

Presentation to NHS-HE Forum

The Scotland Wide Area Network (SWAN)

Edinburgh 27th October 2016

National Information Systems Group,
NHS National Services Scotland

Topics

- Background
- SWAN Value Added Services
- Governance
- SWAN Services
- HE opportunities?
- NHS Non SWAN programmes

What is SWAN?

- Scottish Wide Area Network
- Scotland PSN but with two tier security approach
- Enables secure sharing of information between Public Sector Organisations
- Is a Contract that is available to all Public Sector entities in Scotland
- Delivered by Capita

Progress

- 49 Organisations have now joined SWAN
- Over 4600 out of 5300 sites live
- Roll-out slower than expected
- N3 Scotland closed down in August 2016
- Improved Service
 - Independent Audit
 - Service Improvement plan (SIP)
 - Major incidents significantly reduce
- Value added services (VAS)
 - Managed LAN now available and more to follow in the next year

Who has joined SWAN?



Sector	Organisations
Local Government (14)	<ul style="list-style-type: none">• Pathfinder North (Highland, Argyll & Bute, Moray, Orkney, Western Isles and Angus Councils)• Pathfinder South (Dumfries and Galloway and Scottish Borders Councils)• West Lothian Council• East Renfrewshire Council• Inverclyde Council• Aberdeen City Council• North Lanarkshire Council• Midlothian Council
