

NATIONAL NETWORK SERVICES

BTPA BRIEFING PAPER

Department:	TECHNOLOGY
Author:	Sarah Winmill
Sponsor:	Simon Downey
Version date:	1.1

Version	Date Issued	Brief Summary of Change	Owner's Name
First draft	18/05/2018	First draft	Sarah Winmill
Second draft	21/05/2018	Updated following review by Shrin Honap and Willie Gallagher	Sarah Winmill
Final	23/05/2018	Published	Sarah Winmill
First revision	18/06/18	Draft update following BTPA Strategy and planning Committee	Sarah Winmill

Executive Summary

This paper seeks £22.1m to award contracts for BTP's Wide Area Network (WAN), Local Area Network (LAN) and Telephony services, collectively referred to as National Network Services (NNS), and bring these services into operation. These services are mission-critical to BTP. They are foundational enablers to our digital ambition and key to delivery of ICT enabled savings across BTP2021. Without them the force loses national access to all computer and internet based services.

Contract award follows a best practice procurement process, supported by Government Digital Services and BTPA Executive. Quality and value for money assurance has been provided by Gartner. Finances include £1.7m contingency and a further £1.7m for works which are 'subject to survey' and are £3.32m higher than the NNS profile in the Medium Term Financial Plan over the five year contract term. The planned contract award date is 6th July to enable work to commence in August 2018 with all sites completed by 18th May 2019.

Key risks to the project are the need for 'way leaves' and enabling construction works, which are subject to third party approvals. These risks will be managed closely by the project team and mitigated by early escalation to local commanders to leverage their local contacts and relationships to highlight the urgency of resolution. This risk is reflected in the financial contingency.

Case for Change

BTPs current contract for national network services expires on 18th May 2019 and cannot be extended.

Current network services are inadequate for the needs of a modern digitally enabled police service and are frequently flooded with traffic at full capacity. This is evidenced by logins taking up to 20 minutes in some locations, an inability to support streaming of any video content, an inability to support multiple sessions of command and control systems, and a generally poor user experience wasting significant staff time. There is also a growing operational risk as equipment reaches 'end of life' and cannot be adequately supported. The current network is not capable of carry the traffic necessary to facilitate a move to cost-saving Cloud services.

The Delivered Solution

This solution will replace all network hardware, data circuits and telephony infrastructure components. It delivers network capacity and flexibility scaled to meet

the force’s current needs and those foreseeable for the next 5 – 10 years. It provides secure network facilities such as Wifi, audio-conferencing, and remote access, as well as integrating with other technology services to deliver a seamless user experience between mobile, fixed, and software phones.

It delivers to all BTP’s 162 sites including Scotland, BTP’s First Contact Centres, third party Data Centre locations and the accompanying security and network management services. It also provides secure connectivity to the Internet and Cloud hosted services.

Procurement process and assurance

The new NNS services have been procured via a robust process, following government best practice and overseen by Crown Commercial Services and Government Digital Services. Assurance on bid quality and value for money has been provided by Gartner, an independent ICT research and advisory organisation. Legal assurance has been provided by Weightmans LLP.

Opportunities for collaboration were explored with Network Rail, however, legal/commercial considerations meant that this is not feasible for this procurement cycle.

Commercials

The LAN, WAN and Telephony offers will be provided via three contracts. The contract term commences upon contract signature by both parties and is for a term of up to 5 years, with a review after 3 years. BTP will retain ownership of on-premise capital equipment.

Financials

Funding required to deliver the programme is £22.11m. The table below compares the revenue and capital costs to those allocated to the programme within the Medium Term Financial Plan.

	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	Total
Variance to MTFP year-on-year							
Capital	(1.84)	(0.65)	0.00	0.00	0.00	0.00	(2.49)
Revenue	0.44	(1.13)	(0.04)	(0.04)	(0.04)	(0.04)	(0.83)

Within these figures uncertain final costs and risk have been built into the total as shown in the table below.

£m (inc. VAT)	WAN	LAN	Telephony	5 Year Total
Known	0.7	0.5	0.5	1.7
Unknown	0.6	0.5	0.5	1.7
Total	1.3	1.1	1.0	3.4

Known items are where costs are 'subject to survey' post award. Unknown are contingency to cover financial risks, such as contract over-runs due to way leave delays or extraordinary remedial works.

Gartner have provided assurance that the solutions represent market rates and are good value for money.

In addition to those elements requiring survey the financial contingency is underpinned by the inclusion of a number of planning assumptions as follows;

- £552k - An overrun of all services under the existing contract of 3 months (A single month would be £184k pro rata)
- £213k - Transition costs from incumbent supplier
- £120k – Change control over contract duration
- £690k – Excess construction works
- £480k - Low-level design adjustments
- £170k – BTP managed remedial works

The overall revenue plan assumes that charges are accrued for WAN links from the point of installation. Installation is assumed to be on the first day of the two month window during which a group of links are scheduled to be installed.

