

Code for Adoption Agreements

Sewerage sector documents: Change proposal (Ref 001)

Modification proposal	Design and construction guidance: Modification to the maximum depth of inspection chambers
Decision	Ofwat has approved this change proposal
Publication date	20 May 2021
Implementation date	28 May 2021

Background

On 13 July 2020, the British Plastics Federation (**BPF**) submitted a change proposal to the Independent Sewerage Adoption Panel (**the Panel**). The function of the Panel is to consider change proposals to the sewerage sector guidance and model sewerage adoption agreement. These documents were developed by companies as required by the [Code for Adoption Agreements](#) (**the Code**) and came into effect in April 2020. A change proposal is defined in the Code as a proposed change to the sector guidance or the model adoption agreements.

The BPF proposed changing the maximum permitted depth of inspection chambers¹ (Type D²) under the Design and Construction Guidance (**DCG**) from two metres to three metres. The DCG is part of the sewerage sector guidance documents. It provides technical guidance on the construction of sewerage infrastructure.

The Panel considered the proposal at its meetings on 22 September 2020, 25 November 2020 and 20 January 2021. Following the Panel's meetings in September and November, it decided further information and consultation was required in order to make a recommendation to Ofwat. As such, we provided the Panel with an extension to submitting its recommendation until 31 January 2021. The Panel provided its recommendation on 29 January 2021.

¹ Inspection chambers are chambers on a drain or sewer with working space at ground level only and are used to introduce equipment for testing, inspection and maintenance.

² There are two types on inspection chamber referenced in the DCG – Type D and Type E.

The change proposal

Before the Code, and the DCG, came into force the main technical document used for the adoption of sewers was voluntary guidance published by WaterUK called ‘Sewers for Adoption’. In its proposal, the BPF noted that in Sewers for Adoption version 7 (**SfA7**) the maximum depth of inspection chambers was three metres. Whilst this depth was retained in the initial drafting of the DCG, it was subsequently changed to two metres during the consultation process. This was due to a water and sewerage company comment regarding potential access issues and health and safety concerns for three metre deep inspection chambers. The comment was discussed by companies, and other stakeholders, at a meeting on 15 March 2019 and as a result the text was amended to the current text.

As a result, from 1 April 2020³, customers installing access points up to three metres deep now need to use manholes⁴ instead of inspection chambers. The BPF considers this will result in increased product purchase (manholes, larger covers) and labour costs. The BPF also made the following points in support of its proposal:

- Changing the maximum depth of inspection chambers from two to three metres will mean customers avoid unnecessary increase in costs, changes to supply contracts and amendments to layouts due to increased space requirements.
- Plastic inspection chambers for adoptable systems are manufactured, and third party certified, to a British Standard (BS EN 13598-2) with shaft depths of two or three metres performing in the same way.
- Limiting inspection chamber depths to two metres does not affect the performance of the installed product.
- The Confined Spaces Regulations 1997 puts a preference on carrying out work without man entry wherever possible. Changing from inspection chambers to manholes does not support this, and without this correction, the changes made in SfA7 to address safety by facilitating above ground working will be reversed.

Industry consultation and assessment

In submitting its recommendation, the Panel confirmed that it met the Code requirement⁵ to assess the change in terms of:

- The need for change, for example, is it a service improvement or is it needed to address a particular issue;
- Consistency with the principles and objectives of the Code, and any relevant statutory requirements; and

³ This is the date the DCG formally came into force.

⁴ Manholes are chambers with working space at drain/sewer level used for entry of personnel and equipment.

⁵ See paragraph 3.8.11 of the Code.

- The impact of the change (be it positive and/or negative) on customers and on water and sewerage companies.

Following the Panel's meeting on 22 September 2020, it considered it needed further information to fully consider the proposal. As such, on 17 November 2020, the Water Research Centre Limited (**WRc**) provided technical advice to the Panel. This advice concluded that the proposed change is likely to have a very limited effect on the use of Type D inspection chambers because of the following factors:

- Trials demonstrate it is feasible to carry out the expected activities in inspection chambers⁶ up to four metres deep.
- The WRc is not aware of inspection chambers being widely used at depths of two or three metres since they were first introduced in SfA7 in 2012.
- The maximum depth set out in product standard for thermoplastics inspection chambers (BS EN 13598-2) goes up to six metres.
- The guidance on Type D inspection chambers in the DCG is highly restrictive. In particular, the limit on the number of connected properties. This means it is less likely to see inspection chambers at a depth in excess of two metres.
- The restriction in the number of connected properties means, in almost all cases, there will be a downstream manhole not far from an inspection chamber. In the event of any problems with an inspection chamber, access may be possible to such a manhole.

