



# **Review of Water UK Service Levels for PR19 D-MeX Incentive**

**Report on Water UK Service Levels Review for D-MeX**

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## Executive Summary

The developer services market is an important stakeholder for the water sector. Providing a quick, high quality service to customers in this area should be a key focus of water companies and is a key part of facilitating increases in and changes to housing supply. It is also one of the limited number of markets in the water sector in which competition is able to take place, delivering benefits to both water company customers and the wider economy and society.

It is therefore important that Ofwat, customers and all stakeholders can have confidence in how water companies are performing in this area – both for holding companies to account and assessing the best, most appropriate use of regulatory tools.

To help drive improvement in the developer services customers experience Ofwat set out in Delivering Water 2020: Our final methodology for the 2019 price review (December 2017) that Ofwat would be introducing the Developer Services Measure of Experience (D-MeX) as a common Performance Commitment (PC) for all companies in England and Wales for the 2020-25 period. Ofwat set out that this would be based on both regular qualitative survey feedback and a quantitative measure against a set of key metrics based on Water UK's existing metrics of service levels for developer services customers. Ofwat appointed Jacobs to provide recommendations to Ofwat on which of the current Water UK metrics should be considered in combination to form the basis of the quantitative component of D-MeX.

In developing our recommendations for which metrics to include we have looked to collate evidence from both customer and company stakeholders and have used our extensive knowledge and experience of the water sector to make additional judgements where appropriate. We have analysed the collected data through the lens of the following criteria; importance, complexity, clarity, consistency and stretch and developed an Evaluation Assessment to recommend the metrics for inclusion in D-MeX. A summary of our findings for each of these criteria is outlined below. Metrics focused on New Appointments and Variations (NAVs) have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market, as a result their consideration for inclusion within D-MeX is important so as not to overlook this customer cohort.

*Clarity:* In assessing whether there is sufficient clarity in the latest set of Water UK metric definitions (as of August 2019) we have confirmed that there are no significant areas of remaining ambiguity in the metric definitions and that the issues identified as part of the 2017 CH2M horizontal audit have been addressed. We have identified a small number of minor opportunities that we consider are worthy of further clarification but do not represent a risk to the use of the associated metrics within D-MeX.

This review included the newly defined, but as yet unreported, NAV metrics. Whilst we have highlighted the potential for some minor refinement to the definitions of two of these new metrics, in common with the established metrics we do not consider these issues to be material to their use within D-MeX. Furthermore, we are of the view that these new metrics designed to help deliver good customer service across a newly emerging element of the developer services customer, are suitable and should have appropriate representation within the D-MeX.

*Stretch:* It is our view that the introduction of the metrics has driven transparency in service provision and has driven some improvements to date. There are certainly a number of metrics where greater stretch could be considered but equally there are some where it is not at all clear that customer benefits would arise from greater stretch. Overall, we consider the set of metrics to provide sufficient stretch at this point in time. When context is considered i.e. the metrics are relatively new, the definitions have been evolving, the data set is not consistent, the data is not subject to third party assurance and some of the metric timescales are likely to be impacted by the Code for Adoption Agreements review, we consider that a period of stability to establish a level playing field for reporting and confidence in consistency of reporting is important before changes to stretch are considered. As a consequence, there is no suggestion that the quantitative element of D-MeX, would warrant any reduced weighting over the qualitative elements.

We also note, that the metrics represent a simple pass/fail compliance against an associated timescale. This does not allow for any differential of performance i.e. where one water company may significantly deliver ahead of the required timeframe, whereas another company delivers just in time. Whilst this does not represent a shortcoming associated with the use of metrics for D-MeX, consideration could be given by all stakeholders to future refinement to allow for this differential level of service.

*Importance:* Whilst developers place more importance on physical elements of the developer services process than others e.g. acknowledgements, there is no suggestion the information/acknowledgement metrics do not add value. All stakeholders concur that D-MeX should focus on metrics which measure aspects of service considered to be more important. Whilst some metrics may not be selected for use in D-MeX, customers recognise they have an inherent value in measuring customer service provision that should be maintained. It is our opinion, supported by stakeholders, that D-MeX should include metrics that cover a range of customer types, including NAVs and Self-Lay Providers (SLPs), and should focus on the physical end to end delivery process. D-MeX should focus on driving customer service improvements across all customer and work types, regardless of associated work volumes. We have taken this into account in both the evidence sources used, and the relative weighting applied to criteria scoring in the evaluation assessment.

*Complexity:* Whilst complexity of service provision undoubtedly varies across the individual elements, with the more complex construction activities clearly recognised as having both more complex components as well as requiring multiple third-party involvements. Notwithstanding these inherent complexities, water companies are able to deliver developer service customer requirements and concur with our opinion that customer performance metrics should be appropriately challenging and focus on the importance of the end to end process across the differing customer types regardless of delivery complexity. We note this view is consistent with what developer service customers have said in their responses to the question of what aspects of service are most important to them.

We have also considered the impact of some companies being subject to differing charging rules and potential variance of adoption codes, namely as a result of being either wholly, or mainly located in England or Wales. Both Welsh Water and Hafren Dyfrdwy operate wholly or mainly in Wales. Since adoption of sewers is legally different for these companies compared to companies located in England, if differing levels of service arise from the Code for Adoption Agreements and are incorporated into D-MeX, this is likely to reduce the ability to compare English and Welsh companies against some metrics.

