

FMB Webinar

New Build Home Connectivity

The Building etc. (Amendment) (England) (No. 2) Regulations 2022

Date: 31/01/23

Policy Drivers

- Government priority is to deliver nationwide gigabit connectivity as soon as possible. Target is 85% coverage by 2025 and the [Levelling Up White Paper](#) includes a mission for the UK to have nationwide gigabit connectivity by 2030.
- The COVID-19 pandemic demonstrated how vital it is for people to remain connected. Fast and reliable gigabit connectivity allows us to work more flexibly, access health and educational services and helps to support social inclusion and economic growth.
- A policy to mandate gigabit connectivity to new homes forms part of this national deployment.
- The introduction of a cost cap and financial contributions from network operators will help to keep the impact on developers proportionate.
- There is a consumer value to good connectivity with home buyers more willing to purchase and pay more for good broadband speeds.
- An [independent review](#) on the impact of higher broadband speeds on average house prices showed an increase 0.6 to 0.7 percent.

The new Part R requirements

- The aim of the new regulations is to ensure that where new dwellings are constructed, consideration is always given to ensuring that the new homes have access to, or are future-proofed for, the best possible broadband connectivity at the point of construction.
- The regulations require the installation of:
 1. Gigabit-ready physical infrastructure necessary for gigabit-capable connections up to a network distribution point, or as close as is reasonably practicable where the developer does not have the right to access land up to that distribution point; and
 2. Subject to a £2,000 cost cap per dwelling, a functioning gigabit-capable connection. Where a developer is unable to secure a gigabit-capable connection within the cost cap, developers must install the next fastest connection available, provided this can be done without that connection also exceeding the cost cap.
- To help reduce costs for developers the Government has secured commitments from network operators to contribute towards the costs incurred under the cost cap.

In scope

- The new connectivity requirements commenced on 26 December 2022 and apply unless building regulations application was made prior to this date, and works physically commence by the 26 December 2023.
- In Scope:
 - The erection of new dwellings in England; that is, the construction of a self-contained building or part of a building to be used as a new residential dwelling.
 - New dwellings developed within conservation areas are in scope of the requirements, noting that local planning conditions should also be met.

Out of scope

- New homes created by a material change of use (conversions).
- Rooms for residential purposes in hostels, hotels, boarding houses, schools and other educational establishments, and hospitals and other similar establishments used for patient accommodation.
- The erection of wholly non-residential buildings and existing buildings (including existing dwellings) undergoing major renovation works.

Note: For buildings not in scope of the new home connectivity requirements, the existing Part R “access” only requirements will continue to apply when wholly non-residential buildings are erected or when existing buildings (including existing dwellings) are subject to major renovation works.

See [Approved Document R Volume 2](#)

Gigabit-ready physical infrastructure: a tiered approach

- The requirement to install gigabit-ready infrastructure applies even where a gigabit-capable connection is not installed; this is to ensure that the new dwellings are future-proofed for gigabit-capable connections when these become available.
- Ideally, developers will be able to build gigabit-ready infrastructure all the way to a network distribution point, which may or not be on the development site or on land to which the developer has access rights.
- Where the developer has no right to install infrastructure in or on intervening land, and no gigabit-capable connection is being provided, the developer is still required to install infrastructure to one of the following points in order of priority:
 1. as close as reasonably practicable to a location at which it is likely that a distribution point is to be installed within a 2-year period.
 2. where there is no existing network distribution point to which infrastructure can be built and where there is no likely future location for a distribution point, an access point in or on the building.
- The tiered approach is best demonstrated with diagrams as well as wording. These are provided in paragraphs 1.8 to 1.29, and diagrams 1 to 6 in [Approved Document R Volume 1](#), and on the following slides.

Installing gigabit-ready physical infrastructure - tier 1

- Ideally, developers will be able to build gigabit-ready infrastructure all the way to a network distribution point, which may or not be on the development site or on land to which the developer has access rights.

