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Head of Development Management Northumberland National Park Authority Eastburn South Park Hexham NE46 1BS

21 March 2018

Dear Sir or Madam,

### FULL PLANNING APPLICATION PROPOSED INSTALLATION OF A TELECOMMUNICATIONS SITE FOR THE EMERGENCY SERVICES COMMUNICATIONS NETWORK ON LAND AT BELL HILL, BLINDBURN, NORTHUMBERLAND, NE65 7DD

Please find enclosed a full planning application and notice in accordance with the electronic communications code under the Telecommunications Act 1984 Schedule 2 as amended by the Communications Act 2003, for permission for the following development:

Installation of a 20m high lattice mast on a concrete base accommodating 3No antennas and 2No 600mm transmission dishes (overall height 21.3m) on land at Bell Hill, Blindburn, Northumberland, NE65 7DD (NGR: 384419, 610052). The proposal also involves the installation of a foul weather enclosure (2700x2452x2500mm) accommodating equipment cabinets; 1No generator and 1No 1200mm satellite dish on a 2.6m high support pole within a 14mx9m compound surrounded by a 1.8m high barbed wire topped, mesh fence. The proposal involves the installation of a 3m wide, compacted stone access track for 45 metres between the existing access track and the site compound and the installation of a 60x60m area of additional planting around the proposed compound. The planting would be a mixture of Birch, Rowan, Scots Pine and Alder interplanted amongst the existing natural regeneration of conifers.

This proposed telecommunications site is required as part of the Extended Area Services network; an integral part of the Emergency Services Mobile Communications Programme. Mono Consultants Limited are acting as Agents for the Home Office; lead department for delivery of this Government programme which seeks to replace the existing Airwave blue-light communications system with a 4G platform. The proposed site that is subject of this application is required to provide emergency services coverage to the farm settlements and roads between Fulhope, Blindburn, Carlcroft, Carshope and Alwinton and also to the extensive MOD Training Area, including the Emergency Rendezvous points within the Danger Areas.

The Home Office has entered into an agreement with EE Limited pursuant to which, insofar as the Extended Area Services project is concerned, EE is contracted to operate an Emergency Services telecommunications network on mobile infrastructure acquired and built by the Home Office. The acquisition, design and build undertakings are being overseen by Lendlease who have appointed Mono Consultants as part of their supply chain to secure Planning Consents for the required sites.

This application is submitted for and on behalf of The Secretary of State for the Home Department (Home Secretary) and comprises:

- Planning Application form and certificates;
- Planning drawings Refs: EAS0103i: 101B, 103B; and 104B;
- Prescribed fee of £462
- General Background Information on ESMCP;
- Site Specific Technical Justification;
- Supplementary Information Report; and

ICNIRP declaration

The proposal outlined in the enclosed application is identified as the most suitable site option and design that balances operational requirements with local planning policies and national planning policy guidance.

If appropriate, we would be keen to arrange a presentation or meeting with your officers and members to discuss this proposal and we would be happy to provide any additional information that is required to assist in the determination of this application. We look forward to receiving your acknowledgement that this application has been registered.

Yours faithfully

Joll.

Ginny Hall MRTPI SENIOR PLANNER Email: ginny.hall@monoconsultants.com Direct Dial: 0141 270 2733 Mobile: 07796 995 843

# SUPPLEMENTARY INFORMATION

### 1. Site Details

Site Name:	Land at Bell Hill	Site Address:	Land at Bell Hill,
NGR:	384419, 610052		Blindburn,
			Northumberland,
			NE65 7DD
Site Ref	EAS0103i	Site Type:	Greenfield
Number:			

# 2. Pre Application Check List

### Site Selection

Was an LPA mast register used to check for suitable sites by the operator or the LPA?	Yes	<u>No</u>
If no explain why:		
No mast register available		
Was the industry site database checked for suitable sites by the operator:	Yes	No
If no explain why:		
n/a		

# Pre-application consultation with LPA

Date of written offer of pre-application consultation:	Various	
Was there pre-application contact:	Yes	No
Date of pre-application contact:	Various	
Name of contact:	Susannah Buylla	& Rebecca Adams

Summary of outcome/Main issues raised:

We understand that an introductory meeting was held between the Home Office and Susannah Buylla to explain the project in June 2016. It was noted that the National Park Authority were very happy to be consulted at that stage and noted the importance of collaboration on projects such as this.