With respect to potential reporting requirements, it is important to recognise that the existing metrics have been through a period of evolution, and new metrics covering NAVs are about to be incorporated in to the Water UK measures. There is no evidence of a consistent application of third-party assurance on the underlying data for these returns, and we are of the opinion to allow for any robust comparison of company performance this should be in place for the D-MeX PC. As with the established Annual Performance Reporting, there is clear benefit for any D-MeX PC returns to be accompanied with a commentary setting out performance observations and associated assurance in support of data.

In conclusion we are recommending a total of 26 metrics out of a combined total of 55 metrics (45 existing Water UK metrics and 10 new NAV metrics) are incorporated into the D-MeX PC.

Figure 1 Final D-MeX metrics selection

Mapping of metrics to delivery process							
	Point of Connection	Acknowledgement	Quotation	Acknowledgement	Construction	Certificates/Vetting	Type of development
Water	W1.1	W5.1	W6.1 & W7.1		W8.1 & W18.1		Typical developer site -mains
		W2.1	W3.1		W4.1		Typical developer site -conns
	(W1.1) & W20.1 & W21.1	W19.1 & W22.1	W23.1 & W24.1	W25.1	W26.1 & W27.1	W28.1, W29.1, W30.1	Self Lay
		W2.1	W3.1		W4.1		Individual site
	W16.1	W17.1 & W17.2					Diversion
Sewer	S1.1	S2.1	S3.1		S4.1	S5.1, S6.1, S7.1	Requisition, Adoption, Conn
		S8.1 & S9.1					S106 connection
		S8.1 & S9.1					Individual site
NAV	NAV 1 (W)		NAV 2 (W)	NAV 3 (W)	NAV 4 (W)		NAV Water - mains
	NAV6 (S)		NAV 7 (S)	NAV 9 (S)	NAV 5 (W) & NAV 15 (W)	NAV 8 (S)	NAV Water - testing
							NAV Sewer

Metrics recommended for inclusion have been identified based on:

- the combined result of the output of the evaluation assessment undertaken over a number of criteria including importance, clarity, complexity and stretch; and
- our judgement, supported by stakeholder views, that the key elements of ‘point of connection’, ‘quotation’ and ‘construction’ across the service areas of water, SLP, waste and NAV should form the basis of an appropriate quantitative component of D-MeX PC in order to appropriately represent the full range of service provision.

We note that failure to select a metric does not reduce its relevance and importance moving forwards, in the assessment of good developer customer service. We have also de-selected those metrics which relate to an approval/technical vetting element; this is not to under-estimate the importance of these steps but is in line with focussing on the key elements of physical service delivery.

In addition to those metrics identified by the evaluation assessment, we have ensured that there are representative metrics across both the delivery process and customer types. We have had to include in particular NAV metrics, which on the face of the Evaluation Assessment feature lower down the ranking but is in part a result of the under representation of these customer types in the data available. These metrics have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market, as a result their inclusion within D-MeX is important so as not to overlook this customer cohort.

Whilst we have recommended a sub-section of current metrics for inclusion within the quantitative element of D-MeX, the unselected metrics remain important measures of service provision. Both those metrics that measure the provision of information and acknowledgement, as well as those that also pick up other elements of service delivery remain valid measures of customer service in this sector and we recommend that these non-selected metrics are maintained for this purpose.

# 1. Introduction

## 1.1 Background

The developer services market is an important stakeholder for the water sector. Providing a quick, high quality service to customers in this area should be a key focus of water companies and is a key part of facilitating increases in and changes to housing supply. It is also one of the limited number of markets in the water sector in which competition is able to take place, delivering benefits to both water company customers and the wider economy and society.

It is therefore important that Ofwat, customers and all stakeholders can have confidence in how water companies are performing in this area – both for holding companies to account and assessing the best, most appropriate use of regulatory tools.

Recognising this, Water UK developed a set of largely time focused, activity-based metrics as a first step in 2014. Although the water companies have improved their service levels in recent years against the Water UK metrics, feedback from customers raises concerns that the level of performance indicated by the metrics does not reflect the quality of service they receive. Other work, including Ofwat's consultation (Delivering Water 2020: Consulting on our methodology for the 2019 price review), policy (Policy Decisions for the D-MeX Shadow Year 2019-20) and draft determination documentation suggests other issues with the metrics – such as their coverage and how companies are interpreting them. We also note that in Ofwat's 29 April 2019, letter to water company Regulation Directors (titled: Compliance with competition law and charging rules obligations with respect to the self-lay market for new connections), Ofwat highlighted concerns with self-lay providers competing and operating efficiently.

To help drive improvement in the developer services customers experience Ofwat set out in Delivering Water 2020: Our final methodology for the 2019 price review (December 2017) that Ofwat would be introducing the D-MeX common Performance Commitment (PC) for 2020-25. Ofwat set out that this would be based on both regular qualitative survey feedback and a quantitative measure against a set of key metrics based on Water UK's metrics of service levels for developer services customers. These metrics measure service provision for water, waste, self-lay and New Appointments and Variations (NAVs). Among other aspects, the D-MeX common PC will have financial incentives built into its design.

Given the increased focus falling on the metrics now they are forming part of a formal, financial common PC, it becomes even more important that any metrics that form part of D-MeX are as simple and meaningful as possible; measure performance across companies consistently, reliably and fairly – including fairly differentiating performance given the range of the potential financial incentive; are practical and proportionate to measure; and reflect customer experience in the areas of customer service that are meaningful to them.

This should lead to stakeholders, including developer services customers and water companies, having faith in the results of the metrics. It should also enable Ofwat and customers to assess water company performance in this area more accurately, which in turn provides better information on which to assess whether the incentives are working; or if further review and the use of different regulatory tools might be required. It may also provide better information to support assessment of other aspects of the developer services market (e.g.: charges).

