Summary: Intervention and Options

<table>
<thead>
<tr>
<th>Total Net Present Value</th>
<th>Business Net Present Value</th>
<th>Net cost to business per year (EANCB on 2009 prices)</th>
<th>In scope of One-In, One-Out?</th>
<th>Measure qualifies as</th>
<th>RPC Opinion: RPC Opinion Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.0</td>
<td>20.0</td>
<td>- 1.8</td>
<td>Yes</td>
<td>Yes</td>
<td>OUT</td>
</tr>
</tbody>
</table>

**What is the problem under consideration? Why is government intervention necessary?**

Improving the country’s communications infrastructure is integral to our ability to grow the economy and compete on a global scale. Demand for mobile broadband services is rising, and new 4G services are now being rolled out. Access to mobile services varies significantly across the country, with particularly poor provision in some rural areas. Planning delays can hold back and increase the cost of deploying mobile infrastructure. Government intervention is needed to ensure that planning controls are proportionate and operate in a way that facilitates swift deployment of mobile networks.

**What are the policy objectives and the intended effects?**

The policy objective is to simplify and update existing planning procedures which currently affect the installation of some aspects of mobile networks. Streamlining these processes will assist increasing the coverage of all mobile networks including 4G. It is also expected that business costs will be reduced and equipment sharing will be promoted.

**What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)**

Do Nothing: This option involves no change to the existing planning restriction on mobile deployment.

Option 1. Preferred Option: This involves a number of changes to planning regulations to enlarge the scope of permitted development of mobile networks, increase thresholds to reduce existing limitations on installation and clarify a number of issues which have proved ambiguous in the past.

**Will the policy be reviewed?** It will be reviewed. If applicable, set review date: spring/2018

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible
SELECT SIGNATORY:                      Date:  

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**Impact Assessment (IA)**

Date: 16/07/13

Stage: Validation

Source of intervention: Domestic

Type of measure: Secondary legislation

Contact for enquiries: andy.swyer@communities.gsi.gov.uk
## Summary: Analysis & Evidence

### Policy Option 1

**Description:**

**FULL ECONOMIC ASSESSMENT**

<table>
<thead>
<tr>
<th>Price Base Year</th>
<th>PV Base Year</th>
<th>Time Period Years</th>
<th>Net Benefit (Present Value (PV)) (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2014</td>
<td>10</td>
<td>Low: 12.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High: 29.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Best Estimate: 20.0</td>
</tr>
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</table>

### COSTS (£m)

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
<th>Best Estimate</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Description and scale of key monetised costs by ‘main affected groups’**

### BENEFITS (£m)

<table>
<thead>
<tr>
<th>Low</th>
<th>High</th>
<th>Best Estimate</th>
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</thead>
<tbody>
<tr>
<td>1.3</td>
<td>3.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

**Description and scale of key monetised benefits by ‘main affected groups’**

### Other key non-monetised costs by ‘main affected groups’

Potential visual dis-amenity from increased deployment and environmental costs from additional infrastructure. However, uncertainty around their significance means impacts are not monetised (see Costs and Benefits section).

### Other key non-monetised benefits by ‘main affected groups’

Reduced uncertainty for business and potential increased coverage leading to better connectivity also leading to higher revenue for 4G operators and additional capacity and connectivity for 3G and 2G (voice only). However, uncertainty around its significance means impact is not monetised (see Costs and Benefits section). Potential increase in speed of roll out of 4G.

### Key assumptions/sensitivities/risks

Discount rate (%): 3.5

Savings from no longer submitting planning or prior approval applications for mobile telecommunications are between £2,500 and £4,330 per proposal. Between 4,000 and 6,000 sites will no longer be required to submit either a prior approval notification or a full planning application between 2014 and 2017. 5% of the 7,000 sites in protected areas will become redundant as a result of infrastructure rationalisation.

