

Telephony (Unified Communication) Project Business Case

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Change History

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0.1	30/01/2014	Initial draft	Michelle Harris
0.2	31/01/2014	Amendments from Technology Manager	Michelle Harris
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0.7	18/03/2014	Final Draft	Michelle Harris
0.8	30/03/2014	Editing	Julie McMurray Jane Wintermeyer

1. Project Background

1.1. Background

The concept introduced for the Executive Board to consider is the introduction, development and implementation of a Unified Communications Platform. Unified Communications (UC) is a telephony platform that enables the integration of various communications methods. The platform will allow users to integrate the use of telephony, email, instant messaging and video collaboration to deliver an overall communications solution. The platform uses Internet Protocol Telephony (IP Telephony), a type of digital telephony that utilises the Internet and data network rather than the traditional phone system.

NYP are seeking to ensure it has a robust technology infrastructure, providing a core foundation for the development and future proofing of its technology in line with the IT Strategy and Police and Crime Plan goals, and the UC platform will be a core component of this.

By delivering the new telephony infrastructure NYP will provide a strong foundation to deliver the strategic objective of an agile workforce. The platform will also enable NYP to take advantage of current and future technologies both in house and to engage with its communities. The introduction of UC technology will provide a robust platform that will enable a larger number of communication channels with the public to be readily utilised.

In addition to delivering strategic objectives the replacement of the current telephony systems will seek to resolve the following issues:

- Improved customer access and experience and a more responsive service to the public
- Better management of customer enquiries, through use of available technologies
- Wider range of communications channels/media streams, increasing public engagement opportunities, providing increased availability of services to demographics within NYP communities
- Provide platform to enable officers to engage more readily with NYP communities
- Costs for support and maintenance contracts
- Minimise and simplify the number of contracts associated with NYP telephony
- Address the issues caused by disparate systems that are not fully integrated causing issues
- Address the lack of functionality of current systems
- Improved telephony resilience for the Force Control Room (FCR)

- Organisational projects that are reliant on telephony – SNSD hub, Aspire at front counters, live links (to be delivered by 2016). These projects are identified as key areas that will improve the customer access and contact experience with NYP.
- Provide a platform to promote mobile working and create an agile workforce and environment
- Simplified management of staff and office moves
- Improved management reporting tools particularly FCR

North Yorkshire Police (NYP) currently have 2 telephony platforms, one within the Force Control Room (FCR) which is utilised for force critical calls (999 and 101) and another providing telephony to the remainder of the force. The two systems are disparate creating issues, for the end users. The contract associated with the force critical telephony is due for renewal in March 2014 and the platform supplying all other telephony will reach the products 'end of life' in 2017.

The force telephony systems have not been upgraded for a number of years, and as such a number of products are outdated, are no longer supported or fit of purpose. The adopted approach has been to renew contracts and as such the organisation has failed to make significant progress in respect of this key infrastructure.

The project will support the following goals of the Police and Crime Plan:

- People First
- Deliver more with less
- Fit for the future

The UC concept is still in its early stages and the IT Department have undertaken soft market testing with selected vendors and regional procurement to identify the most appropriate solutions and route to market that will enable NYP to obtain the most value from any future telephony contracts. The project will aim to provide value for money by consolidating contracts, assessing lease options (to ensure NYP have access to the most up to date technologies) and by utilising appropriate procurement frameworks available.

Key Points of the Project:

- Enabler in the provision of a responsive policing service
- To readily engage with the communities of NYP, to establish how they wish to be able to contact NYP, providing key aspirations that NYP will strive to incorporate into strategic plans
- To assess Telephony products and contracts and where possible consolidate contracts to one supplier, providing robust and cost effective management of the telephony infrastructure moving forward
- Engage with other regional forces to identify if any economies of scale can be realised and to enable close working, by utilising similar systems and technologies, should any future integration be required
- Upgrade the telephony infrastructure and operating systems to support the implementation of the required technologies in order to realise the maximum benefits for the organisation

- Utilise collaborative technologies to enable staff to communicate more freely with one another and in future, partner agencies
- Create collaborative opportunities and potential efficiency gains to deliver the growing need across the organisation to work together more efficiently and effectively

1.2. Outcomes and Scope

Unified Communications as a telephony solution is a completely new concept for NYP. With these new technologies will come new ways of working which will enable strategic objectives to be achieved. In order to achieve the benefits, it is recognised that there will be a need for cultural change and to secure workforce 'buy in' to the new technologies and what NYP is seeking to achieve.