## 1.2 Project aims and scope

The objective of the project is to provide recommendations to Ofwat on which of the current Water UK metrics should be used in combination to form the basis of the quantitative component of D-MeX.

In identifying the metrics to support D-MeX, the scope of the project was set out to cover the following:

- Check the clarity of definitions of the Water UK current set of metrics (as at August 2019) and advise Ofwat on consistency of definitions, including:
  - check whether definitions of the Water UK current set of metrics are sufficiently clear and unambiguous based on comparative analysis that Water UK has conducted and will provide to Ofwat

by the end of July 2019 and are in line with previous findings from CH2M final report on Industry Horizontal audit of levels of service reporting; and

- recommend which metrics would benefit from clarification, and how.
- Identify which metrics are most important for customers, how they align with customer priorities and to recommend how to define “importance” (for example, customers’ priorities, the impact on customers, efforts required for companies or alternatively the relative importance of all those factors). This should be informed by stakeholder engagement including by:
  - setting up a workshop with customers and customers’ representative bodies;
  - taking into account first-hand knowledge of customer experience through analysis of anonymised verbatim comments for customer surveys conducted for the qualitative element of D-Mex throughout the shadow year.
- Comment on the activities that underlie each of the LoS metrics and more precisely the level of complexity or difficulty with which these activities can be undertaken.
- To advise on the suitability of the proposed NAVs metrics that are currently being developed by Water UK, (these are expected to be available in August 2019).
- Comment on whether the current set of metrics are sufficiently stretching overall through a high-level assessment (rather than a metric-by-metric assessment), including comment on whether the metrics are stretching enough to differentiate between companies’ performance and provide customers with an excellent level of service.
- Recommend reporting requirements for companies in relation to metrics – i.e. to outline the information that should be collected as part of company reporting of performance of metrics.
- Take into account any implications for the qualitative element of D-Mex.

### 1.3 Water UK metrics

Water UK has had in place since 2014 a series of performance metrics against which the water companies are measured. Over this time a number of metrics have been retired, existing metrics have been refined, and as of August 2019 a number of additional metrics proposed. A definitive list of all current, newly proposed and retired metrics is held in Appendix F.

These recently added metrics include the provision of service to NAVs (New Appointments and Variations). These metrics have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market and as a result their consideration for inclusion within D-MeX is important so as not to overlook this customer cohort

The scope of this project includes the 45+10 Water UK metrics as of August 2019, and these have been mapped to typical routes through the developer services process and to different developer service customers as shown in Figure 2. Understanding this process is important when considering the findings from our review.

The colour codes represent typical developer journeys through the process and therefore some metrics appear more than once in this schematic. This diagram shows the metric mapping for large scale developers (blue), self-lay (orange), individual/household developments (light blue) as well as sewers (gold) and water and waste NAVs (greys). The last column in this figure indicates the typical type of development, for example a typical development site requiring water may follow the initial blue route for mains, then drop on the next blue line for connections

Figure 2 Mapping of metrics to developer services process

Mapping of metrics to delivery process

	Point of Connection	Acknowledgement	Quotation	Acknowledgement	Construction	Certificates/Vetting	Type of development
Water	W1.1	W5.1	W6.1 & W7.1		W8.1 & W18.1		Typical developer site -mains
		W2.1	W3.1		W4.1		Typical developer site -conns
	(W1.1) & W20.1 & W21.1	W19.1 & W22.1	W23.1 & W24.1	W25.1	W26.1 & W27.1	W28.1, W29.1, W30.1	Self Lay
		W2.1	W3.1		W4.1		Individual site
Sewer		W16.1	W17.1 & W17.2				Diversion
	S1.1	S2.1	S3.1		S4.1	S5.1, S6.1, S7.1	Requisition, Adoption, Conn
		S8.1 & S9.1					S106 connection
NAV		S8.1 & S9.1					Individual site
	NAV 1 (W)		NAV 2 (W)	NAV 3 (W)	NAV 4 (W)		NAV Water -mains
	NAV6 (S)		NAV 7 (S)	NAV 9 (S)	NAV 5(W) & NAV 15 (W)		NAV Water - testing
				NAV 8 (S)			NAV Sewer

We note that there are some simplifications within this mapping. For example, whilst a water development may follow a single route i.e. an enquiry, requisition and water connection, it is entirely possible for a site to follow elements of more than one route, i.e. drop into the self-lay route.

## 2. Evidence collection

### 2.1 Overview

We have looked to build on the work already undertaken in compiling the current quantitative Water UK metrics. In doing so, we have taken the following areas in to consideration, using a variety of data sources:

**Table 1 Summary of data sources**

Attribute	Data source
Importance	<ul style="list-style-type: none"> <li>Developer and Self Lay Providers (SLPs) online survey</li> <li>Developer 1:1 interviews</li> <li>Qualitative customer survey (anonymised verbatim comments on top 3 priorities)</li> </ul>
Complexity	<ul style="list-style-type: none"> <li>Water company online survey – activity and reporting complexities</li> </ul>
Clarity	<ul style="list-style-type: none"> <li>CH2M horizontal audit (2017)</li> <li>Water UK definitions</li> <li>Discussions with the Water UK working group sub-group</li> </ul>
Consistency	<ul style="list-style-type: none"> <li>Water UK comparative analysis</li> </ul>
Stretch	<ul style="list-style-type: none"> <li>Prior years' performance data</li> </ul>

Each of these data sources, and the analysis undertaken, is described in more detail in the following sections.

In addition to these source data, we had also looked to hold a workshop with representatives from the developer community. Unfortunately, due to the low response rate, this workshop had to be cancelled and additional reliance placed on the one to one interviews undertaken with developer representatives.

