Explanatory Memorandum to The Building etc. (Amendment) (Wales) Regulations 2025

This Explanatory Memorandum has been prepared by Planning Directorate and is laid before Senedd Cymru in conjunction with the above subordinate legislation and in accordance with Standing Order 27.1

Cabinet Secretary's Declaration

In my view, this Explanatory Memorandum gives a fair and reasonable view of the expected impact of The Building etc. (Amendment) (Wales) Regulations 2025. I am satisfied that the benefits justify the likely costs.

Rebecca Evans MS
Cabinet Secretary for Economy, Energy and Planning

25 March 2025

PART 1

1. Description

1.1 The Building etc. (Amendment) (Wales) Regulations 2025 ("the instrument") amend the Building Regulations 2010 ("the Building Regulations") to make new provision for the installation of gigabit-ready physical infrastructure and a connection to a gigabit-capable public electronic communications network in new dwellings. The instrument makes associated changes to the Building (Registered Building Control Approvers etc.) (Wales) Regulations 2024 and also makes transitional provision under which the new provisions do not apply.

2. Matters of special interest to the Legislation, Justice and Constitution Committee

2.1 None.

3. Legislative background

3.1 The Building Regulations were made pursuant to powers in the Building Act 1984 and section 2(2) of the European Communities Act 1972. The particular regulations that this instrument amends were made under powers in the Building Act 1984. Improved digital infrastructure fits with the Programme for Government aims of "delivering a stronger, greener economy through updating our digital and communications infrastructure". It also supports the delivery of Mission 5 (Digital Infrastructure) of the Digital Strategy for Wales by creating the right conditions for investment in digital infrastructure. Improved digital infrastructure contributes to several of the Well-Being of Future Generations (Wales) Act 2015 well-being goals including a healthier Wales, a Wales of cohesive communities and a prosperous Wales.

3.2 The Building Regulations impose requirements on people carrying out building work and are supported by Approved Documents, approved and issued under section 6 of the 1984 Act, which set out detailed practical guidance on compliance. The 1984 Act and the Building Regulations set out procedures for the supervision and control of building work.

3.3 Existing requirements in Part 9A of, and Part R of Schedule 1 to the Building Regulations make provision for in-building infrastructure for high-speed electronic communications networks for new dwellings (commonly known as superfast broadband).

3.4 This instrument amends the existing requirements in Part 9A of, and inserts new paragraphs RA1 and RA2 into Schedule 1 to, the Building Regulations. These amendments make provision, in respect of new

dwellings, for in-building gigabit-ready physical infrastructure and, for the first time, gigabit-ready physical infrastructure which extends beyond the building, together with a connection to a gigabit-capable public electronic communications network.

3.5 The instrument also makes consequential amendments to paragraph R1 of Schedule 1 to the Building Regulations to ensure that building work falling within the new paragraphs RA1 and RA2 is not also required to comply with the requirements of paragraph R1.

3.6 The majority of the Secretary of State's functions conferred by or under the 1984 Act were, so far as exercisable in relation to Wales, transferred to Welsh Ministers on 31st December 2011, by the Welsh Ministers (Transfer of Functions) (No.2) Order 2009 (the 2009 Order) and, in relation to excepted energy buildings in Wales, on 1 April 2018 by section 54 of the Wales Act 2017.

3.7 These Regulations are being made under the negative resolution procedure.

4. Purpose and intended effect of the legislation

4.1 The last two decades have seen the move from a dial up connection to broadband and then to superfast broadband. As the possibilities grow and new opportunities are seized, there is an ever-growing requirement for fast broadband to deliver them. As technologies continue to evolve gigabit capable broadband (capable of delivering 1000Mbps (1Gbps) download speeds) will become the standard to underpin current and future needs. Today around 74 per cent of premises in Wales have access to gigabit capable broadband.

4.2 Digital connectivity and telecommunications policy is the responsibility of the UK Government. The Welsh Government, however, continues to step in through the Programme for Government which highlights the ambition to upgrade our digital and communications infrastructure and through the Digital Strategy for Wales. The Welsh Government has already invested over £50 million to provide access to full fibre gigabit capable broadband to 44,000 premises in Wales.

4.3 In addition to intervening directly to improve fibre connectivity, the Welsh Government is also committed through the Digital Strategy for Wales to use devolved powers to create the right conditions for investment and innovation in broadband. The UK Government also has an ambition for 85 per cent of UK premises to be able to access gigabit capable broadband by 2025.

4.4 An important part of ensuring that homes have access to fast and reliable broadband is through future-proofed development of new homes with access to the very best connectivity available. It is also important that this

connectivity is delivered consistently across Wales. Not all new homes are currently provided with gigabit connectivity and these legislative measures seek to address this position. The measures will help deliver the Digital Strategy and prevent the need for disruptive retrospective works to homes to enable connectivity.

4.5 To support gigabit broadband for new homes, this instrument replaces the requirement for inbuilding high-speed electronic communications networks (superfast broadband) with requirements for developers to ensure that dwellings are equipped with gigabit-ready physical infrastructure and provided with a connection to a gigabit-capable public electronic communications network (providing the connection can be secured without exceeding a £2,000 per dwelling cost cap). The instrument requires an alternative connection where the cost cap cannot be maintained.

