

OFFICE OF POLICE AND CRIME COMMISSIONER FOR NORTH YORKSHIRE

Record of decision made by the Commissioner

Decision Notice Number/Date (xx/2014)

Title/Description:

The Home Office Airborne Data Link (ADL) Project

Executive Summary and recommendation:

The Home Office (HO) sponsored ADL project is a one-off undertaking to assist police services to move away from a historic Ministry of Defence (MoD) radio frequency - by providing alternative frequencies and associated infrastructure – this in turn will allow for the sale of the historic MoD frequency in 2014/15 by the HO. Currently police services in the United Kingdom use this radio frequency to provide live video images for their air support via ground microwave links to officers commanding on the ground and in control rooms. This is currently not available in North Yorkshire Police (NYP) and so the benefit of this proposal is to provide a new and additional operational capability cost effectively.

The HO project will pay the capital costs of upgrade or replacement of existing services' ground and aircraft equipment. As NYP currently has no fixed downlink facilities this equates to provision by the HO of capital assets to a current value of £148,781. A breakdown of these assets is at Appendix 1. A Discussion Paper of 26 November 2013 was approved after which the following progress has been made:

- The Chief Constable responded to the HO letter dated 5 November 2013 and agreed to receive the specified equipment and services as listed here:
 - One mast mounted fixed receiver.
 - Backhaul (connection) between Cleave Dyke mast and NYP HQ.
 - Upgrade of the Major Incident Vehicle (MIV) analogue equipment to a digital capability.
 - A new portable receiver.
 - A first year Ofcom licence for the backhaul link.
- Project members continue working with the HO and its suppliers to identify in-house costs and resource requirements.
- NYP has agreed to act as the No.2 Region Single Point of Contact for the project. The Force hosts regional meetings and feeds back from quarterly national meetings to assist the HO and further discussions with neighbouring forces on implementation and the possible sharing of capability and coverage.
- The HO site visit to NYP was undertaken in April 2014 and installation is scheduled for end of August 2014. The national deadline for completion of this work in its entirety is the end of the 2014/15 financial year.

This report provides confirmation of the ADL:

- Implementation timescales

- Nationally funded specification
- Options for alternative use of some equipment to enhance coverage
- Capital and revenue costs
- Business continuity
- Future development

There are two options presented:

Option 1 - Install the HO equipment so that a downlink is available in the Force Control Room (FCR), through the fixed receiver, MIV and portable equipment. This realises the benefits of providing a new operational capability in a cost effective manner and fitting nationally common and compatible equipment. It does still leave gaps in coverage across the geographical policing area however. Once the service is in use, further demand and benefits analysis may be undertaken to assess whether there is a need for greater capability.

Option 2 – Install as in Option 1 and enhance some of the coverage by investing in further equipment so that downlinks are available from the site of Scarborough Police Station.

The Executive Board is requested to approve Option 1:

1. Install the Home Office equipment so that a downlink is available in the FCR, through the fixed receiver, MIV and portable equipment. This realises the benefits of providing a new operational capability cost effectively.
2. This option consists of the equipment provided by the HO to police forces that do not have a current downlink capability. It is NYP's responsibility to integrate this solution into the network, display the images and replace equipment in future years as necessary. Where NYP lacks technical expertise this will be outsourced to West Yorkshire Police (WYP).
 - One fixed receiver: to be located on the NYP mast at Cleave Dyke as this provides the greatest coverage from a single geographical point.
 - Backhaul (connection) between Cleave Dyke and NYP HQ to be via microwave to an antenna on the HQ roof and into the Force network.
 - Installation of digital downlink capability in the MIV.
 - A new portable receiver.
 - A first year Ofcom licence for the backhaul link with future licence costs for subsequent years falling to NYP.
 - Maintenance of the HO equipment managed on a break/fix basis rather than through a separate contract with the supplier.
 - Installation and support of the media server is through an agreement with WYP.
3. Approve the Option 1 five year capital and revenue costs of £26,856 (subject to replacement of any assets).
4. Business continuity arrangements:
 - The Uniformed Operations will be the service owner, overseeing the use and management of National Police Air Service (NPAS) resource and best placed to take responsibility for the replacement of capital assets. They will also hold the service level agreement and make revenue payments to WYP for dealing with faults on the media server.
 - The Technical Support Unit (TSU) is responsible for maintenance and support of the backhaul microwave assets and holds the revenue budget for the Ofcom licence.
 - The ISD is responsible for the network and security infrastructure and best placed to take administrative responsibility for the Ofcom licence. They will access the TSU

