

## CAIRNGORMS NATIONAL PARK AUTHORITY

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### FOR INFORMATION

**Title: MOBILE TELECOMMUNICATIONS DEVELOPMENTS**

**Prepared by: Gavin Miles, Head of Planning  
David Watson, Economic Development Manager**

### **Purpose of Report**

To inform the Planning Committee of planned improvements to mobile communications networks by the main mobile network operators and of the development implications that will be considered through the planning system.

### **Background and Context**

1. The limitations of the existing mobile telecommunication networks in the Cairngorms National Park and other remote and rural parts of Scotland are well established. Of the three generations of network, even the oldest 2G, voice-only networks have incomplete coverage of the Cairngorms National Park. The coverage of the later 3G and 4G networks that allow data transfer to and from mobile devices is significantly less extensive, with only a few locations having good connections. Communities, businesses, visitors and public services are all limited by the poor mobile connections.
2. Over the next two years, the mobile network operators (MNOs) will invest over £5bn to increase geographic coverage of the UK to 90% through a deal with the UK Government. The current geographic coverage in Scotland and the Highland and Islands is 29% but the UK Government expect only 6% of Scotland's land should be complete "not spots" following the improvements. Highlands and Islands Enterprise are helping to coordinate the investment and development by the MNOs and have been able to give the CNPA a summary of the likely changes in the Cairngorms National Park. The terms of the funding for the improvements mean that there are likely to be planning applications submitted over the next few months to support them.
3. The technology which supports mobile telecommunications networks has become more efficient and effective since it was first developed. Although the network improvements will require some new mast sites, the MNOs now use generally smaller masts and can direct signals more accurately. This reduces the need for as many multiple masts as would have been required a few years ago.

## Summary of the main developments

4. There are four initiatives that affect the Cairngorms National Park. Once implemented, the commercial networks of Vodafone, O2 and EE will provide 4G network coverage along the main transport corridors, for most settlements and a significant area of land in between. It will be a very significant change for most communities. The improvements are unlikely to affect the experience of those who want to be off-grid in the remote areas of the Cairngorms such as the Wild Land areas. It will also not guarantee that every household or small rural community will notice improvements as there will always be locations where signals are weak or disrupted by topography.
5. **Cornerstone Telecommunications Infrastructure Limited (CTIL)** is a joint venture company between **Vodafone** and **O2**. CTIL now owns and operates their infrastructure. They are rationalising the number of mast sites throughout the country by bringing all Vodafone and O2 services to the same sites and by sharing all equipment and antenna systems. CTIL will be upgrading 36 existing mast sites in the Cairngorms National Park to 4G and plan to install 5 new 4G mast sites under their “Grow the Grid” project. The upgrading of CTIL masts will also increase the reach of 2G services from Vodafone and O2.
6. The **EE** network has recently been bought by British Telecom (BT) and share some sites with **Three**. EE currently have 29 mast sites in the Cairngorms National Park, 16 of which carry both 2G and 3G services, while 13 carry only 2G services. EE will be upgrading their network to 4G and extending coverage as the provider of the UK’s Emergency Services Mobile Communications Programme.
7. **The Emergency Services Mobile Communications Programme (ESMCP)** is a UK-wide project led by the Home Office to replace the communications system used by emergency services known as Airwave. The new service will use the 4G networks and be called the Emergency Services Network (ESN). It will be used by Police, Fire and Ambulance services in England, Scotland and Wales. As part of the ESMCP, EE will be upgrading all 29 of their existing mast sites in the Cairngorms National Park to 4G technology. They will also be installing 15 new masts of up to 15m height in order to provide the geographic coverage needed for emergency services. The network will be available for commercial use as well as emergency services.
8. The Scottish Government has started to develop a **Rates Relief Scheme for Mobile Masts**. The project will pilot a non-domestic rates relief scheme for new mobile masts in areas that would not normally be commercially viable. The Scottish Futures Trust (SFT) has identified 3 community pilots across Scotland, one of which is an area between the Braes of Glenlivet and Tomnavoulin in the Cairngorms National Park that was previously identified as having “not spots” for mobile signals.

## Implications for the Planning Committee

9. Clearly, the construction of 20 new masts across the National Park (Table 1) will have impacts that need to be considered through the planning process. This is most obvious in the potential landscape and the visual impacts of the masts themselves. While older technology tended to look for sites above valleys to gain coverage, the new technology means that new masts are likely to be located in relatively easy to access areas in or near to settlements and main transport corridors. This may avoid the need for many new tracks or prominent hill locations for the new masts and should place them within a landscape that already contains communications and energy transmission infrastructure and well as a range of buildings. From what we know so far, we don't expect the upgrading of existing masts will give rise to significant landscape or visual impacts. The physical changes should be relatively minor and lead to small changes in appearance.

Network	Existing masts	Upgrades	New masts
CTIL (Vodafone & O2)	36 masts at 2G&3G	36 masts to 4G	5 masts at 4G
EE	29 masts at 2G&3G	29 masts to 4G	15 masts at 4G

10. Any planning applications that are made will be considered against the policies in the Cairngorms National Park Local Development Plan. We encourage the MNOs and their agents to use the pre-application services of the local authority planning teams that the CNPA contributes to. However, because the 4G networks that will be developed require good signals to work well, there may not always be many options for the location of new masts. The emphasis for the MNOs and the planning authorities will be to ensure that any adverse impacts are minimised as much as reasonably possible.
11. Although the CNPA may not call-in all the new mast applications, it is likely that some will be in locations that trigger call-in and determination by the CNPA Planning Committee. The CNPA planning team will also monitor the applications made so that when the CNPA Planning Committee consider applications, they can be set in the context of the other applications made or expected. Staff will also update either the Planning Committee or CNPA Board on the success of the commercial network expansion once this project is complete or if any new projects to improve mobile connections for remote rural communities are established.

## Next Steps

12. CNPA staff will continue to work with the MNOs and Highland and Islands Enterprise to make the network upgrades as smooth as possible. The CNPA planning team will provide pre-application advice where needed and work with the MNOs to encourage well-considered planning applications. The Planning Committee will see notice of any associated planning applications in the weekly call-in lists.

**Gavin Miles, April 2016**  
[gavinmiles@cairngorms.co.uk](mailto:gavinmiles@cairngorms.co.uk)