The project team has engaged with key stakeholders across the organisation to clearly identify the needs the new solution will need to meet, both now and in the future.

From these discussions a project scope has been developed and this can be found in **Appendix A**.

The project aims to provide the following benefits:

- Enable better communication with the public through future technologies and media streams
- Enable future organisation changes and delivery e.g. Safer Neighbourhood Service Desk (SNSD) Hubs, that are geared towards improving the customer experience
- Better management of enquiries through use of available technologies
- Efficient communication and collaboration within NYP and partner agencies, which in turn will provide improved customer service?
- Improved reporting within FCR and agent environments resulting in efficient responses to demand
- Resource efficiencies (IT Department)
- Consolidation of support and maintenance contracts
- Unified telephony model and reduced integration complexities
- Increased telephony resilience – FCR and remote sites
- Enable mobile working strategy
- Reduce carbon footprint and staff resources for meeting attendance
- Reduced audio call and conferencing charges
- Maintain current technologies and equipment

For the full UC benefits matrix please see **Appendix B**

The changes made during the duration of the project will have an impact on all staff who have access to force telephony. The project aims to take a phased approach to delivery.

Phase 1 will focus on:

- Upgrading the infrastructure

- Detailed design of the telephony model and migration planning
- Procurement of services required
- Testing of the system
- Migration of all telephony to the new platform (staged approach to FCR and force, which will be developed in conjunction with the chosen supplier during the solution design phase)
- Implementation of Workforce Optimisation Software, enabling more intuitive scheduling and forecasting of resources required to meet demand for Agents e.g. FCR, IT Service Desk etc
- Training staff to utilise new telephony
- Roll out of new telephony handsets
- Video conference facility at each Diamond site (Newby Wiske, Harrogate, York, Scarborough for internal conferencing only.

Phase 2 will focus on:

- Review design for Unified Communications (UC)
- Security implications of UC use outside of NYP
- Training staff to utilise UC capabilities
- Roll out UC capabilities to all users

For high level indicative plans for project delivery, please see **Appendix C**

The following are out of scope for the Telephony (Unified Communications) Project, and will be addressed as part of other IT Strategy delivery projects:

- WiFi – implementation and availability across NYP
- Blackberry’s and mobile devices
- MAUDS
- Airwave replacement
- Lack of mobile phone coverage across force estate
- Telephony for mobile police stations
- 3G and 4G technology
- Smartphone application links to telephony platform
- Bring your own device (BYOD)

1.3. Governance

Role	Name
Chief Officer Team Lead:	Joanna Carter
Project Sponsor:	Julie McMurray
Senior User:	ACC Kennedy
Senior Supplier:	Sudeep Chatterjee
Project Manager/Lead: <i>(as appropriate)</i>	Michelle Harris
Key stakeholders (to be listed):	Please See Appendix E for the project stakeholder analysis

1.4 Resource Requirements and Timeline

Activity Description	Start Date	End Date	Resource (e.g. IT Department/P&F)
Procurement	March 2014	September 2014 (4 – 6 month procurement)	IT Department/Regional Procurement
Detailed design, planning, configuration and testing	June 2014	December 2014	IT Department
Video suites	January 2015	February 2015	IT Department
Training	January 2015	August 2015	IT Department /Training
FCR migration & roll out	Feb 2015	April 2015	IT Department /FCR SysAdmin/P&F
Force migration & roll out	March 2015	September 2015	IT Department /P&F
Embed voice platform	October 2015	December 2015	IT Department
Review UC Design	November 2015	December 2015	IT Department
Assess security parameters	November 2015	December 2015	IT Department
Implementation and testing	January 2016	February 2016	IT Department
Training	February 2016	June 2016	IT Department /Training
Roll out UC to all staff	April 2016	July 2016	IT Department
Embed UC	August 2016	October 2016	IT Department

The timeframes provided above are high level indicative timeframes and are subject to change. Detailed plans will be provided upon consultation with the chosen supplier.