### BUSINESS ASSESSMENT (Option 1)

<table>
<thead>
<tr>
<th>Costs: 0</th>
<th>Benefits: - 1.8</th>
<th>Net: - 1.8</th>
<th>In scope of OIOO?</th>
<th>Measure qualifies as</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
<td>OUT</td>
</tr>
</tbody>
</table>
Background

Improving the country’s communications infrastructure is integral to our ability to grow the economy and compete on a global scale. The Secretary of State for Culture, Media and Sport announced a package of complementary measures on 7 September 2012 designed to achieve this goal that included a specific commitment to speed up the deployment of mobile infrastructure which is the subject of this consultation.

Mobile telephony is central to the Government’s vision. More telephone calls are made via mobile handsets than on fixed line telephones. The number of mobile subscriptions in the UK is 82.1m (Ofcom Q3 2012). There are on average 1.29 active handsets for every man, woman and child in the UK and less than 10% of people do not own one. Mobile telecommunications enable businesses and individuals to be more productive. They potentially offer access to new services which may help transform education, health care and the places we live. It is the means by which many people access the markets they use to buy goods and services and to find new employment opportunities. They are an important way of keeping in touch.

Mobile technology has changed significantly over recent years, and has had to respond to radically increased demand from businesses and the public’s appetite for greater online connectivity and faster data download speeds. The latest data shows that 92% of individuals now have a mobile phone and 39% of individuals own a smart phone with internet access. International comparisons reveal UK consumers’ appetite for mobile connectivity and devices. For the first time, UK consumers are downloading more data on their mobiles and tablets than any other major nation. Today we see over 32 million smartphone data users, 5.1 million users of mobile broadband and over a million 3G-enabled tablet users.

However, whilst the UK has high levels of internet penetration and online activity overall, not all parts of the country enjoy the same levels of access to the latest technologies or enjoy transmission speeds that enable the latest and most innovative services to be used. Businesses and the public have a reasonable expectation that they should be able to access the internet through either a fixed line or through their mobile phone as well as make calls on the move as a given.

While mobile broadband coverage generally continues to improve there remain households who cannot receive mobile services (voice or broadband). Ofcom estimate that 0.3% of premises are in ‘complete not-spots’ (they have no 2G voice mobile coverage) while 6.1% of premises are in ‘partial not-spots’ (they are served by only one

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3 Ofcom: “Landline and Mobile Phone Services” 2011; Ofcom: “Adults media use and attitudes report” 2012
4 Ofcom international communications market report 2012 http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr12/international/
or more, but not all mobile operators)\textsuperscript{6}.

Following the auction of the spectrum for 4G mobile services earlier this year (2013), the successful bidders will begin competitive commercial provision of 4G mobile broadband services throughout the country beginning in summer 2013. This will facilitate competition amongst communications providers following the launch of 4G which will need to be supported by new infrastructure. The Government wants 4G services to be widely available, particularly in areas where currently 2G and 3G provision is poor. Capital Economics estimated in April 2012 that if £5 billion (in 2009 prices) is invested in the 4G supply chain it will create 125,000 new jobs. In addition, the coming of 4G is estimated to lead to a rise in GDP of roughly 0.5\%\textsuperscript{7}.

The Government believes that an efficient and effective communications infrastructure is integral to increased economic growth and improvement in international cost competitiveness. Consumers and businesses should be confident that their mobile technology will work wherever they are in the country\textsuperscript{8}. Table 1 gives an indication of the connection speeds required for various common online activities. The actual speed that a mobile consumer experiences depends on a number of factors including distance from the mast, numbers of users in the area and topology of the area. Average mobile broadband speeds are generally significantly lower than fixed broadband speeds and higher throughput applications such as high definition video streaming challenge the limits of capability of the current generation of connections. The proposals in this consultation will facilitate the roll out of networks capable of delivering higher speed mobile broadband services.