- nominal code for annual licence renewal charges.
- The Force Crypto Custodian will be responsible for the necessary security measures associated with cryptographic equipment.
 - The day to day operation of the system will be the responsibility of the FCR:
 - calling for NPAS aircraft
 - following procedures such as changing channels
 - following the escalation process for resolving faults through NPAS, TSU and WYP
 - liaising with the NYP Uniformed Operations.

~~Police and Crime Commissioner/DPCC decision~~
 or *Chief Executive (Hro)*
 Officer decision under delegated powers*
 (*delete as appropriate)

Signature	<i>[Handwritten Signature]</i>	Date	13/8/14
Title	<i>Chief Executive (Hro)</i>		

Part 1 – Unrestricted facts and advice to the PCC

1. Introduction and background

1.1 NYP is a member of the NPAS and so now has a consistent means of seeking air support, at an agreed cost, to assist with such operations across the county as Missing Person Incidents, pursuit and hydroponics. Incident commanders are not currently able to view live video downlink from the aircraft thus the ADL project provides two major new services to NYP from air support units, namely a new live video downlinks capability and standardisation of equipment across NYP and NPAS nationally.

1.2 The project is funded by the HO and the MOD to facilitate the removal of police services from the present airborne downlink radio frequencies so that this space may be sold to commercial organisations. NYP site visits took place in April 2014 to assess requirements and installation for the whole of No. 2 Region is scheduled for August 2014. Nationally there is an absolute completion deadline of end of 2014/15.

1.3 The majority of Option 1 equipment and its installation will be funded centrally whilst Option 2 will require further investment. Ongoing support and maintenance costs will be NYP's responsibility for all Options.

1.4 In order to deliver the service, NYP will need to provide infrastructure compatible with the HO solution for the display of video feeds as well as security of the backhaul link. In summary this comprises:

- Media server
- Viewing capability at the FCR Silver Room – TV screen
- An Ofcom Licence for the backhaul link from year two onwards

- Video encoder
- Configured PC to hold the control software

1.5 The project is providing the connection between the Cleave Dyke mast and NYP's network at Newby Wiske Headquarters (HQ) (backhaul) by microwave link as this provides a significantly reduced recurring revenue cost over a fixed telecoms link. Also, during planning it was identified that the Technical Support Unit (TSU) has previously tested a link and is planning a communications network including a microwave link from Cleave Dyke to HQ. By increasing the capacity of the HO link rather than installing two links, a saving will be made. As the TSU also has the relevant expertise and capacity, it is proposed that they support the backhaul microwave link once the system is live and holds the revenue budget for the Ofcom licence managed by the ISD.

1.6 Consultation and visits to other forces have taken place to best understand how to display the helicopter downlink. Elsewhere downlink images are streamed through force networks and accessed in both control rooms and force wide via a media server. That solution is followed here.

2. Matters for consideration

2.1 Implementation across the seven northern No.2 Region forces is scheduled for end of August 2014. To meet this mandated deadline, the level of service provision for NYP needs agreeing and resources approved with this Decision Notice.

2.2 **Option 1** – Install the HO equipment so that a downlink is available in the Force Control Room (FCR), through the fixed receiver, MIV and portable equipment. This realises the benefits of providing a new operational capability, to national standards, in a cost effective manner, although still leaving gaps in coverage across the geographical policing area.

This option consists of the equipment provided by the HO to police forces that do not have a current downlink capability. It is NYP's responsibility to integrate this solution into the network, display the images and replace equipment in future years as necessary. Where NYP lacks technical expertise this will be outsourced to WYP.

- One fixed receiver to be located on the NYP mast at Cleave Dyke as this provides the greatest coverage from a single geographical point.
- Backhaul (connection) between Cleave Dyke and NYP HQ to be via microwave to an antenna on the HQ roof and into the Force network.
- Installation of digital downlink capability in the MIV.
- A new portable receiver.
- A first year Ofcom licence for the backhaul link with costs for subsequent years falling to NYP.
- Maintenance of the HO equipment managed on a break/fix basis rather than through a separate contract with the supplier.
- Installation and support of the media server is through an agreement with WYP.

