

# **New Build Developments: Delivering gigabit-capable connections**

September 2023

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## 1. Ministerial foreword

The Scottish Government recognises the ever-increasing importance of digital connectivity in our daily lives. The COVID-19 pandemic demonstrated how important this was for keeping in touch with friends and family, working from home or accessing digital public services. Our Digital Strategy outlines the role of digital infrastructure in ensuring economic, social and environmental wellbeing of Scotland.

Access to digital infrastructure also has a role to play in tackling digital exclusion and ensuring no one is left behind. As a key component of this, it is important that we ensure that new build housing developments are future proofed with digital connectivity that supports our ambitions.

This consultation outlines proposals to amend building standards to ensure that all new build homes are equipped with gigabit-capable (greater/faster than 1,000 megabits per second) infrastructure from the outset, with a connection available subject to a cost cap. In cases where a connection cannot be provided within the cost cap there will be a requirement to install the passive infrastructure (e.g. ducts) required to facilitate a connection at a later date.

While telecoms legislation is reserved to the UK Government, to date the Scottish Government has invested over £1 billion of public funding to transform Scotland's digital connectivity through the Digital Scotland Superfast Broadband (DSSB) and the Reaching 100% (R100) programmes, and improving mobile connectivity through the Scottish 4G Infill (S4GI) programme. Investing in these future-proofed networks is the right call for Scotland's economic future and is providing a backbone of digital infrastructure that will enable reliable connectivity services and drive innovation across all sectors of the economy.

In addition to our investment, commercially telecoms operators have made significant investments in gigabit-capable connectivity across the length and breadth of Scotland.

We have used devolved powers to extend rates relief on newly laid and lit fibre for a period of fifteen years until March 2034 – longer than anywhere else in the UK – to create the right conditions for commercial investment in digital infrastructure in Scotland. Through our Affordable Housing Supply Programme, we have taken steps to ensure that new social housing is digitally enabled with the best available technology. We are also working closely with the UK Government to shape potential Project Gigabit activity in Scotland.

To help deliver our ambitions for digital connectivity this consultation invites your views on the proposals to amend building standards to include gigabit-capable ready infrastructure up to the proposed cost cap.

Richard Lochhead

**Minister for Small Business, Innovation, Tourism and Trade**

## **2. Introduction and how to respond to this consultation**

### **Purpose**

Telecommunications legislation and regulation are the responsibility of the UK Government as reserved matters under the Scotland Act 1998. Despite this the Scottish Government has invested in our programmes to improve the connectivity picture in Scotland.

Where devolved powers are available the Scottish Government have considered digital connectivity within the planning system, through permitted development rights and in National Planning Framework 4, and extended rates relief on newly laid and lit fibre to a total of fifteen years.

These proposals complement existing activity, both commercial and public sector interventions, to improve digital connectivity across Scotland.

### **Drivers for the consultation**

The position at present is that there is no requirement for a broadband connection of any speed to be available in new homes with the legislative requirement limited to the provision of passive in-building infrastructure to facilitate a connection – this could be a copper or fibre connection.

If no connection has been made available from an operator a resident is eligible to apply for a connection under the Universal Service Obligation (USO) to BT for a connection of over 10 megabits per second at a cost of no more than £3,400.

Data published by Thinkbroadband, an independent broadband news site, indicates significant progress being made towards gigabit-capable connectivity availability in new build premises. In 2022, fibre to the premise was delivered to 97.6% of new build premises in Scotland based on their data for approximately 15,000 homes. A superfast connection (a download speed greater than 30 megabits per second) was available at outset to 99.7% of premises. The full fibre figure is unchanged while the superfast figure has risen from 99.1% in 2021. We are however aware that reflects only a partial picture as it relies upon new postcodes. The broadband status of developments within existing postcodes is not captured.

Although the availability of gigabit-capable connectivity in new build homes is increasing it is important that this connectivity is available consistently throughout Scotland.

### **Scope of this consultation**

Our proposals outlined in this consultation will amend building regulations to require developers to ensure that:

- all new build homes are installed with the gigabit-ready physical infrastructure necessary for gigabit-capable connections, where reasonably practicable;
- a gigabit-capable connection is installed in a new build home subject to a £2,000 cost cap per dwelling;
- or where a gigabit-capable connection is not being installed, the next fastest broadband connection is installed without exceeding the £2,000 cost cap.

We welcome views from everyone with an interest in delivering future proof connectivity to new build homes across Scotland.

## **Timetable for Implementation**

Subject to the outcome of this consultation, Ministers' would propose to introduce new requirements via amendment of Building Regulations and supporting guidance in early 2024, bringing changes into force later in 2024.

## **Consultation documents**

This consultation package comprises the following elements:

- The consultation document
- [A Partial Business and Regulatory Impact Assessment](#)

## **Scottish Government consultation process**

Consultation is an essential part of the policy-making process. It gives us the opportunity to consider your opinion and expertise on a proposed area of work.

You can find all of our [consultations online](#). Each consultation details the issues under consideration, as well as providing a way for you to give us your views – either online, by email or by post.

Responses will be analysed and used as part of the decision-making process, along with a range of other available information and evidence. We will publish a report of this analysis for every consultation. Depending on the nature of the consultation exercise the responses received may:

- indicate the need for policy development or review
- inform the development of a particular policy
- help decisions to be made between alternative policy proposals, or
- be used to finalise legislation before it is implemented.

While details of particular circumstances described in a response to a consultation exercise may usefully inform the policy process, consultation exercises cannot address individual concerns and comments, which should be directed to the relevant public body.

## Responding to this consultation

We are inviting responses to this consultation by 12 December 2023. Please respond to this consultation using the Scottish Government's consultation hub, Citizen Space. You can save and return to your responses while the consultation is still open. Please ensure that consultation responses are submitted before the closing date of 12 December 2023.

If you are unable to respond using our consultation hub, please complete the Respondent Information Form and the consultation questionnaire and return to:

Digital Connectivity Policy  
The Scottish Government  
5 Atlantic Quay  
Glasgow  
G2 8LU

Email: [digitalconnectivity@gov.scot](mailto:digitalconnectivity@gov.scot)

## Handling your response

If you respond using the consultation hub, you will be directed to the 'About You' page before submitting your response. Please indicate how you wish your response to be handled and, in particular, whether you are content for your response to be published. If you ask for your response not to be published, we will regard it as confidential and we will treat it accordingly.

If you are unable to respond via Citizen Space, please complete and return the Respondent Information Form. If you ask for your response not to be published, we will regard it as confidential, and we will treat it accordingly.

All respondents should be aware that the Scottish Government is subject to the provisions of the Freedom of Information (Scotland) Act 2002 and would therefore have to consider any request made to it under that Act for information relating to responses made to this consultation exercise.

To find out how we handle your personal data, please see our [privacy policy](#).

## Next steps in the process

Following the closing date, all responses will be analysed and considered along with any other available evidence to help us. Responses will be published where we have been given permission to do so, and after we have checked that they contain no potentially defamatory material. Responses will be made available to the public at [Scottish Government consultations](#). If you use Citizen Space to respond, you will receive a copy of your response by email. An analysis report will also be made available.

## Comments and complaints

If you have any comments about how this consultation exercise has been conducted, please send them to:

Digital Connectivity Policy  
The Scottish Government  
5 Atlantic Quay  
Glasgow  
G2 8LU

Email: [digitalconnectivity@gov.scot](mailto:digitalconnectivity@gov.scot)

### **3. Current Policy**

Currently the Building Standards Technical Handbook Section 4.14 'In-building physical infrastructure for high-speed electronic communications network' outlines the current requirements to provide in-building infrastructure.

At present every building and building unit must be designed and constructed in such a way that:

- a. a high-speed ready in-building physical infrastructure up to a network termination point for high-speed electronic communications network is provided;
- b. in the case of a building which contains more than one building unit, a common access point for high-speed electronic communications networks is provided.

### **4. Proposed Policy**

#### **The steps to installing gigabit-capable broadband in new build homes**

The exact process for installing gigabit-capable broadband in new build homes is dependent on which network operator is engaged. However, the overarching steps remain the same for all developments:

#### **Gigabit-capable broadband installation steps**

1. A developer (or a contractor working on their behalf) engages with at least two network operators.
2. The network operators provide quotations.
3. Agreement reached with chosen network operator.
4. In-building physical gigabit-ready infrastructure is installed (from a network termination point within each dwelling to an access point, or a common access point within multi-dwelling buildings).
5. Necessary external physical gigabit-ready infrastructure is installed from an access point or common access point to the nearest network distribution point (different methods are used). This work will be done in phases for developments but would typically include on-site ducts, chambers and access points.
6. A gigabit-capable connection from the network distribution point is installed to a dwelling's network termination point, composed of an optical fibre cable or other equipment by which such a connection will be provided (in some cases this may involve expansion of the network),



A consumer can then contract with a relevant internet service provider who activates the gigabit network connection.

The new requirements are designed to align with current practices and complement existing processes. This will ensure that all developers are taking the necessary steps to equip new build homes with gigabit-ready infrastructure and gigabit-capable connections whilst minimising burdens.