**Table 1: Activities and speed requirements**

<table>
<thead>
<tr>
<th>Number of simultaneous users</th>
<th>Send an email or download one and submit a form online</th>
<th>Make a high quality video call</th>
<th>Stream video in standard definition</th>
<th>Stream video in high definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&lt; 1 Mps</td>
<td>&lt; 1.5 Mps</td>
<td>2.0 Mps</td>
<td>6-8 Mps</td>
</tr>
<tr>
<td>2</td>
<td>&lt; 1 Mps</td>
<td>&lt; 3.0 Mps</td>
<td>2-4 Mps</td>
<td>12-16 Mps</td>
</tr>
<tr>
<td>3</td>
<td>&lt; 1 Mps</td>
<td>&lt; 4-5 Mps</td>
<td>3-6 Mps</td>
<td>18-24 Mps</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 1 Mps</td>
<td>&lt; 6 Mps</td>
<td>4-8 Mps</td>
<td>24-32 Mps</td>
</tr>
</tbody>
</table>

**Key:** Mps – Mega BITs per-second

24 Mbps and above requires a superfast broadband connection

\textsuperscript{6} Ofcom Communications Infrastructure Report 2012

\textsuperscript{7} Capital Economics: “Mobile Broadband and the UK Economy”, report commissioned by Everything Everywhere, 30 April 2012.

\textsuperscript{8} Policy Exchange analysis.
Installation of telecommunications infrastructure is subject to planning regulations. Electronic telecommunications permitted development rights are set out in Part 24 of Schedule 2 to the Town and Country Planning (General Permitted Development) Order 1995 (as amended). This means that in prescribed circumstances equipment can be installed without making a planning application. The last update to Part 24 of Schedule 2 to the 1995 Order was in 2003. The approach adopted then was built around the technology available at that time. It is timely to reflect the technological advances of the last decade to update and amend Part 24 of Schedule 2 to the 1995 Order.

Permitted development rights in some circumstances, are subject to a prior approval process. This provides a statutory 56 days for the local planning authority and community to consider the siting and appearance of communications apparatus before development commences. In addition, land in certain areas is also in specific circumstances excluded from certain permitted development rights i.e. Areas of Outstanding Natural Beauty, Conservation Areas, World Heritage Sites, National Parks, The Norfolk and Suffolk Broads and Sites of Special Scientific Interest. For this document we will call these areas protected and all other areas non-protected. In view of their exceptional status combined with the low numbers of commercial premises and householders in these areas\(^9\), none of the changes we are bringing forward will apply to Sites of Special Scientific Interest.

**Problem under Consideration**

The Government announced a package of measures 7 September 2012 to support the rapid rollout of superfast broadband across the country, including changes to planning requirements for fixed and mobile infrastructure. The deployment of superfast mobile broadband is not as rapid as it might otherwise be, in part, because of the existence of the need in many cases to seek approval from the local planning authority prior to installing equipment for mobile telephony. This can delay, and add cost to, the deployment of superfast mobile broadband. It is considered that this could potentially reduce the social and economic benefits that are likely to emerge from the adoption of 4G mobile technology.

**Rationale for Intervention and Policy Objective**

The policy intention is to further deregulate permitted development rights by making changes to Part 24 of Schedule 2 of the 1995 Order to support the swifter rollout and delivery of improved mobile services, in particular, 4\(^{th}\) Generation (4G), greater rural connectivity (mobile and mobile broadband), encourage more sharing of infrastructure between mobile telecommunications providers and therefore make more efficient use of existing sites. These changes should also provide greater capacity and connectivity for 3G and 2G (voice only).

The changes proposed in the consultation which closed 14 June will provide certainty for mobile operators that planning approval is in place under permitted development rights subject in specific situations to prior approval (siting and design). This means that the physical infrastructure required to deliver 4G and mobile broadband can be brought forward with more certainty than going through a planning process. This certainty should

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\(^9\) There are 261 commercial and around 1,100 residential properties in Sites of Special Scientific Areas - OS Address Layer dataset http://www.ordnancesurvey.co.uk/oswebsite/products/os-mastermap/address-layer-2/index.html

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also encourage operators when upgrading sites to 4G with the larger antenna height to use some structural capacity to provide greater access and more reliable 2nd Generation (2G voice only) and 3rd Generation (3G) services. This should, in turn, support economic growth and job creation.