4.6 To assist developers with the costs, funding commitments have been secured from Openreach, Virgin Media and Gigaclear. Further information on these commitments is set out at: https://www.gov.uk/government/publications/new-build-developments-delivering-gigabit-capable-connections. Based on UK figures given the funding commitments made by network operators, it is estimated that developers would need to make a cost contribution in less than 5% of new build premises. It is estimated that the average cost contribution required from the developer in these instances will be below £2,000 and in many, would be below £1,000 per premise.

4.7 The UK Government Explanatory Memorandum to the Building etc. (Amendment)(England)(No 2) Regulations 2022 (S.I.2022/ 984) estimated that the cost cap will be breached in less than 2% of cases. This will likely occur in areas that are isolated from existing infrastructure that can support a connection. However, the requirements are technologically neutral so that types of connections more typically deployed in areas that may be impacted (including rural or very hard to reach areas) can be used in the alternative. The home will still require to be built with gigabit-ready infrastructure to future-proof for a gigabit connection, even where such a connection cannot be achieved within the cost cap.

4.8 As gigabit-capable coverage grows across Wales over time, cost cap breaches will be a diminishing problem.

4.9 These changes are being delivered partially through this instrument and partially through changes to Approved Document R volumes 1 & 2

5. Consultation

5.1 The Welsh Government held a consultation on the proposed changes to the Building Regulations and the accompanying statutory guidance, which ran from the 3rd February 2023 and closed on the 28th April 2023. Consultation responses were published in November 2023 alongside draft

versions of the revised Approved Document R in two volumes (1&2). This stage of the consultation set out proposals relating to the Building Regulations and the accompanying statutory guidance for Part R (Infrastructure for electronic communications Volumes 1 & 2) of the Building Regulations for new buildings.

5.2 The Consultation generated 13 responses, and all responses were read and considered as part of the analysis process in moving forward with final drafts. The evidence documentation can be accessed on the Welsh Government website here: https://www.gov.wales/new-build-developments-delivering-gigabit-capable-connections

5.3 In general, there was broad agreement to the proposals in the consultation There have been some amendments to the proposals following the feedback to the consultation. This includes removing the requirement to submit a 'connectivity plan' with full plan applications, building notices, initial notices or amendment notices provided to a local authority. However, to ensure that connectivity is still sufficiently planned for all new build homes at an early stage, the connectivity plan is to be submitted to the building control body prior to commencement of building work, rather than on submission of application (the developer will still be able to submit at the application stage if completed, however). This will allow applications to be submitted where developers are awaiting a response from network operators, but still require submission of the plan before commencement of any building work. Alongside this we are also introducing guidance within Approved Document R, recommending that a less detailed 'connectivity statement' be submitted to the Building control body at application stage where a connectivity plan is not already part of the information submitted with a building regulation application. The aim of the 'connectivity statement' is to still ensure early communication between developer and network operator(s) and will act as a reminder to developers that a connectivity plan is required before commencement on site.

5.4 The Government's response to the publication was published in November 2023 and is available at
New Build Developments: delivering gigabit capable connections

6. PART 2 – REGULATORY IMPACT ASSESSMENT

6.1 A regulatory impact assessment has been carried out in respect of the proposed amendments to the 2010 Regulations.

6.2 This document sets out the results of assessing the costs and benefits of the proposed new requirements within Part R of Schedule 1 to the Building Regulations 2010, ensuring new build homes have gigabit-capable connections.

6.3 The policy proposals being assessed are the new requirements within Part R of Schedule 1 to the Building Regulations 2010 (summary in Figure 2.1 below), ensuring new build homes have gigabit-capable connections through the installation of:

- Gigabit-ready 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 or other technological means of facilitating such a connection);
- The cost cap was arrived at after industry consultations by Department for Culture Media and Sport (DCMS) and is set at that level as it enables 99% of UK properties to be gigabit connected within the cap[1]. A number of other options and cost caps were considered by DCMS - a long list of options considered in the England Impact Assessment was published by the DCMS in October 2018.[2]

Figure 2.1: Summary of current requirements under Building regulations Part R, the proposed changes and the Impacts

• Current Part R requirements –
  ○ High speed electronic communication network (i.e speeds of at least 30 Mbps – over copper for example)
  ○ Developers required to put in in-building infrastructure only
• Proposed Part R requirements –
  ○ Developers required to put in onsite gigabit ready infrastructure (ducting and termination space) plus the gigabit capable connection if it costs less than £2,000 (where the cost is over £2,000, developers need to put the next fastest broadband connection which can be installed without exceeding £2000)

[1] A very good summary of the issues is here: "Gigabit-broadband in the UK: Government targets and policy" https://researchbriefings.files.parliament.uk/documents/CBP-8392/CBP-8392.pdf (see section 5.2).

[2] See pp 75 *et seq* in: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752146/New_Build_Developments_Impact_Assessment_FINAL.pdf

- To ensure this happens, there will now be a need for a Connectivity Statement[3] to be submitted at application stage and a Connectivity Plan to be submitted to the Building Control Body before commencement on site.

- Impacts -
  - Under current Part R requirements, it's possible some dwellings wouldn't/didn't get a 30 Mbps broadband connection and ended with a lower speed
  - Under proposed Part R requirements, all sites will be capable of getting connected and the vast majority will get gigabit.

6.4 The policy proposals require that a connectivity plan is prepared, agreed with a supplier and submitted prior to commencement of building work for each new site. This is the element of providing gigabit-capable infrastructure and connections that falls within scope of the Building Regulations. If a connectivity plan is not available when the application is submitted to the building control body, then the statutory guidance requires that a connectivity statement is provided until this is produced.