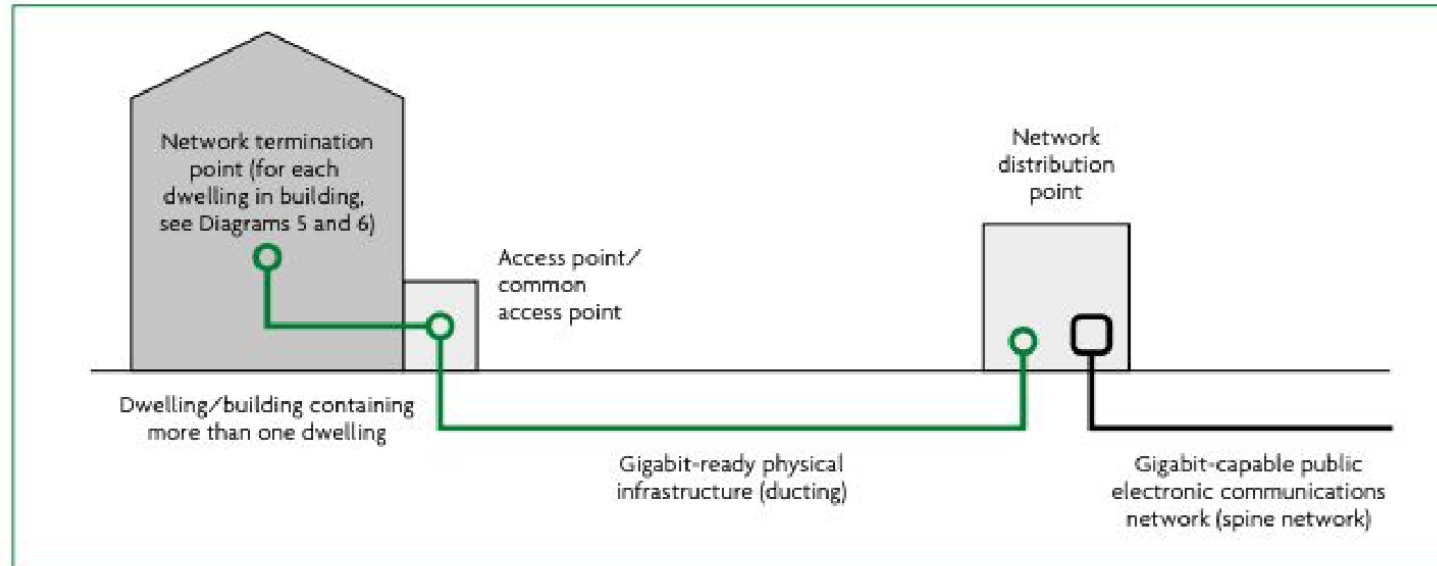


Diagram 1 Requirement RA1 – schematic example of gigabit-ready physical infrastructure from the network termination point to the network distribution point

Installing gigabit-ready physical infrastructure - tier 2

- In this case, the developer is unable to install infrastructure all the way to the existing network distribution point owing to a lack of access rights to intervening land, so the ducting is built to a point as close as reasonably practicable to the network distribution point. This will help to future-proof the homes as the gap between the network distribution point and the dwelling is minimised, thus making it easier to complete the infrastructure in the future.

