



# Update including from N3 JANET Gateway Project Board

## Scotland NHS-HE Forum

7<sup>th</sup> June 2007, Edinburgh

Malcolm Teague, NHS-HE Co-ordinator



# NHS-HE Connectivity Project

- Objective:  
**”To achieve good inter-operability between NHS and Higher Education (HE) networks that enable secure anytime, anywhere access by medical, nursing and allied profession students, clinical teachers and researchers”**





# Overview

- **N3 JANET Gateway Update**
  - Infrastructure
  - Information Governance
- **Towards an N3 JANET Gateway “Roadmap”**
- **Other brief updates**





# Update from the N3/JANET Gateway ~~Working Group~~ Project Board

As given by Bob Day  
Chief Technology Officer  
UKERNA

At NHS-HE Forum on 9<sup>th</sup> Nov





# Synopsis

- What we're trying to achieve
- What needs to happen
- “Foreign” networks
- Timescales





# Objectives

1. to build a gateway for “early adopter” use
  - selected projects as pathfinders
2. to analyse traffic crossing the gateway
  - amounts, and types of use
3. to demonstrate practical collaborations
  - establish that investment was worthwhile
4. to prepare a case for a permanent gateway
  - sized and operated appropriately





# Early adopters

- University of Newcastle | NE CETL
  - fast web access and videoconferencing between NHS and university sites in NE partnership
  - reduced costs compared to dedicated circuits
- University of Bristol | Clinical Academies
  - eight academies linked to UoB and UWE
  - move from bespoke network → trust network
  - reduced costs of networking & improved support





## Early adopters (contd.)

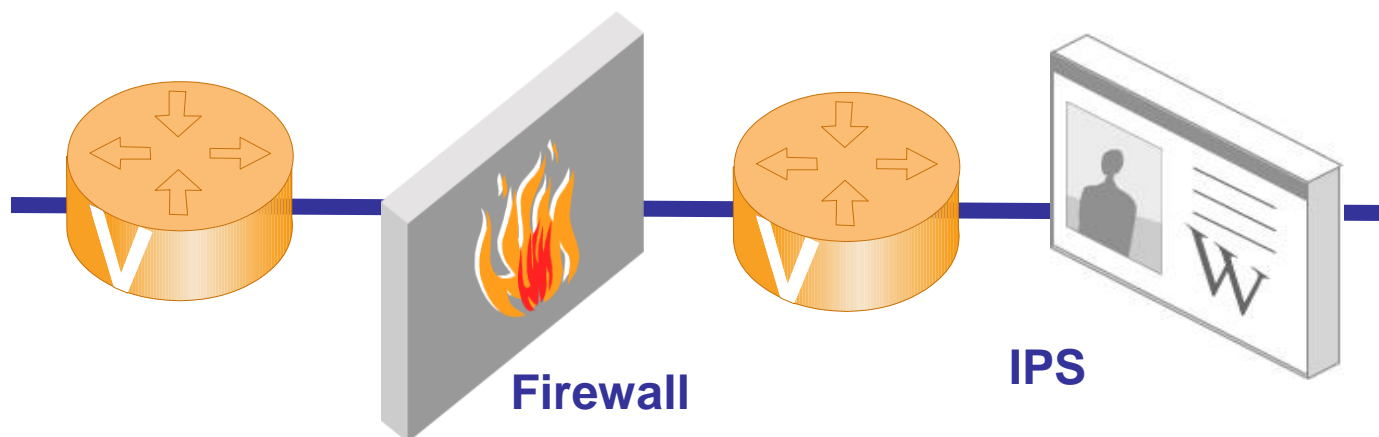
- University of Birmingham: MidReC EN
  - add NHS access: improved service to users
    - collect data from practices
    - allow NHS staff access to database
    - video-based training & support
- JANET Videoconferencing Service
  - NHS studio access to HE (+ FE + schools ...) conferences running over JANET