We also presented our interim findings to the Ofwat D-MeX Working Group, which includes representatives from the water companies, developer trade associations and NAVs. Details of the points raised at that session can be found in Appendix D, plus insights from the group on ranking and weighting of the evaluation assessment criteria are discussed in section 3.8.

We have also considered the introduction of the Code for Adoption Agreements and potential impacts for D-MeX for those companies operating wholly or mainly in England compared to those operating in Wales. We undertook one to one discussion with Welsh representatives to gain insight on this matter.

### 2.2 Importance - Online surveys

Online surveys were created as a means to reach a wider range of respondents than would be practicable by other means. Surveys were targeted to developers and NAVs. Separate surveys were created and distributed as set out in the table below:

Table 2 Online surveys created

Survey focus	Metrics in scope	Distribution
Importance of speed of service to developers	All performance metrics including NAV metrics	Approximately 220 developers via Home Builders Federation 15 Self-lay providers
Importance of speed of service to NAVs	NAV metrics only	5 NAVs

Refer to Appendix A for the designs of these surveys.

The Water UK Level of Service metrics only measure the success rate of companies in meeting targets for activity. They measure speed of service, and therefore the surveys to developers and NAVs were designed to understand the importance of speed of service for the activities underlying each metric. This allows conclusions on the importance of each metric to be drawn directly from the survey results.

### 2.3 Importance – One-to-one engagement

In addition to consultation with customers through the online surveys, we initially proposed a developers' workshop where we could explore in more detail customer views on the importance of aspects of service delivery. A series of invitations were issued, co-ordinated through both Water UK and the House Builders Federation. We estimate 40-50 invitations were issued through this route, although the specific details remained confidential to the issuing bodies.

Unfortunately, acceptance of the workshop invitation was initially very low, so additional invitations were issued through liaison with water company contacts and a further 50 invitations were issued to a range of small and large developer contacts. Again, the take up for attendance at the workshop was prohibitively low and it was agreed with Ofwat to cancel the session.

For each respondent who accepted the workshop invitation, an offer was made to engage on a 1:1 basis via a telephone call. Initially four respondents agreed to a telephone call but ultimately only two were able to do so.

Each representative was asked to highlight the metrics that they considered of most importance to the service they receive from their water company interactions, as well as being given the opportunity to share their thoughts and views on relevant issues.

To widen the developer representative liaison, we also engaged with a representative from self-lay customer cohort, undertaking a face to face interview and discussion.

### 2.4 Importance – Qualitative customer survey (anonymised verbatim comments on top 3 priorities)

We were provided with the anonymised output from a survey undertaken by BMG appointed by Ofwat to run C-MeX and D-MeX in the shadow year (2019-20). Developer Services customers, ranging from single property connections through to major national house-builders were asked to identify the three most important elements of water company service. Data was provided in spreadsheet form, from a total of 1,952 respondents who in turn provided 4,420 individual responses ranked 1-3 by each respondent.

Each of the verbatim comments were individually reviewed and categorised according to the broad area of comment. Each comment was assigned a category. A total of 30 categories were assigned, see Table 3 below.

**Table 3 Response categories and overview**

#	Category	Characteristic type of response
1	Speed of response from water company	The speed at which companies respond to inquiries
2	Value for money	The value of services provided and overall costs.
3	Quote accuracy	The accuracy of the quotes provided or certainty over costs.
4	Ease of communication	How easy it is to talk to the water company, or making it easier.
5	Flexibility	Flexibility of the company in relation to on site dates and/or adapting 'standard' services for particular needs.
6	Ability to talk to the right/knowledgeable person	The desire to be able to talk to the right person on the first attempt. Availability of specific phone numbers and staff. General desire to speak to someone 'who knows what they're talking about'.
7	Progress updates - transparency	Provision of progress updates. Developers wanting to know how their applications are getting on.
8	Keeping promises	At the overall level: companies doing what they say they are going to do. This is subtly different to arriving on site at agreed times - which comes under punctuality.
9	Website/publication accuracy/clarity	The accuracy and usefulness of website and published information.
10	Straightforward online tools / documentation	The ease of use of: online portals and/or documentation and forms.
11	Customer service	Overall good service. Polite, helpful and working hard to understand the needs of the client and the specifics of each job.
12	Quality of work	The quality of onsite work, and other outputs.
13	Clarity of communication/info - setting expectations	Developers wanting to know everything from the beginning. Setting the right expectations from the outset. 'no hidden steps or costs'. The overall clarity of communications.
14	Online tracking	A desire for application tracking - online.
15	Consistent point of contact	Developers wishing to speak to the same person each time who knows their applications to avoid recounting previous progress with every interaction.
16	Meet agreed dates - punctuality	Turning up to site at the times agreed.
17	Lead times to site	Specific references to cutting down the time between initial inquiry and onsite work.
18	Human interaction	Wanting to talk to a person. Dislike of portals, web forms and emails.
19	Getting through first time (e.g. on the phone)	Not wanting to be put on hold, waiting in call queues or being told to phone back. A desire for the companies to be available at any time.
20	More products/options	Specific references to limited options on products, communication types, or suggesting features.
21	Overall efficiency or speed - getting it done more quickly	Cut the time down overall. Broad references to speed and timeliness.
22	Site visits	A personal service, similar to human interaction above - a desire for a company representative to visit the site during the planning to make quoting easier.
23	Advanced notice	More warning deadlines, expiry dates and site visits.
24	Simple process	A desire for application processes, forms, payment etc. to be simpler.
25	Quality/accuracy of information e.g. mapping	Any expression of frustration with company records, information quality. A desire for full information and a right first-time approach.
26	Dealing with issues/complaints	Desire for simpler and faster processes when things go wrong.
27	Charging clarity	Any expression that the quotations are over complicated, or lack detail.
28	Right people on site	Similar to speaking to knowledgeable persons above, this is about having the right people on site to do the work right and links to the overall quality of output.
29	Payment process	References to simplifying or speeding up the payments or reimbursements processes.
30	Alternatives - providers, info etc. advice...	A desire for the companies to provide support, advice and tips to the developer. This can include information on the regulations, application processes, technical support or even of competitors.
Z	Unable to categorise	Not categorised - these will be reviewed separately for any themes.

