

An Overview & its Relationship with Janet

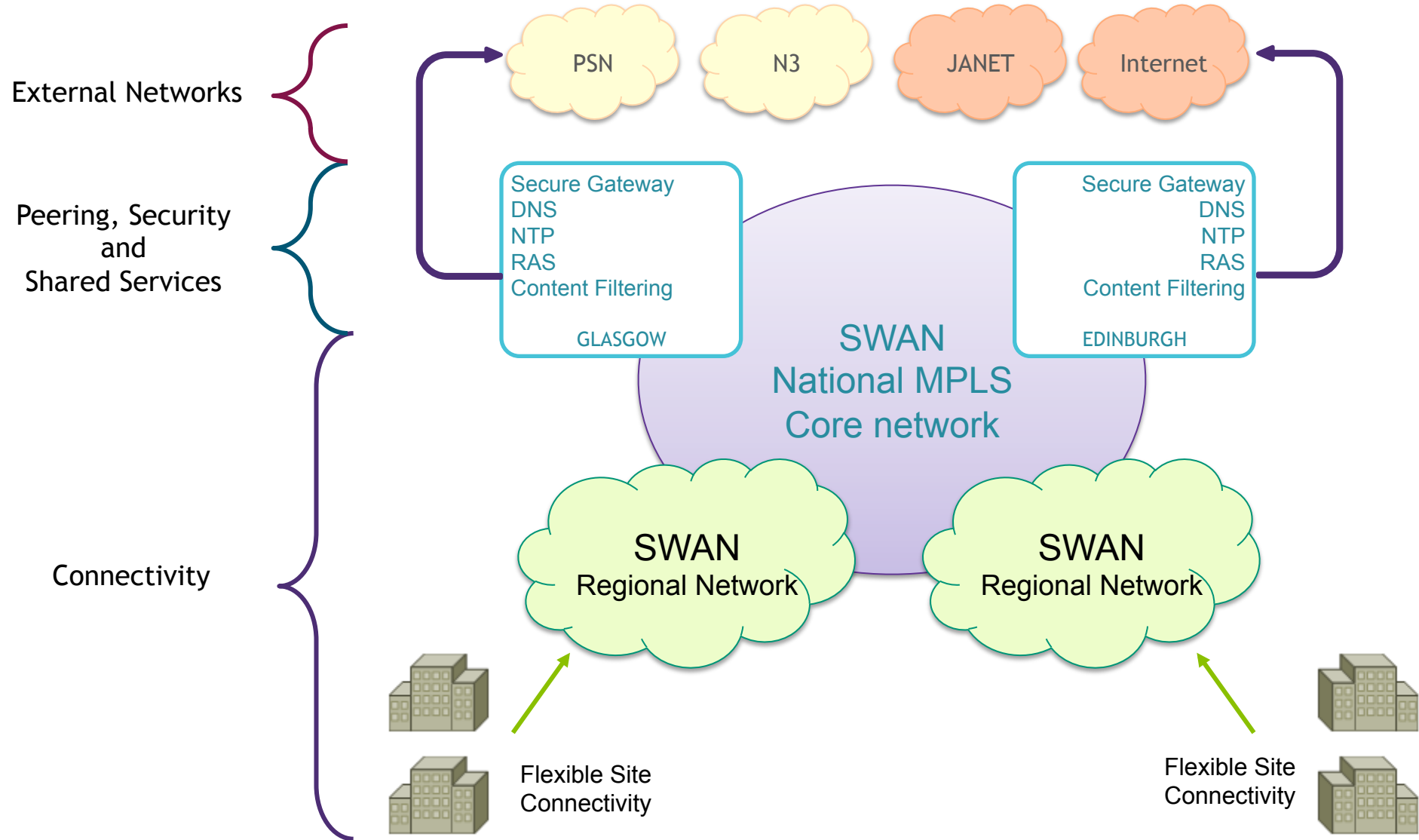
The Scottish Wide Area Network (SWAN) Programme

