



CabinetOffice



Public Sector Network Forum

Intellect

(March 31, 2010)

Making Government Work Better

Today's Agenda

0930-1000	Coffee
1000-1010	PSN Update from Programme Manager - Martin Gould
1010-1035	Creating the Market Place - Phil Gibson
1035-1100	Customer Adoption Commitments – Simon Foster
1100-1115	Break
1115-1140	Security – CESG
1140-1230	Standards and Testing - Geoff Hall
1235-1300	Q&A and wrap-up from Martin Gould
1300-1400	Light Lunch



PSN Programme Update

Martin Gould

PSN Programme Update

- Programme Plan baselined and signed off by Programme and Steering Boards
- First set of PSN Standards delivered in technical domain description document
- Testing completed with Juniper and Cisco which proves GCN Standards can be utilised by industry
- PSN Landing Points developed with Government Departments and is now available on the website
- Codes-IA Conditions available for 2-2-4 and 3-3-4, first full draft of Codes available end of April 2010
- PSNGB has met for the first time. GCNGB Constitution nearing completion
- PSN branding exercise completed and logo approved



Creating the Market Place

Phil Gibson

Why are we all Here?

Buy and sell more ICT?

Why are we all Here?

**Change our world to an internet
model?**

Why are we all Here?

Build a cloud?

Why are we all Here?

Save £500m?

Why are we all Here?

Protect £500m?

Why are we all Here?

Protect our jobs?

Why are we all Here?

No !

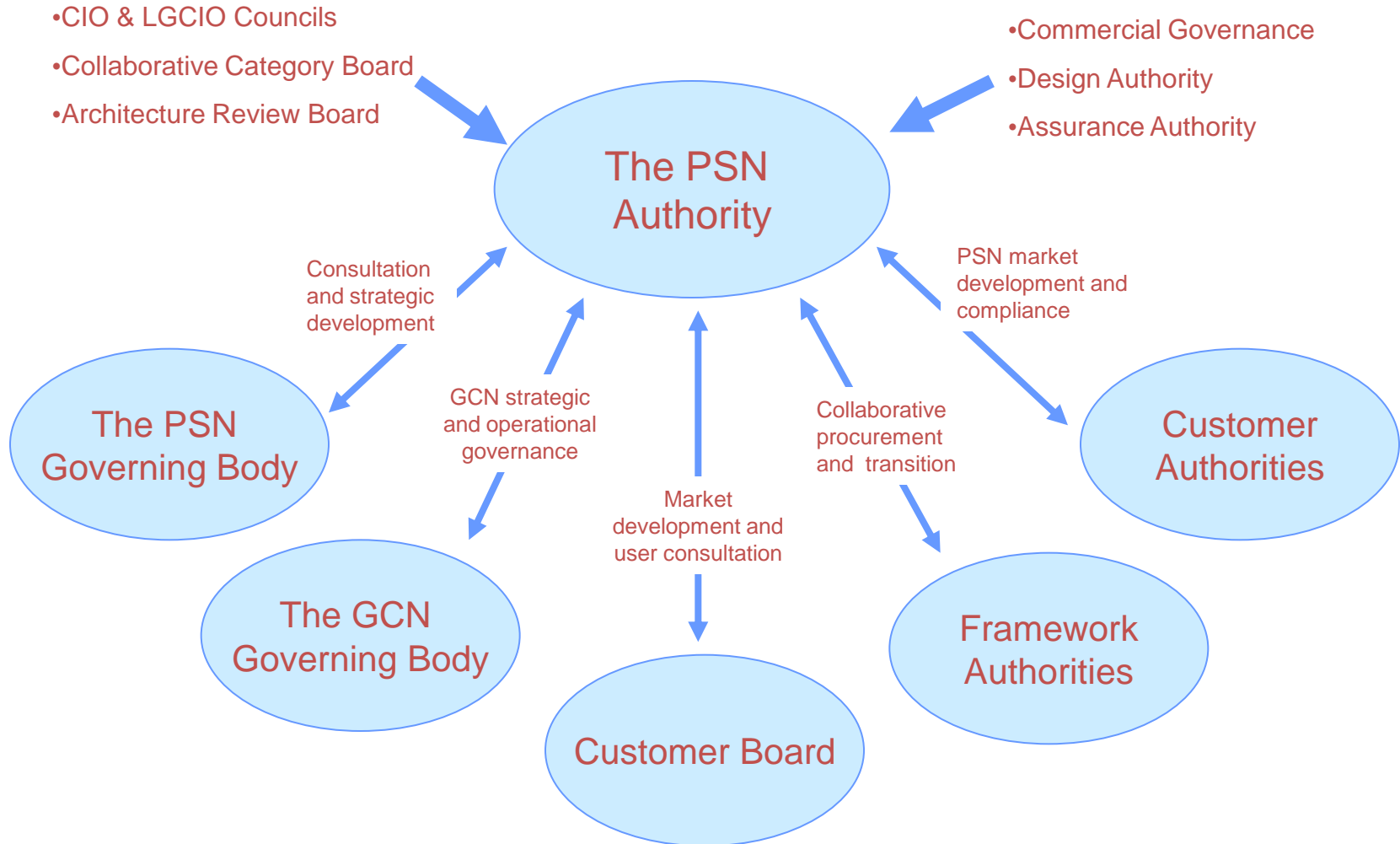
Why are we all Here?

**We are here to create a new market place,
which will.....**

Why are we all Here?