There will be a need to engage with the identified departments to confirm resource availability.

1.5. Summary of Options

No.	Title of Option	Net Present Value	Reason for Selection or Rejection
1	Do Nothing – Stay with current infrastructure	Current revenue spend maintained	NYP will be unable to realise its strategic goal of mobile workforce and utilisation of mobile technology. The force will maintain out of date technology that is not scalable or future proofed
*2	Recommended – Unified Communications Solution	** See Appendix E of the IT Strategy Business Case dated 30/5/14	Enable NYP to realise its strategic goal of mobile workforce and utilisation of mobile technology

** The figures for option 2 shown at 3.4 do not include the potential savings from reductions in call costs, line rental and conferencing features and only covers the capital investment to deliver the project.*

*** The detailed figures within Appendix E will be published in due course when no longer commercially sensitive as part of the procurement exercise and value for money aspects of the project.*

1.6. Decisions Required/Recommendations

The project requests the Executive Board provide approval for the full funding of the project and for the authority to proceed with the project. Once agreed the project will proceed with a compliant procurement exercise and will provide detailed costs, and plans for the delivery of the project.

By agreeing to proceed with the project, the board will enable the project to deliver the new foundation on which NYP will build a robust infrastructure to support the strategic objective of a mobile workforce and will enable the force to exploit mobile technologies to the benefit of the force and its communities.

2. Option 1 – Do nothing

2.1. Description

Maintain 2 disparate telephony systems, one to manage calls within the FCR and the other to manage calls for the rest of NYP. All charges for support and maintenance, calls and line rental will remain. Some of these products are due to reach end of life and will become unsupported.

2.2. SWOT Analysis, Option 1

<p>Strengths:</p> <ul style="list-style-type: none"> • Users know how to utilise the technology available to them • No ongoing training requirements 	<p>Weaknesses:</p> <ul style="list-style-type: none"> • Customer service levels will be maintained within minimal improvement • Unresponsive to the communication requirements of the public • Reputational risk that NYP are unresponsive to customer needs and are not utilising technology to the benefit of the public • Systems are disparate, integration issues will be maintained • Increased costs for support and maintenance contracts will continue • NYP will need to maintain its external conferencing feature costing £18,000 per annum • NYP will not be able to deliver mobile working solutions • The system is not scalable – Due to utilising analogue telephony, system configuration and products being end of life the platform cannot be utilised for the means of unified communications or other modern technologies that will enable force initiatives to be met • Unsupported products will remain unsupported and costly to replace (if replacements can be sought) • No future proofing of technology • Maintain an out of date medium as main form of communication (analogue telephony) • NYP will be unable to exploit technology to communicate with its communities
<p>Opportunities:</p> <ul style="list-style-type: none"> • No opportunities for expansion and development 	<p>Threats:</p> <ul style="list-style-type: none"> • Some products are due to reach end of life threatening business continuity for telephony provision including 999 and the ability for NYP to respond to the public • Current telephony products are unsupported • NYP will be unable to achieve strategic objective of mobile workforce

2.3. Benefits, Option 1

- End users are familiar with the telephony system and can continue to utilise the system as they are currently
- No further training requirements exist for the systems

2.4. Risks, Option 1

Description	Probability	Impact	Possible Actions
Telephony systems and products utilised are unsupported and due	High	Critical	Upgrade to IP telephony platform to ensure continuity of

to reach end of life by manufacturers, putting NYP at risk should failures of these systems and equipment occur. This could affect the telephony provision for 999 and force critical calls			service. NYP should consider option 2 as the recommended action
The organisation will be unable to achieve strategic objectives to deliver a mobile workforce	High	Critical	NYP should consider option 2 as the recommended action
Lack of functionality between systems prevent any future telephony upgrades and deployments	Medium	Significant	Systems will remain limited in functionality. NYP should consider option 2 as the recommended action
Austerity measures remain from FCR 2 to 1, providing limited FCR resilience rendering system set up as unfit for purpose, and Disaster Recovery as inadequate	High	Critical	Additional resilience measures need to be taken, these will be delivered through option 2
Maintaining Analogue technology which is an out of date media	Medium	Significant	Upgrade to IP telephony platform to ensure technologies are future proofed