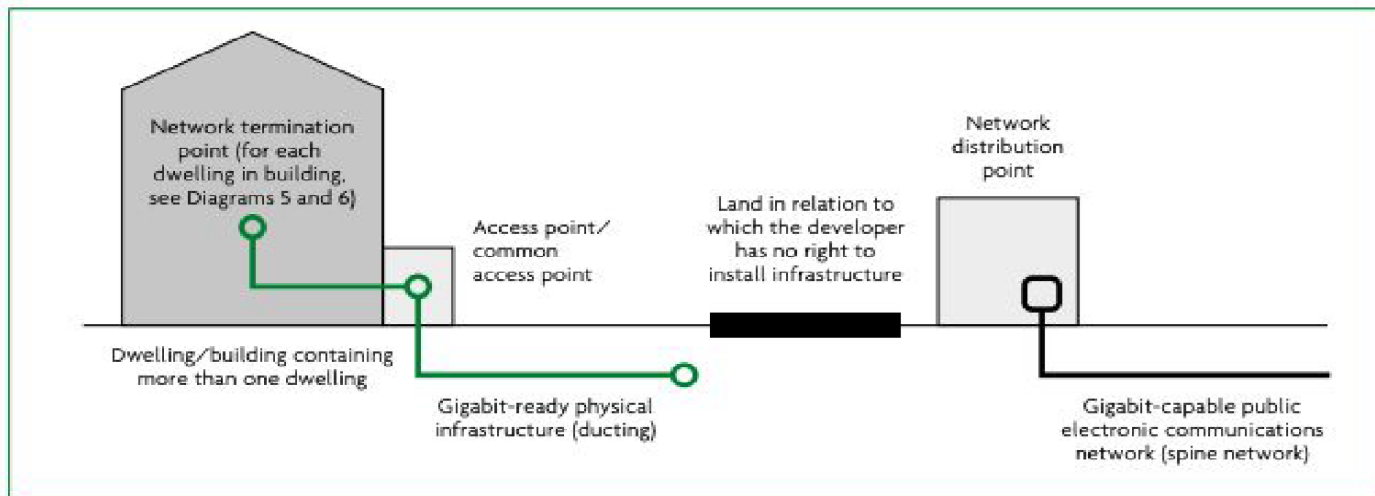
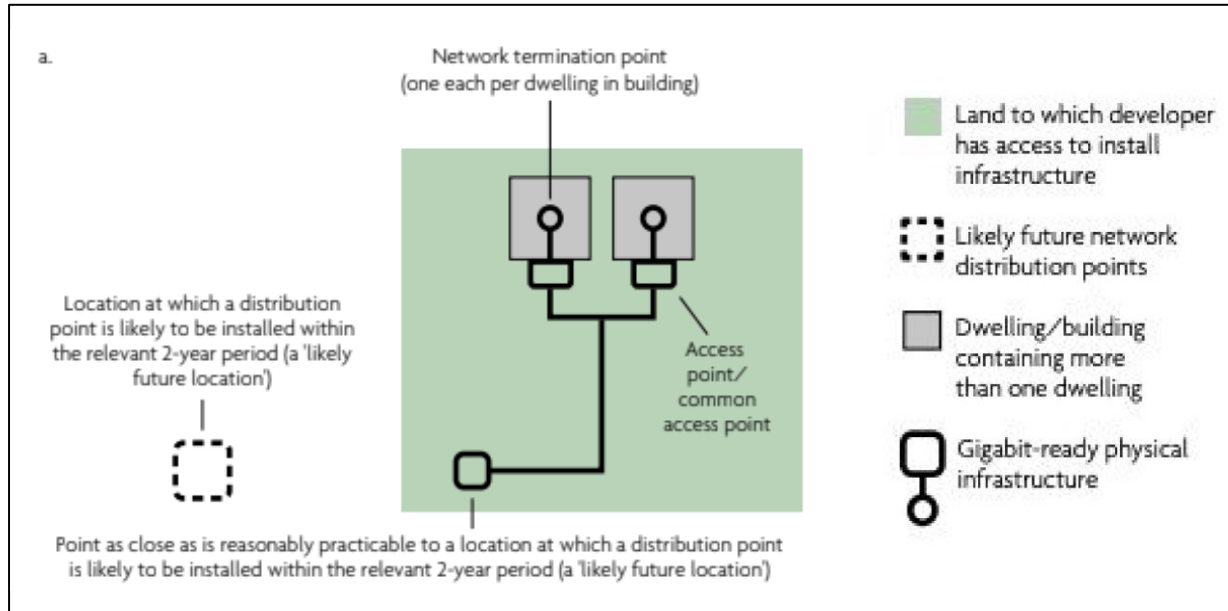