A site visit to review the proposal at Bell Hill with Case Officer Rebecca Adams and Landscape Officer Robert Mayhew was undertaken on 08 December 2017. The feedback on the proposed site location was generally positive however there was a request that a wide band of landscaping was installed around the proposed site compound to assist with visual screening when viewed from the surrounding area. The Landscape Officer suggested that the new area of planting should be a mixture of Birch, Rowan, Scots Pine and Alder interplanted amongst the existing natural regeneration of conifers. A set of drawings were issued to Rebecca Adams for review on 06 February 2018 with a request for comment prior to the submission of a formal planning application.

# **Ten Commitments Consultation**

Rating of Site under Traffic Light Model:	Green	Amber	Red
Outline Consultation carried out:			

An email was sent to the Ward Councillor on 05 February 2018 detailing the need for a new telecommunications site at Bell Hill as part of the new emergency services communications network, and requesting comments prior to the submission of a formal planning application. To date, we have not received any responses to this consultation.

# 3. Proposed Development

#### The proposed site:

The proposed site is located in a field at the top of Bell Hill, which accommodates an existing and established communications site within an MOD Training Area. The existing Airwave site, which is located approximately 30m to the west of the development subject of this application, provides the current emergency services communications coverage to the surrounding area. The existing 10m high mast structure and ancillary equipment will eventually become redundant following the installation and commissioning of the replacement emergency services communications system that is subject of this application.

The surrounding landscape is undulating in character with the River Coquet and public road following a path along the bottom of the valley and ground rising steeply at either side. The proposed site is elevated and exposed with some natural regeneration of conifers as shown in the photograph below:



The following photograph shows the view from the proposed site location (pegged out with marker posts) with the existing Airwave structure in the background. As explained at the site visit with the Planning Officer, there is a need to provide a vertical separation of 30m between the masts to avoid interference during the period when both systems will be running concurrently. As previously mentioned, the Airwave equipment will become redundant when the new system is fully integrated and operational.



The following aerial image shows the location of the proposed site for EAS0103i in the context of the surrounding environment:



Enclose map showing the cell centre and adjoining cells: A map showing the location of adjoining cells in the network is available on request.

# Type of Structure:

Description: Installation of a 20m high lattice mast on a concrete base accommodating 3No antennas and 2No 600mm transmission dishes (overall height 21.3m) on land at Bell Hill, Blindburn, Northumberland, NE65 7DD (NGR: 384419, 610052). The proposal also involves the installation of a foul weather enclosure (2700x2452x2500mm) accommodating equipment cabinets; 1No generator and 1No 1200mm satellite dish on a 2.6m high support pole within a 14mx9m compound surrounded by a 1.8m high barbed wire topped, mesh fence. The proposal involves the installation of a 3m wide, compacted stone access track for 45 metres between the existing access track and the site compound and the installation of a 60x60m area of additional planting around the proposed compound. The planting would be a mixture of Birch, Rowan, Scots Pine and Alder interplanted amongst the existing natural regeneration of conifers.

Overall Height (including antennas):		21.3m			
Equipment Housing: 1No Foul weather enclosure					
Length:		2700mm			
Width:		2452mm			
Height:		2500mm			
Equipment Housing: 1No Generator					
Length:		3700mm			
Width:		1200mm			
Height:	2200mm				
Equipment Housing: 1No Meter Cabinet					
Length:	1230mm				
Width:	650mm				
Height:	1290mm				
Materials:					
Tower/mast etc – type of material and external colour:	The proposed lattice mast w from galvanised steel which down to a dark grey colour o	vould be constructed will naturally dull over time.			
Equipment housing – type of material and external colour:	The proposed equipment housing would be coloured dark green (RAL6009) to minimise visual contrast with the surrounding environment.				