The second stage of review allowed for a broader categorisation via an overall theme. To ensure consistency of approach these categorisations were all assigned to themes via a single member of the team but were then subject to sample checking by a colleague. Approximately 550 of the 4,420 comments were subject to this sample review. The categories broadly fall into four thematic areas (Table 4):

**Table 4 Response thematic area**

Thematic area
Time
Cost
Quality
Communication

The themes aim to capture the primary underlying message, noting that some comments address multiple themes. Where this is evident the primary message has been used for the purposes of assigning a theme. This may be considered a subjective evaluation, but a sample review found in most cases the primary message could easily be identified.

Once the themes had been established, a matrix of theme totals by priority was established.

In addition to a simple summation across the priority areas 1-3, we also undertook a comparison of comments weighting comments assigned priority 1, with a weighting of 1; comments in priority 2 with a weighting of 0.75; and comments in priority 3 with a weighting of 0.5.

## 2.5 Complexity – Online survey

An online survey was created as a means to reach all water companies and to gather data in a consistent manner. Refer to Appendix A for detail of the design of the survey.

Survey focus	Metrics in scope	Distribution
Complexity of activities and reporting	All performance metrics including NAV metrics	All water companies

This survey asked respondents to score each metric for the complexity of the underlying activity and the proportionality of reporting each metric.

The complexity of activity for each metric was described on a scale of minimal to significant effort, with definitions as in Table 3:

**Table 3 Definitions of complexity of activity**

Level of complexity	Definition
Minimal	Activities which are fully automated, or which require a simple manual intervention such as sending an email.
Minimal to moderate	Complexity greater than minimal but less than moderate.
Moderate	Activities which require significant from a single person or small team, but which are generally routine.

Moderate to significant	Complexity greater than moderate but less than significant.
Significant	Activities which require substantial planning, cooperation between multiple teams and management of budgets.

## 2.6 Consistency – Water UK’s sub-group’s comparative analysis

Water UK has undertaken a review of consistency of reporting against the metrics across all water companies. The sub-group has looked at the consistency of data compilation across the companies, how current definitions have been interpreted and applied, and looked to identify areas of inconsistency in approach that could lead to data quality issues. We note that there has been no independent assurance of the Water UK metric data thus far.

We understand that this work has been undertaken within the industry on a voluntary and confidential basis. However the Water UK sub-group, responsible for undertaking this comparative analysis, has discussed with this project team its approach and findings in broad terms. We understand that as a result of their review, a number of issues were identified, which were broadly categorised as issues arising from inconsistencies in assumption and inconsistency in approach driven by ambiguity in the metric definition.

Where the consistency reviews identified opportunities for revisions to metric definitions to further improve clarity (and therefore consistency), these have been fed into the latest definitions, drafted as of August 2019 (see section 2.7).

## 2.7 Clarity – Water UK’s sub-group

The Water UK sub-group’s review on consistency discussed in section 2.6 led to a number of revisions in the Water UK metric definitions, captured in the latest August 2019 version. We met with the Water UK sub-group to discuss their work on clarity, the August 2019 definitions and their views on D-MeX more generally.

## 2.8 Clarity - Desktop review of CH2M’s review and Water UK’s definitions

In 2017 CH2M (now part of Jacobs) was commissioned by Water UK to undertake a horizontal audit of the metrics in place at the time to identify areas of potential ambiguity. Subsequent to that work, Water UK has continued to evolve its metrics, with a combination of metrics being retired, new metrics being introduced associated with NAV entrants to the market, and revisions to metric definitions, in part informed by the CH2M review.

As a consequence, we have taken both the CH2M findings, alongside the currently (as of August 2019) proposed metric definitions and re-assessed for any areas of potential remaining ambiguity.

We reviewed each of the findings of the CH2M horizontal audit, alongside the current Water UK definitions for each metric. Each metric definition has been assigned a RAG status on the basis of the categories described in Table 4 below:

**Table 4 RAG categories for metric clarity review.**

Test	R	A	G
Clarity of definition (also touches on consistency)	Loose definition that could be interpreted differently across companies	Strict definition, but reliant on categories which could be interpreted differently across companies.	Strict definition that can only be interpreted in one way
Customer interpretation (also touches on consistency)	Ambiguity exists in the terminology which companies and developer	Some potential for ambiguity in the definitions that could be	Clear definition that will be clearly understood by all parties

	services customers will interpret in different ways	interpreted differently by companies and developer services customers	
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We included within this exercise a review of the recently proposed NAV metric definitions (as of August 2019). These were subject to the same assessment for clarity as the longer standing metrics, and details of our findings are held in both section 3.4 and Appendix C.

## 2.9 Stretch

Water UK’s metric data is available and published for transparency. The underlying data and associated report can be downloaded from:

[https://developerservices.water.org.uk/latest-reports/interrogate#/sewerage/data-volumes/within\\_target](https://developerservices.water.org.uk/latest-reports/interrogate#/sewerage/data-volumes/within_target)

This data does not include the new NAV metrics. These will be reported on for the first time in 2020.