Diagram 2 Requirement RA1 – schematic example of gigabit-ready physical infrastructure from the network termination point to a point as close as is reasonably practicable to the network distribution point, where there is no right to install infrastructure in land to reach the network distribution point

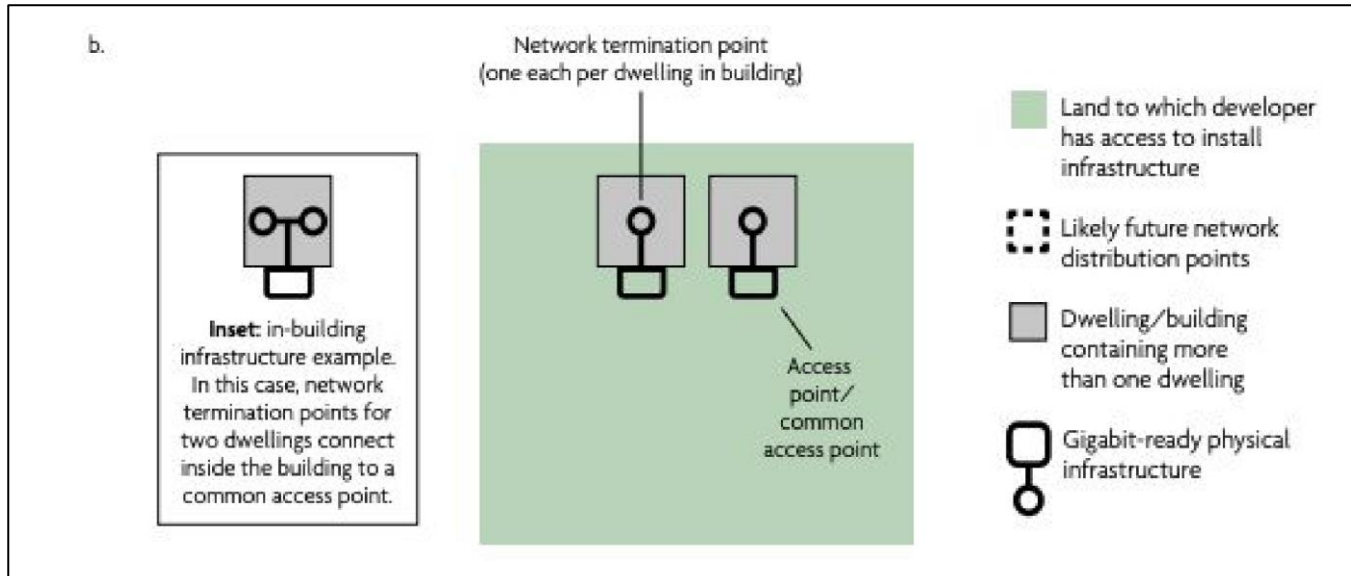
Installing gigabit-ready physical infrastructure - tier 3(a)

- This diagram represents scenarios where there is no existing network distribution point for a gigabit-capable connection to which infrastructure can be built. In these scenarios, where a gigabit-capable connection is not being provided because the cost cap has been breached, the developer must (by cooperating with network operators) identify plans for a likely future network distribution point, and where a plan exists, build infrastructure to a point as close as reasonably practicable to the location of the likely future network distribution point. Again, this will minimise the gap that will need to be bridged to complete the infrastructure in future. See next slide for Tier 3(b).