Reasons for choice of design:

Design and Access Statement

The choice of design at this site has been influenced by the location of the proposed site and the requirement to provide uninterrupted, high quality emergency services communications coverage to the roads between Fulhope, Blindburn, Carlcroft, Carshope and Alwinton and also to the extensive MOD Training Area, including the Emergency Rendezvous points within the MOD Danger Areas.

The lattice design has been selected at this location as it can accommodate equipment required by the Home Office for the emergency services communications network while also having structural capacity to accommodate additional equipment in the future.

The proposed structure, including antennas, will be 21.3m to top, which is the necessary height required to ensure that the proposed antennas have enough height to gain coverage to the roads at the bottom of the valley and meet the operational requirements of the emergency services communications network in the surrounding area. As discussed at the site visit with the Planning Officer, the new emergency services communications system runs on a different frequency to the existing Airwave system and that reduces the coverage footprint of each site. In order to maximise the coverage footprint of the new system and minimize gaps in the availability of 'blue light' communications, the proposed structure needs to be taller than the existing Airwave mast.

Given the fairly elevated and exposed nature of the proposed site, the proposed lattice mast is considered to be an effective design solution as the construction allows light to pass through the structure, thereby helping to reduce the visual mass and bulk of the development on the surrounding environment. There has been some natural regeneration of conifers in the area surrounding the compound, however the proposal also involves the planting of a 60x60m area with a mixture of Birch, Rowan, Scots Pine and Alder saplings in order to provide additional visual screening to the structure in future years.

The dimensions of the proposed mast are the thinnest available to support the required antennas and associated equipment at the required height and geographical location, while also having structural capacity to accommodate additional equipment, if required by future changes to the emergency services communications network.

The proposed lattice mast will have a galvanised steel finish and the proposed equipment cabinets will be painted dark green, unless otherwise requested. This colour scheme is considered to be the most appropriate finish to reduce contrast with the surrounding rural environment.

### 4. Technical Information

International Commission on Non-Ionizing Radiation Protection Declaration attached	Yes	No
ICNIRP public compliance is determined by mathematical calculation and implemented by careful location of antennas, access restrictions and/or barriers and signage as necessary. Members of the public cannot unknowingly enter areas close to the antennas where exposure may exceed the relevant guidelines.		
When determining compliance, the emissions from all mobile phone network operators on the site are taken into account.		

#### 5. Technical Justification

#### Enclose predictive coverage plots.

Reason(s) why site required e.g. coverage, upgrade, capacity (map attached if required):

The proposed site that is subject of this application is required to provide emergency services coverage to the farm settlements and sections of roads between Fulhope, Blindburn, Carlcroft, Carshope and Alwinton and also to the extensive MOD Training Area, including the Emergency Rendezvous points within the Danger Areas.

Page 4 of the attached coverage plots illustrates that, when the surrounding network of ESN sites have been deployed, sections of the road network in the area will only benefit from a minor road service level and there will be large areas of land with no coverage.

Page 5 of the coverage plots illustrates that a combination of the surrounding ESN sites and the proposed site that is subject of this application at, will provide a Major Road Service Level to the majority of the target area. Due to the challenging topography of this area, there are still sections of the road to the north side of Carshope Plantation that will need to be covered by a different site in the network.

Page 6 of the coverage plots illustrates the level of coverage that will be provided from the proposed site at Bell Hill, in isolation of the surrounding ESN network.