Costs

6.5 The costs of compliance with the policy are the time costs of preparing/agreeing/checking a 'connectivity statement' and 'connectivity plan':

- The time costs fall on the developer, supplier and regulator (including familiarisation costs);
- Time to prepare and submit a connectivity statement (if required);
- Time is required for the developer to discuss/negotiate a connectivity plan with a supplier;
- Time is required for the developer to submit the connectivity plan;
- Time is then required for the regulator to check/sign off the plan.

6.6 To calculate the time costs, the analysis uses a 10-year appraisal period from 2025 to 2034:

- Number of sites in scope - it is estimated that there are 330 new build residential sites per year in Wales, rising to 393 by 2034, totalling 3,467 sites over the 10-year period[4];

[3] Approved document R will recommend that the developer provides details to the local authority of any work carried out by the application stage to secure a gigabit capable connection.

[4] The data were calculated based on housing completions from Welsh Government estimates (available at https://statswales.gov.wales/Catalogue/Housing/New-House-Building) with site sizes estimated from the DCMS Impact Assessment (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/752146/New_Build_Developments_Impact_Assessment_FINAL.pdf) based on data from the Ofcom Connected Nations Data Analysis Report 2017. These data were adjusted to reflect smaller average site sizes for Wales.

- Counterfactual - the analysis assumes that gigabit-ready physical infrastructure necessary for gigabit-capable connections is the default option for all sites. In all but the most exceptional cases, the connection will be provided within the £2,000 price cap (for example, Openreach has committed to connect most development sites for a maximum developer contribution of £2,000 per plot[5]). In these cases there is not expected to be a lower cost alternative to providing a physical broadband connection.
- In 85% of cases we anticipate that the developer will engage with the broadband supplier pre-building control application and agree to install a Gigabit connection. The only additional thing the developer needs to do to comply with the proposed policy therefore is to complete a short 'connectivity plan' (and connectivity statement if the plan is not submitted with the building regulation application) which details the contract is in place and confirms the date on which gigabit broadband will be installed, which then needs to be checked by the building control body;
- Of the remaining 15% of sites, the analysis assumes that the developer will not have engaged with the broadband supplier before submission of the building control application and additional time costs are incurred by the developer/supplier. The amount will vary depending on the £2,000 price cap:
  - For those sites where a supplier agrees with the developer that the developer's contribution is no more than £2,000 per dwelling to provide gigabit-capable connections, the additional activity involves negotiating with the supplier, preparing and submitting the connectivity statement and connectivity plan.
  - In the exceptional cases where the developer's contribution would be over £2,000, the analysis assumes the majority will still install gigabit capable connections because it would remain the lowest cost option. However, there may be cases where the cost is significantly higher for a gigabit connection and the developer chooses to request a copper connection. In these cases the developer will need to get an additional quote from a supplier to confirm this is the case.

Results - Costs

6.7 Table 2.1 sets out the estimated 10yr Present Value Costs of the policy proposals; Table 2.2 shows the equivalent annual costs and table 2.3 shows the estimated person time required (full time equivalent):

- Annual mid-scenario costs are £24,000 over 10 years;
- The majority of the costs are for building control to check the connectivity plans for each site;

[5] Registering your site | Openreach

- For most developers, there will be limited additional costs to demonstrate that they can achieve gigabit broadband connectivity.

Table 2.1: 10yr Present Value Costs	10yr PV Costs		
	Low	Mid	High
Developer Costs	£30,613	£51,555	£88,151
Operator Costs	£443	£1,004	£1,709
Regulator Costs	£91,656	£156,450	£266,394
Total policy costs	***£122,711***	***£209,010***	***£356,254***

Table 2.2: Annual costs	EANC		
	Low	Mid	High
Developer Costs	£3,556	£5,989	£10,241
Operator Costs	£51	£117	£199
Regulator Costs	£10,648	£18,176	£30,948
Total EANC	***£14,256***	***£24,282***	***£41,388***

Table 2.3: FTE required	Average FTE over 10 years		
	Low	Mid	High
Developer FTE	0.11	0.19	0.31
Operator FTE	0.00	0.00	0.00
Regulator FTE	0.20	0.34	0.57
Total FTE	***0.32***	***0.53***	***0.89***

Benefits

6.8 The principal benefit of the policy will be to increase early engagement between developers and suppliers to ensure that gigabit connectivity is delivered to the site at the time of build. This early engagement will allow suppliers to plan the delivery of a gigabit connection to the site to ensure it is available at the time of build.

6.9 Installing gigabit-capable connections at the start can, in addition, cost less by reducing the need for further disruption from retrospective infrastructure deployment and ensures that the digital infrastructure is future proofed as demands for bandwidth continue to increase and new services emerge.

6.10 The policy will help to make sure that gigabit capable broadband is deployed consistently and where the cost cap is breached the next fastest technology is deployed in a consistent manner. The regulations will mean that the approach in Wales closely mirrors regulations in Scotland and England providing a clear and consistent approach.

6.11 Deploying gigabit capable broadband on new build housing developments also present an opportunity to bring the network closer to other unserved

areas where it might not otherwise be economically viable therefore reducing the costs deployment to the wider area.

Policy proposals

6.12 The policy proposals being assessed are the new requirements within Part R of Schedule 1 to the Building Regulations 2010, ensuring new build homes have gigabit-capable connections through the installation of:

- gigabit-ready 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 or other technological means of facilitating such a connection).

Cost cap

6.13 The value of the cost cap is set at a cost of £2,000 to the developer, after any financial contribution from the network operator has been deducted in respect of each new dwelling created.