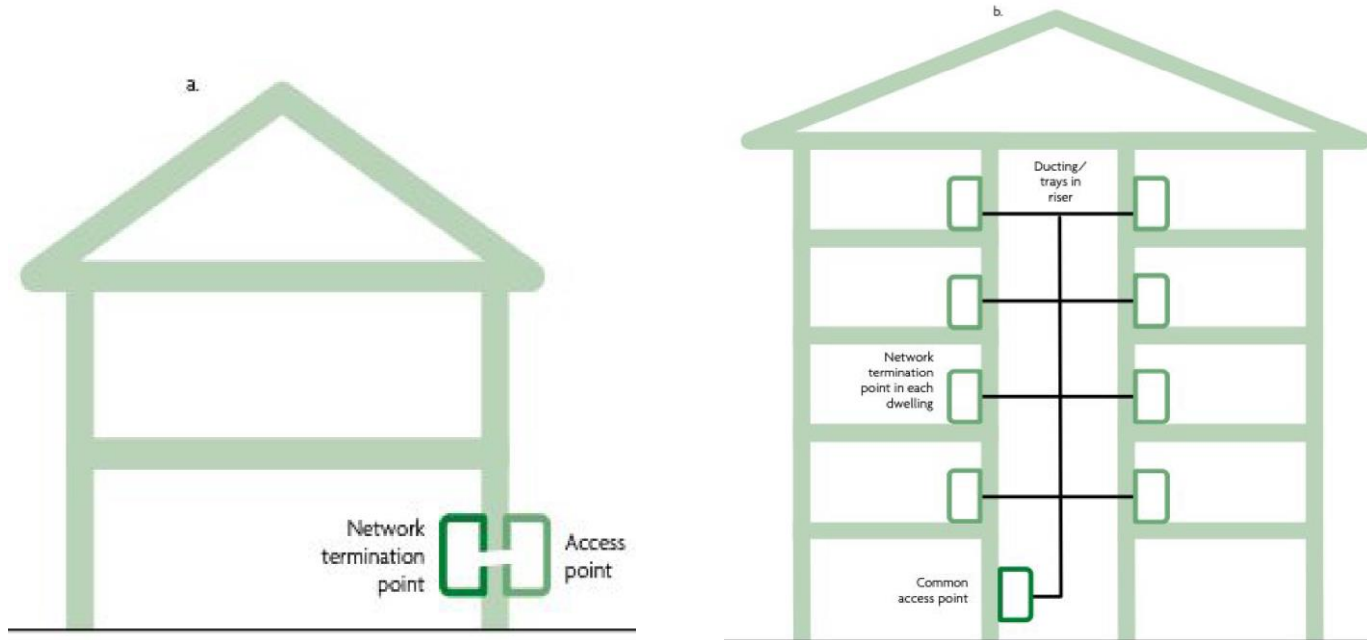
Installing gigabit-ready physical infrastructure - tier 3(b)

- This diagram represents scenarios where there is no existing network distribution point to which infrastructure can be built, and where there is no network distribution point planned for installation within the relevant 2-year period. Where this is the case, and where a gigabit-capable connection is not being provided because the cost cap has been breached, developers are required only to install in-building gigabit-ready infrastructure between the network termination point in each individual dwelling and an access point or a common access point in or on the building.



Installing in-building gigabit-ready physical infrastructure

- These two diagrams (available in Approved Document R Volume 1 as Diagram 4a/b) demonstrate the in-building infrastructure required where there is no requirement for external infrastructure to be installed.



Gigabit-capable connections and the cost cap

- Developers are required to install at least one functioning gigabit-capable connection from a network distribution point to a network termination point at each new dwelling on a development.
- A developer will be exempt from the gigabit connectivity requirement, if having engaged two suitable network operators, it can be demonstrated that the provision of a connection will exceed £2,000 per dwelling after any financial contribution from the network operator has been deducted.
- Where a developer is unable to secure a gigabit-capable connection within the cost cap, developers must install the next fastest technology connection available, provided this can also be done without exceeding the £2,000 cost cap.
- Included in the cost cap is the cost of providing a gigabit-capable connection or next fastest technology connection from the network termination point at each new dwelling to the network distribution point, inclusive of VAT.
- Excluded from the cost cap is the cost of installing gigabit-ready physical infrastructure and the cost for the ongoing provision of broadband services.
- Should the costs of a gigabit-capable connection or next fastest technology connection exceed the cost cap and an exemption apply, a developer will still be required to install gigabit-ready physical infrastructure in line with the previously described tiered approach.