Save public sector money
+
Save suppliers money
+
Save the planet

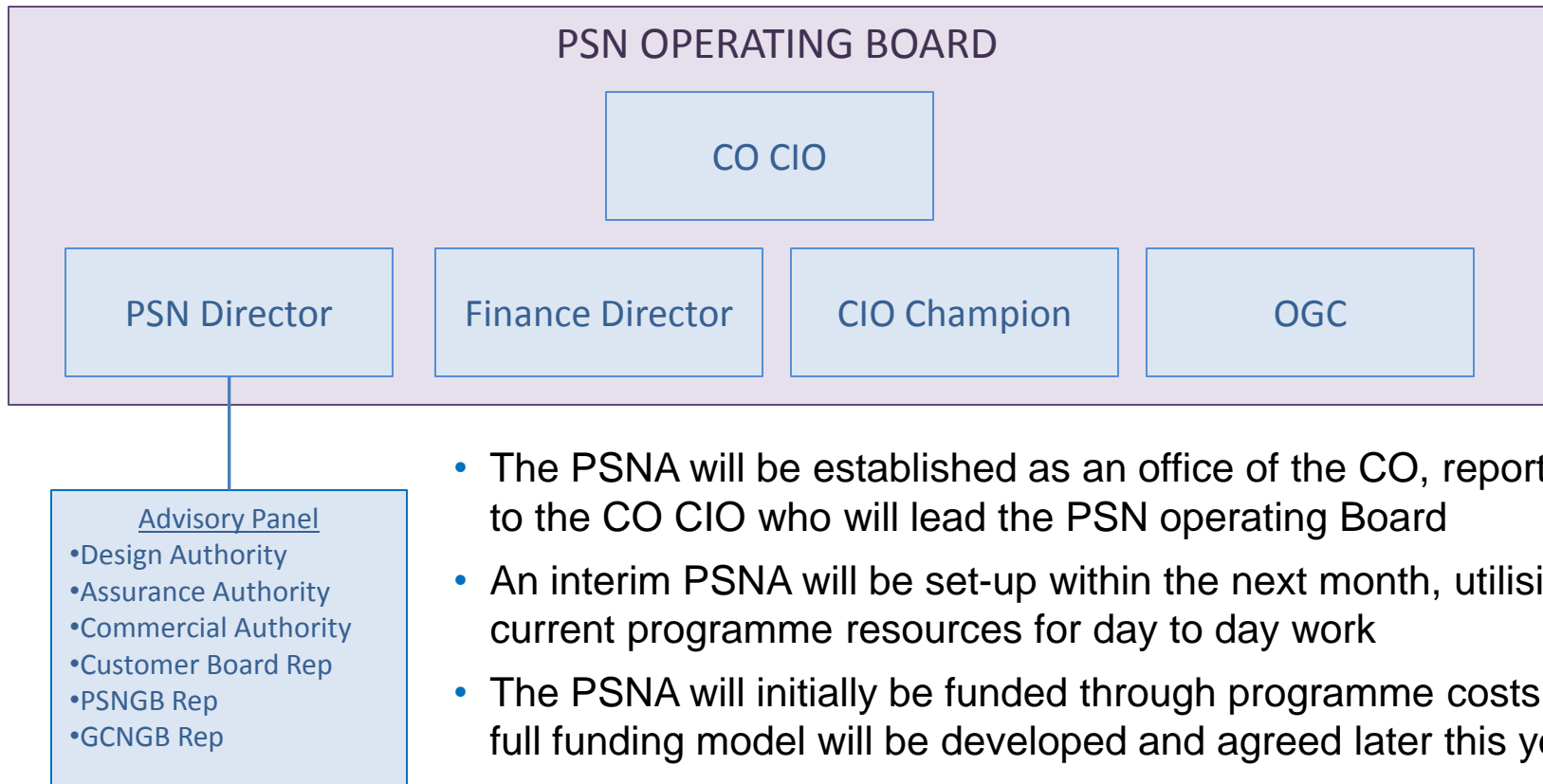
Governing the PSN Market Place



The PSN Authority

- The PSNA will be an independent body responsible for strategic governance and operation of the PSN
- Overseen by a PSN operating Board the PSNA will set-up and maintain agreements with public sector organisations allowing them to procure and use PSN compliant services
- Through the roles of design Authority and Assurance Authority it will proactively monitor and maintain technical and commercial standards and endorse new customers and suppliers
- The PSNA will be low cost, credible (to both the supply and customer communities), and, be timely in its actions and decisions

Establishing the PSNA



- The PSNA will be established as an office of the CO, reporting to the CO CIO who will lead the PSN operating Board
- An interim PSNA will be set-up within the next month, utilising current programme resources for day to day work
- The PSNA will initially be funded through programme costs; a full funding model will be developed and agreed later this year
- The transition from programme delivery to PSNA will take place as the PSN marketplace develops and suppliers and customers go live

The PSN Governing Body

- A forum for PSN Service Providers to develop the PSN market place
- A central representative body through which the collective views of PSNSP's can be channelled to the PSN Authority
- Providing 'supply side' support, commentary, guidance and advice on PSN policy, technology and security issues to the PSNA and other interested groups
- Promoting the PSN services industry and supporting the wider development of the public sector ICT strategy and market place
- Assisting with dispute resolution between PSNSP's, Direct Network Service Providers, GCN Service Providers and any other PSN stakeholder as may be appropriate