6.14 The following costs are to be included in the cost cap:

- a. value added tax;
- b. the cost to provide connection to a gigabit-capable public electronic communications network from the point of connection at the network distribution point to the network termination point at each new dwelling on a development;
  - = Note: labour and material costs may include direct costs to the developer and the costs to the developer of sub-contracting to network operators or a mixture of both.

6.15 The following costs are excluded from the cost cap:

- a. the cost of providing gigabit-ready physical infrastructure (i.e. ducting, poles, access point etc.) in relation to each individual dwelling including in-building infrastructure in common building areas in a multi-dwelling building;
- b. administrative cost incurred by the developer including costs associated with submission of the particulars of any public electronic communications network to which a connection is provided (‘connectivity plan’) and building control fees;
- c. the cost to an end-user (as defined by section 151(1) of the Communications Act 2003) of the ongoing provision of a public electronic communications service.

Submission of a Connectivity Statement

6.16 The person carrying out the building work is required to submit a 'connectivity statement' during the application process (with full plan applications, building notices, initial notices or amendment notices) where a connectivity plan is not submitted during this process (as requested by the building control body). The details required within a 'connectivity statement' will be which network operator(s) have been contacted in relation to providing gigabit capable connections together with evidence from the network operator of receipt (e.g. email confirmation of receipt). A connectivity statement form will be added to the appendix of the final approved document. The aim of the 'connectivity statement' is to still ensure early communication between developer and network operator(s) and will remind developers that a connectivity plan is required before commencement on site.

Submission of a Connectivity Plan

6.17 The person carrying out the building work is required to submit particulars of any public electronic communications network in relation to which a connection is to be provided ('connectivity plan') to a local authority or Registered Building Control Approver (RBCA) prior to commencement of the building work. The assessment assumes a policy start date in 2025 and a transitional provision period of 12 months for Building regulation applications submitted prior to the publication of the changes to the Building Regulations.

Scope of the 'connectivity plan'

6.18 Where the particulars of the public electronic communications network state that connection to a gigabit-capable public electronic communications network is being provided, Part A of the 'connectivity plan' should be completed and should include the following information:

- a. Building Control Application Number;
- b. Development/Address/Plot Number;
- c. Developer (name of developer, point of contact);
- d. Network Operator (name of provider, contract reference, point of contact);
- e. Confirmation that gigabit-ready physical infrastructure will be installed from the network distribution point to the network termination point at each new dwelling on the development; or that gigabit-ready physical infrastructure will be installed to a point as close as is reasonably practicable to a network distribution point to the network termination point at each dwelling; or that each dwelling on the development will be provided with gigabit-ready physical infrastructure from an access point or common access point to a corresponding network termination point at each dwelling;
- f. Confirmation that a connection will be installed from the network distribution point to the network termination point at each new dwelling on the development;

- g. Evidence to support this (for example, written confirmation that a suitable provider of public electronic communications networks has been contracted to provide each dwelling on the development with connection to a gigabit-capable public electronic communications network).

6.19 Where the 'connectivity plan' confirms that connection to a gigabit-capable public electronic communications network is not being provided, Part B of the 'connectivity plan' should additionally be completed to provide the following information:

- a. Evidence in the form of at least two formal quotations from suitable providers of public electronic communications networks to demonstrate that the cost of providing at least one connection to a gigabit-capable public electronic communications network exceeds the cost cap; or evidence from at least two suitable providers of public electronic communications networks confirming that they have refused to provide a gigabit-capable connection and stating the reason why;
- b. Where connection to a gigabit-capable public electronic communications network is not being provided, Part B of the 'connectivity plan' should additionally confirm the next fastest broadband connection that falls within the cost cap that is being installed instead and attach the relevant technical information;
- c. Where no connection to any public electronic communications network is being provided, Part B of the 'connectivity plan' should include evidence in the form of two formal quotations from at least two suitable providers of public electronic communications networks confirming that they have refused to provide any connection to a public electronic communications network and stating the reason why;
- d. Confirmation that even where a slower speed connection or no connection is being installed, gigabit-ready physical infrastructure will still be installed from each new dwelling on the development to the following points, listed in order of priority:
  - = distribution point on the network operator's gigabit-capable public electronic communications network (which could be off-site), or where the person carrying out the building work has no right to install the infrastructure in land in which it would need to be installed in order to reach the network distribution point, a point as close as is reasonably practicable to a network distribution point which the owner of the building is entitled to install gigabit-ready infrastructure, or where this is not reasonably practicable because 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.

Exemptions

6.20 Building regulations requirement RA1 (gigabit-ready physical infrastructure) does not apply to the following types of building or building work:

- a. Wholly non-residential buildings and existing buildings undergoing major renovation works;
- b. New Dwellings created through a material change of use;
- c. Rooms for residential purposes in hostels, hotels, boarding houses, schools and other educational establishments, and hospitals and other similar establishments used for patient accommodation.;
- d. buildings occupied by the Ministry of Defence or the armed forces of the Crown, or otherwise occupied for purposes connected to national security;
- e. buildings in isolated areas where a connection to a gigabit capable public electronic communications network, a high-speed public electronic communication network or a USO-standard public electronic communications network is not possible within the cost cap and the prospect of a connection to any public electronic communications network is considered too remote to justify equipping the building with gigabit-ready physical infrastructure or an access point.