2.3 The attached Appendix 2 gives an indication of the optimum coverage from the Cleave Dyke mast (although this is dependent upon weather conditions and aircraft height). So, whilst benefits are realised in terms of a new, nationally compatible capability, this option will leave gaps in coverage, for example on the east coast and Yorkshire Dales. Balanced against that is NYP's level of demand for flying hours which is currently for 110 hours annually, within which the requirement for a downlink capability is as yet untested. Further, as the national funding formula is currently under review, the NPAS contract cost is almost

certain to rise beyond 2014/15 and so this option may feel to be most cost effective against that level of demand.

2.4 Option 2 – Install Option 1 and enhance some of the coverage by investing in further equipment so that downlinks are available from the site of Scarborough Police Station.

2.5 A single receiver, due to the size and terrain of North Yorkshire (most notably the Dales and North Yorkshire Moors), will not give full coverage for live down linked video feeds. An area of particular operational importance is the east coast and the town of Scarborough and so this option looks to provide downlink coverage there by purchasing additional equipment to provide a secondary downlink receiver at Scarborough Police Station. Thus:

- An additional antenna on the roof of Scarborough Police Station
- New cabling from the roof to the equipment room
- Two new firewalls at Scarborough for the new antenna
- A new network switch due to lack of capacity at Scarborough.

2.6 An indication of the additional, optimum coverage is provided at Appendix 3. The considerations for this option are that greater investment is required, against untested demand, and the ISD is currently committed to a number of key infrastructure stabilisation projects and strategic initiatives scheduled for delivery over the next 12-24 months (as per DN001/2014 published on the PCC's website). Due to this level of demand there may be restrictions on the level of support the ISD can provide to the ADL initiative.

2.7 Capital and revenue costs: these are set out in section 6. The details of the provider's maintenance contract are not yet available but the equipment warranty will be for two years and the general consensus amongst practitioners is that this equipment is reliable, robust with a long shelf life and the risk of loss of service is low. Because of this it is recommended that NYP does not take up the HO maintenance agreement, rather effects replacements when necessary.

2.8 Business continuity: It is proposed that a number of departments are involved:

- The Uniformed Operations will be the service owner, overseeing the use and management of National Police Air Service (NPAS) resource and best placed to take responsibility for the replacement of capital assets. They will also hold the service level agreement and make revenue payments to WYP for dealing with faults on the media server.
- The TSU is responsible for maintenance and support of the backhaul microwave assets and so will hold the revenue budget for the Ofcom licence.
- The ISD is responsible for the network and security infrastructure and so is best placed to take administrative responsibility for the Ofcom licence. They will access the TSU nominal code for annual renewal charges.
- The Force Crypto Custodian to be responsible for the necessary security measures associated with cryptographic equipment.
- The day to day operation of the system will be the responsibility of the FCR:
 - calling for NPAS aircraft
 - following procedures such as changing channels
 - following the escalation process for resolving faults through NPAS, TSU and WYP

2.9 Future development:

- This capability is being included in the new Northern Base planning.
- Post installation and when the service is being delivered consistently, further

resources could be assigned to identify whether wider Force coverage is required and how that will be achieved. This may include recommendations for collaborative arrangements with neighbouring forces and/or additional infrastructure if coverage gaps are deemed operationally significant.

- Post delivery consideration could also be given to developing the Force CCTV capability and linking that to ADL. This would require further analysis and resources.

3. Other options considered, if any

3.1 Following earlier reports NYP has confirmed acceptance of this capability so as to enhance current operational capability. Declining the HO equipment at this stage is therefore not recommended..

3.2 Providing full, stand-alone coverage for the Force geographic area would require the installation of multiple receivers around the county. This option was not supported at the earlier Executive Board as it does not align investment with demand and operational requirements. Further the coverage provided by a mast mounted downlink receiver can only be estimated prior to installation so a proposal to cover all of the county would have to be based on desktop planning. Enhanced coverage may be pursued via discussions with neighbouring forces to establish the feasibility and implications of accessing downlinks via other forces' masts.