Central Government / National Public Bodies (10)	<ul style="list-style-type: none">• Skills Development Scotland,• Scottish Enterprise & HIE• SEPA , Northern Lighthouse Board• Historic Environment Scotland• Scottish Natural Heritage• Scottish Qualifications Authority• Creative Scotland• Care Inspectorate
Health (22 Boards)	<ul style="list-style-type: none">• NHS Scotland
Education (2)	<ul style="list-style-type: none">• Education Scotland• University of the Highlands & Islands
Central Government (1)	<ul style="list-style-type: none">• Scottish Government

Further Engagements



- A further 34 organisations are currently engaging with SWAN including:

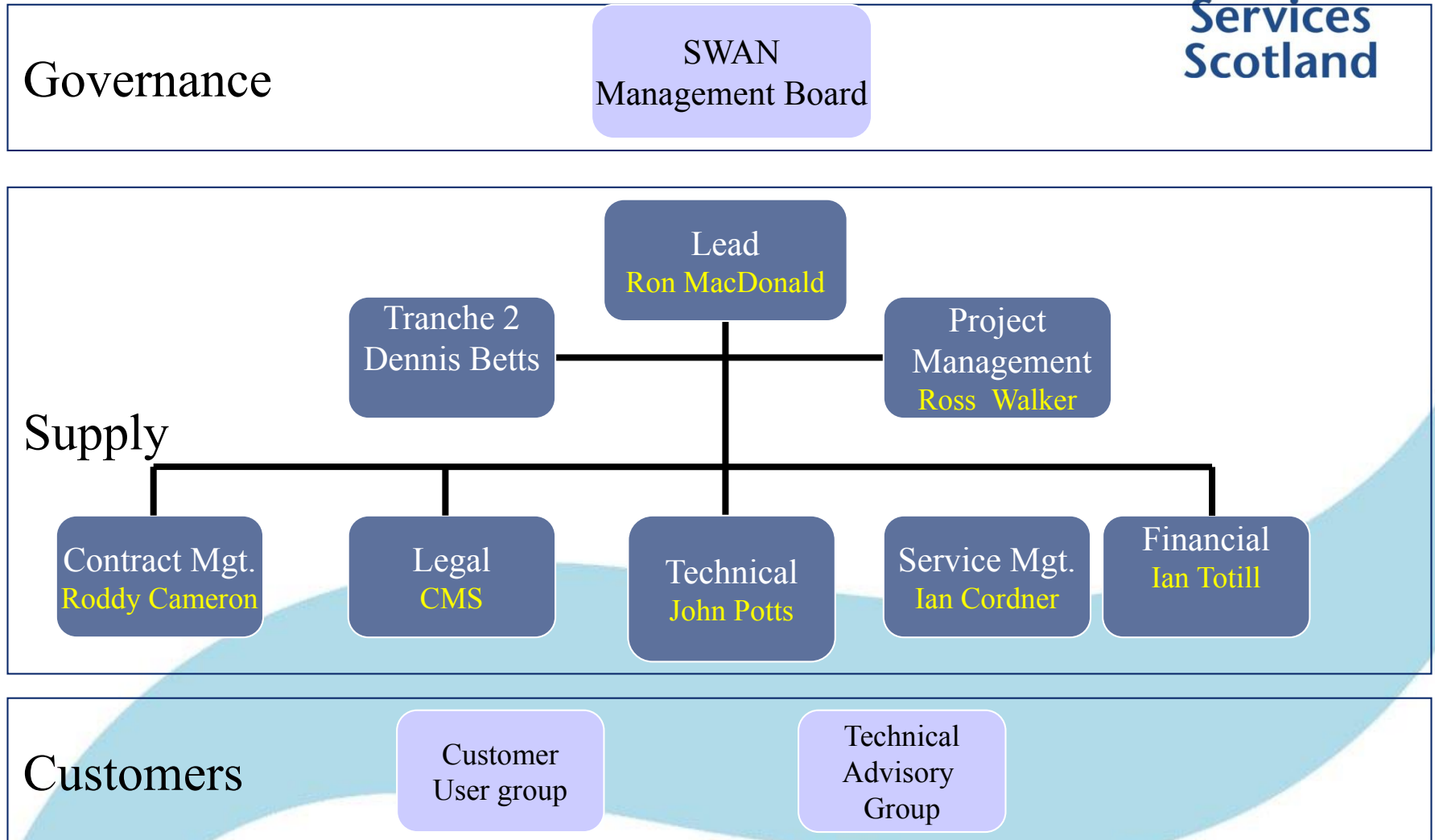
South Lanarkshire Council	Fife Council
East Ayrshire Council	Aberdeenshire Council
Perth & Kinross Council	North Ayrshire Council
West Dunbartonshire Council	East Lothian Council
East Dunbartonshire Council	Midlothian Council
Falkirk Council	Shetland Council
Loch Lomond & Trossachs National Park	Cairngorms National Park
Police Scotland	Sports Scotland