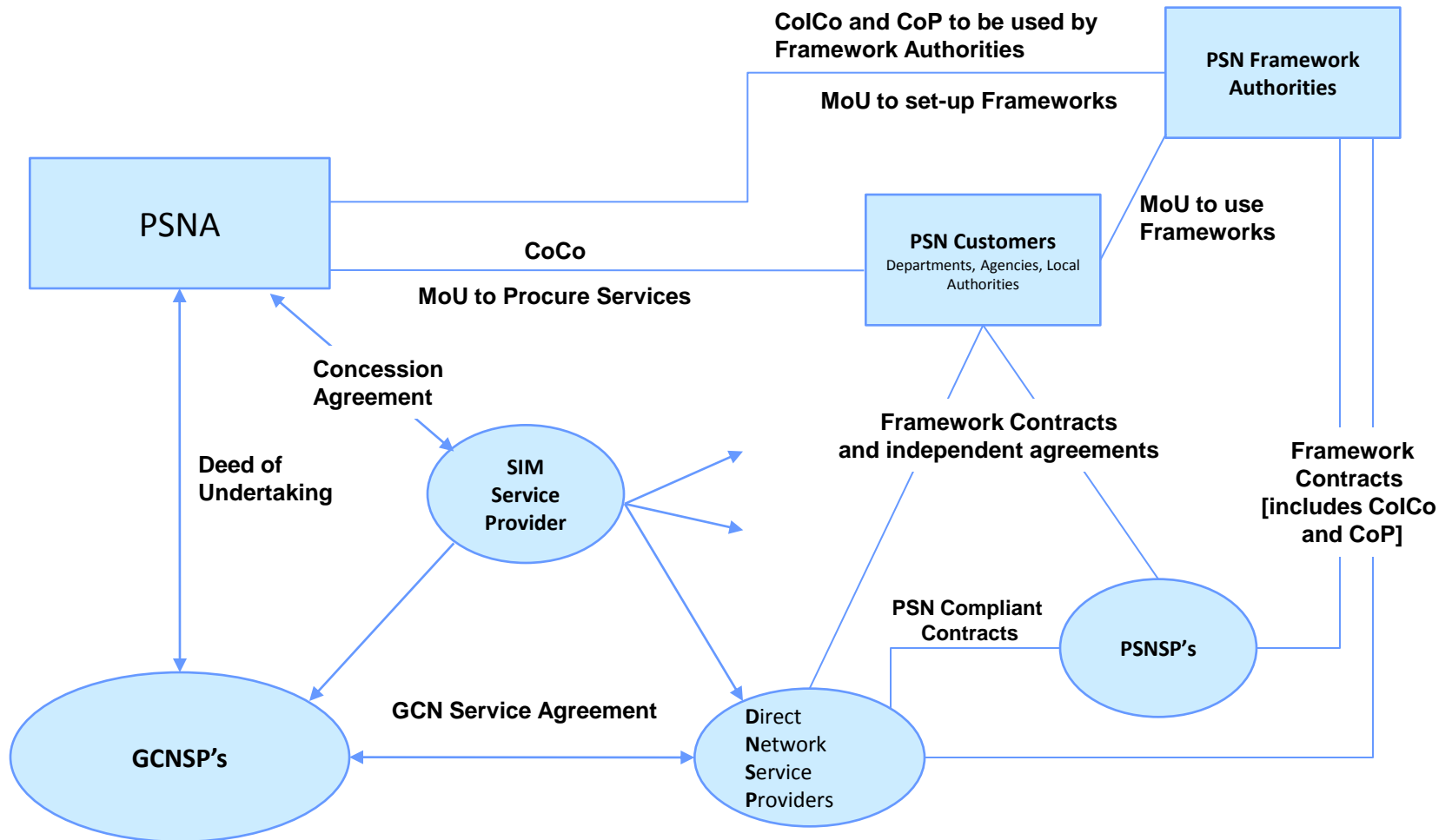
The GCN Governing Body

- Providing formal governance over the GCN and GCN Service Providers, (GCNSP's) with a focus on fair competition
- Regulating the operation of the GCN to the rules, conditions and standards defined within the GCNGB Constitution, the Deed of Undertaking and the wider PSN Operating Model
- A forum for GCNSPs and Direct Network Service Providers, which promotes improvement, innovation, discussion and development
- Assisting with dispute resolution within the GCN market place
- Chaired by HMG representative with equal number of GCNSP's and DNSP's

Developing the PSN Codes

	Code of Connection (CoCo) PSN Customer	Code of Inter-connection (CoICo) GCNSP and DNSP	Code of Practice (CoP) PSNSP
PSN Common Requirements (Strategic Context, Governance, Compliance and Commercial)	↑ ↓	↑ ↓	↑ ↓
Information Assurance Conditions			
Service Delivery Conditions			
Technical and Interoperability Standards			

The PSN Operating Model





Customer Adoption Commitments

Simon Foster

PSN Landing Points: Purpose - 1

- Landing Points are a means of describing how aligned a public sector body is with PSN
- PSN provides us with the overall direction of travel that enables G-Cloud
- Each Landing Point is defined in broad terms – the definition includes degrees of compliance with the commercial, technical, security, and service management elements of the PSN vision and ultimately, the broader ICT strategy

PSN Landing Points: Purpose - 2

- Each landing point represents a measurable stage in alignment with the overall ICT strategy
 - Later Landing Points include all the characteristics of earlier ones
 - Public Sector organisations are expected to continue to progress in future
- A public sector body can target the most appropriate Landing Point at its next opportunity
- The PSN Programme will work with key customer stakeholders to identify the most appropriate Landing Point for them, and use the aggregated information to understand the adoption profile for PSN

