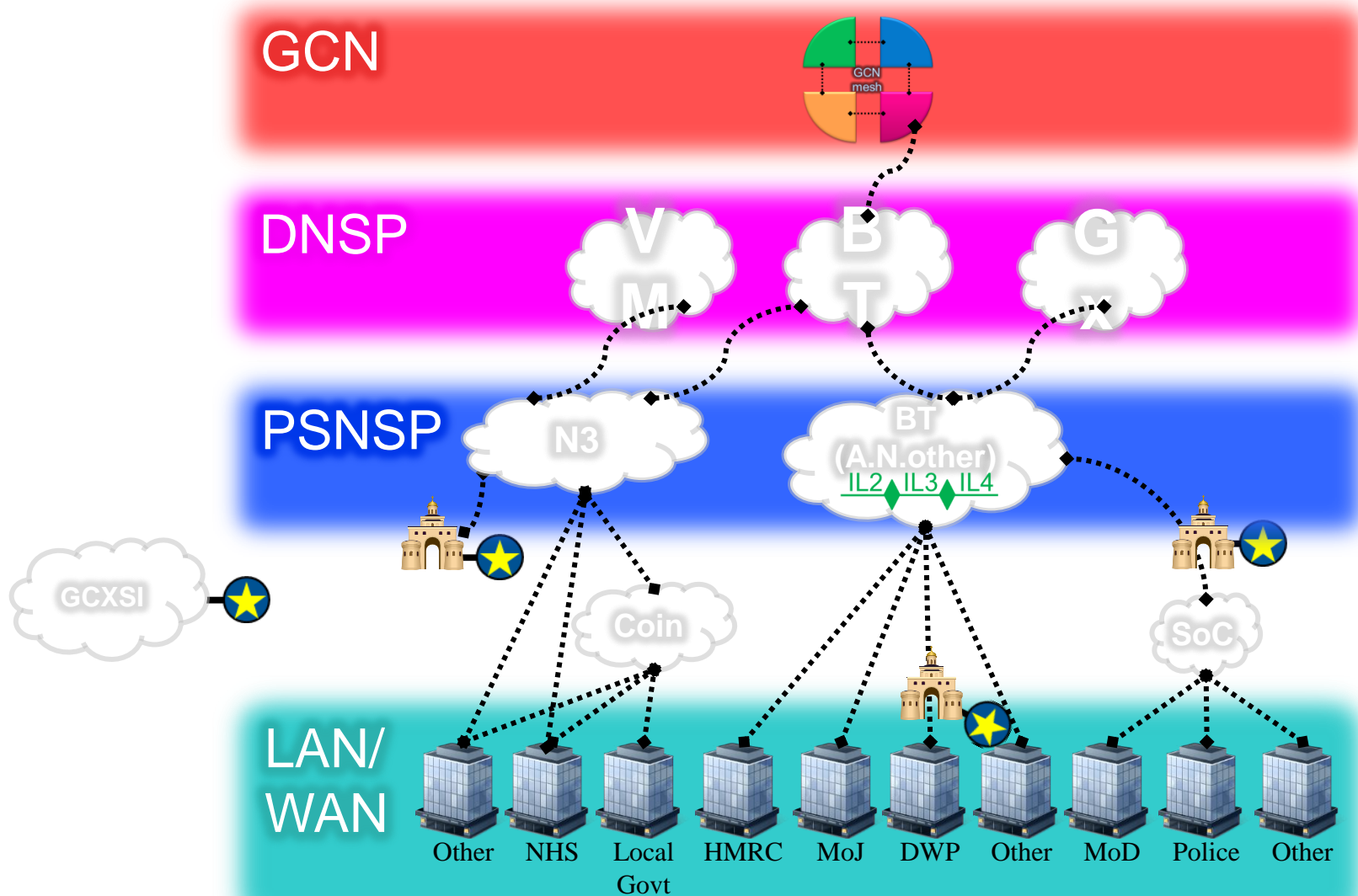


Leverage Investment

- No change to N3
- JANET/GCSX gateway maintain in advance of GCN gateway
- GCN security model changed to encompass more than 2-2-4 security (in progress)
- Agreement has been reached on the co-existence
 - Work is ongoing to work through the implications of this in real-life scenarios

Multi Tenanted Networks – The benefits

- Best balance between new and existing infrastructure to minimise costs and speed of deployment.
- Supports sharing of IP exploitation such as voice, video, collaboration and virtualised data centres.
- True traffic segregation provided by closed user groups.
- The ability to deploy overlapping address space per organisation
- Encryption could be added if required.
- Ability to failover between primary & secondary services.
- Potential to support per organisation QoS policy.
- Ensures equitable use of bandwidth.



N3 PSNSP

- N3 well positioned to make GCN / DNSP connections “simpler/cheaper”
- Maintain JANET/GCSX gateway in advance of GCN DNSP gateway
- GCN providers and DNSPs achieve DHID IG clearance for secure health layers to connect to N3

- Benefits:
 - Provides a route for DNSPs to offer services to the NHS, thus leveraging the N3 integrator model.
 - Potential to reduce number of gateways.
 - N3 would be a fully PSN compliant network.
- However
 - The issue of information sharing between market sectors is not resolved by any “PSN network” solution alone, identity management, access control, etc need to be addressed in all cases.

Speak with us!

- We are looking to use real case scenarios for information sharing between health and academia.
- Please approach us if you would like to assist with the business assessment of information governance sharing requirements for JANET phase 2 project.

Thank you

Any questions?

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