Policy Options

Do Nothing

This option involves no change to the existing planning restriction on mobile deployment.

Option 1: Extending permitted development rights for mobile telecommunications operators (preferred option)

The proposed changes to planning restrictions on the installation of mobile equipment are detailed in the consultation document. Installing new mobile telecommunications equipment will provide greater access to operators’ networks in rural areas whilst also facilitating more sharing of infrastructure in both urban and rural areas. In summary, the proposed changes are:

- Extending permitted development rights.
- Changing thresholds
- Clarifying existing regulations to remove ambiguity.

While some apparatus installations will no longer require prior approval (siting and design) all will continue to be covered by statutory consultation requirements under the Electronic Communications Code (Conditions and Restrictions) Regulations 2003 (“the Electronic Communications Code”). Operators are required to give local planning authorities 28 days prior notice of development commencing for apparatus subject covered by permitted development and where prior approval (siting and design) is required the consultation period is a statutory 56 days.

Some of the changes proposed will apply to protected areas, or non protected areas only, others to both protected and non-protected areas.

Costs and Benefits

Change in coverage

The size of the costs and benefits of this measure will depend, in part, on the extent to which coverage changes as a consequence of this measure. On the one hand, coverage could increase as the change in planning regulation makes it easier for development to happen. This would mean there are benefits to society and business from improved access and connectivity. However, there would also be potential corresponding visual dis-amenity impacts as a result of greater development. In addition, these issues are further complicated by the following:

1. the extent to which coverage would change in the medium to long term; and
2. the extent to which existing sites are used to provide the additional coverage thereby dampening the environmental impact of this measure;

Reduced planning costs would improve the commercial case for expansion which could enable an increase in coverage. However, consultation with industry has suggested that
while coverage may increase, it is the delivery of 4G roll out which will be speeded up. This would mean no actual increase in coverage but more immediate commercial benefits to business. The difficulty is that there no data or evidence available to enable a robust estimate of the potential change in coverage. Consultation with industry has suggested minimal impact on coverage (and therefore associated environmental impacts) but the industry response is also uncertain on the potential impact on coverage. In addition, coverage itself will depend on the unique circumstances of each area and the level of demand from individuals and business. Given this, it is impossible to estimate with any degree of confidence a monetary value for the change in coverage. [Given the existing levels of planned coverage and a relatively high approval rate for current mobile telecommunications application (around 72%\(^{10}\)) we expect the marginal impact of any change to be relatively small. Significant impacts will result from speeding up applications that would have been delivered more slowly in the counterfactual. The high approval rate and reduction in requirement for new sites show that the number of additional site relative to the counterfactual is likely to be small. Therefore, we have reflected these potential impacts as non-monetised impacts in this impact assessment.]

**No longer submitting a planning application: benefits to business**

Consultation with the mobile operators' trade association suggests their best estimate of the number of sites that will benefit from no longer being required to submit either a planning application or a prior approval is between 4,000 and 6,000. These sites are expected to come forward over the period to 2017. In the central scenario 5,000 sites are therefore assumed to come forward spread equally over three years. High and low scenarios assume 4,000 and 6,000 proposals are spread equally across the three years. This represents around 10% of all mobile infrastructure including ground based masts. Applications for this type of development will continue to benefit from these measures, however, the volume of applications beyond this point is uncertain. The first three years will be the focus for the applications required to facilitate the latest roll out.

Given the variety of proposals, and the spread of applications across protected and non-protected areas, some applications will benefit from moving from full planning to prior approval and others will benefit from moving from prior approval to full permitted development rights. The mix of the two will be dependant on how operators choose to manage their networks.