Landing Points

Landing Point 5: G-Cloud vision

- Use Government App Store, allow provisioning on demand and dynamic charging; use consolidated data centres
- (EU Procurement Law issues resolved)

PSN Landing Point 4: Commoditised services

- Procure services, transparently priced, from suppliers' standard portfolios
 - supporting pan-Govt Authentication, Authorisation and Addressing standards
 - that have undergone security /ICT strategy assurance, at suppliers' own risk

Effective
PSN
Marketplace

PSN Landing Point 3: PSN compliant interoperable services

- Recognise PSN Governance and comply with the PSN Codes of Connection for both intra- and inter-departmental network services.
- Procure services that support PSN technical standards, share data with PSN central services and use network services provided by Direct Network Service Providers

eg: PSN
Frameworks
1 and 2

PSN Landing Point 2: Shared Services

- Collaborate with other public sector organisations – or use existing collaborative frameworks – to procure both intra- and inter-departmental network services.
- Use frameworks that are multi-supplier, ensure flexibility of supply between suppliers

eg: GSi/ MTS
Transition
Frameworks

PSN Landing Point 1: Sharable services

- Buy network services from frameworks that can be used by the wider Public Sector
- Plan to consolidate and transition from any existing network services contracts
- Structure commercial arrangements so that network backbone services and products are commoditised and separated out

Most
Departments
are here

PSN Adoption Commitments (as at 25 March 2010)

Organisation	Contract end date	Target Landing Point	Decision date for next opportunity to implement PSN	Proposed Implementation route	Engagement point
Buying Solutions Convergence Frameworks	Feb-12	LP2	ITPD - Apr-June 10	Buying Solutions	Part of Programme
BS Frameworks 1 & 2	Jan-14	LP3	Q1 2010	Buying Solutions	Part of Programme
DWP	Mar-11	LP3	Decision made - part of extension	Via Contract Change	engagement
MOD	Apr-12	LP3	Q2 2010	Options being explored	CIO & commercial engagement
NHS - N3	Apr-11	LP3?	Q1 2010	Options being explored	Technical, CIO & commercial engagement
Org 1	TBD	TBD	TBD	Lead agency TBD	possibly on behalf of group.
BIS - JANET	Apr-11	LP3 as DNSP	TBD	TBD	Technical engagement
NPIA	Sep-11	LP3+	Q1 2010	Collaborative Framework	Commercial and CTO engagement
Home Office	2016 or earlier	LP3	by 2016	Options being explored	CTO & Commercial engagement
HMRC	2017	LP1	Q1 2010	Via Contract Change	IT Strategy engagement, CIO/Commercial
MOJ	2012/ 2013	LP3+	Q1 2010	Options being explored	Commercial/WAN Strategy engagement
TFL & GLA	Various	LP3	Q2 2010	Collaborative Agreement	IM Strategy engagement
Org 9	2018	LP2	Decision made	Via Contract Change	Awaiting strategy development
FCO/Echo	Jul-10	LP2	Decision made	Collaborative Agreement	on Programme Board
MET Police	2012	LP3	Q2 2010	Options being explored	IM Strategy engagement
Hants & IOW	2019	LP3	Decision made	Collaborative Agreement	on Programme Board
Kent PSN	Nov-12	LP3	Decsion made	Collaborative Agreement	Workstream engagement
Dorset PSN	Jun-10	LP3	Decision made -OJEU Apr 10	Collaborative Agreement	Transition workstream
Org 15	2011	LP3?	Q3 2010	Collaborative Agreement	Technical & Transition engagement
Cambridge	Mar-11	LP3	Decision made OJEU May 10	Collaborative Agreement	Transition workstream
Org 17	Jun-10	LP3 TBC	OJEU Dec 09	Collaborative Agreement	Transition workstream
Org 18	Jun-10	LP3 TBC	OJEU Dec 09	Collaborative Agreement	Transition workstream
Wales	TBD	LP3 as DNSP	Decision made	Collaborative Agreement	Transition workstream

Time for





Security Workstream Update

CESG

Security Workstream

The Security workstream has several groups tackling specific issues

- Accreditation and Authorisation
- Encryption and key management
- Identity Management (Authentication and Authorisation)
- Protective Monitoring and (Security) Incident Management

Brands are left at the door and Chatham House Rule Used

The Technical Workstream and Design Authority is represented in a number of the groups

