

Multi Occupancy Buildings (MOB's)

September 2020



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Executive Summary

This document provides further clarification and justification for our Multi Occupancy Building (MOB) Planned Replacement allowance as submitted in our Business Plan in December 2019.

We require £8.34m to deliver our planned MOB workload for GD2. In the draft determinations (DD's) Ofgem have proposed funding of £2.7m. This £5.64m reduction in allowance will not enable us to deliver the required workload and may put residents of MOB's at risk. This reduction in the allowance is inadequate and not suitably evidenced. Ofgem's assumption is based on Cadent's assumed building unit cost. We have concerns with the reliability of this given the incomplete business plan submission by Cadent. We have highlighted this to Ofgem through the DDQ process and cover in more detail in the Cost sections of this document.

WWU GD2 BPDT	Ofgem DD	Ofgem Model
£8.34m	£2.70m	£2.55m

GD2 Workload

We have reviewed the methodology Ofgem have used to determine our allowance and have found the approach taken inappropriate and unjustified. The reduction in funding will not enable us to carry out the MOB works required.

During GD1, we have continually captured MOB data by developing inspection plans for all MOB's with varying frequencies depending on the condition and height of the buildings (prioritised high rise). This data alongside continued risk-based inspections have determined our outline workload requirements for GD2.

Costs

We did not receive any Supplementary Questions in relation to the MOB unit costs though we would have welcomed the opportunity to provide clarity and evidence to support the detailed forecast cost submitted in our business plan.

We have also identified an error in the Ofgem Model - (*GD2_Disag_Allow_Model_(huddle_upload).xlsx*) document which proposes funding at £2.55m – we first raised a DDQ on this discrepancy on the 19th August and the response didn't address this point therefore it was re-submitted on 24th August and we are yet to receive a response.

Ofgem has incorrectly set the allowance by multiplying a unit rate for one GDN on a per building basis without taking account of the important factors such as riser height, number of risers, number of laterals or metre points.

The proposal to base the allowances on a rate per building could incentivise GDN's to only replace buildings which have the least amount of risers and metre points as possible, High rise replacements are likely to be avoided due to the significant costs they incur.

The risk assessed workload volume and our experience of competitive tendering has been used to determine our GD2 forecasted costs. Our understanding is that Ofgem have used the lowest possible unit cost available within the BPDT's without any consideration given of the real cost drivers which are number of risers, number of supplies or metres and the height of the building.

It's clear that OFGEM lack understanding in this area and we aim to assist with this in the paper.

We think Ofgem should set allowances based on technical assessment, each GDN's historic costs, forecast costs and supporting evidence rather than a unit rate per building across all GDN's due to the significant variances between MOB type population, riser frequency to buildings and the specialist nature of this type of works.

Stakeholders

We are very mindful of public concerns towards risk and how this might be changing, particularly in light of the fire at Grenfell Tower incident, raising the profile of issues around safety and risk in high rise buildings. We have engaged with all local authorities and building owners of high rise MOBs, asking questions on their plans for energy in the buildings and whether any planned work was likely. We also shared our own investment and management plans. This activity is enabling us to coordinate activities and we want our workload to reflect our stakeholders' requirements.

Conclusion

It is clear from the DD's that Ofgem lack significant understanding of the complexities and variances between MOB projects and gas networks.

We can provide further examples demonstrating the huge variances in costs if Ofgem require them.

We hope Ofgem will review their methodology and cost allowances for GD2, so we can carry out the necessary risk-based MOB workload.

Introduction

Multi Occupancy Buildings (MOBs) are buildings of 3 or more stories which would include converted houses with multiple dwellings. MOB riser replacement works are required to keep buildings safe and protect those who live in MOBs.

Each MOB is unique and can vary greatly in height and complexity. They are supplied by either internal or external steel risers and laterals and we are required by law (Regulation 13 of the Pipeline Safety regs) to replace those that are deteriorating and require intervention. We currently categorise MOBs into two groups based on the Ofgem supported Mains Replacement Prioritisation System (MRPS):

- Those of six storeys and above (known as high rise).
- Those between three and five storeys (known as low rise).

Inspection surveys enable us to identify if/when MOB's will need to be refurbished or replaced.