### 6. Site Selection Process

Alternative sites considered and not chosen:

Before progressing with the proposal that is subject of this planning application, The Home Office considered the following other options in the area:

Map Ref	Option Location & NGR	Site Type	Reason for discounting
D1	Bell Hill Communications Site 384365, 610041	Site Share	The possibility of sharing on the existing Airwave Mast on Bell Hill was originally considered but subsequently discounted because the structure does not have the required height or structural capacity to accommodate the equipment required by the Home Office. A new site, approximately 30m from the Airwave compound is therefore proposed so that there is the necessary vertical separation in place between the two systems to avoid interference issues for the short time when they will be running concurrently. When the new communications system is fully operational, the existing Airwave network will become redundant.
D2	Calcroft Copse 383902, 611577	Greenfield	This option was discounted because the proposed option on Bell Hill would provide a significantly better level of coverage to the target area while also benefitting from a good level of visual screening and backdropping from the existing trees and proposed tree planting when viewed from the surrounding area.
D3	Carshope Plantation Boundary 384457, 611499	Greenfield	A site at this location would not meet the coverage requirement to the south and west of Carshope Plantation and was therefore discounted as being unsuitable from a technical and operational perspective.
D4	Stogie's Cleugh Plantation 384671 611565	Greenfield	There is no existing access to this elevated location and it was considered that the installation of a new access track up the hillside would have a greater impact on the character and visual amenity of the area than the proposed site at Bell Hill.
D5	Carlcroft North Plantation 383816 611743	Greenfield	This site was discounted as there is no satellite visibility from this location due to the surrounding trees. If there is no satellite visibility, the site is not operationally suitable for use in the emergency services communications network.
D6	Blindburn 382949 610899	Greenfield	This site was discounted as it was considered to have a greater impact on the character and visual amenity of the area than other options in the area due to the lack of screening available. In addition, coverage provided to the north eastern section of the target coverage area would be very limited from this location and Bell Hill was considered to be preferable in terms of the level of coverage provided.
D7	Carshope Plantation 383878 611154	Greenfield	Various locations within the Carshope Plantation were considered but due to the height of the existing trees the mast would need to be in excess of 30 metres tall. This option was discussed with the NPA who raised concerns about the impact of such a tall mast in the long term, when

			the plantation is felled. On that basis, the proposed site at Bell Hill, with some existing and proposed new tree planting was considered to be the better long term option to minimise visual impact.
D8	Lower Carshope 384329 611238	Greenfield	Various locations within the Carshope Plantation were considered but due to the height of the existing trees the mast would need to be in excess of 30 metres tall. This option was discussed with the NPA who raised concerns about the impact of such a tall mast in the long term, when the plantation is felled. On that basis, the proposed site at Bell Hill, with some existing and proposed new tree planting was considered to be the better long term option to minimise visual impact.
D9	Carshope South 383498 610413	Greenfield	A site at this location would not meet the coverage requirement to the north and east of Carshope Plantation and was therefore discounted as being unsuitable from a technical and operational perspective.

The location of the discounted sites listed above are shown on the following aerial image:



# **Planning Policies**

# Central Government's stance on Telecommunications Infrastructure Development

The Government is committed to securing world-class communication networks across in both urban and rural areas of the UK and recognises the importance of telecommunication infrastructure development in supporting connectivity needs. It is recognised that this should be facilitated through the planning system and papers such as the National Infrastructure Delivery Plan aid the delivery of communications base stations in areas where there is a justified technical requirement.

# National Planning Policy Framework (2012)

The National Planning Policy Framework (NPPF) set out Central Government's planning policies for England and how these are expected to be applied. Section 5 of NPPF sets out the Government's general overview regarding supporting high quality communications infrastructure and states:

*"42. Advanced, high quality communications infrastructure is essential for sustainable economic growth. The development of high speed broadband technology and other communications networks also plays a vital role in enhancing the provision of local community facilities and services.* 

43. In preparing Local Plans, local planning authorities should support the expansion of electronic communications networks, including telecommunications and high speed broadband. They should aim to keep the numbers of radio and telecommunications masts and the sites for such installations to a minimum consistent with the efficient operation of the network. Existing masts, buildings and other structures should be used, unless the need for a new site has been justified. Where new sites are required, equipment should be sympathetically designed and camouflaged where appropriate.