## **Building Standards**

The requirements for developers will ensure new build homes have gigabit-capable connections through the installation of:

- the in-building and onsite physical infrastructure necessary for gigabit-capable connections (consisting of infrastructure including ducts, chambers and termination points) up to an off-site network distribution point where reasonably practicable; and
- subject to a £2,000 cost cap per dwelling, a gigabit-capable connection (composed of equipment such as an optical fibre cable, other cabling or wiring, or wireless connection that will provide gigabit-capable broadband if such a service were to be provided by an Internet Service Provider)

Where a developer is unable to meet the requirement to secure a gigabit-capable connection, for example because the developer costs incurred after any network operator contribution exceed the cost cap or another exemption applies, a developer will be required to install the next best technology connections available unless the quote for that installation also exceeds the cost cap. In the first instance this should be at least a superfast 30 Mbps connection, and failing that a broadband connection in line with the Broadband Universal Service Obligation's download speed. As set out in the Universal Service Order 2018 (Electronic Communications (Universal Service) (Broadband) Order 2018 – SI 2018/445) this is currently a connection delivering at least 10 Mbps download speed (along with other defined quality parameters). Where future amendments to the Universal Service Obligation are made the standard for new homes will require review.

Where no connection can be secured without exceeding the cost cap, the first requirement to install gigabit-ready physical infrastructure necessary for gigabit-capable connections will ensure that the new build home is future-proofed and ready for gigabit connectivity unless any further exemption based on the remoteness of the property is appropriate. In the absence of a broadband connection in line with a Broadband Universal Service Obligation connection, a consumer will normally be able to make a request for a Universal Service Obligation connection.

The Broadband Universal Service Obligation is a UK-wide measure intended as a 'safety net' to deliver broadband to those premises that do not have access to a decent and affordable connection. This is currently defined as a connection delivering at least 10 Mbps download speed and 1 Mbps upload speed (along with other defined quality parameters). Ofcom has defined an affordable connection as one that costs not more than £54 per month. The Broadband Universal Service

Obligation provides a legal right to consumers to request a broadband connection, up to a cost threshold of £3,400 providing eligibility criteria are met, and a mechanism to contribute above this threshold to ensure a connection within a specified timeframe.

## **Gigabit-ready physical infrastructure**

The developer's requirement to install the gigabit-ready physical infrastructure necessary for gigabit-capable connections will require building works to ensure that each dwelling (including each individual dwelling in multi-dwelling buildings) is equipped with the required infrastructure to support at least one gigabit-capable connection. This includes in-building and onsite physical infrastructure. Infrastructure can be located anywhere within the site such as in the footpath, driveway or common area leading from the building.

### **In-building physical infrastructure**

To meet this requirement, in-building physical infrastructure should be provided to extend from a network termination point within a dwelling (a physical point providing access to an electronic communications network) to a building access point (a physical point accessible to a network operator) typically located on the external wall. For domestic buildings containing more than one dwelling, in-building physical infrastructure should be provided to extend from a network termination point within a dwelling to a common access point (typically located in a communal service riser). This mirrors existing requirements of Standard 4.14 of the Building Standards updating the standard to reflect that the physical infrastructure should be capable of enabling a gigabit electronic communications network connection.

### **Onsite physical infrastructure**

For the developer to meet the requirement to install gigabit-ready physical infrastructure the new build home will also need to be equipped with infrastructure external to the building. This can vary across developments but typically includes the installation of ducts, chambers, cabinets, towers and poles, connecting a dwelling's access point to a network distribution point or an access point located in close proximity to a network distribution point.

This gigabit-ready physical infrastructure will need to extend to one of the following points:

- a network operator's network distribution point for gigabit-capable connections, which could be off-site, or
- where the developer has no right to install gigabit-ready physical infrastructure on intervening land in which it would have to be installed to reach the network distribution point, a point as close as is reasonably practicable to the network distribution point, or

- where the developer has no right to install such infrastructure in land beyond the building, a network termination point's corresponding access point or common access point.

This stepped approach is designed to ensure that the requirement does not extend to the installation of infrastructure on or over third party land upon which the developer does not have the rights to access.

A network distribution point will vary based on the network in question and may typically include cabinets, boxes mounted on walls or telephone poles. It is the point at which the network operator's spine or core network ends. In order to facilitate a connection, the network operator's spine or core network must be met by physical infrastructure leading from the dwelling's network termination point, via an access point.

Where developers are unable to install gigabit-ready physical infrastructure to a network distribution point because they are unable to access intervening third party land to do so, a network operator may be able to gain access to the intervening third party land, including through engaging Electronic Communications Code ('the Code') powers. The Code is the legal framework underpinning network operators' rights to install and keep electronic communications apparatus on public and private land, and to carry out other activities needed to provide electronic communications networks. The purpose of the Code is to provide a regulatory framework that supports and encourages the efficient and cost-effective installation and maintenance of robust digital communications networks.

As the locations of network operator's networks and distribution points will vary across developments, we encourage developers to work with network operators as early as possible to ensure that the installed infrastructure is capable of hosting gigabit-capable connection equipment to ultimately establish a live network connection. This work should ensure that planned infrastructure deployment corresponds to a network operators planned or located network distribution point. Proposed guidance under Standard 4.14 of the Building Standards Technical Handbooks provides further information as to how this requirement can be met (see Annex A).

## **Infrastructure performance and specifications**

The installation of the gigabit-ready physical infrastructure necessary for gigabit-capable connections will be defined in a similar way to existing arrangements for high-speed electronic communications networks in the existing Standard 4.14, updated for gigabit connectivity. Namely, it will include any infrastructure or installation which is intended to host elements, or enable delivery, of wired or wireless gigabit-capable public electronic communications networks that are capable of delivering a broadband access service at download speeds of at least 1,000 Mbps.

The requirement will not specify what infrastructure should be used. It will need to be able to host elements or enable delivery of either wired or wireless gigabit-capable public electronic communications networks. A non-exhaustive list of infrastructure

types that could be used include: on-site pipes, masts, ducts, chambers, manholes, buildings or entries to buildings, antenna installations, towers, poles and termination points. The physical infrastructure requirement does not include an optical fibre or other cabling or wiring equipment that will provide the broadband connection related to the Standard 4.14(d) requirement and installing a connection.

These physical infrastructure requirements will not be subject to a cost cap given the low costs involved to developers and the need for residents to be able to obtain gigabit connectivity. Within most new build developments, groundworks will be carried out at an early stage to enable connection to other utilities, which should also assist with the inclusion of the physical infrastructure.

## **Physical infrastructure and next best technology connections**

Except for where an exemption is applicable (see Gigabit-ready physical infrastructure exemption in the following section), the gigabit-ready physical infrastructure requirement will apply to all new build homes in scope. We anticipate that in some cases a developer will:

- not be able to fit a gigabit-capable connection within the cost cap, so will be under an obligation to fit a next best technology connection (see Next best technology connections, and
- be required to fit gigabit-ready physical infrastructure, but
- will be unable to use gigabit-ready physical infrastructure capable of supporting both a next best technology connection (for example, a high-speed electronic communications network connection) and a gigabit-capable connection in parallel.

In most cases, we anticipate that the gigabit-ready physical infrastructure to be installed will also support a high-speed electronic communications network connection, if a gigabit-capable connection is not required.

However, we anticipate that in some cases a developer will:

- not be able to provide a gigabit-capable connection within the cost cap, so will be under an obligation to install the next best technology connection (see next best technology connections); and
- be required to fit gigabit-ready physical infrastructure but will be unable to utilise this to support a next best technology connection and a gigabit-capable connection in parallel.

In such scenarios, the developer may be required to install two sets of physical infrastructure or oversize the physical infrastructure to carry parallel connections.

We are keen to seek views on the likelihood of duplicate infrastructure being required, challenges associated with such a scenario, burdens that this may impose as well as any opportunities to overcome such issues.

## **Gigabit-ready physical infrastructure exemption**

As detailed above, the requirement to install the gigabit-ready physical infrastructure necessary to support gigabit-capable connections exists even where installing the gigabit-capable connection exceeds the cost cap or a next best technology connection will be unable to use gigabit-ready physical infrastructure (see Physical infrastructure and next best technology connections in the section above). This means that when a gigabit-capable broadband connection exceeds the cost cap at the point of construction or an alternative connection is installed, new build homes will still be built with the right infrastructure to support a gigabit-capable connection in the future.

This obligation can be fulfilled in a variety of different ways, although in most cases this would involve the new build home having the necessary physical infrastructure to support a gigabit-capable full fibre connection. This infrastructure can be located anywhere within the site, such as in the footpath, driveway or common area of the site in which the dwelling is located, the outside wall of the dwelling and inside the dwelling.

Where a developer and a network operator are able to identify a network option to support gigabit connectivity, how and where the installation of the infrastructure should be undertaken will be ascertainable. However, there may be a small number of cases where it may not be evident what form of infrastructure should be installed or where this infrastructure should be deployed to meet a network distribution point.

As such we are keen to seek views on any practical difficulties anticipated with a blanket application of this requirement and if any exemption would be appropriate.

1. Are costs of providing the gigabit-ready physical infrastructure element reasonable?
2. Will the proposals help ensure that gigabit-ready physical infrastructure is placed in the best location to connect to a network distribution point? If not, please explain why.
3. How common is it for third party land issues to prevent connectivity to new build homes?
4. How are third party land issues resolved where they do take place?
5. Are there circumstances where it would be difficult to meet the gigabit-ready physical infrastructure requirements?
6. What circumstances may necessitate an exemption from the requirement to provide gigabit-ready physical infrastructure?
7. Do you anticipate any issues with the stepped approach to the gigabit-ready physical infrastructure requirements extending to the network distribution point? Please provide any comments/reasoning on your position.