- Only 7 Organisations have so far declined to join SWAN, includes:
 - City of Edinburgh Council
 - Scottish Fire & Rescue Service
 - Renfrewshire Council
 - Crown Office and Procurator Fiscal Service

NHS SWAN Review

- Bandwidth provided to most sites have remained the same during the two years to move from N3 to SWAN.
- Review of future bandwidth in progress
- Remotely hosted GPIT will require a large increase in bandwidth.
- Analysis and Report produced. FTTC/NGB is the new recommended minimum. Awaiting funding confirmation.
- Review of hospital bandwidth now in progress.

SWAN Governance Structure



SWAN Design Authority and SWAN User & Delivery Forum

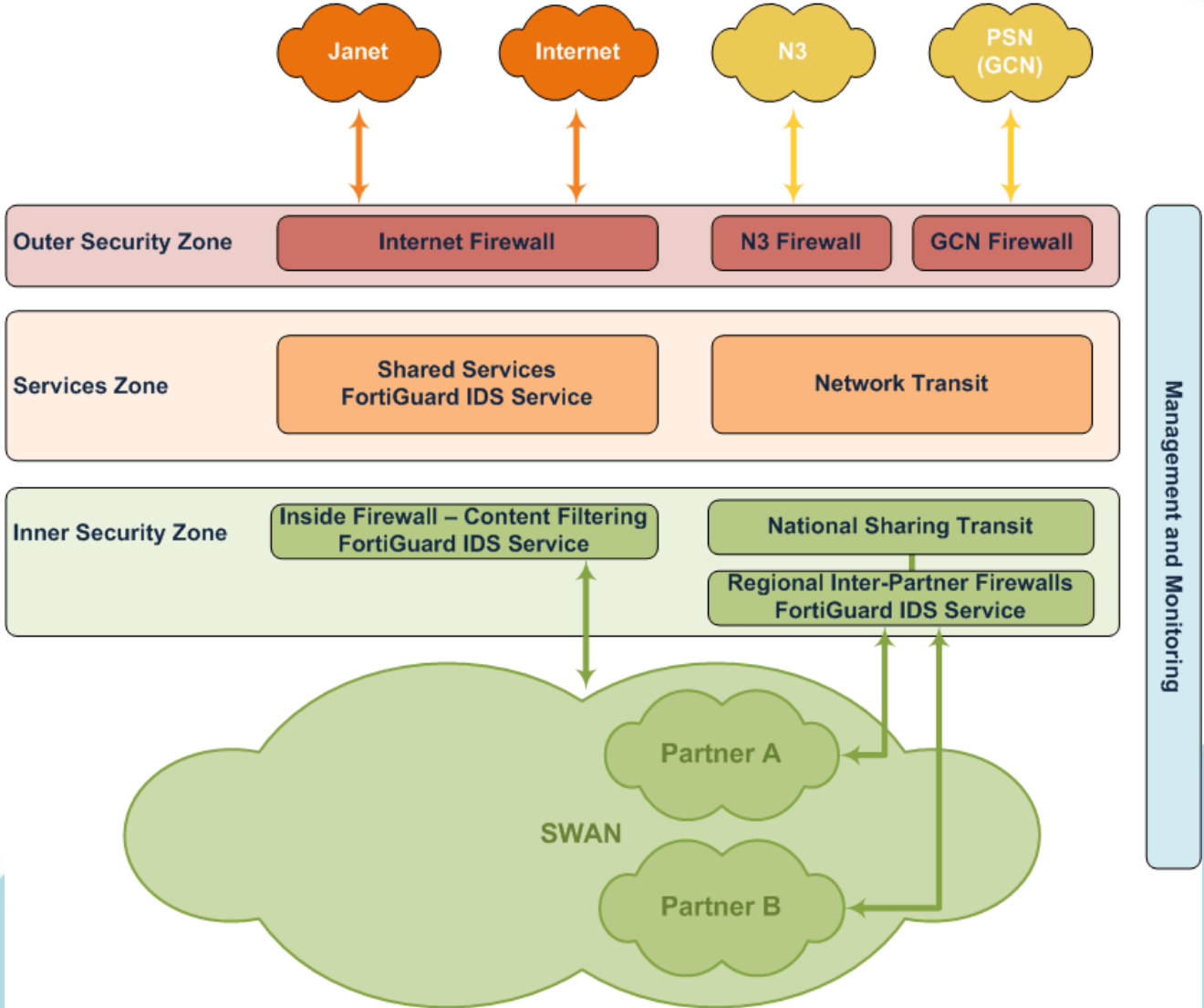


- SWAN Design Authority
 - Considers design, technical, architectural, resilience, innovation and security matters of SWAN Services
 - Reviewing possible additions and deletions to the Catalogue and Shared Services
 - Includes the SWAN Information Assurance Panel
 - Includes representation from existing and any eligible future Call-Off Customers.
- SWAN User and Delivery Forum
 - Considers all matters regarding the delivery and functioning of the Services
 - Only Service Recipients able to attend

Services - High level

Shared Services	Gateways	Catalogue
Service desk	JANet	Broadband 1M to 1Gb/s
Network Management	PSN	Options of secondary ccts
DNS & NTP	N3	User and site VPN
Mail relay	Internet	Gold silver bronze service levels
Web filtering		Value added service (VAS)
Remote access		
CPE management & Support		