We have analysed the water and sewer data from the above site. Our primary focus was on data for the period August 2018 to July 2019. We also considered two prior years, i.e. August 2017 to July 2018 and August 2016 to July 2017. We considered the following horizontal analysis for comparison between the companies:

- Compare the individual score for the 24 water metrics from 18 companies
- Compare the individual score for the 9 wastewater metrics from the 11 water and waste companies
- Compare the average scores for each company for each metric
- Assess the total number of requests/applications received that were within target

## 2.10 Interaction between qualitative and quantitative components

In order to assess whether there are any implications for the qualitative element of D-MeX, we have considered the potential for reinforcement, duplication or perverse impacts between any future quantitative element to D-MeX and a qualitative assessment.

In reviewing the qualitative questions asked in the 2018-19 BMG shadow year pilot, we have looked to consider if there is any overlap with the quantitative aspects of service. We have also looked for potential areas of reinforcement and/or for the potential for perverse effects to be generated.

The qualitative questions fall into the broad areas of service quality and accuracy; of timeliness and adherence to targets; and of communication. It is under these categories we have considered the scope for duplication, reinforcement and perverse impact.

## 2.11 Ofwat D-MeX Working Group’s Views

On the 11<sup>th</sup> September 2019 we attended the D-MeX Working Group meeting to present the detail of our findings as described in section 2. Output from this session is discussed in more detail in section 3.8, where the feedback from attendees was used to inform a view on the relative ranking of the assessment criteria and the appropriate weightings between the criteria. We have considered this input in our Evaluation Framework for each metric.

### 3. Findings

#### 3.1 Importance

##### 3.1.1 Findings from importance survey to developers

There were 33 respondents to the survey of developers, 29 of whom stated that they represented or worked for a developer. A range of sizes of organisation were represented in the respondents, with a range from 0 to 10,000 plots developed per year and a median of 450 plots per year (Figure 3).

Figure 3 Box plot of respondent number of plots developed per year



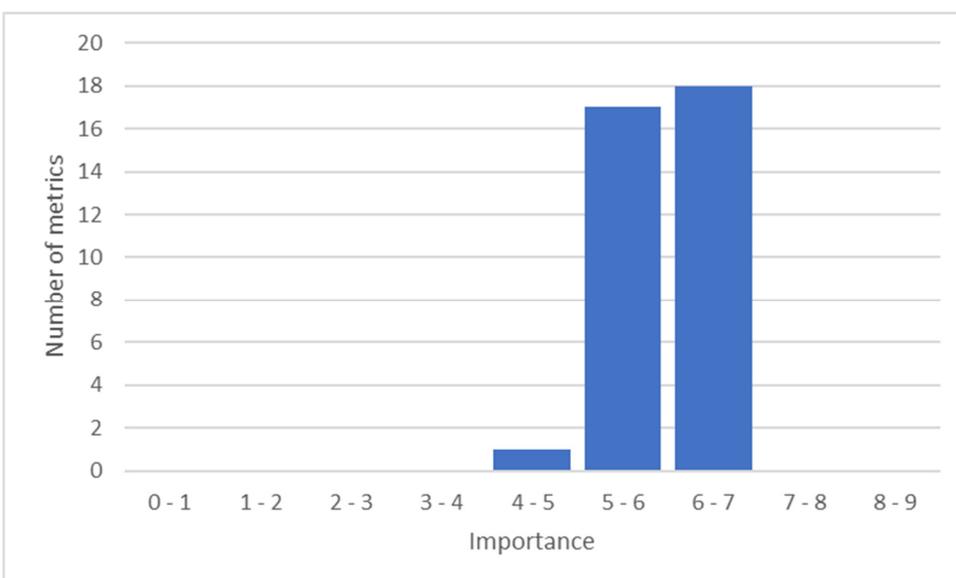
The Level of Service metrics collectively address five stages and eight kinds of service. Each metric addresses one stage and one kind of service. Respondents were asked to score each stage and kind of service on a scale from ‘not important’ to ‘critically important’.

Following close of the survey, the responses were converted into scores on a scale of 0 to 3, with 0 corresponding to not important and 3 corresponding to critically important. To obtain the importance score for each metric, the score for its activity type and the score for its kind of service were multiplied together, giving a possible range of scores from 0 to 9. Responses indicating ‘don’t know’ and ‘not applicable’ were removed from the final score. This scoring has been used to allow prioritisation/ranking of the metrics.

The NAV and self-lay metrics were handled separately to avoid confusion. The survey made clear that it asked developers how important water company service to NAVs and self-lay providers is to them.

The results showed that developers regard all of the metrics as important (Figure 5). The individual metric results are used in our assessment of the metrics in Section 6. Scoring at this point is to allow ranking of important of the service measured by the metrics only.

Figure 4 Overview of survey results - importance of metrics to developers



### **3.1.2 Findings from importance survey to NAVs**

A survey was sent to five NAVs to ask for the relative importance of each NAV metric to them. Two responses were received. One response was from a full-service NAV and explained that the metrics do not apply to them as they do not interface with an incumbent water company. The other response indicated that all but two of the metrics cover critically important activities, with the other two, which concern acknowledgement of agreements, being significantly important.

We acknowledge that this level of response does not represent a statistically significant sample size, for this particular cohort of customer. We do however take this into account, in the selection of metrics, ensuring a low response does not lead to misrepresentation of this cohort's interests.

### **3.1.3 Findings of developer one to one discussions**

The findings are split into two categories; general comments, and comments specific to individual metrics.