## **Gigabit-capable connection**

The proposed Standard 4.14(d) requirement is for the installation of the specific equipment capable of supporting a broadband connection, providing this can be secured without exceeding a £2,000 cost cap per dwelling. Whilst any technology capable of delivering gigabit connections can be considered, in practice, most connections under the requirement are likely to use full-fibre to the premises.

This equipment would include an optical fibre or other cabling, wiring or wireless technology provided by a network operator to facilitate a connection. This should support a broadband connection for service provision from at least one internet service provider through connection with the network operator's infrastructure. The requirement does not extend to making the connection 'live'. This will only happen once a consumer contracts with an internet service provider.

The equipment in the first instance should be capable of delivering a broadband service at download speeds of at least 1,000 Mbps. This definition will enable the requirement to be met through any form of existing or future wired or wireless technology including fibre to the premises (FTTP), fixed wireless access (FWA) and other cables (e.g. DOCSIS 3.1) or satellite. This definition and technologically neutral approach will be supported in the guidance supporting the new provisions under The Building (Scotland) Regulations 2004 (as amended) noting forms of existing technology (as referenced in Ofcom's [Connected Nations Reports](#)) that could be suitable for meeting the requirements.

## **Next best technology connections**

Should the cost cap be exceeded, a 'next best technology connection' requirement will apply, requiring the developer to seek to obtain a quote for the installation of the fastest possible connection available without exceeding the £2,000 cost cap per dwelling. In the first instance this should be at least a high-speed electronic communications network capable of delivering broadband access services at speeds of at least 30 Mbps (superfast broadband).

If a developer is unable to secure a superfast connection within the cost cap, the developer would then need to secure a broadband connection with a download speed as defined in the [Broadband Universal Service Obligation](#) or provide evidence that this could not be secured without exceeding the £2,000 cost cap. A standard connection under the Broadband Universal Service Obligation currently includes a connection that can deliver connectivity download speeds of at least 10 Mbps.

For new build homes where the developer has been unable to secure broadband connectivity of at least 10 Mbps download speed without exceeding the cost cap, a consumer moving into the new build home could seek to obtain a broadband connection under the Universal Service Order 2018, subject to the normal eligibility conditions.

Both next best technology connections requirements will be kept under review and should amendments be made to the Broadband Universal Service Obligation the connection requirements may be adjusted or removed as appropriate.

The arrangements for developers obtaining quotes from network operators will not be prescribed. However, it may be practical for a developer to engage with the network operator to determine how much the quote would also be for a high-speed connection and/or a Broadband Universal Service Obligation connection, in the event that a gigabit connection would not be provided because the cost exceeds the cost cap. This may avoid the need for the developer to request repeated quotes from the network operator.

In some instances, but possibly not all, the gigabit-ready physical infrastructure installed for a next best technology connection will also be capable of supporting a gigabit-capable connection. By way of an example, ducting for a high-speed electronic communications network connection that is capable of supporting a gigabit-capable connection would contribute to meeting the gigabit-ready physical infrastructure requirements. However, as set out in Gigabit-ready physical infrastructure exemption, this may not always be the case. In these scenarios, developers will be required to install additional gigabit-ready physical infrastructure alongside the physical infrastructure required for the next best technology connection.

The Scottish Government recognises the additional costs and challenges of deploying in rural areas and that some new build homes in these areas may not obtain a gigabit-capable connection. These proposals have therefore been designed to work in conjunction with other programmes designed to boost rural connectivity. This includes the £5 billion funding for Project Gigabit which will ensure premises in the hardest to reach parts of the UK get gigabit-capable connections.

## **Cost cap**

The Scottish Government recognises that in some cases the costs of installing connections may be prohibitive. As the majority of the costs associated with connectivity relate to connecting a dwelling to an operator's network (in line with the second requirement), a £2,000 cost cap is to be applied to this requirement. A developer will be exempted from the connectivity requirement, if having engaged two suitable network operators, the developer has not been able to secure the provision of a connection without exceeding a cost cap of £2,000 per dwelling.

Should the costs of a gigabit connection or next best technology connection exceed the cap, a developer will still be required to ensure that the first requirement (i.e. installation of the gigabit-ready physical infrastructure necessary for gigabit-capable connections, is met).

## **Scope of the new requirements - new build homes**

It is proposed that the new requirements under The Building (Scotland) Regulations 2004 will apply to new build homes, that is, the construction of a self-contained building or part of a building to be used as a new residential dwelling. This includes the following forms of buildings:

- dwellings
- domestic buildings (those comprising dwellings and common areas)
- mixed-use (applying to the part of the mixed-use development which is comprised of dwellings)
- dwellings created from a material change of use (conversion) from an existing building

The requirements will apply to new build homes because they will apply to each dwelling or building containing one or more dwellings for which a building warrant

application has been submitted, including buildings undergoing conversion to create one or more dwellings.

Any of these forms of new build home developments within conservation areas will also be included within scope of proposals. There is no automatic restriction on installing broadband infrastructure in new or converted buildings in designated conservation areas, and restrictions in such areas are subject to huge variation and considered by local planning authorities on a case-by-case basis. Therefore, to have a blanket exemption on new build homes in conservation areas would needlessly exclude some new build homes from having gigabit-ready physical infrastructure installed.

Buildings occupied by the Ministry of Defence or the armed forces of the Crown, or otherwise occupied for purposes connected to national security are explicitly excluded from the scope of the requirements under The Building (Scotland) Act 2003 (Exemptions for Defence and National Security) Order 2009.

## **Material change of use or ‘conversions’ resulting in creation of one or more dwellings**

In this context, a material change of use or ‘conversion’ as defined under regulation 4 and schedule 2 of the building regulations includes work which forms a new dwelling (type 1 or type 3 conversions). This includes changing non-dwellings into dwellings and where more or fewer dwellings are created within an existing building, such as where a house is converted to multiple flats or a block of flats converted to a single house. We understand these forms of works are undertaken by a range of small and medium enterprises (SMEs) and large development firms.

Such conversions are required to meet current building regulations, including the mandatory standards, either in full or as far as is ‘reasonably practicable’. Current provisions under standard 4.14 for in-building physical infrastructure are to be met as far as is ‘reasonably practicable’. To ensure this proportion of new housing stock is furnished with gigabit-ready infrastructure and gigabit-capable connectivity, allowing consumers to take advantage of the benefits, we propose to apply the requirements of the new provisions being added within Schedule 2 to the Building (Scotland) Regulations 2004 to new build homes developed through building conversion. We are keen to ensure that the proposals are workable for these developments.

8. Is the Universal Service Obligation an appropriate reference point for lower speed services?
9. The proposals provide no exemptions for developments within conservation areas. Do you agree with this?
10. Are there any other exemptions that should be considered?
11. Do you agree that a material change of use or ‘conversions’ should be included in the scope of the proposals?

## **Suitable network operators**



The cost cap exclusion will only be applicable where the developer having approached two suitable network operators for quotes is declined a connection without exceeding the cap. What constitutes a suitable network operator will vary depending on the development circumstances, but a developer will need to consider which network operators appear to be among those more likely to be able to provide a connection. Examples of factors to take into account include:

- the development location
- the ability of a network operator to provide a suitable connection in the location
- existing network operators in the location
- network operator development plans
- other network operators who could deploy in the area

Where a network operator is not currently operating in or near the location and does not have plans to deploy in the location, they are less likely to be able to provide a connection. Should a suitable network operator not respond to a developer within a reasonable time period, this will amount to being refused a connection. Further information as to what constitutes an appropriate network operator is set out in the Technical Handbook. Further support will be provided to stakeholders, to assist them on what constitutes a suitable network operator.

## **Network operator commitments**

To ensure that the costs for developers are minimal and do not exceed the cost cap, the UK Government have secured commitments from network operators who are to contribute towards the costs incurred under the cap. These commitments ([Correspondence: New Build Developments: Delivering gigabit-capable connections](#)) include, subject to certain requirements:

- a Virgin Media contribution of at least £500, rising in the case of some larger sites to £1,000
- an Openreach and Developer combined Contribution of £3,400, with a maximum developer contribution per plot of £2,000
- additionally, Openreach has committed that when new build homes cannot be provided with a gigabit-capable connection within the cost cap and contribution, it will fall back on offering to provide the next best alternative, depending on available infrastructure
- Openreach has published a price structure that reduces the costs developers pay for connecting two premise developments from £3,100 to £2,000 per premise, bringing all developments of two premises or more within our proposed cost cap
- Openreach also committed to connect full fibre infrastructure free from developer contributions for all new build development sites of 20 or more premises, reducing this from its previous offer of 30 or more premises
- a Gigaclear contribution of up to £1,000 per new build property (providing Gigaclear can carry out infrastructure work at the appropriate stage)

While these commitments were made to the UK Government and as telecommunications is a non-devolved policy area, we would expect the commitments to apply equally in Scotland.

## **Cost cap calculation**

In assessing if the cost cap is to be exceeded, a developer will take account of the costs quoted by a network operator minus any financial contribution from the network operator. The calculation of the cost to the developer is to include value added tax but will exclude:

- the cost of installing gigabit-ready physical infrastructure
- administrative expenditure incurred by the developer
- the cost to consumers for the provision of a service

12. Do you envisage any problems with the requirement to approach two suitable network operators for a quote?

13. Please give your views on the criteria for defining a suitable network operator.

14. Is £2,000 the right amount for the cost cap given the higher costs of delivering gigabit-capable broadband in Scotland?