44. Local planning authorities should not impose a ban on new telecommunications development in certain areas, impose blanket Article 4 directions over a wide area or a wide range of telecommunications development or insist on minimum distances between new telecommunications development and existing development. They should ensure that:

- they have evidence to demonstrate that telecommunications infrastructure will not cause significant and irremediable interference with other electrical equipment, air traffic services or instrumentation operated in the national interest; and
- they have considered the possibility of the construction of new buildings or other structures interfering with broadcast and telecommunications services.

45. Applications for telecommunications development (including for prior approval under Part 24 of the General Permitted Development Order) should be supported by the necessary evidence to justify the proposed development. This should include:

- the outcome of consultations with organisations with an interest in the proposed development, in particular with the relevant body where a mast is to be installed near a school or college or within a statutory safeguarding zone surrounding an aerodrome or technical site; and
- for an addition to an existing mast or base station, a statement that selfcertifies that the cumulative exposure, when operational, will not exceed International Commission on non-ionising radiation protection guidelines; or
- for a new mast or base station, evidence that the applicant has explored the possibility of erecting antennas on an existing building, mast or other structure and a statement that self certifies that, when operational, International Commission guidelines will be met.

46. Local planning authorities must determine applications on planning grounds. They should not seek to prevent competition between different operators, question the need for the telecommunications system, or determine health safeguards if the proposal meets International Commission guidelines for public exposure."

# Code of Best Practice on Mobile Phone Network Development (2016)

The Code of Best Practice on Mobile Network Development was updated in 2016 to coincide with amendments to Part 16 of the GPDO. The latest Code was developed by a working group consisting of representatives from within the communication industry as well as national and local government. While the proposal that is subject of this application will provide an emergency services communications network rather than a mobile phone network, it is considered that the good practice principles contained within the document remain relevant. Paragraph 1.3 states:

"The principal aim of this Code is to ensure that the Government's objective of supporting high quality communications infrastructure, which is vital to continued economic prosperity and social inclusion for all, is met. The development of such infrastructure must be achieved in a timely and efficient manner, and in a way which balances connectivity imperatives and the economic, community and social benefits that this brings with the environmental considerations that can be associated with such development."

Paragraph 3.1 confirms that;

"There are many special operational and technical considerations associated with mobile network development and these have changed over time as the technology and demand for services have changed."

And that;

"there remains a reliance on radio masts, especially in rural areas to provide the main umbrella of coverage. As radio signals operate like light and must "see" over the target coverage area, they cannot be hidden and so there will always be a degree of visual impact."

With regards siting and appearance, the general principles for communications development are set out in Appendix A of the Code of Best Practice. It is recognised that the general policy approach to

communications development should be to facilitate the growth of efficient and effective communication systems whilst keeping the environmental impact of such development to a minimum:

"In particular, the following general design principles should be regarded as important considerations in respect of telecommunications development:

- Proper assessment of the character of the area concerned, especially in relation to designated heritage assets and their setting, where more sensitive design solutions may be required
- Design should be holistic and three dimensional showing an appreciation of context;
- Analysis of the near and far views of the proposal and to what extent these will be experienced by the public and any residents;
- Proposals should respect views in relation to existing landmarks and distant vistas;
- Proposals should seek to consider the skyline and any roofscapes visible from streets and spaces;
- Choice of suitable designs, materials, finishes and colours to produce a harmonious development and to minimise contrast between equipment and its surroundings.

The options for the design used by an operator will be affected by site conditions, technical constraints including requirement to link the site to the network, landscape features and coverage and capacity requirements. The main options would include:

- Mast and/or site sharing (including redevelopment of a site to enable upgrade or sharing with another operator);
- Installation on existing buildings and structures;
- Erecting new ground based masts.
- Camouflaging or disguising equipment where appropriate;
- Using small scale equipment (although small cells themselves are generally used to address capacity issues as opposed to providing coverage)."