Managing the MTFP Budget Risk

Whilst there is negligible difference between MTFP and contract costs from 2020/21 there is an adverse variance in capital provision in years 1 and 2. A twin track approach will be taken to managing the MTFP impact of NNS;

- Managing down costs within the programme, whilst maintaining quality and delivery
- Managing the wider Capital Programme to remain within the MTFP

There are a number of opportunities to manage the funding gap within the Programme. These include, but are not limited to;

- Exercising supplier efficiencies - A single supplier of the data network (WAN & LAN) will allow for the consolidation of service support operations and device management platforms. Expected efficiencies are in the region of £300k. We will

actively pursue opportunities to find further efficiencies in service management resources and single billing.

- Financially targeted deployment - A targeted approach to transition will pursue sites with the highest current running costs and seek to minimise parallel running costs.
- Current incumbent costs - The costs of continuity of service with the incumbent, if required, will be negotiated early in the programme. Current contingency amounts are for the full 3 month pro-rata amount but this is unlikely to be the financial liability.

At portfolio level, the MTFP will be actively managed. NNS is the highest priority programme in the 2018/19 and 2019/20 Capital Portfolio and a key enabler to a significant number of BTP2021 savings. Within the Capital Portfolio the spend profile of other programmes will be reviewed and sequenced to ensure that the overall Capital Programme remains within the MTFP.

Key Risks

Programme risks will be tracked via a RAID log (Risks, Assumptions, Issues and Dependencies) and reviewed each month by the NNS Programme Board. The BTP risk management platform, 4Risk, will be used to provide visibility to the wider organisation.

The mitigation of transition and service continuity risks will be handled as follows:

Risk	Mitigation
External factors, such as complicated way leave issues, may cause installation delay.	Incoming suppliers are to investigate alternative access methods and delivery scheduling/issues will be reviewed weekly and reported up through the programme board. Relationships (whether through TfL, Network Rail or BTP's own local points of presence) will be used to expedite resolutions where possible.
Financial impact of retained services where delay occurs.	Contingency is provided in the budget in case of increased costs for retained services, if required, for business continuity. Expectations will be set early in the transition process and maintained

	through direct communication and dialogue with all suppliers of existing and new services.
--	--

Lessons learnt from the previous network upgrade in 2010 have been applied.

Business Benefits

The NNS programme is an enabling project for the Force-wide Digital Transformation portfolio and the ambitions of the BTP2021 Strategy and will remove existing shortcomings. Whilst it does not, of itself, provide financial benefits it is the foundation on which many BTP2021 projects will be built.

The solution is flexible, enabling the addition, removal or relocation of sites readily within the design. Scotland is within the scope of this implementation but can be removed seamlessly as required.

The programme will improve the effectiveness of operational policing by providing a highly available and resilient data communications service, including improved access to key Crime and Command and Control systems. Additional capacity will allow for 'digital growth' and the movement of high volume digital content (eg. for Body Worn Video, Criminal Justice workflows and CCTV) within BTP and with partner organisation.

The new network will enable a wholesale move to Cloud services, reducing the dependency on BTP on premise data centres and unlocking the route to potential Estates savings. Adopting a Cloud model enables BTP to move from a capital intensive model of ICT procurement to a revenue 'pay per click' approach, significantly reducing the risk of future 'technical debt' where competing capital priorities result in underinvestment in ICT infrastructure. Further, Cloud service providers ensure that software versions, security patches, and bug fixes remain current, significantly reducing BTP's technical administration overhead. Disaster recovery capabilities are included 'by design' in cloud services.

Wifi services will be provided to support agile working and data services to BTP Mobile devices, reducing data bundle costs, in particular during handset software updates.

Transition Plan

			# of sites	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19
LAN	Phase 1	Project Initiation, Design, Setup backend services													
	Phase 2	Install/test pilot sites. Data Centre failover testing	5												
	Phase 3	Complete P1 and P2 transitions	13												
	Phase 4	'Mop up' and programme documentation.	15												
WAN	Phase 1	Project Initiation, Design, Setup backend services													
	Phase 2	Install/test pilot sites. DC failover testing. Tranche 1 sites.	10												
	Phase 3	Tranche 2 sites.	55												
	Phase 4	Tranche 3 sites and ICCS sites.	100												
	Phase 5	Tranche 4 sites.	145												
	Phase 6	'Mop up' and programme documentation.	162												
Telephony	Phase 1	Project Initiation, Design, SIP and Port Migration													
	Phase 2	Proof of Concept													
	Phase 3	Pilot													
	Phase 4	P1 (FHQ) and P2 Migrations													
	Phase 5	P2 (Axis) and P2 Migrations													
	Phase 6	P3 migrations													
	Phase 7	ICCS Migration and P3 Migrations													
	Phase 8	'Mop up' and programme documentation.													

Governance Route

24 th May 2018	BTPA Strategy and Planning Committee
w/c 21 st May 2018	Submit to Government Digital Services & DfT (28 day SLA)
25 th June 2018	BTPA Full Authority
26 th June 2018	Notification of contract award (10 day standstill period)
6 th July 2018	Commitment/Contract signature

Recommendation

This briefing recommends the approval of release of funding up to £22.11m (inclusive of VAT) and authority to award contracts for the national network services.