Security Workstream Deliverables

Since the last Forum, the following has been achieved

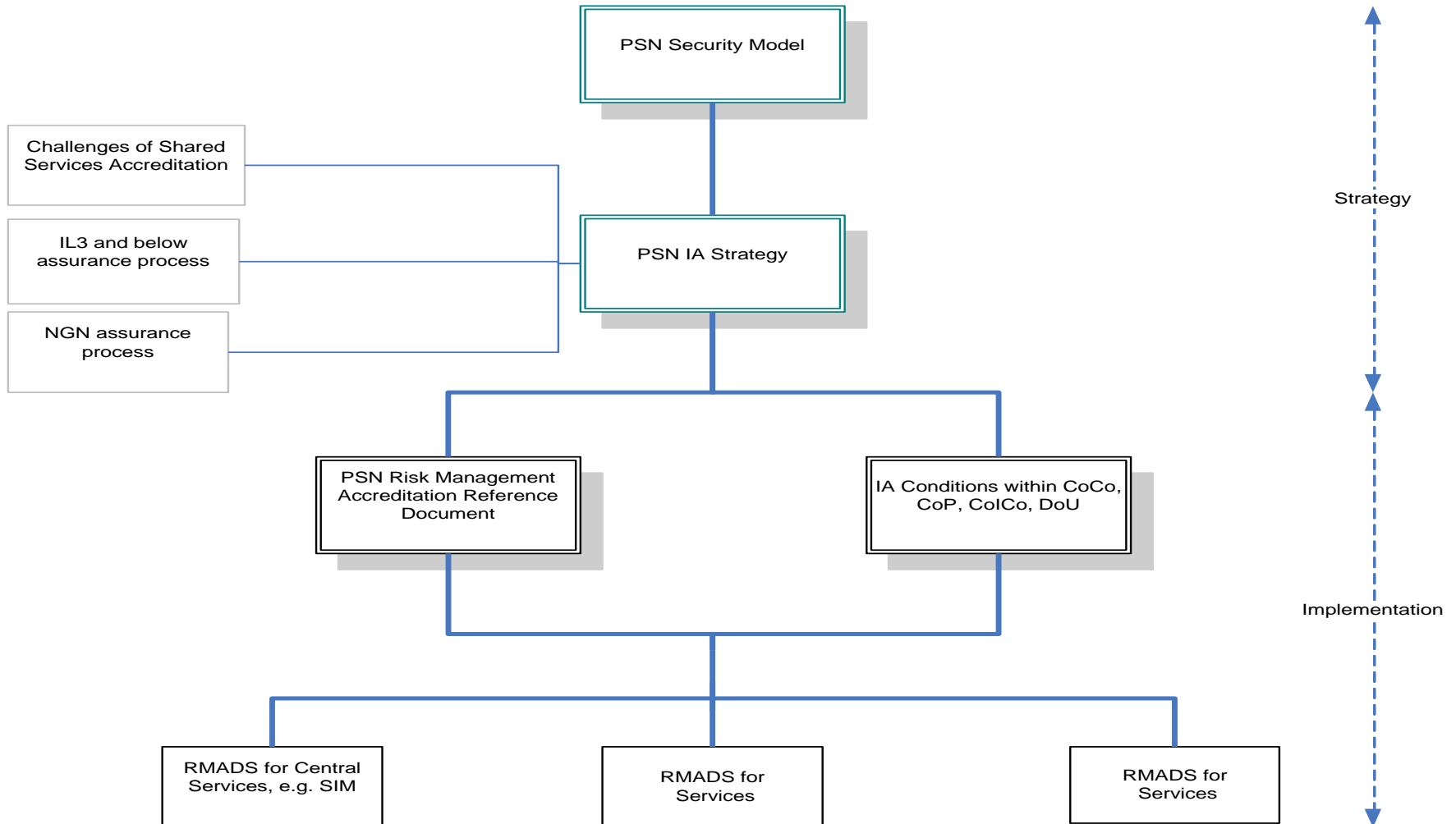
- PSN Security Model has been produced and presented to the PSN Board: overall document set has been agreed
- PSN IA Strategy (drafted and being reviewed by the workstreams)
- PSN IA Conditions for CoCos, ColCos, CoPs and DoUs (being reviewed by workstreams)
- PSN RMARD (Risk Management Accreditation Reference Document): repository for detailed standards and guidance
 - PSN Service Authorisation Process (drafted and being reviewed by workstreams)
 - PSN Encryption and Key Management principles being created within CESG and PSN Encryption workstream
 - PSN Protective Monitoring and Security Incident Management principles drafted and being reviewed
 - PSN Identity Management (Authentication and Authorisations Vision created)

Security Workstream Dependencies

The following dependencies exist

- Shared Service Accreditation and Authorisation
- NGN Assurance Processes
- CESG Assurance Processes for IL4, IL3 and IL2 products, systems and services
- Interoperation with IL5 and IL6 systems and services
- Compatibility with the G-Cloud IA Strategy