### National Infrastructure Delivery Plan 2016 - 2021 (2016)

The Government's Infrastructure and Projects Authority who report to HM Treasury and Cabinet Office have produced a national plan that aims to improve the planning and delivery of infrastructure based projects. Chapter 7 relates specifically to Digital Communications and paragraph 7.1 states:

"Digital communications are now a crucial component of everyday life. Technologies such as mobile phones and broadband have revolutionised the way we work, socialise and enjoy our leisure time. Improvements in connectivity mean the UK is rapidly embracing a vibrant digital economy, currently worth around £120 billion a year. Over 30% of UK premises have taken up superfast broadband and there are more than 23 million 4G subscriptions."

Paragraph 7.2 confirms that:

"Reliable and high quality fixed and mobile broadband connections support growth in productivity, efficiency and labour force participation across the whole economy. They enable new and more efficient business processes, open-up access to new markets and support more flexible working practices."

Paragraph 7.4 states that:

"Demand for digital services and applications will continue to rise rapidly, with a consequent acceleration in the amount of data being carried over networks. Over the next decade we can expect the emergence of new services, applications and devices which will create additional demands on networks. To support this demand, the UK needs infrastructure that is high capacity, reliable, resilient, secure, affordable and fast."

The above statements refer more specifically to the general mobile communications networks, however it is important to note that although the proposal subject of this application will be primarily for the use of the new emergency services communications network, it also has structural capacity to accommodate additional equipment in the future.

#### Northumberland National Park Local Plan

Northumberland National Park Authority Core Strategy & Development Policies: March 2009 contains Policy 28 'Utilities and Infrastructure' which states:

"The development of utilities and infrastructure projects which serve local community and business needs will be supported provided that:

a. The proposal does not have an unacceptable impact upon the landscape quality or character, either individually or in combination with other proposals;

b. The siting and appearance of the proposed development seeks to minimise impact on the special qualities of the National Park;

c. Where electricity distribution lines are required they are undergrounded or, where the Authority is satisfied that this is not feasible, they follow a route of least impact;

d. Where the proposal relates to telecommunications development: - the need for the development should be demonstrated in terms of the operator's network; - if proposing a new mast, applicants should demonstrate that they have explored the sites outside the National Park, and if this is not possible, they have looked at the possibility of erecting apparatus on existing buildings, masts or other structures; and where new apparatus are required it must be sensitively designed in order to minimise the impact of the development on the special qualities of the National Park.

Utilities and infrastructure developments which are to serve wider than local needs will be regarded as major development."

With reference to Policy 28 of the Plan, it is our considered opinion that the proposal would not have any unacceptable impact on the integrity, vibrancy or sustainability of the surrounding area. It is our considered opinion that any minor visual impacts caused to the local area would be clearly outweighed by the social benefits of national importance in terms of the provision of a high quality emergency services communications network.

Due to the specifications of the proposed communications network, it is difficult to demonstrate that the development will be fully in-keeping with the landscape character and special qualities of the National Park, however, care has been taken to select a site that minimises impact on the local character and environment. Any minor adverse impact to the local area will be clearly outweighed by the social benefits associated with high quality emergency services communications. The proposed site has been selected close to an existing and established communications site for Airwave and in an area surrounded by some natural conifer regeneration. The visual impact of the proposed compound. While the proposed 60x60m tree planting scheme in the area surrounding the proposed compound. While the proposed development is solely for use by the emergency services in the first instance, the proposed mast has the structural capacity to accommodate additional equipment in the future. In accordance with Government aims, this approach will facilitate future mast sharing and provision of improved communications services (subject to mobile network operator interest) with little additional impact on the character and visual amenity of the area. Any improvement to communications infrastructure in rural areas is promoted by the Government and the benefits of this would include a positive contribution to the economic and social development of local communities.