Cost Assessment Methodology

Sequence of calculations undertaken to estimate the cost of the proposed policy

6.21 The following sequence of calculations were undertaken:

- Estimate the total number of new build sites per annum in Wales over the 10-year appraisal period;
- Estimate the proportion under the counterfactual – those that will be already implementing the requirements of the policy proposals;
- Of the remainder, estimate the proportion likely to be able to comply with the policy proposals, within the price cap;
- Estimate the activities, time and cost involved in complying.

The appraisal period

6.22 A 10-year appraisal period is used for this assessment which is regarded as ‘standard’ by the UK Treasury’s Green Book. In this case, we consider that this 10-year appraisal period is appropriate for Wales’ Gigabit Broadband policy for new build.

6.23 A 10-year policy period means that this appraisal assumes that policy is implemented over a 10-year period. It may in practice be implemented for longer but for appraisal purposes, a-10-year period is used. The costs of implementation are assessed for this period.

6.24 The benefits have not been monetised in this appraisal (for the reasons noted earlier) but if they were, the benefits' appraisal period would reflect the effective life of the benefit. These are one-off benefits that occur at the time of construction. The appropriate benefits appraisal period would therefore also be 10 years as this particular benefit is not ongoing.

New build estimates

6.25 Table 4.1 shows the number of new build sites each year in Wales by size of development and type of buildings. These figures are based on:

- To derive the estimate of the number of new dwellings per annum, the assessment takes a 5 year average of dwelling completions split between houses and flats then uses three growth rates to give a low/mid/high range - mid of 3% growth, high of 5%, low of 1%;
- This gives a mid-estimate of new dwellings per annum averaged over the 10 year policy period of 6,900 (low: 6,055 high: 7,867);
- The number of sites is estimated by assuming 70% of dwellings are delivered on large sites (with an average of 100 dwellings per site); 15% of dwellings are delivered on medium sites (with an average of 20 dwellings per site) and 15% of dwellings are delivered on small sites (with an average of 4 dwellings per site)[6].

Table 4.1: Number of new build sites each year in Wales by size of development and type of buildings

	2025	2026	……	2033	2034
	yr1	yr2		yr9	yr10
Small developments					
Number of sites with houses	178	183		225	231
Number of sites with flats	42	43		53	54
Medium Developments					
Number of sites with houses	36	37		45	46
Number of sites with flats	11	12		14	15
Large developments					
Number of sites with houses	33	34		42	43
Number of sites with flats	3	3		4	4
Total number of sites	**303**	**312**		**383**	**393**

The counterfactual

6.26 It is assumed that almost all sites will be able to get a gigabit connection within the price cap and that this would cost less than the alternative of getting a superfast connection.

6.27 It is assumed that 85% of new build sites will conduct early engagement with the broadband supplier under the counterfactual. The assumption is

[6] These percentages are based on Ofcom data for the UK which is used in the DCMS IA. This analysis assumes a slightly higher proportion of small sites for Wales than the UK average.

based on assumptions provided by DCMS in August 2020 for England and supported by PRP's experience[7] of working on schemes across England and Wales.

[7] PRP is a member of the Adroit Consortium and a leading architectural firm with a track record of advising the UK and Welsh Government. Adroit is responsible for the economic aspects of the appraisal and PRP for all technical aspects such as specifications, costings, current practice etc

Table 4.2: The Counterfactual		
Process followed for - 85% of all sites	85% of all sites conform to the Counterfactual except that the Developer needs to provide evidence of Connectivity to Building Control.	The developer completes a short 'connectivity plan' prior to commencing on site, which details this contract is in place and confirms the date on which gigabit broadband will be installed. If the developer does not submit a connectivity plan during the application process, the Building Control officer can request a connectivity statement.

Sites in scope

6.28 The analysis assumes that 15% of sites do not undertake early engagement with broadband suppliers and will be required to do so by the policy.

6.29 Of the 15% of sites that are not expected to undertake early engagement, it is assumed, based on a review of broadband suppliers' policy, DCMS assumptions and PRP's experience, that only in exceptional circumstances will the site be unable to comply at a cost less than the £2,000 price cap.

6.30 Table 4.3 shows the Number of new sites per year which can comply within the price cap.

Table 4.3: Number of new sites per year which can comply within the price cap					
	2025	2026	……	2033	2034
	yr1	yr2		yr9	yr10
15% of all sites - can be installed at a cost of less than £2,000	*45*	*47*		*57*	*59*
Limited negotiations on a small proportion of 15% of all sites - number of sites	1	1		2	2
Number of sites where Documents need to be re-submitted for errors etc	6	6		8	8

Process followed by 15% of sites

6.31 Table 4.4 sets out the process followed by 15% of all sites and the calculations and assumptions used to estimate the costs of compliance with the policy proposals.