The WRc also said the proposed change could provide benefits to sewerage companies and developers. This is because it would allow suppliers to demonstrate the benefits of using deep inspection chambers in a way that is not practical with a small-scale trial.

On 20 November 2020, the BPF provided an additional submission to the Panel to pick up on some of the comments from the Panel's meeting in September 2020. The BPF noted:

- To prevent accidents, unauthorised access needs to be avoided. This is achieved by restricting the clear opening for any chamber where a person cannot lift themselves out should they fall. Reducing the maximum allowed installation depth of inspection chambers from three metres to two metres will not improve the health and safety aspect of the installation.
- In regard to comments on there being difficulties of access for maintenance and CCTV where inspection chambers are three metres deep, the BPF referenced site trials to show their suitability.

⁶ CCTW surveys, clearing blockages by rodding or jetting and sealing the end of the incoming or outgoing pipe and undertaking a leak-tightness test using either the water or air pressure test method.

- In regard to the comments on the number of three metre inspection chambers being offered for adoption being very low, the BPF considered panel members may not be aware of the number of units sold.
- It does not consider inspection chamber depth was fully considered as part of the DCG consultation process, noting that there were no changes to chamber depth until the final consultation draft on 25 March 2019.

In September 2020, the Panel carried out consultation by emailing a copy of the proposal to relevant stakeholders namely British Water, the Home Builders Federation (**HBF**) and the House Builders Association (**HBA**). The Panel confirmed none of these stakeholders made any comments on the proposal.

The Panel's water and sewerage company members⁷ consulted with their respective company operations and safety teams. The feedback was that the proposed change would be of low impact from an operational and safety perspective with no other concerns raised. A developer member of the Panel also contacted the HBF to outline the change proposal. The feedback was the change would be of low impact with no other concerns raised.

Panel recommendation

On 29 January 2021, the Panel recommended to Ofwat, by unanimous decision, that we approve the change proposal and amend the DCG accordingly. In reaching its recommendation, the Panel took the following into account:

- The WRc conclusion that the change is likely to have a very limited effect on the use of Type D inspection chambers and previous trials involved chambers with a depth of up to four metres.
- British Standards permit chamber depths up to six metres, which is also in line with the practice in European countries. An increase from two metres to three metres is, therefore, in line with this. It would also bring the DCG into closer alignment with other relevant guidance, such as British Standards and building regulations.
- An increase to three metres may encourage developers to put forward more assets for adoption. The result being customers would not be required to maintain the assets. This would benefit customers without placing an undue burden on sewerage companies.
- Operational and safety teams at sewerage companies did not consider the increase to three metres would pose any additional engineering, operational or safety risks. Consultation with the HBF also confirmed that the change would have low impact on developers.

⁷ Please see [Water UK's website](#) for a complete list of Panel members.

- An increase to three metres may provide suppliers with more scope to demonstrate the benefits of the use of deep inspection chambers extensions. This could provide benefits to companies and developers.

To give effect to the change proposal, the following amendments to the DCG will be required:

- Figures B 18, B 20 and B 21 – change the depth from cover level to soffit of pipe from “up to 2 metres” to “up to 3 metres”;
- Clause B5.2.4 (a) – change the depth from cover to soffit from “is greater than 2 metres” to “be greater than 3 metres”; and
- Figure B3 – update to reflect the above changes.

The Panel’s recommendation was made on the basis of improving the principle(s) of the Code. In particular, the Panel referenced the “efficiency” and “encouraging innovation” principles. In terms of efficiency, the proposed change will bring the DCG process into closer alignment with other relevant guidance, such as British Standards and building regulations. In terms of encouraging innovation, the proposed change could provide benefits to companies, customers and developers.

Our decision and reasons

We have considered the above issues, and all the supporting documentation provided to us by the Panel, and have decided to approve the change proposal. As set out above, the change has been assessed to not pose any additional risks and may ultimately provide greater benefits to customers, companies and developers. We also note that no objections to the proposal were made as part of the Panel’s consultation process.

We have concluded that the implementation of this change proposal will better facilitate the principles and objectives of the Code, and is consistent with our statutory duties. In particular, we consider the implementation of this change proposal supports the Code principles of efficiency and predictability and transparency. This is because it brings the DCG requirements closer in line with other industry standards and regulations. We also note the potential to encourage innovation by enabling suppliers to demonstrate the benefits of the use of deep inspection chambers in a way that is not practical with a small-scale trial.

Decision notice

In accordance with paragraph 3.9.4 of the Code Ofwat approves this Change Proposal.

Emily Bulman
Director, Markets and Charging