4. Contribution to Police and Crime Plan outcomes

4.1 The Police and Crime Plan 2013 – 2017 has a clearly stated vision of "*Be safe, feel safe* – protected by the most responsive service in England." This vision is supported by a number of key goals, two of which "Reduce harm" and "Put people first" will be contributed to directly by the enhancement of air support.

4.2 Air support is already embedded in NYP's range of operational capabilities and is managed through clear national and local policies. Deployment criteria are weighted towards safety of vulnerable and/or missing people as well as covering pre-planned events such as the Tour de France and a range of response incidents such as pursuing offenders and managing civil contingencies like flooding.

4.3 Thus the proposed additional capability of having live video links to the FCR for officers to direct operations has a strong correlation with the Commissioner's vision of "*Be safe, feel safe*".

5. Consultations carried out

A small project team has been established to progress this work and has consulted internally with the Operations Command, ISD, Properties and Facilities (P&F), Finance and the Information Security Officer. NYP, as the No. 2 Region SPOC, continues to host regional development meetings which include the HO and suppliers as well as representing No. 2 Region at national meetings.

6. Financial Implications/Value for money

6.1 Whilst the HO will provide the equipment as set out in the Executive Summary and Appendix 1, additional capital and revenue investment by NYP is required for both options. The tables below include costs for some aspects which are as yet unconfirmed, such as the implications of PSNP and demand for support from WYP for the media server. These are therefore as accurate as possible with the information that is currently available and are included now mindful of the approaching HO implementation date. The recommended Option requires the least investment to provide this new and additional operational capability.

Option 1: Install HO equipment as provided

YEAR 1:

Capital	£
Media Server for receiving and distributing video	900
Configured PC to support control software	800
Smart TV for FCR downlink display	800
Video Encoder	400
Total capital	2900
Revenue	£
WYP media server installation	1000
WYP media server support arrangement £500 per day (x 2 p.a.)	1000
Penetration testing	3000
Total Revenue	5000
Total Year 1 capital and revenue costs	7900*

* These costs do not include the necessary support from NYP departments to ensure compliant installation of the service. Also media support costs will vary according to the support required from WYP.

YEAR 2 onwards:

Capital	£
Breakdown of possible capital replacement costs are itemised at Appendix 1	0.00
Revenue	£
Ofcom microwave backhaul licence	739.00 per annum
WYP media server support arrangement £500.00 per day (x 2 p.a.)	1000
Penetration testing	3000**
Total Revenue	4739
Total Year 2 capital and revenue costs	4739
Total capital and revenue over 5 years	26,856

** Penetration test requirements and costs are subject to confirmation of PSNP requirements

**Option 2: Install HO equipment and provide for Scarborough
YEAR 1**

Capital	£
Media Server for receiving and distributing video	900
Configured PC to support control software	800
Smart TV for FCR downlink display	800
2 x Video Encoders	800
2 x Firewalls at Scarborough	4000
Network switch for Scarborough	5000
Additional antenna and installation (subject to survey)	25,000
Cabling at Scarborough	2000
Total capital	39,300
Revenue	£
WYP media server installation	1000
WYP media server support arrangement £500 per day (x 2 p.a.)	1000
Penetration testing	3000
Revenue Year 1	5000
Total Year 1 capital and revenue	44,300

YEAR 2 onwards:

Capital	£
Breakdown of possible capital replacement costs are itemised at Appendix 1	0.00
Revenue	£
Ofcom microwave backhaul licence	739.00 per annum
WYP media server support arrangement £500.00 per day (x 2 p.a.)	1000
Penetration testing	3000
Total Revenue	4739
Total Year 2 capital and revenue costs	4739
Total capital and revenue over 5 years	63,256

6.2 Implementation Resources – some information such as the HO provider's Migration Survey Reports and PSNP requirements are still either awaited or being ratified and in the meantime NYP departments are working together to confirm the internal resource requirements needed to deliver the ADL into NYP.

Chief Constables Chief Finance Officer Comments:

- o Penetration testing and Media Server installation will be Capital rather than Revenue.
- o Year 2 Penetration Testing is a contingency to cover testing which may be needed in relation to PSNP.
- o The estimate for payments to WYP may not be required (Capital or Revenue parts) if ISD are able to support the installation in house.