Table 4.4: Process followed by 14% of sites, calculations and assumptions					
	Sequence	Assumptions	Time needed		
			L	M	H
Process followed for 15% of all sites	1% of all sites - can be installed at a cost of less than £2,000; in almost all cases these are boilerplate and very limited negotiations over commercial terms takes place	Proportion of sites to be costed	15%	15%	15%
		Assume very limited commercial negotiations in a small percentage of cases.	1%	3%	5%
Developer costs		Developer negotiation time costs	0.5	1	1.5
Operator costs		Operator negotiation costs	0.5	1	1.5
	Assume a proportion of developers do not submit a connectivity plan with an application and are requested to submit a connectivity statement	Proportion of applications	25%	33%	50%
Developer costs	The developer completes a short 'connectivity statement' if requested	admin time for developer	0.25	0.25	0.25
Developer costs	The developer completes a short 'connectivity plan' which details this contract is in place and confirms the date on which gigabit broadband will be installed.	admin time for developer	0.33	0.5	0.75
Regulator costs	Regulator requests connectivity statement (if required)	Building Control Administrator time and day rate	0.25	0.25	0.25
Regulator checking costs	Logging receipt – connectivity plan	Building Control Administrator time and day rate	0.33	0.5	0.75

	Checking content	Building Control Officer	0.33	0.5	0.75
	assume a % involve resubmission and rechecking		1.5%	2%	3%
		Developer time	0.33	0.5	0.75
		Building Control Administrator time	0.33	0.5	0.75

Process followed by exceptional sites that cannot install gigabit broadband for less than £2000

6.32 For the sites that cannot install gigabit broadband for less than £2000, table 4.5 shows the estimated costs involved.

Table 4.5: Process followed by exceptional sites, calculations and assumptions					
	Sequence	Assumptions	Time needed		
			L	M	H
	If the first quote indicates that gigabit broadband cannot be installed at a cost of less than £2000 to the developer, a second quote for gigabit broadband must be sought from a different network operator.	Time for Developer	0.33	0.5	1
		Time for 2nd Operator	0.5	1	1.5
	If the second quote also indicates that gigabit broadband costs more than £2000, then an exemption applies and the next fastest broadband available should be installed. Usually, where network operators cannot install gigabit broadband they will automatically offer a superfast connection instead. Therefore, in practice, developers will revert to one of the two quotes they have received and request a superfast connection.	Time for Developer in deciding which of the 2 quotes to adopt. No additional costs for Operators.	0.33	0.5	1

	Assume a proportion of developers do not submit a connectivity plan with an application and are requested to submit a connectivity statement	Proportion of applications	25 %	33 %	50 %
Developer costs	The developer completes a short 'connectivity statement' if requested	admin time for developer	0.25	0.25	0.25
	The developer completes a 'connectivity plan' which details: a. Why gigabit broadband is not being installed b. Provides evidence that the cost cap is exceeded (likely to be the quote from the operator) c. Which broadband connection is being installed and provides evidence of this (likely the contract with the operator) d. The date of installation of the broadband	Costs for Developer	0.5	1	1.5
Regulator costs	Regulator requests connectivity statement if required	Building Control Administrator time and day rate	0.25	0.25	0.25
Regulator checking costs	Logging receipt – connectivity plan	Building Control Administrator time and day rate	0.33	0.5	0.75
	Checking content	Building Control Officer	0.33	0.5	0.75
	assume a % involve resubmission and rechecking	Building Control Officer time	0.33	0.5	0.75

6.33 Table 4.6 shows the number of sites per year, of those that are likely to be able to comply within the price cap, that are subject to limited negotiations and only require one quote with a supply and those that need to get a second quote.

Table 4.6: Number of new sites per year which can comply within the price cap					
	2025	2026	……	2033	2034
	yr1	yr2		yr9	yr10
15% of all sites - can be installed at a cost of less than £2,000	45	47		57	59
Limited negotiations on a small proportion of 15% of all sites - number of sites	1	1		2	2
Number of sites where Documents need to be re-submitted for errors etc	6	6		8	8

Estimated time cost of compliance

6.34 Table 4.7 shows how compliance time requirements – for the developer, operator and regulator - were calculated.

Table 4.7: Mid scenario compliance time requirement calculations – for the developer, operator and regulator							
			2025	2026	…..	2033	2034
	Time		yr1	yr2		yr9	yr10
Limited negotiations on a small proportion of 15% of all sites - Developer time	0.50	per site	1	1		1	1
Developer completes short connectivity statement that is submitted if requested	0.25	Per site	25	26		32	32
The developer completes a short 'connectivity plan' which details this contract is in place and	0.50	per site	151	156		191	197

confirms the date on which gigabit broadband will be installed.							
The developer needs to resubmit documents that fail BC checks	0.50	per rejection	3	3		4	4
Total Developer time (hrs)			**181**	**186**		***229***	***235***
Limited negotiations on a small proportion of 15% of all sites - Operator time	1.00	per neg	1	1		2	2
Total Operator time (hrs)			***2***	***2***		***2***	***2***
Regulator requests connectivity statement if required	0.25	Per site	25	26		32	32
Regulator logging receipt	0.50	per site	151	156		191	197
Building Control Officer checking	0.50	per site	151	156		191	197
Building Control rechecks and approves	0.50	per app rejected	3	3		4	4

resubmitted documents							
Total Regulator time (hrs)			***331***	***341***		***418***	***430***

6.35 Table 4.8 shows how, for the mid scenario, compliance time costs – for the developer, operator and regulator, were calculated.