If replacement is required the MOB risers and laterals are replaced with a safe, long lasting external polyethylene or stainless-steel gas pipe, ensuring the safety of the occupants into the future. If a refurbishment/intervention is required, this can include grit blasting and re-painting along with small component parts to extend the life of the asset.

Our MOB projects are carried out by Specialist Contractors through a competitive tendering process. Site visits are arranged to clarify any particulars and we produce very detailed Scope of Works for each MOB project to ensure accurate prices are received. Our detailed scope of works includes the location of each riser, replacement diameter, replacement material, photographs, existing utility plans and as much relevant information as possible. Please see an example of this in Appendix: [GDQ38B MOB Scope of Works - Upavon Court Penhill Drive Swindon SN2 5HD.](#)

Our Contractors require specialist training such as:

- Polyethylene WASK and Geberit Stainless Steel riser system installations
- Working at heights
- PASMA Scaffolding
- Specialist access equipment
- Welding (welded risers are used where the proposed replacement means that welded steel is required to meet standards)

Where possible we take the opportunity to replace all risers in the immediate vicinity as these were installed at the same time. This allows us to gain efficiencies and avoid re-visiting locations in the future i.e. If a building has 4 risers and only one of them requires replacing and the other 3 are nearing replacement we would complete as one project rather than 4 separate projects.

Determining the MOB Workload

GD2 workload forecasts

Risk based workload

During GD1, we have continually captured MOB data by developing inspection plans for all MOB's with varying frequencies depending on the condition and height of the buildings (prioritised high rise). The data captured from these surveys is held in a comprehensive database containing information on all assets and their condition. Our forecasted GD2 MOB workload has been calculated using the valuable data and it has enabled us to determine a workload based on risk and customer safety. Our MOB asset records will continue to be regularly updated following risk-based inspections to ensure that we hold the most up to date condition data and can keep our assessment of risk relevant.

Customer impact of reduced allowance/workload

If our GD2 business plan proposal is not allowed in full then our workload would have to be reduced and there is a safety impact associated with this. The table below shows that for GD2 the proposed allowance in Ofgem's DD's supports our MOB replacement programme for only one full year. The section in red equates to approximately 1,651 of customers whose risers will not be replaced in line with our Business Plan proposal.

TABLE 1: MOB PROGRAMME (WWU BPDT TAB 4.08 REPEX MULTIPLE OCCUPANCY BUILDINGS (MOB))

	Unit	2021/22	2022/23	2023/24	2024/25	2025/26
Planned Replacement						
Riser Length <20m	£m	0.814	0.853	0.997	0.989	1.011
Riser Length ≥20m & ≤40m	£m	0.812	0.463	0.460	0.341	0.554
Riser Length >40m	£m	0.163	0.432	-	0.376	0.070
SUBTOTAL	£m	1.789	1.749	1.457	1.705	1.636

Costs

Our business plan allowance calculation

We think Ofgem should set allowances based on each GDN's historic costs, forecast costs and supporting evidence rather than a unit rate across all GDN's.

We have used our historic cost per riser (up to 2018) to forecast our GD2 expenditure by converting this into a rate per metre based on the riser height to enable us to complete OFGEM's BPDT fully. We believe this is the most accurate and reliable method to complete the tables given the site-specific variances that occur with this type of work and without a section in BPDT 4.08 to provide quantity of risers. Please see the table below which highlights the unit cost variances across the years at a riser level due to project specific requirements (all in 18/19 prices) for Low Rise MOB's;

TABLE 2: LOW RISE AVERAGE ACTUAL COST PER RISER

Low rise MOB's			
Year	Risers	Total Cost (£)	Unit Cost (£)
2014	96	968,172	10,085
2015	228	1,984,108	8,702
2016	133	2,151,261	16,175
2017	91	1,654,695	18,183
2018	40	1,016,456	25,411
2019	141	1,585,887	11,247
2020	33	937,537	28,410
Total	762	10,298,116	13,515

Inaccuracies in Ofgem's DD allowance calculation

Unit cost variances across the GDN's

The allowances Ofgem have set in the DD's are based on "*Cadent's RIIO-GD2 unit costs as they were considered the most reliable based on an assessment of historical and RIIO GD2 submitted costs across all of the networks*" pg32, section 3.29.