The approval request therefore becomes £9,900 Capital (of which £3,000 is a contingency, and £1,000 may also not be required depending on whether ISD can support the maintenance in house) and £1,739 pa revenue (£1,000 in year one), of which £1,000 pa is an estimate to cover possible third party costs with WYP.

There is no specific provision in the MTFP for this project, but the initial capital costs and year one revenue costs (£5,000 plus up to a further £5,900) can be funded from the Plant and Equipment Rolling Programme in 2014/15.

The ongoing revenue implications will impact on the MTFP gap in future years.

Asset replacement costs after between 5 and 10 years as set out in Appendix 1 are significantly higher than the initial costs (because of Home Office support for the initial installation). These will be built into the plant and equipment rolling programme going forward, but will utilise a significant amount of that programme in the year the replacement is required and it may be that when the rest of the rolling programme is considered, additional resources will need to be earmarked for the rolling programme in that year.

7. Legal Implications

Having read this report and having considered such information as has been provided at the time of being asked to express this view, the Acting Force Solicitor and Head of Legal Services is satisfied that this report does not ask the PCC for North Yorkshire to make a decision which would (or would be likely to) give rise to a contravention of the law.

8. Equality Implications

This report relates to the continuation and increase in the provision of a current service and so does not generate any new equality implications.

9. Human Resources Implications

It is noted that any people related matters in relation to resource capacity to support the installation and maintenance of the proposed data link have been considered. Provision for additional support and expertise has been explored and sourced through West Yorkshire Police and is noted within costings provided.

Public Access to information

The Police and Crime Commissioner wishes to be as open and transparent as possible about the decisions he/she takes or are taken in his/her name. All decisions taken by the Commissioner will be subject to the Freedom of Information Act 2000 (FOIA).

As a general principle, the Commissioner expects to be able to publish all decisions taken and all matters taken into account and all advice received when reaching the decision. Part 1 of this Notice will detail all information which the Commissioner will disclose into the public domain. The decision and information in Part 1 will be made

NOT PROTECTIVELY MARKED

available on the NYPCC web site within 2 working days of approval.
 Only where material is properly classified as restricted under the GPMS or if that material falls within the description at 2(2) of The Elected Local Policing Bodies (Specified Information) Order 2011 will the Commissioner not disclose decisions and/or information provided to enable that decision to be made. In these instances, Part 2 of the Form will be used to detail those matters considered to be restricted. Information in Part 2 will not be published.

Is there a Part 2 to this Notice –**NO** (please delete as appropriate)
 If Yes, what is the reason for restriction –

Originating Officer Declaration – Author name: Claire Craven-Griffiths

Collar number: 004529

	Name (Collar Number)	Date of completion (√)
Head of Department has reviewed the request and is satisfied that it is correct and consistent with the NYPCC's plans and priorities.	Supt A. McMillan	23.07.2014
Legal Advice Legal advice has been sought on this proposal and is considered not to expose the PCC to risk of legal challenge <u>or</u> such risk is outlined in Part 1 or Part 2 of this Notice.	Jane Wintermeyer 3840	08.08.14
Financial Advice The CC CFO has been consulted on this proposal, for which budgetary provision already exists or is to be made in accordance with Part 1 or Part 2 of this Notice.	Jane Palmer 004364	7/08/2014
Equalities Advice Either there is considered to be minimal impact or the impact is outlined in Part1 or Part2 of this Notice. Author to complete as Equalities matters are mainstreamed within departments.	004529	24.07.14
HR Advice HR advice has been sought in relation to any people related matters	Rosemarie Holmes 004647	12/08/14

I confirm that all the above advice has been sought and received and I am satisfied that this is an appropriate request to be submitted for a decision

Signature Claire Craven-Griffiths **Date** 24.07.2014

<i>Author to complete at all times</i>

Appendix 1: Home Office provided equipment replacement values (based on current values)