In general, developer customers highlighted the importance of companies delivering service as promised. Developer programmes of work are developed on a critical path basis, and when water or waste services are not delivered when promised, this has a consequential impact on the rest of their development programme. They emphasise the need for appropriate, and often proactive communication should the agreed timescales need to change. They see key elements of service of paramount importance i.e. quality and timely response to pre-development enquiries, to requests for quotation and for delivery of physical construction.

Developer customers have also highlighted that whilst the more recent addition by Water UK of acknowledgement metrics form a beneficial role in aiding communication and response times, they are generally considered of lower importance compared to the metrics measuring physical delivery i.e. point of connection, quotations and on-site construction of assets.

They do note that there are specific areas where current service timescales are not considered fast enough. Highlighted examples include W8.1 where 90 days is considered too long; developers look to be on site 6 weeks after planning permission is granted, and generally water companies cannot respond quickly enough. S4.1 sewer requisition construction is also highlighted as an area of delay, which has consequential cost implications.

Developer customers also highlight the need for quality and expressed concern that reducing timescales to speed up the process may come at the cost of quality. There are some metrics which differentiate on the size of development such as W6.1 (Mains design <500 plots – quotations within target) and W7.1 (Mains design >500 plots – quotations within target). Views were expressed that D-MeX metrics should focus on measures that cover the highest volume areas; for example, small scale development sites (<500 plots) tend to be more prevalent, than the smaller number of larger development sites (>500 plots).

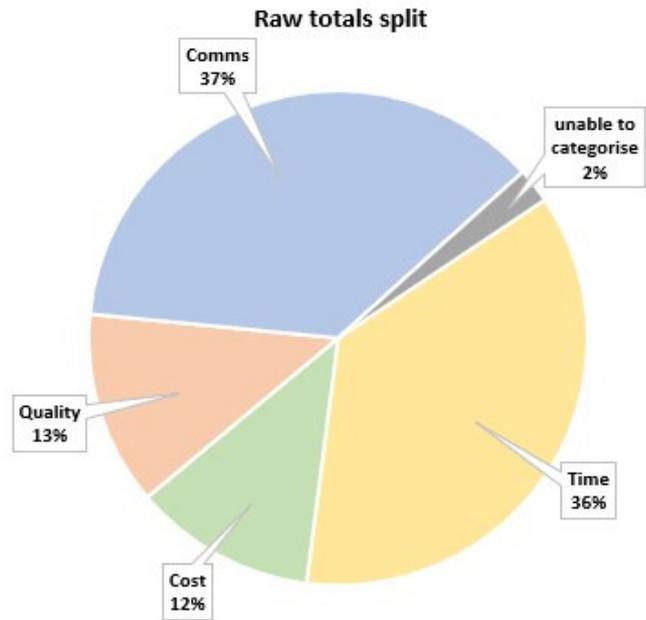
In our judgement, it is important that D-MeX as a performance commitment drives customer service provision across all customer and work types, and that work volume alone is not an appropriate differentiator for selecting D-MeX metrics. However, we note that % compliance figures can risk being distorted for low volume metrics, see section 3.5.1.

### **3.1.4 Findings from Qualitative customer survey (anonimised verbatim comments on top 3 priorities)**

Further details of the summation matrix by priority comment can be found in Appendix B, for both un-weighted and weighted analyses.

#	Category	Total
	Time	1612
1	Speed of response from water company	581
5	Flexibility	62
16	Meet agreed dates - punctuality	217
17	Lead times to site	40
21	Overall efficiency or speed - getting it done more quickly	592
23	Advanced notice	47
24	Simple process	73
	Cost	524
2	Value for money	447
3	Quote accuracy	31
27	Charging clarity	34
29	Payment process	12
	Quality	560
8	Keeping promises	57
9	Website/publication accuracy/clarity	56
10	Straightforward online tools / documentation	57
12	Quality of work	130
20	More products/options	13
25	Quality/accuracy of information e.g. mapping	245
28	Right people on site	2
	Comms	1623
4	Ease of communication	418
6	Ability to talk to the right/knowledgeable person	196
7	Progress updates - transparency	179
11	Customer service	194
13	Clarity of communication/info - setting expectations	195
14	Online tracking	1
15	Consistent point of contact	143
18	Human interaction	58
19	Getting through first time (e.g. on the phone)	65
22	Site visits	19
26	Dealing with issues/complaints	44
30	Alternatives - providers, info etc. advice...	111
Z	Unable to categorise	101

Figure 5 Summary of verbatim comments



In summary, the un-weighted assessment identified two significant themes from the verbatim comments; the two most common prioritised areas of water company service were the timeliness of service and the ease of communication with the company. Cost and quality were considered of equal importance to each other, but a lesser consideration than time and communication.

These four themes collectively cover both qualitative (Comms and Quality) and quantitative (Time and Cost) aspects of service. Therefore, these findings are consistent with customer views expressed through 1:1 discussions in that both elements of service are considered equally important.

We note that the survey results which were shared with us were anonymised and did not indicate type of respondent, however we were able to identify that larger developers form approx. 10% of the respondents. Some water companies at the working group meeting expressed a view that greater weight should be placed on the views of large developers, who drive a significant volume of work they deliver. This can be considered to be in contrast to the views expressed in section 3.1.3 where it was considered that greater weight should be given to high volume activities associated with small developments and individuals. In our judgement, we believe all customer views are valid in determining which elements of service are of most importance. We accept that these differing customer types will also represent a differing

level of interaction and process familiarity, but that this remains a fundamental part of the water companies'

customer experience. It supports our view that D-MeX should include metrics that cover the range of customer type.