15. Do you agree with the criteria for calculating the cost cap?

## **Process and procedure**

The aim of the new policy is to ensure the process for installing gigabit-capable broadband is as simple as possible for developers, mirroring as it does the process to evidence compliance with other Building (Scotland) Regulations 2004 requirements.

To ensure that the requirements can be met, developers are encouraged to engage with network operators at the earliest point to ensure a new build home development can be furnished with connectivity efficiently. This early engagement with appropriate network operators will also enable confirmation of the particulars related to connectivity and compliance for building control.

For building control purposes, a developer will be required to submit a 'connectivity plan' with full plan applications, initial notices or amendment notices provided to a local authority (either directly or through an AI). To ensure that connectivity is considered for all new build homes, the legislation will extend connectivity plan requirements to initial notices and amendment notices.

A proposed model connectivity plan is included in the guidance supporting the new provisions of the Building (Scotland) Regulations 2004. The information that will need to be provided includes:

- the quotes received from network operators to provide connections, and evidence of a network operator being contracted to provide connections to the dwellings in question,

- that the gigabit-ready physical infrastructure necessary for gigabit-capable connections is to be installed,
- that the suitable installation of a gigabit-capable connection has been arranged with a network operator and the nature of the network to be deployed,
- in the absence of a gigabit-capable connection, any exemption or exclusion being relied upon, providing evidence towards applicability,
- in the absence of a gigabit-capable connection, the form of the next best technology connection being installed within the cost cap.

## **The building warrant and construction process and connectivity plans**

In line with existing practice, a building warrant is issued by the local authority verifier once they are satisfied that the construction work set out in the application for building warrant will meet building regulations. It is then the responsibility of the applicant to ensure that the construction work undertaken is in accordance with the issued building warrant and The Building (Scotland) Regulations 2004. A statement on compliance (the completion certificate) provided by the applicant on completion of building works will confirm the works comply with the Building (Scotland) Regulations 2004, including the new gigabit requirements.

The new requirements do not impinge on the arrangements between developers and network operators. However, should a network operator not meet the terms of an arrangement with a developer, this will be recorded in the connectivity plan as a relevant consideration for the applicant and the building standards verifiers in determining the works required to comply with the regulations prior to the issue of a building warrant..

The proposals extend the provisions of standard 4.14 to include on-site physical infrastructure and a means of connection to a network. Once the extents of these elements are confirmed and included in the issued building warrant, it is the responsibility of the applicant to complete the works in accordance with the agreed provisions.

The new requirements for developers will be enforced using the existing Building Standards verification and enforcement regime. This system is well established and sufficient for the new requirements, with key information on proposals recorded in the connectivity plan.

16. Do you have any concerns about extending the requirement for a connectivity plan to initial notices and amendment notices?
17. Do you have views on how inspection of the new physical infrastructure elements beyond in-building infrastructure to a network distribution point should be undertaken?

## **Guidance (Technical Standard 4.14)**

The Building (Scotland) Regulations 2004 include, under schedule 5 to regulation 9, a schedule of functional requirements that must be complied with when building work is carried out. The government publishes Technical Handbooks, under powers contained in the Building (Scotland) Act 2003 ([section 4](#)). More information on the regulations and guidance can be found at [www.gov.scot/policies/building-standards](http://www.gov.scot/policies/building-standards).

To accompany our proposed amendments to the Building (Scotland) Regulations 2004, we plan to update the related guidance to Standard 4.14 of Technical Handbook. The Technical Handbook will also aid monitoring and enforcement by local authority building standards verifiers.

## **New provisions and statutory guidance**

It is proposed that the new provisions within the Building (Scotland) Regulations 2004 will be further broken down into requirements for gigabit-ready physical infrastructure, common access points for buildings containing multiple dwellings and connection to a gigabit-capable electronic communications network, and this will be reflected in the updated Technical Handbook Standard 4.14.

It should be noted that the requirements of the Building (Scotland) Regulations 2004 and guidance in the Technical Handbooks is performance-based and technology neutral. There is no single industry standard and it would not be appropriate to cite any particular network operator's specifications for gigabit-capable infrastructure. Advice is offered on the design and specification of passive infrastructure and the recommendation that the specification is agreed with the successful network operator. This approach ensures that potential future developments in technology are not excluded.

## **Practical guidance for developers**

A draft of the proposed updated Standard 4.14 can be seen attached to the consultation. The proposed amended Standard 4.14 is drafted in the context of the guidance contained within the Domestic Technical Handbook, however it is helpful to note the non-domestic handbook would also be updated to reflect relevant changes to the functional standard and any revision of terminology relating to in-building physical infrastructure. Within the equivalent non-domestic text, which would exclude clauses 4.14.2 to 4.14.4, reference would be made to 'building units' instead of 'dwellings'.

18. Do you have any specific comments on the content of the updated edition of Standard 4.14, for example references to external guidance?
19. Do you agree with proposals to refer to Scottish Road Works Commissioner's and Streetworks UK guidance for external gigabit-ready physical infrastructure in the Technical Handbook?
20. Do you agree with proposals and guidance for network termination points and the inclusion of best practice advice to improve connectivity within the individual dwelling?

21. Do you agree with proposals to include a two-part model form for the connectivity plan with the revised Standard 4.14?
22. If you have any further comments to make regarding the proposals please set them out here.
23. Please provide any feedback you have on the impact assessment here.

## **ANNEX A – Standard 4.14 Gigabit-ready physical infrastructure for electronic communications networks**

### **Mandatory Standard**

**Every building and building unit must be designed and constructed in such a way that:**

- a. each building unit is equipped with a network termination point for a gigabit-capable public electronic communications network;**
- b. gigabit-capable physical infrastructure from a network termination point to a building access point or common access point is provided;**
- c. gigabit-capable physical infrastructure from a building access point or common access point to a network distribution point is provided within the curtilage of the development site; and**
- d. a means of connecting each network termination point to a gigabit-capable electronic communications network is provided, to the extent this is reasonably practicable.**

### **Limitations**

**This standard does not apply to:**

- a. alterations to, or extensions of a building, other than major renovation works.**
- b. buildings having an area not exceeding 30 square metres, ancillary to and within the curtilage of a dwelling;**
- c. Standard 4.14(c) and 4.14(d) do not apply to non-domestic buildings.**

### **4.14.0 Introduction**

Digital connectivity plays an ever-increasing role in our daily lives. It has become an essential communication tool, enables remote study and work, and provides access to vital commercial and public services such as banking and local government. With increasing prevalence of digital services, use of “smart” technologies and media streaming platforms, ensuring Scotland’s new homes are able to connect to gigabit-capable digital communications networks has never been so important.

Coverage of gigabit-capable broadband within Scotland is increasing through a combination of commercial investment by operators and public subsidised programmes such as the [Digital Scotland Superfast Broadband](#) (DSSB) programme and [Reaching 100](#) (R100) programme. New build development represents an opportunity to ensure that future-proofed connectivity is available at the outset to all new households.

Telecommunications is a reserved matter under the [Scotland Act 1998](#) and the UK Government have taken steps to reduce barriers to deployment of telecommunications infrastructure. Reforms to the Electronic Communications Code (Schedule 3A of the [Communications Act 2003](#)) are making it easier for network operators to get access agreements to install infrastructure on private land and in blocks of flats.

This standard seeks to enable all new build homes, where practicable, are provided with access to gigabit-capable infrastructure at the outset, with connection to a gigabit-capable electronic communications network, subject to a cost cap. Where the cost cap is exceeded, the in-building and onsite physical infrastructure provided will help facilitate the retrospective deployment of gigabit-capable electronic communications networking to a building.

The standard sets out requirements for the installation of physical infrastructure to enable the provision of a network connection to new buildings and includes both in-building and onsite physical infrastructure within the extent of the development site. Network connections will often require additional infrastructure to connect an existing network to a point on or near the curtilage of a development site. The installation of such infrastructure in land not under control of the developer is outwith the scope of this standard and is facilitated by other legislation noted above.

Further information about public electronic communications networks and network operators can be found by visiting the [Independent Networks Cooperative Association](#) (INCA) and the [Internet Services Providers' Association](#) (ISPA UK).

**Conversions** – in the case of conversions, as specified in regulation 4, the building as converted shall meet the requirements of standard 4.14 in so far as is reasonably practicable, and in no case be worse than before the conversion. Standard 4.14 (c) and (d) shall apply only where one or more dwellings are created by conversion (regulation 12, schedule 6).