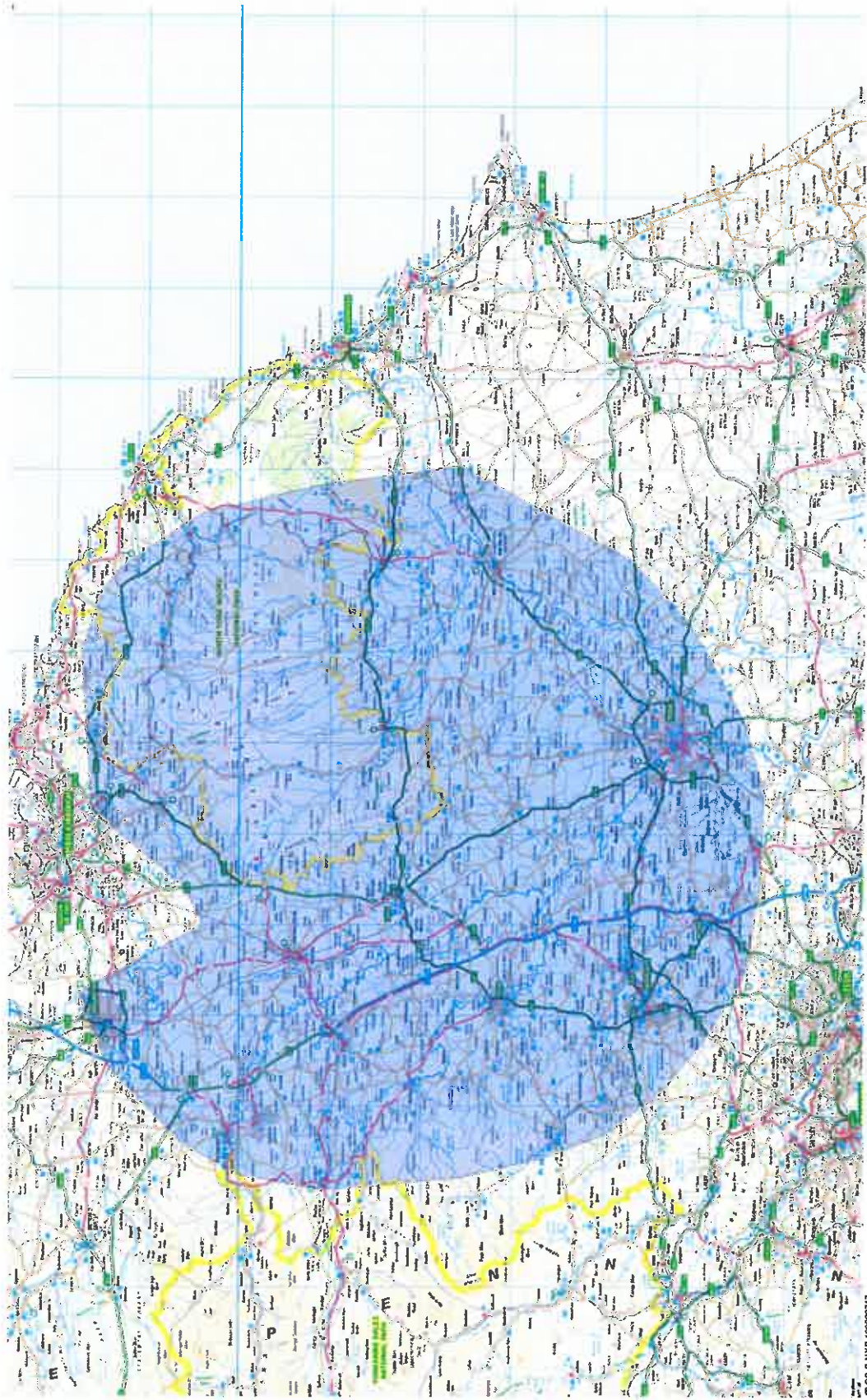
Item	£
Vehicle mounted receiver	14,380
Fixed site receiver	38,270
Portable receiver	13,428
Rack-mounted de-coder (for end-to-end encryption connection from the fixed site)	6,000
Microwave link (for between Cleave Dyke and HQ)	21,314
Development costs	17,185
Programming tool (to update encryption keys in receivers)	9,000
Ground operations console software	7,500
Site surveys	937.00
System engineering and integration	2,400
Fixed site integration	15,180
Fixed site modification package	2,100
Operator training	1,087
TOTAL VALUE	148,781