We have found that of all GDN's, Cadent provided the least amount of workload detail in BPDT table 4.08_Repex_MOB with the length of risers and metre points omitted. **Could OFGEM clarify how many risers and metre points are included within their Unit Rate Calculations and provide any additional information that was provided by Cadent for each of their GDN's?**

All GDN's have a different population of MOB building types (height, complexity, number of risers etc?) and have had varying replacement programmes and strategies across the price controls. No deliverable guidance has been provided by Ofgem or the HSE therefore, it is not realistic to set a unit rate for GD2 on the proposed basis.

We have also found inconsistencies between SGN's population of Risers between their submitted BPDT and 18/19 RRP which has raised concerns surrounding the accuracy of the information being assessed by Ofgem. These include an increase of circa 128 thousand risers in Scotland and circa 132 thousand in Southern. **Can OFGEM confirm if this has been found and that any corrections are shared with all GDN's?**

The missing data from Cadent is unjustified and we fail to understand why OFGEM would set allowances based on a GDN that have not fully populated the BPDT.

You will see from the BPDT comparison below that WWU's cost per meter (MPRN) is the most consistent across the price controls in comparison to all other GDN's and therefore could have been used to derive a unit cost approach just as much as Cadent's.

TABLE 3: WWU'S BPDT COMPARISON OF COST PER METER (MPRN) BY GDN

	GD1 5yr	GD1 8yr	GD2 5yr
	Meter	Meter	Meter
Planned Replacement Total			
WWU	3,512.8	3,430.0	3,461.1
NGN	684.7	641.4	3,233.2
Scotland	1,684.5	2,186.2	3,025.2
Southern	2,659.4	2,701.9	1,923.9
Cad NW	2,590.0	942.8	-
Cad WM	4,224.7	2,069.4	-
Cad EoE	3,151.9	1,756.9	-
Cad NL	2,921.7	1,103.1	-

Unit cost variances across the types of MOB's

We have detailed evidence from our competitive tender returns of our average cost per riser for each scheme. For example, low rise MOB costs range from £9k to £28k due to building layouts, number of risers, scaffolding/access requirements and building owner's requirement (building owners can refuse our most cost-effective solution and insist on bespoke installations for their private property).

Some MOB's are very bespoke and the cost per riser varies significantly, just a couple of examples are;

- Hawkes Avenue in Plymouth was a 6 storey, 2 riser, 1 building scheme which was at a cost of approx. £110k per riser – driven by the building layout and the building owner's specific request (refused any external risers and a bespoke system and safety measures had to be installed within the hallways).
- Fairview Court 12 Storey, 4 riser, 1 building scheme was at a cost of £50k per riser due to access requirements and specialist fittings due to pre-installed cladding.

The total cost of these two MOB Buildings was approx. £430k. Ofgem's Draft Determination value would have allowed us to receive just £23k for both projects.

It's also worth noting that despite the reliable notification process we have in place and the planning of the works we have instances where residents are not present for us to gain access, this has an impact on all of the other residents attached to the riser and costly delays are incurred with standing down the Specialist Team on site, reimbursing them for the delays and scheduling re-visits to complete the replacement works at a later date.

We are happy to engage with OFGEM further should you require more examples.

Frequency of risers to buildings

Below are details which we provided in table 5.02 which clearly demonstrates that the number of risers isn't consistent with the number of and type of buildings.

TABLE 4: WWU BPD T TABLE 5.02 (FOLLOWING SQ)