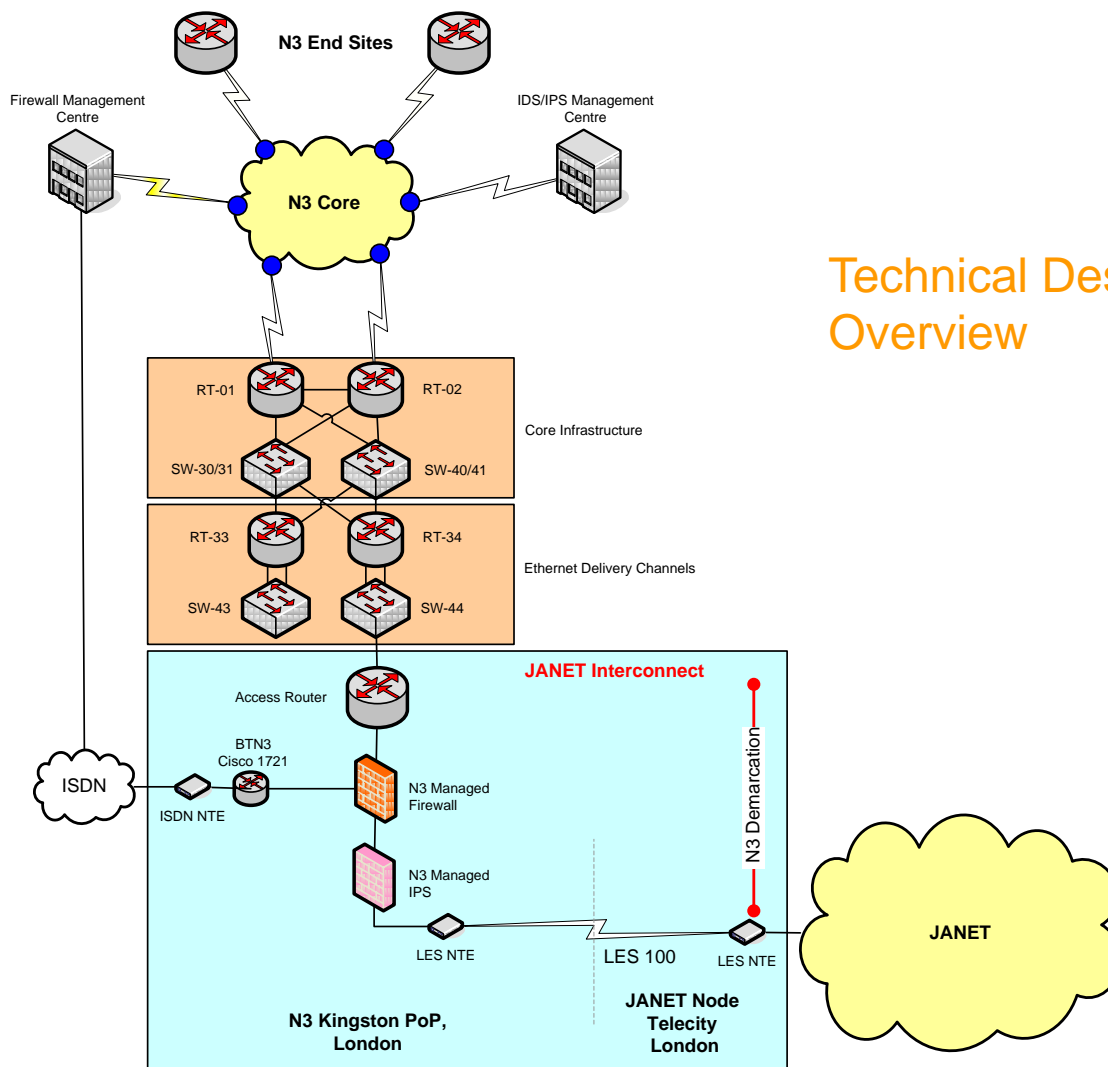
# Physical gateway

- connect JANET backbone & N3 core



- single 100 Mbps interconnection in London

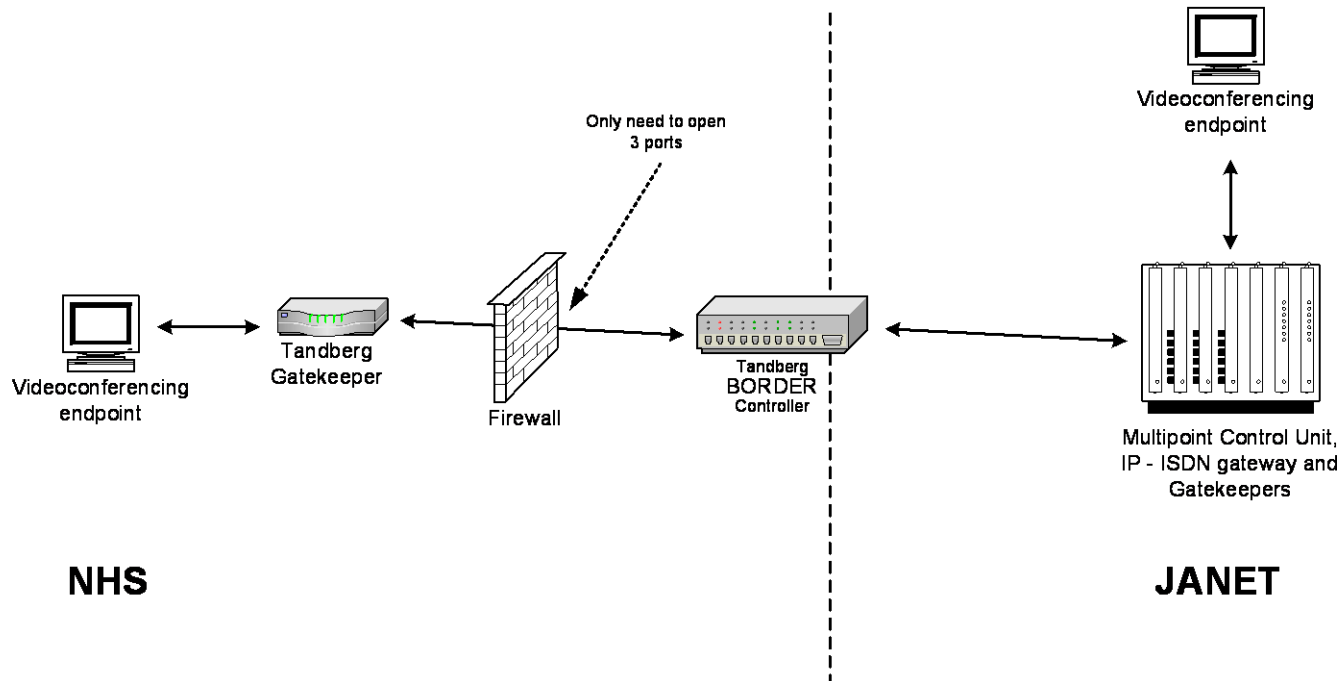




## Technical Design Overview



Videoconferencing – not officially part of initial set-up  
Tandberg Expressway equipment put in place though





# Above the plumbing

- IP addressing on N3
  - not fit to be seen in public
- procedures for authorising flows
  - N3 assumption that it initiates
- bandwidth flows across N3 core
  - enabling and supporting early adopters
- use of bilateral University/Trust links?

Resolved!

**walled garden  
meets  
public square**





# Scotland

- Looking for a suitable early adopter in Scotland (as N3 “covers” England and Scotland)
- Longer term will hopefully fit in with NHS Scotland Infrastructure developments





# Wales & NI

- Wales
  - DAWN2, North & South Wales MANs transition to AWPSN (All Wales Public Service Network)
  - where to gateway?
- Northern Ireland
  - Engagement later



# Current timescales



<del>December</del> <b>March</b> 2007	technical design completed formal orders made ✓
<del>March</del> <b>July</b> 2007	gateway comes into operation
<del>May</del> <b>July/Aug</b> 2007	first use by early adopters
November 2007	initial evaluation of operational and early adopter experience





# Other part to the story

- Implementing the hardware and link is only part of the project
- UKERNA [now JANET(UK)] has to achieve NHS CfH “Statement of Compliance” as the aggregator (manager of the Gateway)
- Each education and research legal entity will have to achieve “Statement of Compliance” to use the Gateway

See [www.connectingforhealth.nhs.uk/systemsandservices/infogov/](http://www.connectingforhealth.nhs.uk/systemsandservices/infogov/)







Statement of Compliance is the new information governance process in England

Is this satisfactory in Scotland?