Security Workstream Dependencies



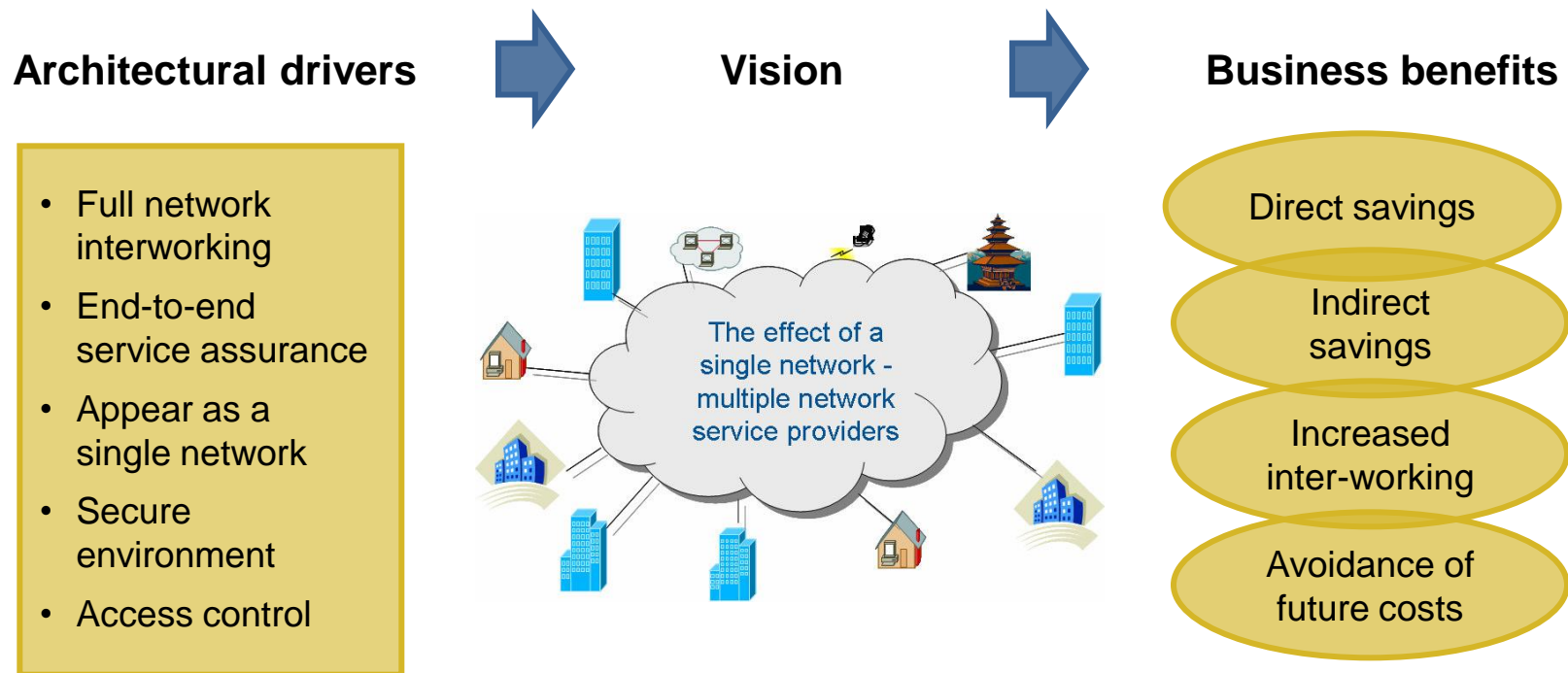


Standards and Testing

Geoff Hall

What are we Aiming to Achieve With the PSN?

The PSN vision demands the integration of services from multiple service providers:



The challenge for end-to-end assurance is that there is no overall 'owner' of the network

How do we Meet This Challenge?

Key PSN elements:

Codes of connection	Rules by which Providers and Consumers interact across service management boundaries, even where there is no direct contract
Standards	Ensure interworking across services and end-to-end serviceability across suppliers
SIM	Provides visibility of service status across the PSN and analysis of dependencies between services
GCN	Common core interconnection network providing high levels of availability and performance that ties operators together
Governance	Ensures adherence to common ways of working

Aim is that Service Providers and Service Consumers can all work together

Standards

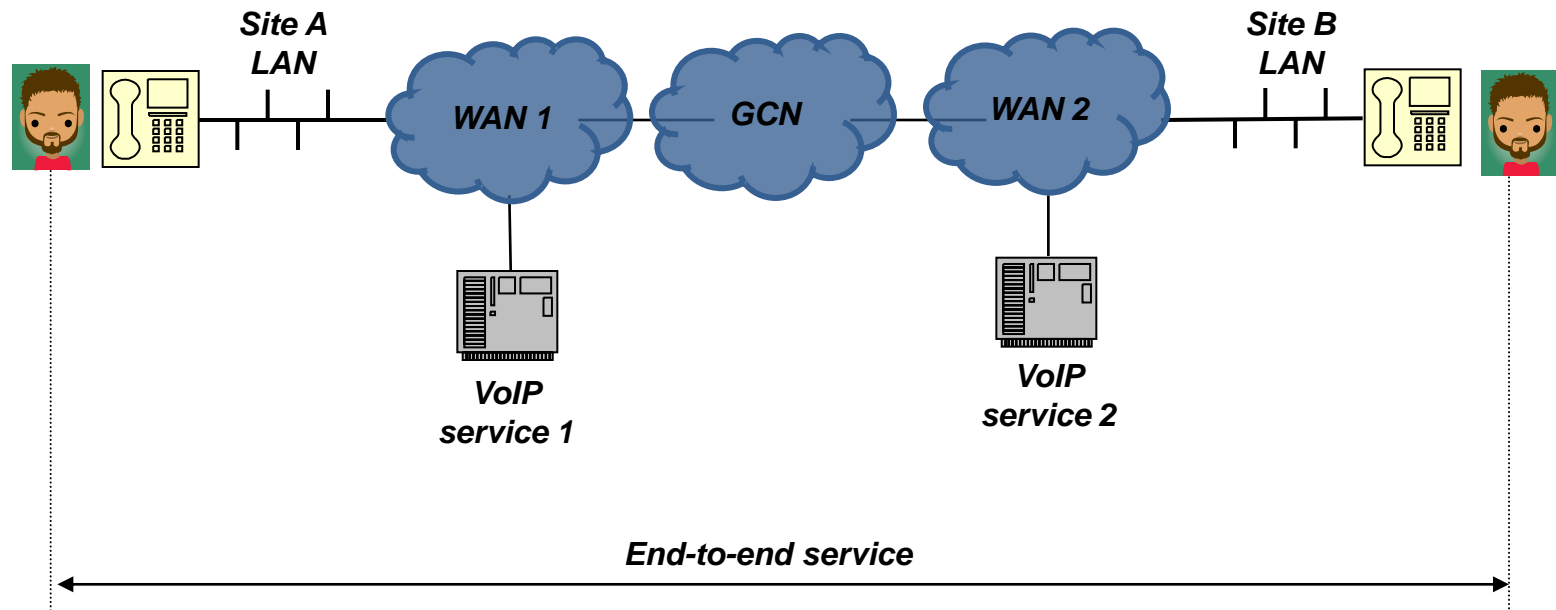
Standards are defined in the PSN Operating Model. Supplementary documents, updates and current activities are as follows:

Network – Network Interfacing	Clarifying the GCN – GCN & GCN - DNSP NNI. Technical Domain Description V1.0 Released 15/03/10
Telephony (VoIP)	Basic VoIP on PSN Service interoperability Technical Domain Description V1.0 Released 15/03/10
SIM	SIM Service description V2.0 released and Service Management Framework under review for release March 2010
Security	Future Standards for: Encryption interoperability and discovery, Authentication & Authorisation brokering and Protective Monitoring
Logical Resources	Future for standards and policies for the management of names, labels, numbers and addresses across PSN

A minimum set of standards necessary to ensure the integrity and interoperability of PSN and to enable PSN Services. Based on the adoption of open standards

Basic Telephony (Voice over IP) in PSN

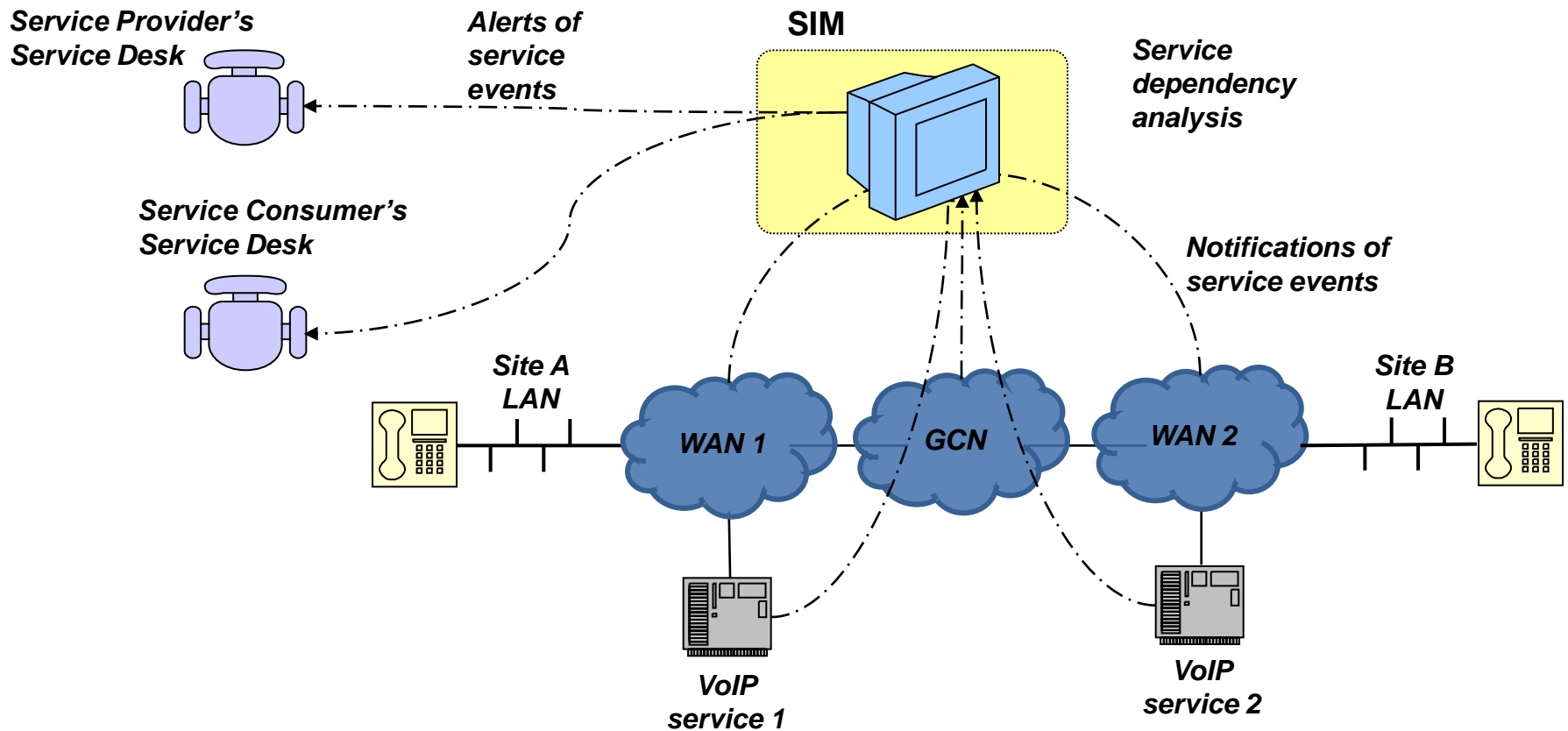
A VoIP telephone call between two departments spans multiple services provided by multiple service providers:



A basic interoperability standard that ensures that calls between PSN Telephony services are always on network

What Does the SIM do?