While the overriding requirement of communications developments is that they are technically and operationally fit for purpose, care is also taken to ensure that equipment is sited and designed to avoid unacceptable impacts on the surrounding area. While there is an existing mast located approximately 30m from the proposed site location, it is not structurally capable of accommodating the proposed equipment to meet the emergency services coverage demand in the surrounding area. As detailed above, the existing Airwave equipment will become redundant when the new emergency services communications system becomes operational, but there will be a period of testing; commissioning and handover where both systems will need to run concurrently. While sharing on the existing Airwave mast was not feasible in this instance, the proposal does involve the installation of a new mast at an existing and established communications site, thereby minimizing the impact on the wider character of the area.

As mentioned above, the proposed site is located close to an area of natural conifer regeneration, thereby ensuring that the proposed structure is not viewed as an isolated element in the landscape, when viewed from the surrounding area. The proposed antennas will always need to exceed the height of surrounding trees in order to avoid any clipping and meet the coverage requirement in the surrounding area. The ground based equipment will be coloured dark green in order to minimise contrast with the surroundings. Given the location of the site on such an exposed location, the proposed lattice mast is an effective design solution as the construction allows light to pass through the structure, thereby helping to reduce the visual mass and bulk of the development when viewed against the skyline from the surrounding area.

Overall, the proposed development subject of this application would both support and assist the local community in terms of providing the emergency services with a high quality communications system in the area. In this case, there are no existing telecommunications sites or other structures in the area that would be suitable for sharing so a new greenfield mast is required. The proposed equipment is the smallest available to meet the Home Office's emergency services coverage requirements in the target area. On that basis, it is considered that the proposed development at Bell Hill complies with the relevant policies of the Local Plan.

#### Planning Assessment

It should be recognised that irrespective of the installation's use as a communications base station, the introduction of a new tall structure within a particular environment will always be, to some degree, a noticeable addition to those residents and regular passers-by found closest. However it should be

appreciated that the visibility of a development or its location within its immediate context does not automatically result in an overwhelming adverse harm occurring. Indeed, the fundamental principle applied by the applicant is always to minimise the contrast between the communication equipment itself and its surroundings through where practicable appropriate siting and design.

In accordance with Government Policy and Guidance, a sequential approach to site selection was undertaken, to consider the possibility of mast sharing or using an existing building or structure before a new ground based structure is proposed. As discussed above, there is no existing telecommunications site in the area that would be suitable for sharing and no other suitable building or structure available on which to mount the proposed equipment. Consequently, the only option to address the emergency services network (ESN) coverage requirement in this area is for a new ground based mast.

Following a technical review of the search area, it was concluded that the proposed site that is subject of this application, is the best option available in terms of meeting the technical requirements of ESN, while also minimising visual and environmental impact on the surrounding area.

The location of the proposed equipment close to the existing conifer trees and proposed new woodland planting ensures that it will not be seen as an isolated element when viewed from the surrounding area, thereby helping it to assimilate with the existing landscape. A lattice mast design has been progressed as its construction allows views through the structure which is considered an appropriate design when seen against the sky or amongst adjacent tree branches.

As far as technically and operationally feasible, it is considered that the proposal has been positioned and designed in a way that respects the character and appearance of the area. In light of the above it is considered that the planning assessment of this case should concentrate on whether the visual impact of the proposed development is significant as to outweigh other material planning matters.

With regards the need for the development, ESN is providing critical national infrastructure to enable communications and interoperability for the police, fire and ambulance services in England, Scotland and Wales to help them cut crime, fight fires and save lives. The new ESN service will provide an integrated 4G mobile broadband data service using the latest generation of mobile technology.

Taking into account the context in which the proposed development would be read, it is considered that this is an appropriate location for a communications site. Taking all matters into account, it is the applicant's opinion that the visual impact as a result of the proposed installation would not outweigh the other material merits of this case.