2.5. High Level estimated costs of project, Option 1

<i>[Fill in the green boxes as appropriate. Yellow boxes calculate automatically.]</i>								
Costs		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Capital	Description							
<i>Maintenance Charges</i>	All telephony contracts	150,749	150,749	150,749	150,749	150,749	150,749	£904,494
<i>Staff Costs</i>	4 x Comms Engineers	148,204	148,204	148,204	148,204	148,204	148,204	£889,224
<i>Other</i>	Call charges, line rental & equipment	245,186	245,186	245,186	245,186	245,186	245,186	£1,471,119
Total Costs:		£544,139	£544,139	£544,139	£544,139	£544,139	£544,139	£3,264,837

3. Option 2 – Unified Communications Solution (Recommended Option)

3.1. Description

Implement a new IP telephony platform, enabled with the ability to utilise unified communications. Introduction of the new solution will enable organisational drivers for the project to be delivered. The solution provided will consolidate a number of contracts. Potential savings may be made in relation to call charges, line rental, conferencing charges and staff efficiencies for meeting attendance. This will become clear as the procurement process progresses

3. 2 SWOT Analysis, Option 2

<p>Strengths:</p> <ul style="list-style-type: none"> • NYP can exploit technology to provide the strategic objective of a mobile workforce and the telephony platform will provide the foundation to achieve this • NYP can maintain current technologies that are future proofed • Potential savings to be made for call charges, line rental, conference charges & efficiency gains • Collaboration between staff and departments can be more efficient • Collaboration with partner agencies • Improved customer access via additional communication channels/media streams to engage with NYP communities • Reduction of downtime associated with customer engagement 	<p>Weaknesses:</p> <ul style="list-style-type: none"> • New technology for end users to familiarise themselves with • Increased media streams of contact with the public, may create demand that NYP has not catered for • Lack of cultural buy in will prevent organisational objectives being met
<p>Opportunities:</p> <ul style="list-style-type: none"> • Communicate with communities through additional media streams • Communicate more effectively with partner agencies • Lease telephony products, to ensure NYP maintain current technologies • Reduce the carbon footprint for the force, for meetings etc • Ability to deliver mobile workforce • Opportunity to take advantage of economies of scale in relation to procurement of services, due to SYP/Humber telephony project • Utilise/exploit available technologies to engage with NYP communities to enhance customer service • Manage customer enquiries more effectively by exploitation of technology 	<p>Threats:</p> <ul style="list-style-type: none"> • Data leakage and misuse of technology are a potential risk to the organisation • Reputational risk to NYP if fail to keep abreast of technical developments and new technologies

Equality Analysis template can be found at **Appendix D**

3.2. Benefits, Option 2

For a full list of benefits please see the benefits matrix in **Appendix B**

3.3. Risks, Option 2

Description	Probability	Impact	Possible Actions
The project is dependant on a	Medium	Significant	IT projects need to work

number of other projects within the IT Department, if for any reason there are delays or these projects cannot deliver, it will impact timeframes associated with delivery			closely together to ensure milestones and deliveries work in tandem.
Data leakage and misuse of technology are a potential risk to the organisation	High	Major	NYP needs to ensure appropriate security measures are instigated as part of the project and that appropriate policies and procedures are followed by users
Mitigate the reputational risk if NYP fail to stay abreast of technical developments and new technologies	High	Critical	NYP need to upgrade ISD infrastructure and technologies to ensure they are investing in longevity of technology and providing appropriate media channels for its communities
Should NYP chose to single tender award via the YHPSN framework, there could be a possible risk to NYP project delivery timescales, due to potential resource conflicts, in relation to a telephony project to be delivered out of SYP/Humber.	Medium	Significant	Liaise with regional forces to identify timescales and drivers and identify whether economies of scale may be achieved.