Research undertaken for the Department of Communities and Local Government looked into the costs associated with the planning application process for mobile telecommunications\(^{11}\). The costs indentified were specific or additional relating to the requirement for planning permission, as distinct from those other costs associated with, for example, producing and implementing a design scheme. These include the overall costs of devising, planning, designing, project managing and commissioning schemes including the following elements associated specifically with preparing and submitting an application:

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\(^{10}\) Average approval rate for mobile communications applications in England Jan 2008 to Dec 2012. The source of the data is Glenigan, a private company that provides data on planning applications [www.glenigan.com](http://www.glenigan.com).

• costs attributable to staff working for the applicant (the developer or eventual occupier)
• research-type costs towards identifying sites, gaps in the market for particular use configurations, development potential etc;
• professional services focused on bringing forward or shaping the research findings into practicable schemes – such as making development plan representations to have a site included in local authority land allocations;
• land or site acquisition costs – including the costs of establishing ownership, procuring deeds, legal and contractual advice, and of course the finance cost of purchase or lease itself;
• scheme scoping to identify potential and desirable uses, including the possible mix, scaling or massing as the ‘terms of reference’;
• scheme development based on the parameters to work into a fully-considered scheme appropriate for planning submission including design, pre-application consultations with authorities and consultees, and interdisciplinary liaison;
• submission of the application – including the information required for the validation of the planning application, again drawing upon a similarly diverse range of disciplines;
• post-submission negotiation and representation with additional information requirements or alterations to the original scheme, design, mix or layout; and
• post-determination elements including handling or any appeal against refusal or particular conditions, or work towards discharging pre-commencement and other conditions.

The total cost for submission of prior approvals ranged from £1,410 to £8,665 for the submission but the upper bound of this range fell to £4,335 when a case which was considered to require full planning permission was removed. Whilst this represents only one case, which may be an outlier/extremely complex case, it is in line with expectations and supports the notion that permitted development with prior approval is a significantly less expensive route than full planning permission. A cost saving of £4,330 (£8,665 - £4,335) is used as an upper bound applied to the range of schemes (4,000, 5,000 and 6,000 spread equally over the first three years only) to reflect sites where the benefit will be moving from full planning permission to prior approval.

The average cost of submitting a prior approval is shown to be £2,350\textsuperscript{12}. More recent estimates from the mobile industry’s trade association provided in their consultation response estimated the cost is around £2,500. This appears to a reasonable estimate of the saving where prior approval is no longer required.

To account for the variation in saving (depending on the type of site and whether it will benefit from the removal of full planning or the removal or prior approval) a range of savings is between £2,500 and £4,330 and has been applied to the range of affected sites (4,000 to 6,000).

The average annual saving from no longer having to submit a full planning application or a prior approval is £1.7m (£1.0m to £2.6m). The ten year present value in the central scenario is £16.5m (£9.7m to £25.1m).

**Rationalisation and Intensification of the Use of Existing Infrastructure: benefits to business**

**Changes from the consultation:**

In response to technical information provided in response to the consultation we will bring forward the following changes to regulations:

- Small cell antenna – there will be no height limit and the two antenna per-building or structure will apply to both protected areas and non-protected areas. The consultation proposal was only protected areas and 1 antenna below 15m and 2 above 15m in height. In addition, we have provided a provision within the volume threshold to include wifi access to be bolted on to the small cell antenna to further support access to broadband for businesses and individuals.

- The addition of 2 antenna and 2 dish antenna to an existing mast in protected areas. Based on technical feedback received we are increasing the thresholds to 3 antenna and 3 dish antenna.

- Include antenna cover within the permitted development right.

Small cell antenna are quick, cost effective to install and minimise the need for ground based masts. As such, they have the potential to make a significant contribution to the swifter roll-out of 4G.

Enabling the addition of 3 antenna and 3 dish antenna in protected sites supports 4G deployment.

Including antenna cover within the permitted development right removes any ambiguity that the cover does not require separate approval via either prior approval or planning permission with their associated fees.