Overall, it is considered that there is no more suitable site or design available in the area which would be acquirable, which would minimise impact on character and visual amenity while also providing the required level of ESN coverage to the target area and on that basis, it is considered that the proposal is in accordance with the requirements of national and local policy and guidance, and should therefore be approved.

**Contact Details** 

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Signed:	Mono Consultants Limited	Date:	21 March 2018

### **General Background Information for ESMCP**

This document is designed to provide general background information on the Emergency Services Mobile Communications Programme (ESMCP); in particular, the Extended Area Services project which is a constituent part thereof. It has been prepared for inclusion with planning applications and supports the network development.

# INTRODUCTION

The new blue light service, to be known as the **Emergency Services Network (ESN)**, will be delivered across England, Scotland and Wales. ESN is being procured competitively to provide a high-quality service that makes full use of the latest 4<sup>th</sup> generation (4G) technology in the telecoms sector and has a number of related projects to provide the capability, resilience and security required for what will be a key part of the Critical National Infrastructure (CNI) supporting public safety.

Most of the UK will be covered directly by EE who are in the process of upgrading their commercial networks to deliver ESN. Largely because of demographics and geography, there exists a number of areas in the country which have not been populated with mobile communications infrastructure. It is these 'not-spots' which are addressed by the Extended Area Services (EAS) project.

The EAS project extends the coverage provided by EE by procuring, on behalf of the Home Office, telecommunications infrastructure in these defined but primarily rural, remote and commercially unviable areas where little or no MNO coverage exists. The Home Office is acting as the prime contractor to contract with Acquisition, Design and Build (ADB) suppliers (Lendlease for EAS sites) and will further contract with transmission suppliers for their backhaul. Sharing existing telecommunications sites is being negotiated where possible, but EAS coverage needs will require mainly new greenfield sites, which the Home Office will then own and operate for Government use. EE will install their active equipment on these EAS sites and connect this to their core ESN network.

EE are at liberty to offer their own commercial services to the general public from these EAS sites, but are under no obligation to do so. The Home Office understands that a number of stakeholders, not least local residents, would be in favour of receiving a commercial service from the new sites so it has undertaken to build, wherever possible, an enhanced design so as to allow subsequent mobile network operators to share the sites and provide commercial services with the minimum of further works required.

# SITE SELECTION PROCESS

The following site selection procedures apply to each new installation to identify and sequentially discount alternative site options:

- 1. Following a technical review which identifies need, Home Office radio planners undertake a desktop analysis to identify the best way of meeting the site requirement. This is completed by using computerised radio propagation modelling tools. These tools show every site on the existing networks and identifies those areas where insufficient ESN signal level exists or where there is a need to increase capacity.
- 2. A desktop search of the area with the coverage deficiency identifies other operators' existing telecommunications installations. This process ensures any mast or site sharing opportunities are maximised. Where available the planning authority's mast register is also reviewed.
- 3. The Home Office radio planners define a search area, which is then issued to Mono Consultants, through Lendlease, to undertake a detailed ground search to identify suitable site options to meet the coverage deficiency.
- 4. Mono Consultants undertake a detailed ground survey to produce a report identifying viable site options which combine the following requirements: location within or close to the search area; a willing landlord with acceptable commercial terms; adherence to planning and environmental policy; and other site specific issues such as initial power and link availability and buildability. These options are then assessed by the Home Office, taking into account the suitability in coverage terms; potential available antenna height and surrounding obstructions.
- 5. A design survey provides a full structural analysis of the proposed site location including confirming access and power routes; and how the site will be linked into the surrounding ESN network and a set of planning drawings are produced.

- 6. Discussions are offered to the local planning authority to consider local policies and any protected areas and to agree additional public consultation if required.
- 7. A plan for local consultation is drawn up, and where appropriate, a consultation exercise is undertaken with the local community.
- 8. Terms are discussed and finalised with the landowner before a formal planning application is submitted to the planning authority.

As far as technically and operationally possible, The Home Office is committed to ensuring that the number and visual impact of the telecommunications sites required for the emergency services communications network is minimised.