NOT PROTECTIVELY MARKED

Appendix 2: Option 1: ADL optimum coverage from the Cleave Dyke mast

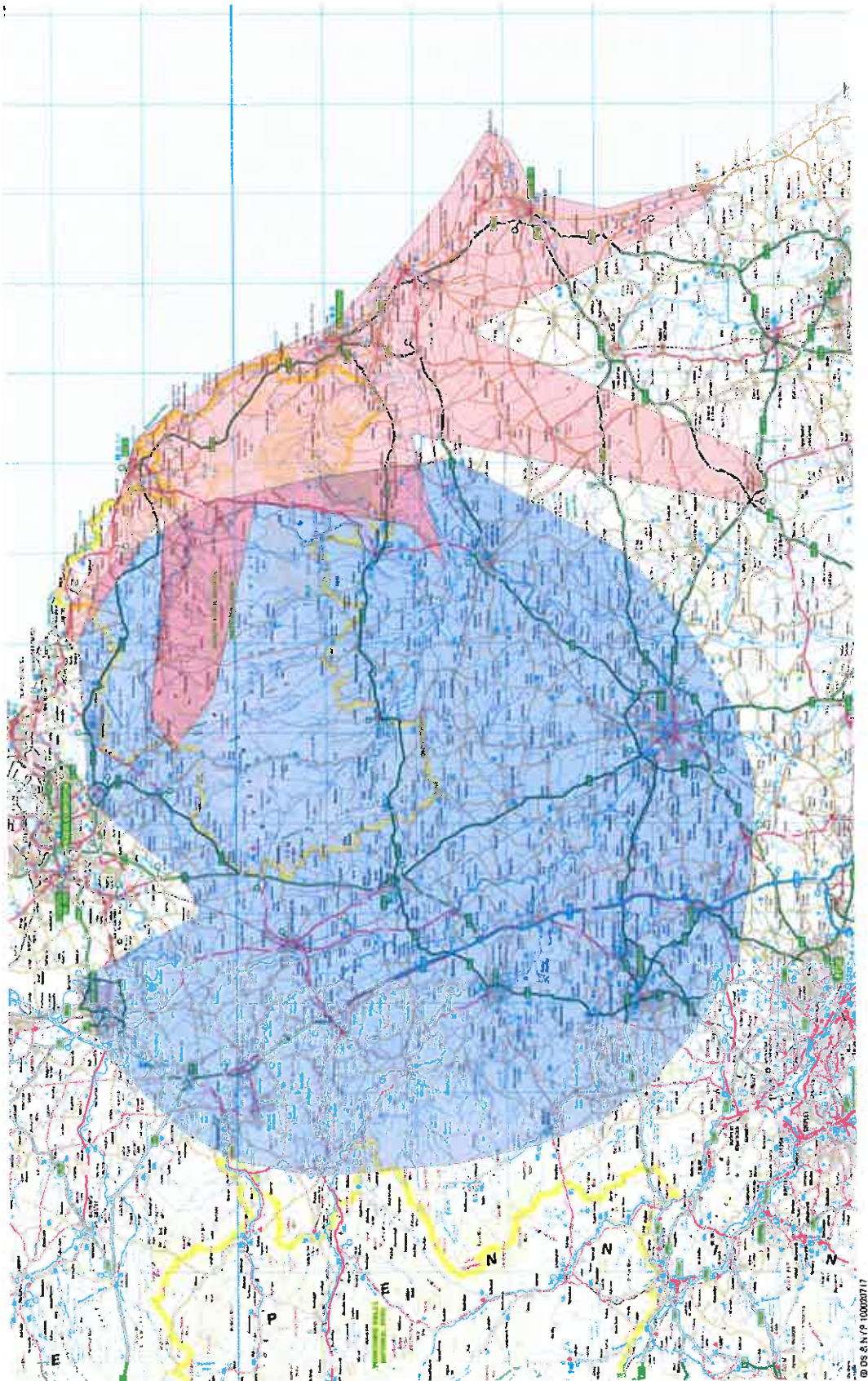
NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED



NOT PROTECTIVELY MARKED

Appendix 3: Option 2: ADL coverage including Scarborough(optimum altitude)



NOT PROTECTIVELY MARKED

Part 2 – Information supplied to the OPCC considered to be restricted - N/A

NOT PROTECTIVELY MARKED