However, in the absence of publicly available data it is difficult to quantify this effect.

It is expected that the new measures will facilitate the rationalisation of mobile networks. Allowing larger antennae and antenna systems (typically comprising of between 4-6 actual antenna) in larger numbers at a given location will make it more cost effective for Mobile Network Operators to maximise the use of a given site. As a consequence, it is expected that Mobile Network Operators capital and maintenance costs will be reduced. However, in the absence of publicly available data it is difficult to quantify this effect.

It is expected that granting permitted development rights over mobile communications infrastructure placement and increased height will lead to more extensive use of existing sites. This will reduce the need to seek planning permission and eliminate the costs of erecting some new ground-based masts. Consultation submissions show the mobile industry estimate that around 5% of the 7,000 potential sites contained in protected
areas will no longer be required. Sites which no longer require a planning application will save businesses up to £4,330 as set out above. As before, a range of savings (£2,500 to £4,330) have been applied to reflect the variation in savings depending on the design and location of the surplus sites.

Average annual savings for no longer submitting applications for the sites identifies are around £0.4m (£0.3m to £0.5m). The ten year present value is £3.5m (£2.5m to £4.4m).

Businesses will also benefit further from no longer having to operate and maintain the equipment on redundant sites. The associated savings are dependent on the exact equipment and sites involved. Consultation responses suggest these could be as high as £15,000 per-site-per annum. Due to the significant uncertainty these have not been included in the summary sheets or the Equivalent Annual Net Cost to Business.

**Wider impacts**

Increasing the number of antennae that can be installed may lead to decreased visual amenity. However, very few locations should have a negative impact when sited appropriately. The Mobile Operators Association response to the consultation confirmed that the taller antenna will enable them to be sited away from the edge of buildings to improve the visual amenity from the ground. However, it is not possible to quantify this. Although some installations may be on previously undeveloped sites, many will be on existing sites or on sites used for commercial or industrial purposes. Any impact is therefore expected to be very minor.

It is considered that the increase in visual amenity may be further mitigated by an expected rationalisation of sites as a result of these changes. Hence any minor visual amenity costs may be offset may be reduced requirement for infrastructure that was otherwise planned.

Any residual effect may be further offset by the increased convenience to tourists of improved mobile coverage. Improved mobile services in protected areas may assist in providing emergency responses to the resident and visiting population. In addition, Individuals and businesses will benefit from wider access to mobile telecommunications particularly 4G for superfast mobile broadband. As such, this will provide freedom to expand and improve their existing businesses, and will be able to grow and thrive without the disruption and cost of relocating to other areas which currently has better access to telecommunications. The online economy is very strong in the UK and the proposals in this consultation will support its continued growth. The internet contributes more to GDP in the UK than it does in any other G20 country i.e. 8.3% in 2010 and forecast to rise to 12.4% in 2016.\(^\text{13}\)

**Direct Benefits to Business (One In, Two Out Methodology)**

This measure counts as an out. Mobile operators are businesses and will make direct savings from a reduction in the costs of seeking planning permission for mobile communications infrastructure. The present value of the net benefit to business is £20.0m (£12.2m to £29.5m). The Equivalent Annual Net Cost to Business is - £1.8m (2009 prices, 2010 discount base year).

**Impacts on Small and Micro Businesses**

\(^{13}\) Boston Consulting Group: “The Internet Economy in the G20” 2012
It is expected that the direct impacts of the proposed measures will fall most heavily upon large firms operating nation-wide mobile networks. However, insofar as the availability and quality of mobile voice and data services are improved the productivity of small and micro businesses should also be improved. This is because enhanced mobile telephony assists small and micro businesses to better coordinate their resources, to more effectively deploy their time and to keep in closer touch with their markets than at present.

**Implementation**

The proposals detailed in the consultation paper will be implemented through changes to Part 24 of Schedule 2 of the General Permitted Development Order 1995.