#### **4.14.1 In-building physical infrastructure**

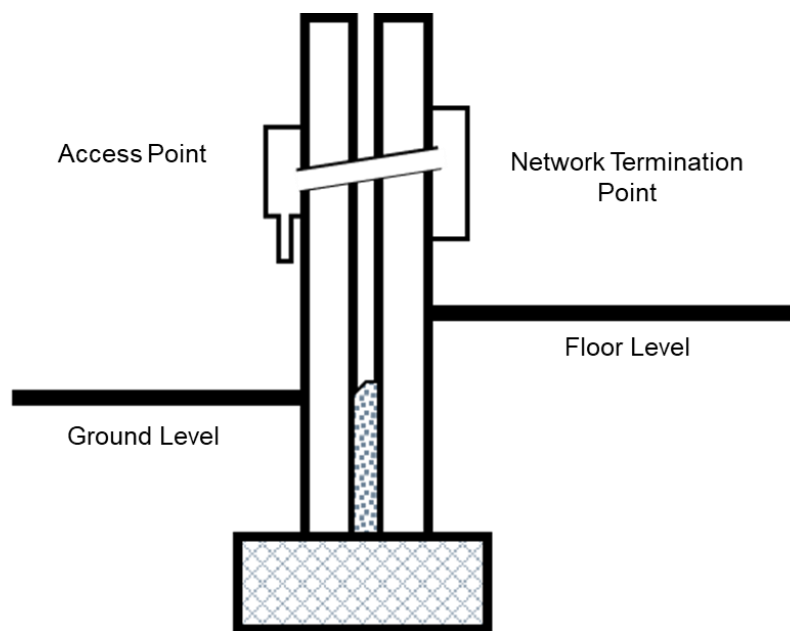
Suitable infrastructure within a domestic building or dwelling will enable connection to a public electronic communications network. It will also make it easier to retrospectively deploy a gigabit-capable electronic communications network where this is unavailable at the time of construction.

Each domestic building and dwelling should be provided with in-building physical infrastructure to enable connection to a gigabit-capable electronic communications network without the need for any additional disruption to the fabric of the building.

The design and specification of the in-building physical infrastructure will depend on the type of building and the number of dwellings it will service.

**For a house**, in-building physical infrastructure will typically consist of ducting from a network termination point within the dwelling through the external wall or building's substructure to an access point. The type, size and routing of ducting should be designed to accommodate cabling suitable for a gigabit-capable electronic communications network connection (see Clause 4.14.3). Any horizontal ductwork through external walls should be angled downward from the network termination point to the access point on the outside face of the wall to prevent risk of water ingress, while still enabling easy access for cable installation.

**Figure 4.XX In-building physical infrastructure serving a single dwelling**

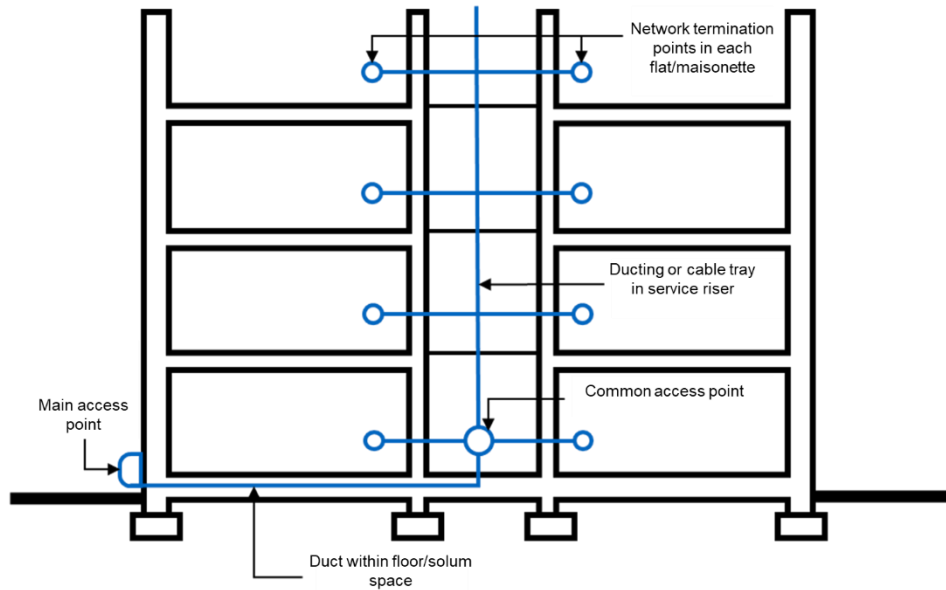


**For flats and maisonettes**, the in-building infrastructure should extend from a network termination point within each flat or maisonette to a common access point within the building. Such infrastructure may consist of a single duct from a main access point outside of the building, leading to a common access point within the building, usually located in a communal service riser. The infrastructure from the common access point to each network termination point may consist of:

- a. a single duct, appropriately designed and sized to accommodate gigabit-capable electronic network cabling, continuous from the common access point to the network termination point within each flat or maisonette; or
- b. a cable tray to an appropriate point adjacent to each flat or maisonette with a suitably sized duct connecting the cable tray to a network termination point within each flat or maisonette.

**Figure 4.XX In-building physical infrastructure serving flats or maisonettes**





Any opening remaining after passage of cabling or physical infrastructure through any element of the building structure should be sealed according to the level of fire-resistance specified for the respective building element prior to penetration (if any) as well as having regard to any impact to noise and thermal insulation, taking into account requirements of Section 2 (Fire), Section 4 (Safety), Section 5 (Noise), and Section 6 (Energy).

**Network termination points** – at least one network termination point should be provided in a suitable position within each dwelling.

A fixed electrical supply for the network termination point and associated distribution equipment should be provided close to the network termination point. The fixed electrical supply should be installed in accordance with Standard 4.5 'Electrical Safety' and Standard 4.6 'Electrical fixtures'.

Consideration should be given to the optimal location of the network termination point for both wired and wireless transmission within a dwelling. Developer's may voluntarily consider making provisions for wired distribution within the building unit to further optimise connectivity within the dwelling and by providing network points to locations, such as office areas or media points, to enable connection to smart technologies or to extend wireless network connectivity via Wi-Fi extenders. For dwellings, further advice can be found within [NF67 The Connected Home: Designing and Building Technology in Today's New Homes](#) (NHBC Foundation, 2016).

#### 4.14.2 Onsite physical infrastructure

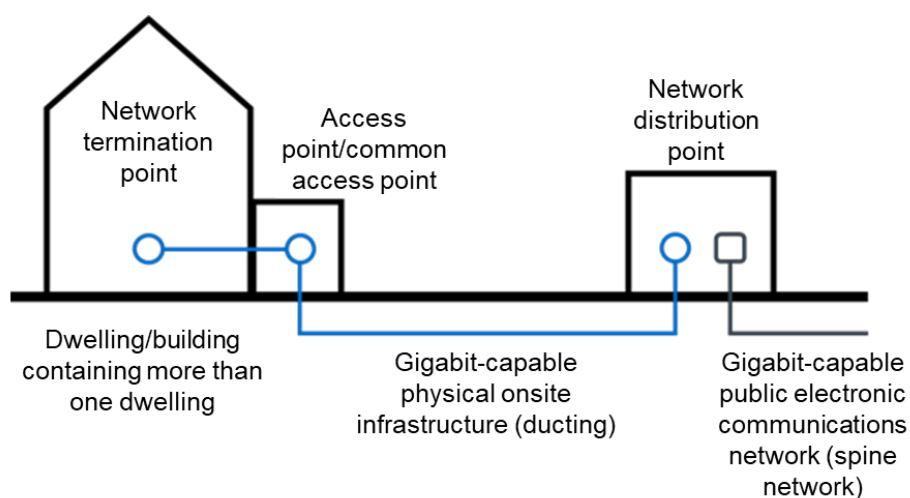
The provision of onsite physical infrastructure, outwith the footprint of the building, connects the in-building physical infrastructure to a network distribution point. This enables new domestic buildings and dwellings to connect to gigabit-capable networks from the outset or retrospectively where a connection is unavailable at the time of construction.

Gigabit-capable physical infrastructure should be provided from a network termination point to a network distribution point. However, the extent of the installation of onsite physical infrastructure may be limited where the developer has no right to access land necessary to extent the physical infrastructure to a network distribution point located outwith the development site. In such cases, physical infrastructure should be provided to a location as close as is reasonably practicable to the site boundary and the offsite network distribution point, as agreed with the relevant network operator.

The design and specification of the onsite physical infrastructure will be dependent on the site layout and number of dwellings which can be serviced by the network. The physical infrastructure should be of a design and specification to enable all domestic buildings and dwellings serviced by the infrastructure at least one connection to a gigabit-capable electronic communications network. The design and specification of the installation should be agreed with the relevant network operator.

**Onsite physical infrastructure** typically consists of the provision of a system of ducts, chambers, cabinets and poles from a network termination point to a network distribution point that enables installation of a gigabit-capable electronic communications network connection (see Clause 4.14.1) to each domestic building and dwelling. The network distribution point is likely to be at a point where the development site meets the public highway. In most cases, this is likely to be met by infrastructure for a full-fibre electronic communications network (e.g., optical fibre from the dwelling to a network distribution point). However, other forms of wired or wireless technologies may be used where these meet the performance requirements of a gigabit-capable electronic communications network connection (see Clause 4.14.3).