In a multi-supplier landscape, there is a need for a network-wide view of service status:



The SIM gives visibility of the network service status across boundaries

The Service Information Monitor – Current View

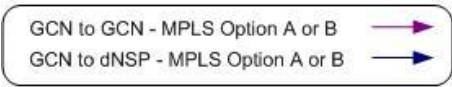
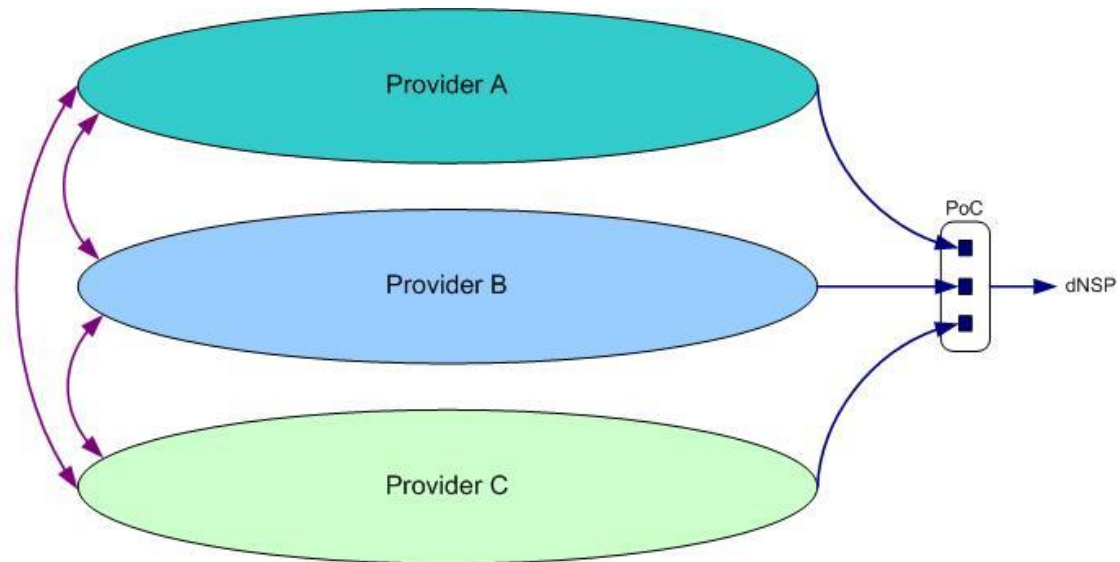
- Service description reviewed, updated and approved by PSN Design Authority – November 09
- Sourcing Strategy and Procurement Strategy approved by Project Board
- Importantly overarching PSN Service Management Framework (within which the SIM fits) drafted and being reviewed through the Service Management Framework
- Statement of Service Requirements in third draft – being reviewed through the Service Management workstream

The Service Information Monitor – Next Steps

- Develop SIM Business Case for approval by PSN Programme Board – end April 2010
- Programme Board endorsement for Sourcing Strategy on approval of Business Case
- Commence procurement for SIM
- Complete high-level SIM Operating Model
- SIM operational early 2011

GCN

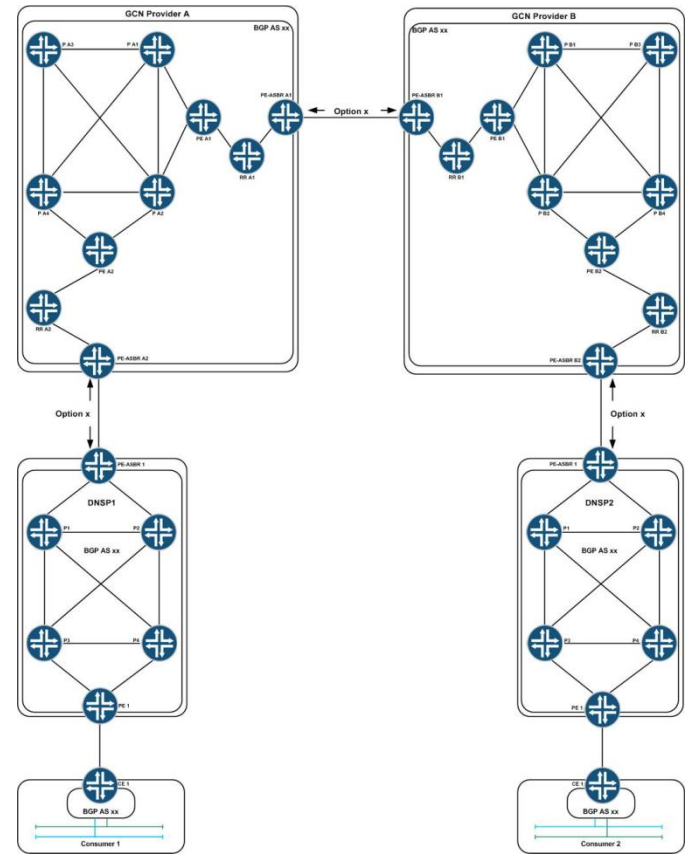
- The Government Conveyance Network is composite of GCN service providers networks that creates the effect of a single network through peering.



Points of interconnection connect the GCN service providers to each other, each connected to all others. Points of Connection are places where a GCN connection is available to a Network Service Provider

Network-to-Network Interface (NNI) Testing

- All testing performed against an industry agreed ‘baseline architecture’ in order to ensure consistency
- Tests run against a number of MPLS Option A & B deployment scenarios
- Results confirm support for the favored deployment model(s) as proposed by industry.
- Deployment of any MPLS Options A and B interconnects can now be benchmarked against a common technical framework



Testing with equipment vendors has successfully validated the NNI standards in the operating Model and Technical Domain Description . Full test results from Juniper have been made available



Questions?



Wrap-up

Martin Gould

Visit us at:

www.cabinetoffice.gov.uk/cio/public_sector_network.aspx

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