Andy Williamson
SWAN Programme Manager
Scottish Government

Agenda

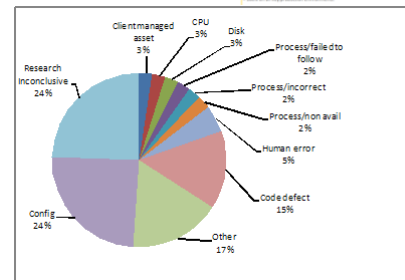
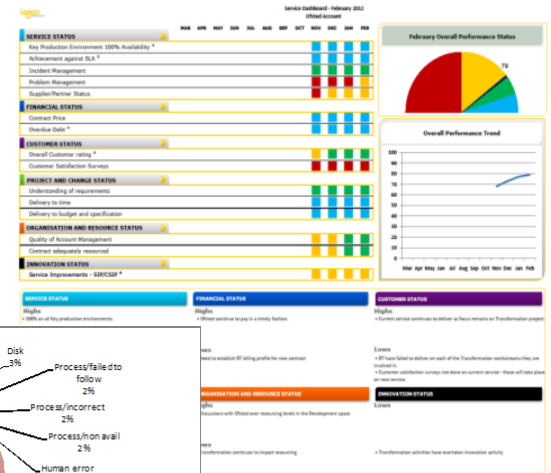
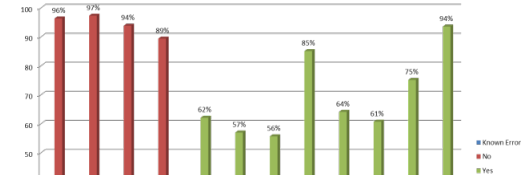
- Overview of SWAN Architecture
- Overview of Services Integrator approach
- SWAN Core and Regional Networks
- Overview of SWAN Services
- SWAN Contract Structure
- SWAN Programme Values
- SWAN and JANET