The connectivity plan

- The new regulations require developers to submit details of plans for gigabit-ready infrastructure and for gigabit-capable or next-best technology connections when applying for building control approval. The “Connectivity Plan” is a shorthand for describing these details.
- Approved Document R Volume 1 provides a model connectivity plan at Appendix B. The model form makes clear the kinds of details and evidence that need to be provided in order to clarify plans or to apply for exemptions.
- The two-part structure of the model plan is designed to reduce burdens on developers:
 - When gigabit-ready infrastructure and a gigabit-capable connection is being provided, only Part A of the connectivity plan needs to be completed, accompanied by supporting information.
 - However, where an exemption is being relied upon, Part B should also be completed with supporting evidence, e.g. quotes from suitable network operators, refusals from suitable network operators to provide connections.
- **It is the responsibility of developers to complete and submit connectivity plans and supporting information, but local authority building control will need to take the requisite information into account before accepting, or rejecting full plans, a building notice or an initial notice.**

Exemptions from requirement RA1

- The requirement to install gigabit-ready infrastructure (RA1) applies even where a gigabit-capable connection is not installed; this is to ensure that the new dwellings are future-proofed for gigabit-capable connections when these become available.
- However in some rare circumstances there are exemptions where gigabit-ready infrastructure (RA1) is not to be installed, this will be due to:
 - the MOD/armed-forces/national security exemption, or
 - The prospect of connection from a relevant public electronic communications network is too remote to justify equipping the building with infrastructure or an access point

Exemptions from requirement RA2

Where a gigabit-capable connection is not to be installed, this will be because:

- Doing so will breach the cost cap of £2,000 per dwelling
 - Where this is the case, developers must install the next fastest technology connection available (superfast broadband and failing that, a Universal Service Obligation-standard connection) provided this can be done within the cost cap.
- At least two suitable network operators did not respond to the developer within 30 working days - this is taken to trigger an exemption to the requirement RA2.
- At least two suitable network operators have proactively declined to provide connections at a cost not exceeding the cost cap; again, this is taken as an exemption to requirement RA2.

Who is responsible for meeting the requirements?

- **The new requirements fall primarily on developers regarding the installation of infrastructure and connections.**
- There are no new requirements for network operators, who are not obliged to cooperate with developers - but the financial commitments some have made to contribute to connectivity and commercial incentives mean that network operators are likely to do so when they can.
- **Developers will need to work with network operators regarding the installation of gigabit-ready infrastructure and of gigabit-capable, or next-best technology, connections.**
- The regulations introduce new responsibilities for building control bodies - local authority building control and approved inspectors (AIs) - in assessing whether developers have fulfilled the new requirements and adhered to the new regulations.

What are the key stages in the requirements?

- **Stage 1:** Planning connectivity
- **Stage 2:** Completing and depositing a connectivity plan
- **Stage 3:** Building control application assessment
- **Stage 4:** Installation and inspection
- **Stage 5:** Building certification

Early engagement

- The first point at which the requirements are engaged is the point at which a developer applies for building control approval, at Stage 2.
- However, work will of course be needed to prepare for this, as per Stage 1.
- By the end of Stage 1, the developer should have sufficient evidence to provide the requisite connectivity plan information plan.
- Early engagement between developer and network operators provides more time for the latter to resolve any issues that may arise in relation to deploying infrastructure and connections.