## Statement of Compliance Requirements – UKERNA [now JANET(UK)!] as aggregator

101 UKERNA must have adequate governance in place to support the current and evolving IG agenda

102 UKERNA must have access to adequate confidentiality and data protection expertise

103 UKERNA must have access to adequate information security expertise

108 (summary score)

110 UKERNA must have formal contractual arrangements that include information governance requirements with all contractors and support organisations

111 All those carrying out work on behalf of UKERNA must have employment contracts that clearly identify their responsibility for compliance with information governance requirements

113 UKERNA must assess staff training needs and ensure that job/role specific information governance training is provided to all staff.

201 Does UKERNA have a confidentiality code of conduct that provides staff with clear guidance on the disclosure of patient personal information.

302 Documented and accessible IG event reporting and investigation procedures must be in place and explained to staff.

308 UKERNA must ensure that digital information shared with other organisations is secure in transit

313 Procedures must be in place to ensure that all information networks under UKERNA's control are configured, managed, operated and used in a secure manner.

Through Information Governance Toolkit: self-assessment





# Towards a roadmap

- Now
  - Fast web access
  - Thin client
  - IP videoconferencing
- Future:
  - Services based at the Gateway?
    - Denmark Agreement System?
    - Janet roaming server?
    - Research databases?
  - Sessions initiated outside N3?
    - Eg National Centre for Young People with Epilepsy (NCYPE)





Being tackled:

If web based or thin client (or H.323 for videoconferencing)

Survey March 2006 Application or Service (on University network being accessed from a device on an NHS network)	Percentage of Responders Expressing an Opinion			Number of Responders
	Desired within 3 years %	Existing connectivity or planned already %	Useful sometime or not required %	
Specialist applications for learning: software and multimedia resources	42	31	28	36
Videoconferencing	41	21	38	34
Other audio-visual services eg telematics, video-streaming	39	36	24	33
Research databases	29	44	26	34
Ejournals and knowledge bases	26	58	16	38
Management Information Systems (MIS) eg student registration, personnel, finance	25	33	42	36
Personal filestore	24	50	26	34
Voice over IP applications (VOIP)	24	14	62	29
Other inhouse databases (not research)	21	38	41	29
Intranet	20	49	31	35
Virtual or Managed Learning Environments (VLE or MLE)	19	67	14	36
Desktop tools eg MS office	14	20	66	35
email	8	73	19	37





Survey March 2006	Percentage of Responders Expressing an Opinion			Number of Responders
	Desired within 3 years %	Existing connectivity or planned already %	Useful sometime or not required %	
Local Trust intranet	55	16	29	31
NHS Intranet (eg nww. In England)	55	13	32	31
Videoconferencing	50	11	39	28
Other audio-visual services eg telematics, video-streaming	48	8	44	25
Specialist applications for learning: software and multimedia resources	48	7	44	27
Research databases	44	15	41	27
Ejournals and knowledge bases	43	23	33	30
Picture Archive and Communications Systems (PACS)	38	8	54	26
Clinical patient-based record systems	37	17	47	30
Learning Management Systems (LMS)	36	12	52	25
Personal filestore	33	17	50	24
Other inhouse databases (not research)	33	6	61	18
email	30	40	30	30
Voice over IP applications (VOIP)	30	10	60	20
Virtual or Managed Learning Environments (VLE or MLE)	26	22	52	23
Management Information Systems (MIS) other than LMS eg estates, personnel, finance	21	16	63	19
Desktop tools eg MS office	15	12	73	26





# Roadmap continued

- Part of next phase of N3 JANET Gateway project to review other requirements and services that are required and how they might be supported with the early adopter Gateway
- Along with working with other potential early adopters for the initial services





# Other Brief Updates

- London NHS-HE Forum on 10<sup>th</sup> May
- Denmark agreement system & EU project ([www.hdn.eu](http://www.hdn.eu)) – Scottish Centre for Telehealth, Aberdeen
- Aberdeen Matthew Hay project
- Sponsored JANET connection applications
- UK Access Management Federation for Education & Research & the NHS in the home countries







# Hopefully if there is a next time?

- Dundee University and the NHS in Tayside are working on a Citrix solution
- NHS Lothian – *“we are in the process of finalising an SSL VPN solution for external connectivity to NHS Lothian to allow staff access to systems and data to a wider community. We're using the same solution that we have for the University , but with added authentication and security to allow folks coming in from the Internet”*







# Thank you

- Questions?
- [www.nhs-he.org.uk](http://www.nhs-he.org.uk)
- M.Teague@ukerna.ac.uk