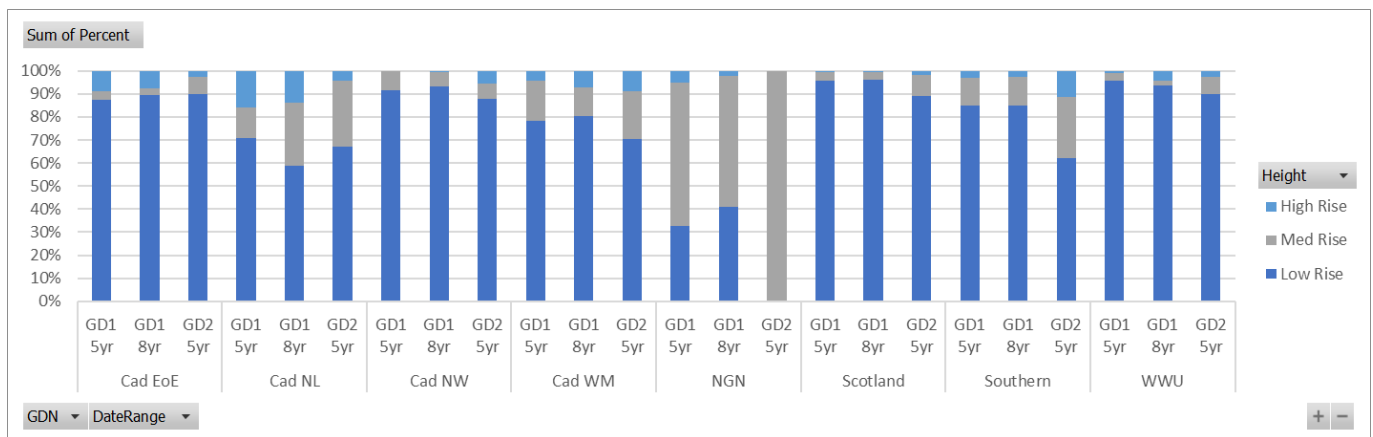
	Unit	2021/22	2022/23	2023/24	2024/25	2025/26
MOB: Riser <20m						
MOBs	No.	28	47	60	45	33
Risers	No.	93	107	124	130	142
Meter Points	No.	253	267	313	312	323
MOB: Riser ≥20m & ≤40m						
MOBs	No.	7	3	3	2	3
Risers	No.	14	7	8	5	3
Meter Points	No.	232	133	133	99	162
MOB: Riser >40m						
MOBs	No.	2	2	-	1	1
Risers	No.	2	5		5	1
Meter Points	No.	47	124	-	109	20

Below is the average number of risers per building for our GD2 workload. This further demonstrates that Ofgem's unit rate per building is not correct as the number of risers is unique to each MOB and a unit rate per building cannot be fairly applied.

TABLE 5: AVERAGE RISERS PER BUILDING FROM WWU BPD T

	Unit	2021/22	2022/23	2023/24	2024/25	2025/26
MOB: Riser <20m	No.	3.3	2.3	2.1	2.9	4.3
MOB: Riser ≥20m & ≤40m	No.	2.0	2.3	2.7	2.5	1.0
MOB: Riser >40m	No.	1.0	2.5	-	5.0	1.0

The chart below demonstrates the varying workloads of building heights that are in each GDN's respective price controls which further demonstrates the flaws in OFGEM's current approach of a rate per building based on only one GDN. ("GD1 5yr" is 13/14 to 18/19 and "GD1 8yr" is 13/14 to 20/21)



Legislation changes and proposals

Following the recent Grenfel enquiry there are a number of legislative documents under continual review and the HSE are included on these, we recommend that these are reviewed in detail and considered. These are listed below and included with this appendix for your convenience;

- GDQ38C - TSP-IGEM-20-138 G5 Ed3 6th Working Draft after Comment
- GDQ38D - Note to IGEM TCC re TCO.EFV End of Network 2020.06.29(JO)
- GDQ38E - Note to GTDC - Building Regs & External Risers
- GDQ38F - Draft Building Safety Bill PART 2

All of which could have a varying impact on the cost and delivery of the MOB workload, we do not believe that Ofgem have considered any of these requirements in their assessment of the allowances, we are happy to provide additional information and consultation with Ofgem regarding the impact of these if necessary.

Conclusion

We maintain that our forecast costs are reflective of our planned workload and have demonstrated that our costs are in line with the market by using robust, historical and market tested costs based on a full data set.

We have demonstrated that Ofgem's calculations to determine allowances is not justified or accurate because of missing data, incomparable workloads and no thought given to the main cost drivers.

We require our full submitted amount to deliver the vitally important workload to keep our customers safe.

The requested allowance does not include any potential legislative changes referred to in this paper and could potentially add further cost pressures.

We would welcome the opportunity to engage further with OFGEM to demonstrate our efficient MOB costs.