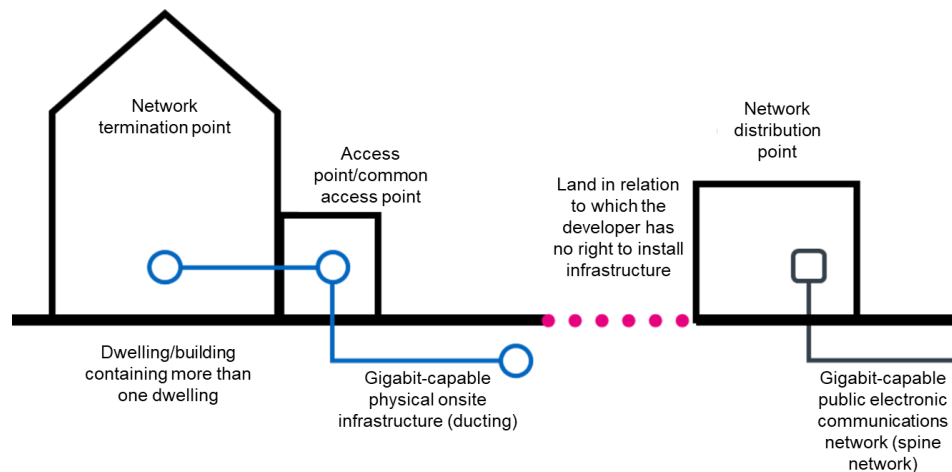
**Figure 4.XX Onsite physical infrastructure from a network termination point to a network distribution point**



(for each dwelling in building see figures 4.XX In-building physical infrastructure serving a single dwelling and 4.XX In-building physical infrastructure serving flats or maisonettes)

Where a developer does not have the right to install physical infrastructure on land required to reach a network distribution point, gigabit-capable physical infrastructure should extend from a network termination point to an access point within the development site that is as close as is reasonably practicable to the network distribution point.

**Figure 4.XX Onsite physical infrastructure from a network termination point to a location as close as is reasonably practicable to the network termination point**



(for each dwelling in building see figures 4.XX In-building physical infrastructure serving a single dwelling and 4.XX In-building physical infrastructure serving flats or maisonettes)

### **Likely future location for a network distribution point**

Where network operators confirm that a suitable network distribution point can be installed within a two-year period, gigabit-capable physical infrastructure should extend from a network termination point to an access point near to a location where the network operator reasonably expects a gigabit-capable network distribution point to be installed (i.e., a “likely future location”).

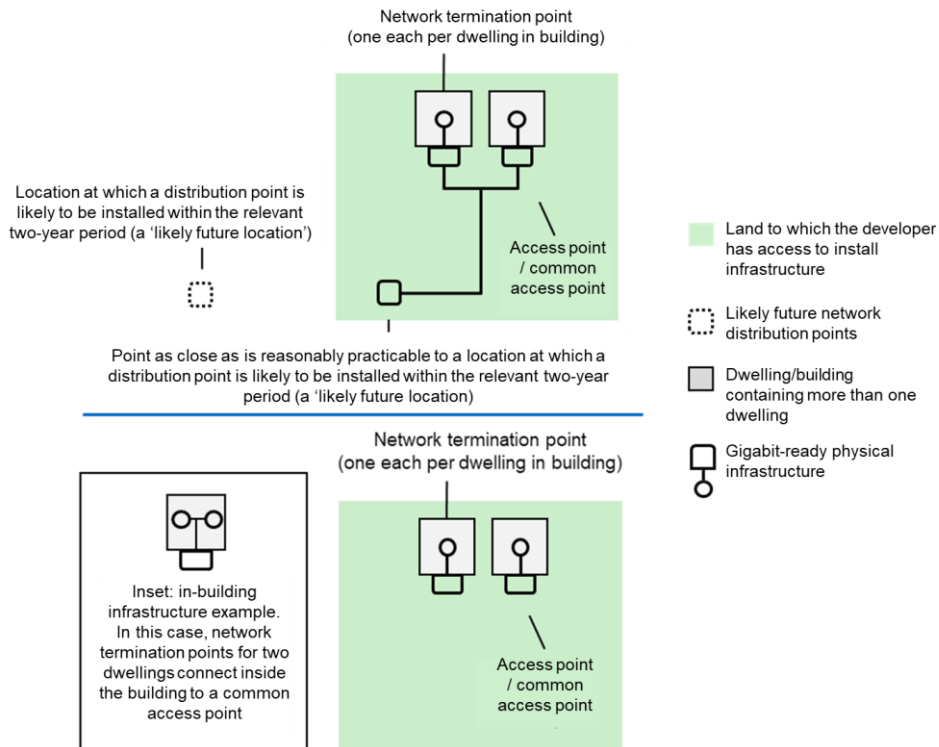
In some instances onsite gigabit-capable physical infrastructure to a likely future location may be unable to carry parallel connections to a next best broadband connection and future gigabit-capable broadband connection. In such scenarios, the developer may need to install two sets of physical infrastructure or oversize the physical infrastructure to carry parallel connections.

### **No likely future location for a network distribution point**

Where network operators confirm that a suitable network distribution point cannot be provided within a two-year period, there is no “likely future location” for a network distribution point. In such a situation, no onsite physical infrastructure needs to be provided. Gigabit-capable physical infrastructure should be provided from a network

termination point to an access point to an individual dwelling and to a common access point for a domestic building as noted in clause 4.14.1.

**Figure 4.XX Onsite physical infrastructure to a) a “likely future location” of a network distribution point and b) an access point where there is no “likely future location” of a network distribution point**



## Domestic buildings and dwellings in areas isolated from a public electronic communications network

A domestic building or dwelling is deemed to be in an area isolated from a relevant public electronic communications network where:

- the cost of providing a connection to a USO-standard public electronic communications network would exceed the cost cap (see clause 4.14.3); and
- the prospect of a connection to a gigabit-capable, high-speed, or USO-standard electronic communications network is too remote;

In such a situation, no onsite physical infrastructure needs to be provided. Gigabit-capable physical infrastructure should be provided from a network termination point to an access point to an individual dwelling and to a common access point for a domestic building as noted in Clause 4.14.1.

The positioning and colour coding of physical infrastructure to be installed alongside other underground utilities should be considered. Further guidance can be found in [UK Guidelines on the Positioning and Colour Coding of Underground Utilities' Apparatus](#) (Street Works, Volume 1, Issue 9, 2018)

Developers should evidence the extent of onsite physical infrastructure provided through the provision of a connectivity plan (see Clause 4.14.4)

### **4.14.3 Connectivity**

Each new dwelling should be provided with the best available connection to a public electronic communications network that can be achieved within a defined cost cap.

**Connection** to a public electronic communications network can be provided in many ways. The technologies that can currently provide a connection to public electronic communications network are set out in the most recent Ofcom [Connected Nations](#) report. These include:

- a. installation of a suitable specification cable from the network termination point to a gigabit-capable network distribution point. This may include full-fibre (optical fibre) or other cable types such as Data Over Cable Service Interface Specification (DOCSIS 3.1); or
- b. use of wireless technologies, such as fixed wireless access or satellite technologies depending on the specific deployment, available capacity and the number of location of users.

### **Cost cap**

The cost cap for a connection to a single dwelling is £2,000. The cost cap for connection of a network to a number of dwellings is the sum of £2,000 multiplied by the number of dwellings. The cost cap is applied after any financial contribution from the network operator has been deducted.

The relevant costs assessed against the cost cap are the direct costs to the developer (and costs to the developer if subcontracting installation to the network operator) of providing a connection (defined above) from a public electronic communications network distribution point to the network termination point in each dwelling, including value added tax (VAT).

The following costs are excluded from this calculation:

- a. the cost of installing gigabit-ready physical infrastructure to each dwelling, both in-building and onsite;
- b. administrative costs, including costs of submitting the connectivity plan and building warrant fee as applicable;

- c. the cost to an end-user (as defined in Section 151(1) of the [Communications Act 2003](#)) for the provision of a public electronic communications service.

## **Best available connection**

Where connection to a gigabit-capable public electronic communications network is offered by the network operator and the cost per dwelling does not exceed the cost cap, a gigabit-capable connection should be provided. Otherwise:

- where the cost of connection to a gigabit-capable public electronic communications network exceeds the cost cap, connection to a high-speed electronic communications network (a download speed of at least 30 Mbps) should be provided; or
- where the cost of connection to a high-speed electronic communications network exceeds the cost cap, connection to a USO-standard public electronic communications network (a download speed of at least 10 Mbps) should be provided; or
- where the cost of connection to a USO-standard public electronic communications network exceeds the cost cap, no connection needs to be provided.

Where no connection is provided due to the cost cap being exceeded for each option, in-building gigabit-ready physical infrastructure to each dwelling, should still be installed as per Clause 4.14.1. Onsite physical infrastructure should still be provided unless the need for this is removed by confirmation, under clause 4.14.2, that there is either no likely future location for a network distribution point or that the development is in an area isolated from a public electronic communications network. Developers should evidence the level of connectivity provided through the provision of a connectivity plan (see Clause 4.14.4)

### **4.14.4 Connectivity plan**

Once an application for building warrant is made, a connectivity plan should be provided to the verifier which demonstrates the extent to which onsite physical infrastructure will be installed, the level of connectivity provided to each new dwelling, and provides evidence in support of any relevant exemptions or modifications to the provisions set out in Clauses 4.14.1 to 4.14.3.

A connectivity plan template is set out within Annex 4.A which the developer may use or adapt when providing such information.

This document should be prepared by the applicant and supported by evidence provided by network operators engaged for the development.

**Part A of the connectivity plan** should be used to provide evidence to demonstrate the extent by which gigabit-capable onsite physical infrastructure will be installed within a new development. Evidence should be provided to demonstrate the steps undertaken to establish the location of an appropriate network distribution point, a likely future location of a network distribution point, or where there is no likely future location, evidence to support installation of in-building infrastructure only. In addition to specifications, schematic diagrams, and site layouts, this should reference written evidence of any limitations to the installation of connection which are then set out in more detail in Part B.