Table 4.8 mid scenario compliance time cost calculations – for the developer[8], operator and regulator[9]							
			2025	2026	…	2033	2034
			yr1	yr2		yr9	yr10
Limited negotiations on a small proportion of 15% of all sites - Developer time	75.40	per hr	51	53		65	67
The developer completes a short 'connectivity statement' if requested	29.11	per hr	727	749		919	944
The developer completes a short 'connectivity plan' which details this contract is in place and confirms the date on which gigabit broadband will be installed.	29.11	per hr	4,406	4,538		5,568	5,721
The developer needs to resubmit documents that fail BC checks	29.11	per hr	88	91		111	114
Total Developer cost(£)			5,273	5,431		6,663	6,846
Limited negotiations on a small proportion of 15% of all sites - Operator time	75.40		103	106		130	133
Total Operator cost (£)			103	106		130	133
Regulator requesting connectivity statement	29.11	per hr	727	749		919	944
Regulator logging receipt (Admin) – connectivity plan	29.11	per hr	4,406	4,538		5,568	5,721
Building Control Officer checking	70.39	per hr	10,655	10,974		13,463	13,834

[8] Developer and Operator rates have been calculated by the Adroit Consortium and are based on salary data – Annual Survey of Hours and Earnings (ASHE) plus 30% (to account for on-costs). The rates used are 'blended' assuming that 50% of the work is done 'in house' and 50% subcontracted. Charge out rates are based on data collected by PRP and
Charge out rates – data collected by PRP and RLF (a specialist cost consultancy).

[9] Regulator costs are based on ASHE salary data for Building Control Officers and Administrators plus 30% (to account for on costs).

Building Control rechecks and approves resubmitted documents	70.39	per hr	213	219		269	277
Total Regulator cost (FTE)			***16,001***	***16,481***		***20,219***	***20,776***
Total policy cost			***21,377***	***22,018***		***27,012***	***27,755***

Conclusions

Costs

6.36 Table 5.1 sets out the estimated 10yr Present Value Costs of the policy proposals; Table 5.2 shows the equivalent annual costs and table 5.3 shows the estimated person time required (full time equivalent):

- Annual mid-scenario costs are £24,000 over 10 years;
- The majority of the costs are for building control to check the connectivity plans for each site;
- For most developers, there will be limited additional costs to demonstrate that they can achieve gigabit broadband connectivity.

Table 5.1: 10yr Present Value Costs	10yr PV Costs		
	Low	Mid	High
Developer Costs	£30,613	£51,555	£88,151
Operator Costs	£443	£1,004	£1,709
Regulator Costs	£91,656	£156,450	£266,394
Total policy costs	***£122,711***	***£209,010***	***£356,254***

Table 5.2: Annual costs	EANC		
	Low	Mid	High
Developer Costs	£3,556	£5,989	£10,241
Operator Costs	£51	£117	£199
Regulator Costs	£10,648	£18,176	£30,948
Total EANC	***£14,256***	***£24,282***	***£41,388***

Table 5.3: FTE required	Average FTE over 10 years		
	Low	Mid	High
Developer FTE	0.11	0.19	0.31
Operator FTE	0.00	0.00	0.00
Regulator FTE	0.20	0.34	0.57
Total FTE	***0.32***	***0.53***	***0.89***

Benefits

6.37 The principal benefit of the policy will be to increase early engagement between developers and suppliers to ensure that gigabit connectivity is delivered to the site at the time of build. This early engagement will allow suppliers to plan the delivery of a gigabit connection to the site to ensure it is available at the time of build.

6.38 Installing gigabit-capable connections at the start can, in addition, cost less by reducing the need for further disruption from retrospective infrastructure deployment and ensures that the digital infrastructure is future proofed as demands for bandwidth continue to increase and new services emerge.

6.39 The policy will help to make sure that gigabit capable broadband is deployed consistently and where the cost cap is breached the next fastest technology is deployed in a consistent manner. The regulations will mean that the approach in Wales closely mirrors regulations in Scotland and England providing a clear and consistent approach.

6.40 Deploying gigabit capable broadband on new build housing developments also present an opportunity to bring the network closer to other unserved areas where it might not otherwise be economically viable therefore reducing the costs deployment to the wider area.

Appendix A: Sequence of steps required to comply with policy

Table 6.1 provides further detail on the sequence of steps.

Table 6.1 Sequence of steps – further details.	
Sequence of steps required to comply	**Adroit comment**
<u>Current process followed by the 85% of developers who install gigabit broadband:</u> 1. Prior to site build beginning, the developer seeks a quote from a single network operator for the installation of gigabit broadband (note: this will automatically include the passive infrastructure required in all cases). 2. **In 85% of cases** the developer chooses to install gigabit broadband (note: in almost all cases these are boilerplate and very limited negotiations over commercial terms takes place). 3. The developer submits a full plans application or initial notice to either Local Authority Building Control or RBCA. This includes proof of compliance with the current requirements of Part R. 4. Building Control Bodies check full plans/initial notice against current requirements. 5. Building Regulations approval is granted, if required 6. Site is built with gigabit broadband and infrastructure 7. Building Control Bodies conduct inspections (note: the current requirement that Building Control Bodies must inspect is that there is the in-building passive infrastructure to support a high-speed broadband connection.) 8. Building Control Bodies issue completion certificate	We use this to define the counterfactual. However, while digital infrastructure site plans and installation certificates are produced for construction/ completion of the site they are not currently submitted to Building Control for approval. This will be an additional cost per site to be added in for all sites.
<u>We will amend the Building Regulations 2010 to introduce the following process to install gigabit broadband:</u>	This applies to 15% of sites