3.4. High Level estimated costs of project, Option 2

At the present time the detailed financial information is not available for the project. The project requires authority to proceed, to procure the services associated with the project. Until the procurement phase is completed detailed costs are unavailable. A soft market testing exercise has been undertaken with select suppliers to provide indicative designs and costs and the following is provided:

2014 - 2015	2015 - 2016
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TOTAL Telephony Budget	528,400	170,000
*Total Capital Costs	1.6 million	
**Total Revenue Costs	135,000 – 150,000	
Total Additional Funding	901,600	

* Capital Costs – These include costs for all associated telephony products identified within the scope and have the associated approximate proportions:

Licensing	25%
Handsets/Hardware	30%
Professional Services	30%
Other	15%

** Estimated Revenue Costs supplied relate to support and maintenance only, against the current spend of circa £150k per annum for support and maintenance. Final costs will be driven out as part of the project implementation. Additional revenue costs may be applicable for handsets, licensing and other products as they may be leased rather than purchased. An assessment of overall costs and value for money, will be undertaken during the procurement exercise, and any increase in revenue costs will result in a saving on capital costs.

4. Decisions Required/Recommendations

The Business Case recommends the following:

- Executive Board to approve the requested investment of £901,600 with the balance of monies being provided from existing telephony budgets.

- It is also recommended that the Executive Board provide the authority to proceed with the procurement of a unified communications system to support the force objective of providing a mobile workforce and to enable NYP to position themselves to exploit technologies as they emerge, by adoption of new technologies rather than renewal of existing systems.

5. Consultation of Scope and Business Case

Stakeholders	Name	Comments/Involvement
Crime	Simon Mason Steve Smith Adrian Gathercole	Attended Crime SMT to provide overview of project and the deliverables

	Leanne McConnell Andy Tooke Richard Champion Jill Gathercole Dawn Prendergast	Followed up key points through 121s and small meetings with different departments within the directorate to gather requirements
Response & Reassurance	Sue Day R&R SMT Jane Larkin Richard Anderson	Attended R&R SMT and met with Sue Day separately to provide an overview of the project and identify any specific requirements for the Directorate Jane has been identified as the key stakeholder for the FCR and the project has worked with Jane and FCR sysadmin to understand and gather the requirements
Workforce Support Services	John Sutton Jill Atkinson Sudeep Chatterjee	Met with Individuals identified to provide an overview
Organisation & Development Services	Laura Thompson Rosie Holmes Jane Palmer Judith Kirk	As above – new requirements identified and will form part of the design phase
Professional Standards	Steve Read Barry Wright	As above – new requirements have been identified and will form part of the design phase
Legal & Compliance Services	Simon Dennis Sarah Wintringham Jayne Wintermeyer Donald Stone	Attended SMT to provide an overview of the project and obtain specific requirements
Superintendents (Supt) Association	Lisa Winward	Engaged with Supt Winward as first point of contact of the Supt Association. Provided an overview the salient points of the project
Federation	Dave Horn	Attended meeting with Dave Horn to provide an overview of the telephony project and the potential impacts and deliverables
UNISON	John Mackfall	Overview and salient points of the project provided to John. UNISON representative also in attendance at OPM working group
Other Stakeholders (e.g. external?)	COT Operational Policing Model (OPM) Working Group	Attended Command SMT to provide an overview of the telephony project and to obtain any specific requirements. Attended OPM working group to provide an overview of telephony project and gather any specific requirements Met with staff in staff office to understand whether there were

	Secretariat	any specific needs or requirements from the group
	Nigel Drayton - Volunteers	Provided Nigel with an overview of the project and identified any specific requirements for the volunteers and management

All stakeholders were asked to complete a user base survey and disseminate this amongst role in their directorates for completion. The responses to the survey will be utilised to provide role specific communications solutions.

6. Appendices

Appendix A – Unified Communications Scope



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Appendix B – Benefits Matrix



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Appendix C – Indicative Timelines



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Appendix D – Equality Analysis



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Appendix E – Telephony Ownership and Engagement Model



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