**Part B of the connectivity plan** should provide the evidence which demonstrates the capability of connection that will be deployed to new dwellings forming part of the development.

Developers should seek at least two quotations from suitable network operators to obtain the necessary information and evidence to complete a connectivity plan or substantiate any exemption from, or modification of, requirements. Early engagement with network operators will help in identifying the location of suitable network distribution points or their “likely future location”, plan routes for the physical infrastructure, confirm the capability of connectivity available and identify any factors that may need mitigating in which a network operator can assist. Where a developer has not invited two suitable network operators to provide a quotation for such a connection, they will be treated as being able to secure the provision of the connection within the cost cap.

Use of Ofcom’s mobile and broadband checker can assist in identifying network operators who are operating in the vicinity of a development site (visit <http://checker.ofcom.org.uk>).

Evidence that the chosen network operators are suitable should be provided. When determining the suitability of a network operator the following should be considered:

- a. the location of the development site;
- b. the ability of a network operator to provide a suitable connection in the locality of the development;
- c. the variety of network operators in the locality of the development site;
- d. network operators’ deployment plans in the locality of the development site;  
and
- e. other network operators not necessarily in the locality of the development site, that may deploy there in the future.

Where an exemption which limits the installation of onsite physical infrastructure (clause 4.14.2) or connection (clause 4.14.3) is to be relied upon, the following information should be provided:

- a. evidence from at least two suitable network operators that demonstrates one of the following:
  - a. the cost of providing a connection to a public electronic communications network exceeds the cost cap, with accompanying quotes provided by the suitable network operator; or
  - b. the suitable network operators refuse to provide a public electronic communications network connection, and evidence demonstrating the reason for this refusal; or
  - c. the suitable network operators cannot confirm a 'likely future location' for connection to a public electronic communications network connection, and evidence confirming the reason for this decision; or
  - d. the suitable network operators have not responded within the 30-working day period; and
- b. evidence in support of any exemption or modification relied upon for Standard 4.14(c). which limits provision of onsite infrastructure.

In addition to the above, where an exemption or modification is being relied upon, Part B of the connectivity plan should be completed to provide one of the following:

- a. confirmation that the next fastest broadband connection, that falls within the cost cap, is being installed (including the relevant technical information);
- b. if no connection to any public electronic communications network is being provided, offers received from at least two suitable network operators confirming that they have refused to provide a connection, or if no suitable network operator has responded within the 30-working day period, evidence to support this;
- c. if a next fastest broadband connection or no connection is being installed, confirmation that gigabit-ready physical infrastructure will still be installed within each new domestic building and dwelling to one of the following points:
  - a. a network distribution point; or
  - b. a location as close as is reasonably practicable to the network distribution point; or
  - c. a likely future location of a network distribution point to be installed within the relevant two-year period; or
  - d. to an access point.



## Annex 4.A Standard 4.14 - Connectivity Plan Template

Guidance for completing this connectivity plan is set out in guidance to standard 4.14 within the Building Standards Domestic Technical Handbook (insert edition), Domestic, Standard 4.14 Infrastructure for electronic communications networks (weblink)

### Part A – information on the development and physical infrastructure provision

**Part A is to be completed when gigabit-ready physical infrastructure is to be installed, and connection to a gigabit-capable public electronic communications network is to be provided.**

#### 1. Building Standards Verifier

Local Authority:  
Building Warrant Application Number:

#### 2. Development

Development / address / plot number(s):  
Please also indicate where further phases of development are to be considered at a later date.

#### 3. Developer contact

Full name:  
Company / organisation:  
Address:  
Email:  
Telephone / mobile number:

#### 4. Network operator contact

Contact name:  
Company / organisation:  
Address:  
Email:  
Telephone / mobile number:  
Reference number (of contract / transaction with developer):

#### 5. Physical infrastructure provision

- a. Will you provide each dwelling on the development site with gigabit-ready physical infrastructure from the network termination point at each dwelling to the network distribution point?
- Yes. Please complete Section 6 of Part A
- No. Please complete Section 5b of Part A

b. Will you provide each dwelling on the development site with gigabit-ready physical infrastructure from a network termination point to a point as close as is reasonably practicable to a current or likely future location of a network distribution point?

Yes. Please complete Section 6 of Part A

No. Please complete Section 5c of Part A

c. Will you provide each dwelling on the development site with gigabit-ready physical infrastructure from a network termination point to an access point or common access point?

Yes. Please complete Section 6 of Part A

No. Please continue to Part B

d. Will you provide each dwelling on the development site with a connection to a gigabit-capable public electronic communications network?

Yes. Please complete Section 6 of Part A

No. Please continue to Part B

## 6. Evidence to support Section 5

Please attach evidence to support your answer to Section 5.

This should include written confirmation that a suitable provider of public electronic communications networks has offered for each dwelling to provide a connection to a gigabit-capable public electronic communications network as stated at section 5(d), and details of which technology will be used to deliver this e.g., full-fibre, satellite, fixed wireless or other technologies.

Developers may also wish to include information why the relevant gigabit-ready physical infrastructure in Sections 5(a), 5(b) or 5(c) is being installed – this includes circumstances in which there is no current network distribution point towards which such infrastructure can be built to a reasonably practicable point of proximity, because the developer does not have the right to install the infrastructure on the relevant land.

Where this form refers to a likely future location of a network distribution point, this should be supported by evidence of where it is reasonable to expect the network distribution point to be located. Evidence would constitute information from a network operator confirming that a network distribution point will be installed within the relevant two-year period and its location. Where this form refers to the lack of a likely future location of a network distribution point, this should be supported by evidence of the efforts to ascertain from a network operator if a relevant network distribution point is to be installed within the relevant two-year period.

To assist with the building standards verification process, developers may wish to demonstrate planned physical infrastructure routes in relation to development site layouts and explain any factors that the infrastructure installation may need to take account of such as specific conservation area conditions for current and future infrastructure installation, or obstacles that need to be circumvented.

## Part B

**Part B of this form is to be completed where an exemption is being relied upon.**

### 1. Exemption from Standard 4.14(d)

a. Is / are the building(s) exempt from the requirement to install gigabit-ready physical infrastructure?

Yes. Please continue to Section 1(b) and / or 1(c), as appropriate

No. Please continue to Section 3

b.  The following applies: The building(s) is/are to be owned and occupied by the Ministry of Defence or the armed forces of the Crown, or to be otherwise occupied for purposes connected to national security.

c.  Both of the following apply:

The building(s) is / are in an area isolated from a relevant public electronic communications network where the cost of a gigabit-capable, high-speed and USO-standard public electronic communication exceeds the cost cap.

The prospect of a gigabit-capable, high-speed and USO-standard public electronic communications network connection is considered too remote to justify equipping the building with gigabit-ready infrastructure (for full-fibre, satellite, fixed wireless or other technologies) or an access point as set out in Sections 5(a), 5(b) or 5(c) in Part A of this form.

Please note other exemptions in the Building (Scotland) Regulations 2004, which are not included in this connectivity plan, including those set out under Regulation 3 Schedule 1 of the Building (Scotland) Regulations 2004.

### 2. Evidence of exemption

Please attach evidence to show how exemption 1(b) and / or 1(c) applies.

### 3. Exemption from Standard 4.14(c)

a. Is / are the building(s) exempt from the requirement to provide a connection to a gigabit-capable electronic communications network?

Yes. Please complete Section 3(b) or 3(c) as appropriate  No.

b. The cost to provide each dwelling on the development site with the following exceed(s) the cost cap:

Tick all that apply

Gigabit-capable public electronic communications network connection

High-speed public electronic communications network connection

USO-standard public electronic communications network connection

Note: Connection should be provided to the fastest public electronic communications network within the cost cap.

c.  The following applies:

At least two suitable providers of public electronic communications networks have declined to provide a connection free of charge or at a cost not exceeding the cost cap, or have failed to respond to requests within 30 working days.

#### **4. Evidence of exemption**

Please attach the following, from suitable providers of public electronic communications networks.

- Evidence that the providers are suitable for the purpose in question.
- One of the following:

- At least two offers from the providers showing that the cost of the relevant connection exceeds the cost cap (where 3(b) applies).
- At least two requests for offers for a relevant connection to which the providers have failed to respond within 30 working days (developers may wish to provide further evidence including evidence of follow-up requests) (where 3(c) applies).
- Correspondences from at least two of the providers that decline to provide any connection to a relevant connection, clearly stating the reason why (where 3(c) applies).

## Defined Terms

**Access point** – a physical point located inside or outside of the building, accessible to network operator, where connection to in-building physical infrastructure is made available.

**Connectivity plan** – a document for developers to provide information on the details of the proposed connection of new homes to a public electronic communications network, to enable verification of compliance of the installation against standard 4.14.

**Network distribution point** – the point at which a public electronic communications network is connected to distribution point for a gigabit-capable public electronic communications network (also referred to as a network distribution point).

**Gigabit-capable public electronic communications network** – a public electronic communications network which is capable of delivering broadband access services at speeds of at least 1000 Mbps.

**Gigabit-ready physical infrastructure** – physical infrastructure or installations, including elements under joint ownership, intended to host wired or wireless gigabit-capable public electronic communications networks.