The SWAN Security Architecture



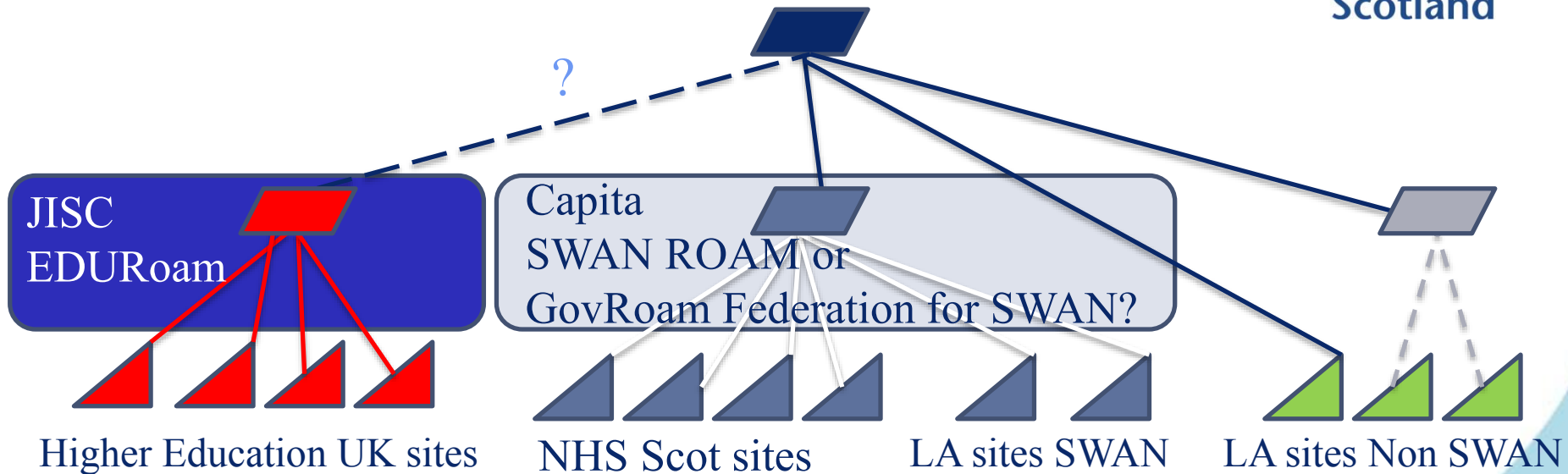
Value Added Services

1. Managed LAN Service – Mar 2015
2. Small Site Secure WiFi – Available Oct16
3. Voice Services
 - SIP Trunks
 - Non Geographic Numbering Services
 - Managed IP Voice Services (including IP PBX and Hosted)
4. Roaming services
5. Video Conferencing
6. Secure e-mail services

ROAMING - Scope

- **Business Requirement**
 - Sector demand for WiFi for Staff
 - SG desire that Public Sector sites offer WiFi access to public
 - Health – Social Care integration
 - Teaching Hospital driving Health – HE demand
- **Can the complete solution be delivered by SWAN?**
 - All NHSBoards on SWAN
 - All HE not on SWAN
 - Half Local Authorities on SWAN Half not on SWAN

ROAM – Hierarchy Development



- Example shows Higher Education, Health and Local Authorities
- Only SWAN Members could get full service under a SWAN solution
- Does this mean that a higher level Radius control is required
- Should it sit at UK or Scotland level?
- What about non SWAN Public Sector in Scotland?
- Conclusion. We need a service that would control both SWAN and non SWAN Customers in Scotland and broadcast one SSID.

 Radius Control  Local Radius Control

GovRoam Pilot



- NHS Greater Glasgow and Inverclyde council have agreed to pilot Gov Roam
- Support health and social care partnership working.
- Starting in October 2016

Video Conferencing

- NHSScotland making its national video conferencing IP service more accessible to SWAN and non SWAN members.
- Additional investment to extend guest access. (Gatekeepers etc)
- Infrastructure implementation in progress.
- Working with JISC to create a SWAN to Janet direct interconnect.
- Looking to allow inbound to NHS from HE booked bridge calls

Secure e-mail

- Existing SWAN relay service unused
- Demand for secure relay service from Scottish Government, local Authorities and Police Scotland for an affordable alternative to Egress service.
- SWAN to adopt the new GDS standards.
 - Implement secure TLS encryption
 - Use Domain-based Message Authentication, Reporting and conformance (DMARC) to verify the sending domain.
- Discussions with Capita to upgrade the existing SWAN relay service ongoing

NHSMail2 Update

- Accenture awarded contract
- Microsoft platform in a private cloud.
- To replace NHSMail services for over 100,000 NHSScotland staff
- Transition complete September 2016
- IM & Presence due November 2016
- optional services such as Skype for Business (in pilot around November)
- NHSScotland looking at Office 365
 - NHSMail - O365 pilot in progress

PACS Update

- Upgrade (V11) programme complete
- Enhanced functionality including compression of images to save cost.
- Secure gateway with HE Farr in place to enable transfer of uncompressed images.
- Transfer of images on hold pending Security (PEN) Test followed by end to end application test.