Scotland's Network: SWAN

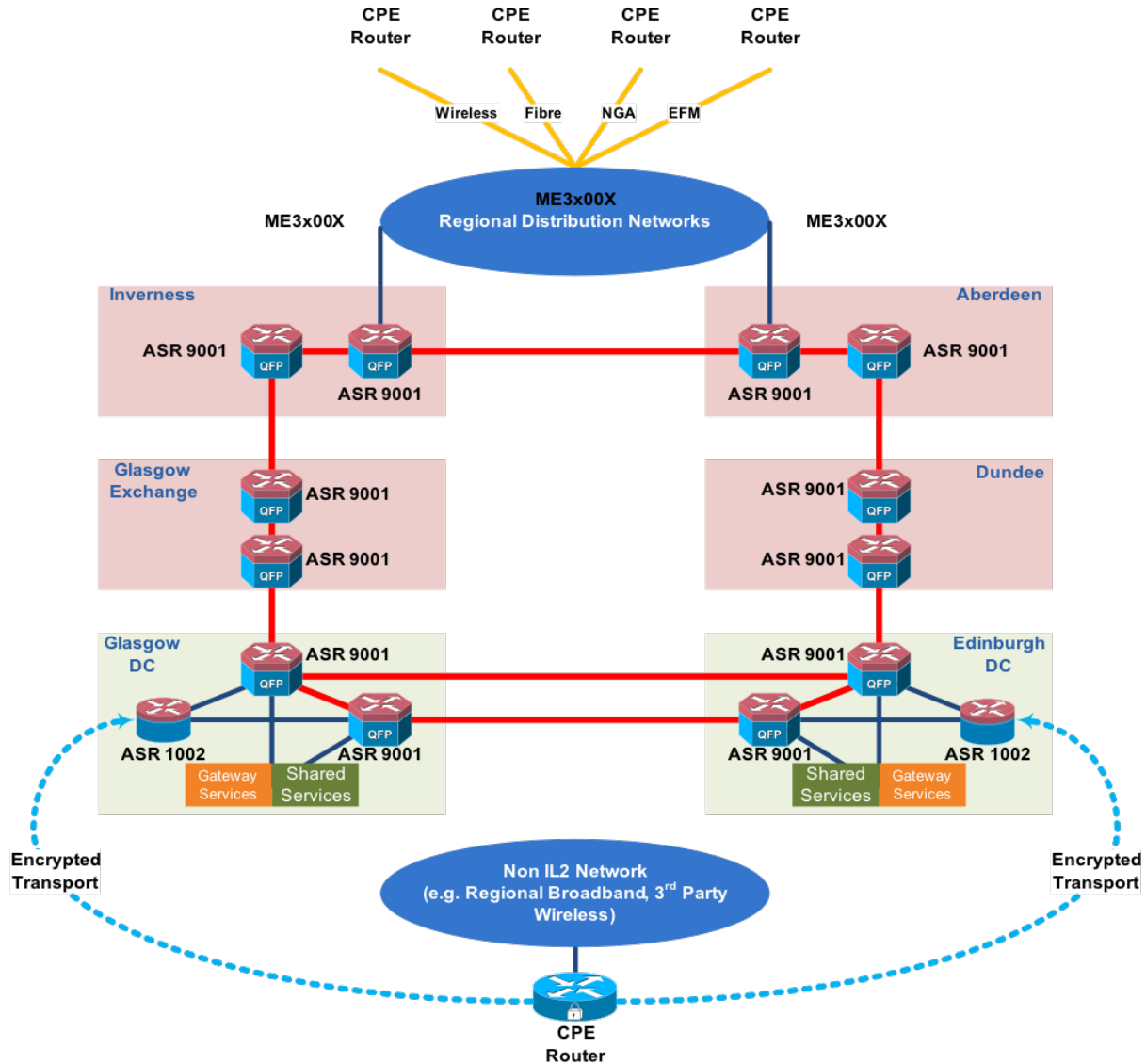


Solution Approach

- Services Integrator approachmost appropriate supplier
 - BTW, BTO, VMB, VF, TTB, SSET and ST all engaged
- High-capacity core network, covering 6 key nodes across Scotland
- Wide range of access technologies as standard
- Security options - IL0 and IL2 initially
- SWAN Network Operations Centre in Scotland
- Online Service Information Portal
- Bespoke and Value Added Services



Backbone Network



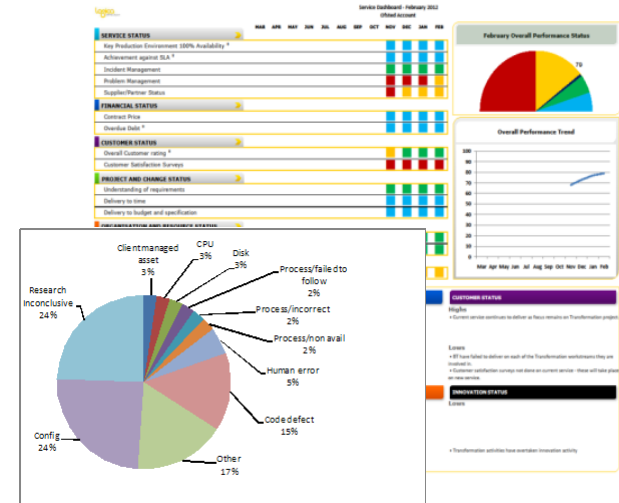
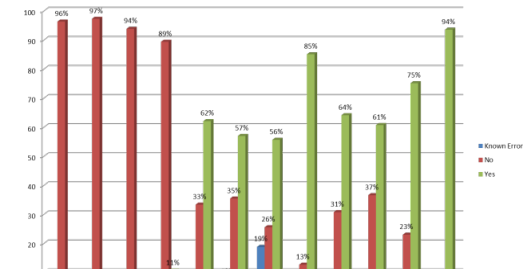
SWAN Shared Services