**High-speed public electronic communications network** – an public electronic communications network which is capable of delivering broadband access services at speeds of at least 30 Mbps.

**“Major renovation works”** means, in respect of standard 4.14, works at the end user’s location encompassing structural modifications of the entire in-building physical infrastructure or of a significant part of it.

**Network operator** – a provider of a public electronic communications network.

**Network termination point** – a physical point within a building unit or dwelling at which an occupier is provided with access to high-speed electronic communications network.

**Public electronic communications network** – has the meaning given by Section 151(1) of the Communications Act 2003.

**Relevant two-year period** – the period of two-years beginning from the date of submission of an application for building warrant for one or more new dwellings.

**USO-standard public electronic communications network** – a public electronic communications network that provides at least the minimum download speed for the time being specified by virtue of Section 65(2B)(a) of the Communications Act 2003 in the universal service order (as defined by Section 151(1) of that Act).

## Privacy Policy

### **General information**

This privacy notice tells you what to expect us to do with your personal information when you contact us, including by phone, email, and post and when you visit our website or subscribe to our newsletter.

When we process your personal information, we promise to:

- Make sure you know why we need it
- Only ask for what we need, and not collect too much or irrelevant information
- Make sure it is accurate and up to date
- Let you know if we share it with other organisations, unless we have a legal obligation to pass it on without telling you
- Protect it and make sure nobody has access to it who shouldn't
- Make sure we don't keep it longer than is necessary

The first part of the notice is information we need to tell everybody.

### **Controller's contact details**

The Scottish Government fall under the legal entity of the Scottish ministers in relation to processing of your personal information. We are the controller for the personal information we process, unless otherwise stated.

Our Central Enquiry Unit will pass on your enquiry to the appropriate area.

### **Telephone**

Opening hours: Monday to Friday – 8:30am to 5pm

From the UK: 0300 244 4000 (0300 numbers are geographically neutral)

International callers: +44 131 244 4000

Text relay service: 18001+ 0300 244 4000 (service for the hard of hearing)

If you are a British Sign Language (BSL) user, you can contact us via our national BSL video relay service Contact Scotland-BSL

### **Email**

[ceu@gov.scot](mailto:ceu@gov.scot)

### **Post**

Scottish Government  
St Andrew's House  
regent Road  
Edinburgh  
EH1 3DG

## Data Protection Officer's contact details

You can contact our Data Protection Officer at [dataprotectionofficer@gov.scot](mailto:dataprotectionofficer@gov.scot) or via our postal address. Please mark the envelope 'Data Protection Officer'.

## Your data protection rights

Data protection law gives you certain rights that you may exercise in respect of your own personal information.

- You have a right to request a copy of personal information we hold about you, by making a subject access request. This right always applies. There are some exemptions, which means you may not always receive all the information we process. [We have published further information on this.](#)
- you have the right to ask us to update our records if you believe that the data we hold is inaccurate or incomplete. This right always applies
- you have the right to ask us to erase your personal information. There may however be some circumstances in which we cannot comply. Such as, if we have a legal duty to keep data, or we process it in a particular way
- you have the right to ask that we stop or restrict the processing of your information in certain circumstances
- you have the right to object to processing if we are able to process your information because the process forms part of our public tasks
- you have the right to ask that we transfer the information you gave us from one organisation to another, or give it to you. This right only applies to information you have given us and we are processing information based on your consent or under, or in talks about entering into a contract and the processing is automated

You are not required to pay any charge for exercising your rights. We have one month to respond to you. Please contact us at [dpa@gov.scot](mailto:dpa@gov.scot) if you wish to make a request, or contact our Central Enquiries Unit on 0300 244 4000.

## Your right to complain

If you have concerns about our compliance with data protection laws ,please contact our Data Protection Officer in the first instance at [DataProtectionOfficer@gov.scot](mailto:DataProtectionOfficer@gov.scot).

They will look into the concerns you have raised and provides the response.

If you are not satisfied with the DPO's response you have the right to lodge a complaint with the Information Commissioner's Office (ICO). The ICO are the

supervisory authority responsible for data protection in the UK. You can contact the Information Commissioner at:  
The Information Commissioner  
Wycliffe House  
Water Lane  
Wilmslow  
Cheshire  
SK9 5AF  
Tel: 08456 30 60 60  
More information is available at [make a complaint on the Information Commissioner's site](#).

## **How we get information**

Most of the personal information we process is provided to us directly by you for one of the following reasons:

- you have a question or a concern about something
- you have made an information request to us
- you subscribe to our newsletter

We also receive personal information indirectly, in the following scenarios:

- we have contacted an organisation about an issue you have raised and it gives us your personal information in its response

## **Lawful basis for processing**

We process your personal information because:

- you have given us clear consent for us to process your personal data for a specific purpose
- processing is necessary for a contract we have with you, or because you have asked us to take specific steps before entering into a contract
- processing is necessary for compliance with a legal obligation that applies to us
- processing is necessary to protect your (or some else's) life
- processing is necessary for us to perform a task in the public interest or for our official functions, and the task or function has a clear basis in law

## **Changes to this privacy notice**



We keep our privacy notice under regular review to make sure it is up to date and accurate. If this privacy notice changes in any way, we will update this page. Regularly reviewing this page ensures that you are always aware of what information we collect, how we use it and under what circumstances we share it with other parties.

## **Contacting the Scottish Government**

You may have written to us, or contacted us by phone, because you have a question or concern about something. This part of the privacy notice sets out how we use your personal data, and your rights when communicating with us.

## **What we do with information we collect from you when you contact us**

When you write to us or call us, your enquiry will usually be first handled by our Central Enquiry Unit or Public Engagement Unit. They will then send it to a specific team so that your question can be answered. We will only use your personal information for the purpose of handling, investigating and resolving your issue. We will use the contact details you provided to respond to your correspondence. If you have raised any issues about a third party, we may use the contact details you have provided for them to investigate your issue.

## **What personal information we collect**

We need enough information from you to answer your enquiry. If you call the helpline, we will make an audio recording of. If you contact us via email or post, we'll need a return address for response.

## **Who we share your information with**

Your enquiry will often need specialist advice, and will be passed to the relevant team for consideration and input.

In some circumstances we will share your information with other organisations. When we do that we'll satisfy ourselves that we have a lawful basis on which to share the information and document our decision making and satisfy ourselves we have a lawful basis on which to share the information.

## **Calling our helpline**

Our Central Enquiry Unit record all incoming calls as an audio record. The information collected is the date, time, duration, the telephone number if not withheld and the name of the agent who handled the call. That is captured by the software

used to record the calls. The calls are recorded to monitor the behaviour of the callers and to provide training for staff. The information is kept for three months.

## **Visiting our website**

We collect information about you when you visit our website, and when you interact with our pages. We also collect information when you provide feedback or subscribe to our newsletter.

## **What we do with information we collect from you when you visit our website**

We use this information to:

- improve the site by monitoring how you use it
- respond to any feedback you send us, if you've asked us to
- send out email alerts to those who have subscribed to our e-newsletter
- record and/or publish your response to a survey or consultation
- publish your comment on a blog or discussion site

## **What personal information we collect**

### **Analytics**

We use a third party service, Google Analytics, to collect information on how you use the site, using cookies and page tagging techniques.

The information we - and Google - collect doesn't identify anyone, and is kept for a maximum of 38 months. If we do want to collect personally identifiable information through the site, we will be upfront about it.

### **When staff use our site**

We use IP addresses to identify Scottish Government staff accessing the site from Scottish Government networks.

We record these users as 'internal' on this site. This helps us produce more accurate data about how members of the public use our content.

All visitors are anonymous. We cannot identify individuals.

### **Cookies**

You can read more about how we use cookies, and how to change your cookies preferences, on our [Cookies page](#).

## **Subscribing to our e-newsletter**

We collect your email address and subscription preferences when you sign up to our e-newsletter. You can also provide your name but this is optional. We track how our emails are used - for example whether you open them and which links you click on. The lawful basis we rely on to process personal data when you subscribe to our newsletter is consent. This means you have the right to withdraw your consent, or to object to the processing of your personal data for this purpose at any time. You can unsubscribe from receiving the newsletter at any time by selecting the 'unsubscribe' link that appears in every email. Once you have unsubscribed, your details will be deleted immediately from the system.

### **Feedback**

If you contact us asking a question or giving feedback, we collect your email address and any other personal data contained in your message. If you contact us asking for information, we may need to contact other government bodies to find that information.

## **Consultations**

We collect names and email addresses with every response we receive through [our consultation platform](#).

Email addresses are used to send an acknowledgement of response following submission. They may also be used to contact you in the future in relation to the consultation exercise if you give consent to be contacted.

Where permission is given, we publish responses. We include personal data where permission has been given to do so. We never publish email or postal addresses. Sometimes you may be accessing or linking to topic specific pages from our website – in such cases please refer to the privacy notice for that site.

## **Blogs and discussion sites**

We collect names or usernames, and email addresses with each comment. This data is kept as long as the blog post or dialogue remains published.

## **Who we share your information with**

We use Mailchimp to process our email newsletter subscriptions. Mailchimp's [privacy notice outlines how they collect, use, share and process personal information](#).

## **Links to other websites**

When we link to other websites, we encourage you to read the privacy policy statements contained on those sites.

**Data protection policy document**

See [Information assurance and data protection: data protection policy](#).



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