Stage 1: Planning connectivity

- Developers will engage with network operators to establish a plan for the installation of gigabit-ready infrastructure and gigabit-capable, or next fastest, connections.
- Developers will need to collate information supporting the connectivity plan, which will be submitted as a part of the building control approval application (Stage 2).
- As noted in Approved Document R, Developers can consider which forms of evidence may most effectively support connectivity plan statements, which will vary between development sites. However, the evidence could take the form of:
 - maps or diagrams of infrastructure routes or locations and setting out sit layouts;
 - written evidence such as quotes, correspondence;
 - estimated timescales re installation.
- **By the end of this stage the developer should have a connectivity plan and adequate supporting evidence, including where exemptions are sought.**

Stage 2: Completing and depositing a connectivity plan

- In this stage, the developer needs to arrange the connectivity plan information ready for submission to the local authority, then submit it.
- Where the local authority is leading building control, the requisite connectivity plan is required for inclusion with the building control approval application whether full plans or a building notice is used.
- Where the developer is employing an Approved Inspector (AI), that AI will need to sign off the initial notice prior to submission; the initial notice form now requires the inclusion of the requisite connectivity plan information with applications made through this method.

Stage 2: Completing and depositing a connectivity plan

- [Approved Document R Volume 1](#) includes a model connectivity plan at Appendix B. We would suggest this as a helpful and efficient format for organising the connectivity plan information, with the two-part structure hopefully reducing administrative burdens.
- Where the developer is applying for exemptions, Part B of the model connectivity plan will need to be completed as well as Part A.
- **Once the connectivity plan information is collated and complete, it must be included in the building control approval application to the local authority.**

Stage 3: Building control application assessment

- The relevant local authority will assess/clear the full plan, or reject the building notice or initial notice, as per existing arrangements
- As the connectivity plan is now a requirement for these applications, the local authority should withhold clearance on or reject applications which do not include connectivity plans.
- Therefore, if the developer has not included a connectivity plan with the building control approval application, the developer may be asked to amend the application to include the requisite information.

Stage 4: Installation and assessment

- The developer will install the gigabit-ready physical infrastructure during the construction process; installing infrastructure at convenient points (e.g. ducting along with other groundworks) may make this process more efficient and cost effective.
- As per usual, the developer will have arranged for a programme of inspections (including some statutory inspections).
- This programme of inspections should now include inspection of the installation of gigabit-ready physical infrastructure and gigabit-capable connections.
- There are no current industry-wide specifications for gigabit infrastructure and connections; network operators have their own individual specifications.
- Therefore, developers should ensure that network operators provide confirmations that installations are made in accordance with specifications and in the case of connections, are functional (i.e. ready for use to carry a live internet service when the resident moves in), in practice, connections tend to be installed by network operators.
- Signposting information is available on the [Digital Connectivity Portal](#).

Stage 5: Building certification

- As the connectivity plan was submitted at the building control approval application stage, it should have been factored into the construction process. In terms of certification, this should be a case of the building control body confirming that, as far as can be reasonably ascertained, building regulations have been adhered to, and the details set out in the plan, have been complied with.
- As noted, there are no current industry-wide specifications for the installation of gigabit-ready physical infrastructure or gigabit-capable connections.
- Where gigabit-ready physical infrastructure has been installed, the developer must confirm it has been installed in accordance with the specification in question, and where possible, the network operator should confirm to the developer that this is the case.
- Where a connection has been installed, the network operator should notify the developer that the connection is properly installed and functional. In the absence of industry-wide installation standards, these confirmations/notifications should suffice as confirmation for the local authority or approved inspector that the requirement to install gigabit-ready infrastructure, and a functional connection (where applicable) has been met.
- Building certification in the form of a completion certificate (from local authority building control) or a final certificate (from an approved inspector) will be carried out in line with the existing regime.

Where can I get further information?

- The regulations are available on Legislation.gov.uk:
<https://www.legislation.gov.uk/ukxi/2022/984/contents/made>
- Statutory Guidance is available at Gov.uk:
<https://www.gov.uk/government/publications/infrastructure-for-electronic-communications-approved-document-r>
- Circular 04/2022 and accompanying Divisional Letter setting out transitional arrangements are available at: <https://www.gov.uk/government/publications/the-building-etc-amendment-england-no-2-regulations-2022-circular-042022>
- Supporting materials are available on the Government's Digital Connectivity Portal:
<https://www.gov.uk/guidance/digital-connectivity-portal>

Any questions?