- Shared Gateways

- N3
- Internet
- Janet
- PSN

- Shared Technical Services

- DNS (hosting and resolution)
- NTP
- Mail Relay (including AV, anti-spam)
- Web filtering (IWF and URL)
- Secure Gateways (internal and external)
- Remote Access (per-user cost)
- Network monitoring
- CPE management and support



Connectivity Services Catalogue

- 54 initial Connectivity Catalogue Items
- Bandwidths from 500Kbps to 1Gbps
- Range of delivery technologies
 - ADSL2/ADSL2+/Bonded ADSL
 - Synchronous Ethernet First Mile
 - Asymmetric Ethernet First Mile
 - Fibre-to-the-Cabinet
 - Wireless
 - Fibre
 - Resilient options available
- Internet Service
- Point-to-point
- User and site VPN
- Different performance characteristics and SLA based on technology

SWAN Contract Structure

- **SWAN Framework Contract**

- Sets out the contractual relationships between the various parties
- The Shared Services service description
- The Catalogue Services which can be purchased
- The service levels and default commercial terms that apply

- **SWAN Shared Services Call Off Contract**

- Between NSS and Capita for all customers
- It defines how NSS procures the Shared Services
- NSS pays Capita for the Shared Services
- NSS recovers Shared Services charges from the other customers
 - An apportionment model has been defined and is set out in the Membership Agreement
 - Based upon the Primary Connectivity bandwidth and service levels

- **Customer-specific Call Off Contract**

- Specific contract between an individual customer and Capita
- Includes a customer-specific Initial Order
- Each service has an individual term under the Call Off Contract
- Co-terminated with SWAN Framework Contract

- **SWAN Membership Agreement**

- Pre-requisite for a Call Off Contract
- Between a public sector body and the SWAN Authority
- Capita plays no part in the Membership Agreement

SWAN Programme Values

- Solution that delivers real choice
 - Connectivity options
 - Shared services that add real value
 - Value added services
- Make the programme easy to join
- Innovation not optional
- Focus on service excellence
- SWAN - The foundation for shared services

SWAN  **Assured**

An enabling
infrastructure for
Scotland - *not solely a
public sector network*

SWAN and JANET

- It was clear that the JANET/SWAN relationship needed to be formalised
 - Stephen Percival presented a paper to the SWAN Programme Board regarding the JANET infrastructure plans
 - Input from Bob Day and Alun Hughes (and other Scottish HE Stakeholders)
- Three areas for discussion
 - JANET 6
 - But likely to be out-of-scope
 - Regional Access Networks could be in scope
 - Could JANET act as a Contractual Hub?

Proposition

- **JANET 6**

- SWAN will not be capable of delivering the services that the UK new national infrastructure is designed to do
 - Therefore no conflict of interest?

- **Regional Access Networks**

- As and when the RAN's in Scotland are due for renewal, and;
- SWAN can deliver the appropriate services at an acceptable price, then;
- SWAN is in contention to become the RAN provider for Scotland

- **SWAN Target Operating Model**

- JANET has offered to become the Contractual Hub for Education in Scotland
 - NOT just for HE but for the whole of Education as a sector across Scotland
 - Education Scotland wish to discuss this in more detail, especially for their own requirements, as well as for schools in general

Conclusion

- **JANET will be a provider of services to SWAN**
 - Internet Transit Services
 - IP address management
 - Video Conferencing Services
 - Others going forwards
- **JANET may also be a consumer of SWAN Services**
 - JANET Regional Access Networks
 - But not for the JANET 6 Backbone
- **JANET has suggested that it could become the Contractual Hub for Education in Scotland**
 - EdS to discuss in more detail with JANET
- **JANET and SWAN Governance**
 - JANET to remain on SWAN Programme Board

Any Questions or Comments?

Thank You

Andy Williamson
SWAN Programme Manager
Scottish Government
0131 244 8051
Andrew.williamson@scotland.gsi.gov.uk