1. Prior to submitting or during the Building Regulations application process, the developer seeks a quote from a single network operator for the installation of gigabit broadband (note: this will automatically include the passive infrastructure required in all cases).	This is the same as the Counterfactual – no additional costs
2. Where a connectivity plan is not submitted during the application process, the developer completes a short 'connectivity statement' which details which network operator(s) have been contacted in relation to providing gigabit capable connections together with evidence from the network operator of receipt (e.g. email confirmation of receipt).	To be costed – admin time for developer
3. The developer will be required to submit the 'connectivity statement' alongside the full plans application or initial notice they make to either Local Authority Building Control or RBCA (only required if connectivity plan not received with application) .	To be Costed – Regulator costs
4. If the quote indicates that gigabit broadband can be installed at a cost of less than £2000 to the developer, the developer agrees a contract with the network operator (note: in almost all cases these are boilerplate and very limited negotiations over commercial terms takes place).	Assume very limited commercial negotiations in a small percentage of cases.
5. Prior to commencement on site, the developer will be required to submit a connectivity plan which details the contract that is in place and confirms the date on which gigabit broadband will be installed.	To be costed – admin time for developer
6. Building Control Bodies check and confirm a contract is in place.	To be Costed – Regulator costs
7. Building Control Bodies conduct inspections.	This is the same as the Counterfactual – no additional costs
8. Building Control Bodies issue completion certificate	This is the same as the Counterfactual – no additional costs

Where the cost cap is exceeded, the following process will be introduced in the Building Regulations. **Our analysis indicates that this process will only be followed in exceptional cases:**	
1. Prior to submitting or during the Building Regulations application process, the developer seeks a quote from a single network operator for the installation of gigabit broadband (note: this will automatically include the passive infrastructure required in all cases).	This is the same as the Counterfactual – no additional costs
2. Where a connectivity plan is not submitted during the application process, the developer completes a short 'connectivity statement' which details which network operator(s) have been contacted in relation to providing gigabit capable connections together with evidence from the network operator of receipt (e.g. email confirmation of receipt).	To be costed – admin time for developer
3. The developer will be required to submit the 'connectivity statement' alongside the full plans application or initial notice they make to either Local Authority Building Control or RBCA (only required if connectivity plan not received with application)	To be costed – admin time for regulator
4. If the quote indicates that gigabit broadband cannot be installed at a cost of less than £2000 to the developer, a second quote for gigabit broadband must be sought from a different network operator.	Costs for Developer and 2nd Operator
5. If this quote also indicates that gigabit broadband costs more than £2000, then an exemption applies and the next fastest broadband available within the cost cap must be installed. 6. Usually, where network operators cannot install gigabit broadband they will automatically offer a superfast connection instead. Therefore, in	Costs for Developer in deciding which of the 2 quotes to adopt. No additional costs for Operators.

practice, developers will revert to one of the two quotes they have received and request a superfast connection.	
7. The developer agrees a contract with the network operator (note: in almost all cases these are boilerplate and very limited negotiations over commercial terms takes place).	This is the same as the Counterfactual – no additional costs
8. The developer completes a 'connectivity plan' which details: a. Why gigabit broadband is not being installed b. Provides evidence that the cost cap is exceeded (likely to be the quote from the operator) c. Which broadband connection is being installed and provides evidence of this (likely the contract with the operator) d. The date of installation of the broadband	Costs for Developer
9. Prior to commencement on site, the developer will be required to submit a connectivity plan which details the contract that is in place and confirms the date on which gigabit broadband will be installed.	To be costed – admin time for developer
10. Building Control Bodies check and confirm a contract is in place.	To be costed – Regulator costs
11. Site is built with gigabit broadband and infrastructure	This is the same as the Counterfactual – no additional costs
12. Building Control Bodies conduct inspections	This is the same as the Counterfactual – no additional costs
13. Building Control Bodies issue completion certificate	This is the same as the Counterfactual – no additional costs

Appendix B: Method for costing time

Calculating how much time is required

Table 7.1 shows how developer, supplier and regulator time was converted to full time equivalent (FTE) persons.

Table 7.1 Converting time (hours) into Full Time Equivalent persons (FTE)	
working hours per day	7.5hrs a day
Working Days per annum	220 days a year
utilisation Rates	utilisation of 65%
working days per year (including utilisation)	productive hours of 1073 per FTE

Hourly Rates

Table 7.2 shows the hourly rates used to cost time in the analysis

Table 7.2: Hourly rates used in the time cost calculations					
		Salary	hourly rate (assuming 100 utilisation	hourly rate including utilisation	hourly rate including utilisation and overheads
HSE RR Rates	SCS	128,641	77.96	119.94	218.9
HSE RR Rates	Band 1	96,727	58.62	90.19	164.59
HSE RR Rates	Band 2	80,311	48.67	74.88	136.66
HSE RR Rates	Band 3	63,398	38.42	59.11	107.88
HSE RR Rates	Band 4	45,322	27.47	42.26	77.12
HSE RR Rates	Band 5	38,351	23.24	35.76	65.26
HSE RR Rates	Band 6	29,141	17.66	27.17	49.59
salary = ASHE + 30%	BCB Building Control Officer	57,100	34.61	53.24	97.16
salary = ASHE + 30%	BCB Administrator	26,200	15.88	24.43	44.58
FRS FTE Costs	FRS Watch Manager	54,613	33.1	50.92	92.93
FRS FTE Costs	FRS Station Manager	75,025	45.47	69.95	127.66

salary = ASHE + 30%	FRS Administrator	29,141	17.66	27.17	49.59
salary = ASHE + 30%	LPA Planning Officer	43,500	26.36	40.56	74.02
salary = ASHE + 30%	LA Environmental Health Inspector	43,500	26.36	40.56	74.02
consultant estimate	BSM	60,000	36.36	55.94	55.94
consultant estimate	BSM (low)	50,000	30.3	46.62	46.62
consultant estimate	BSM (high)	75,000	45.45	69.93	69.93