### 3.1.5 Main findings on importance

- Take up for the planned developer workshop was too low to be effective and it was therefore cancelled. A very limited number of 1 to 1 discussions replaced this. The findings from these cannot be considered statistically robust but they provide further weight to the findings from other sources.
- The response rate for NAVs was very low and this is a limiting factor in drawing differential conclusions between the views of Developers and NAVs.
- Acknowledgements are not considered as important as other aspects of service, with a clear developer steer to focus on the physical elements of service delivery.
- Whilst developers place more importance on physical elements of the developer services process than others e.g. acknowledgements, there is no suggestion the information/acknowledgement metrics do not add value, but that D-MeX should focus on metrics which measure aspects of service considered to be more important. Whilst some metrics may not be selected for use in D-MeX, customers recognise they have an inherent value in measuring customer service provision that should be maintained.
- Developer customers are of the opinion that for specific work areas, the current timescales do not align with their needs or drive good customer service. They do however, recognise the pragmatic elements associated with delivering on-site activities.
- Analysis of the qualitative survey verbatim responses indicates that qualitative and quantitative elements of service provision are valued equally; communication and timeliness are valued above cost and quality.
- D-MeX should include metrics that cover a range of customer types, including NAVs and Self-Lay, and should focus on the physical end to end delivery process. D-MeX should focus on driving customer service improvements across all customer and work types, regardless of associated work volumes.

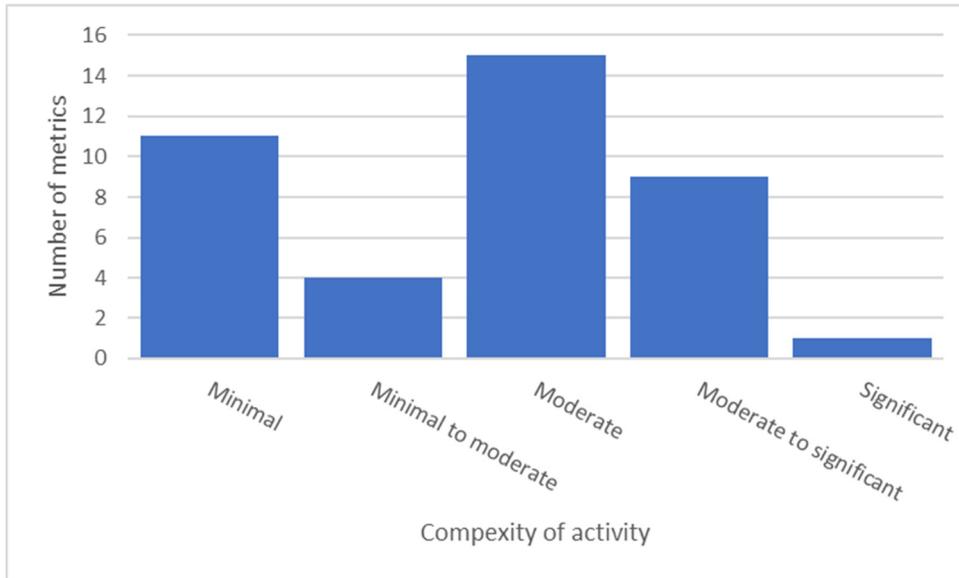
## 3.2 Complexity

### 3.2.1 Findings from online survey to water companies

There were 23 respondents to the survey of water companies, all of whom reported that they worked for or represented a water company, though one respondent reported that their role was not directly associated with delivery of developer services.

At a high level, the results show that there is a wide range of complexities of activity (Figure 6).

Figure 6 Overview of survey results - complexity of activities

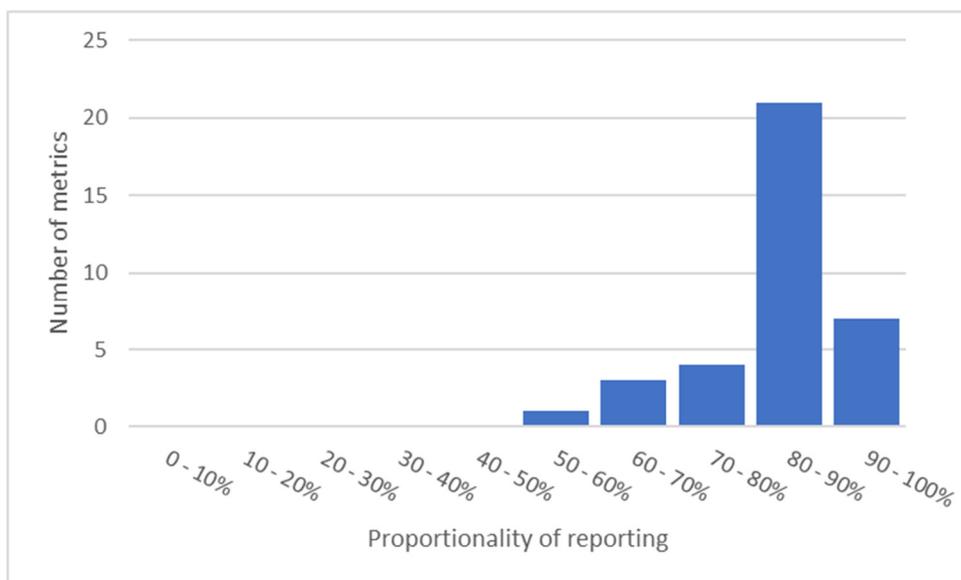


The one metric to achieve a score of ‘significant’ for complexity of the underlying activity was S4.1, concerning the construction and commissioning of sewer requisitions. The eleven metrics having a score of ‘minimal’ complexity were those concerning acknowledgements.

Respondents were also asked to state whether the complexity of reporting of each metric was proportionate or disproportionate to the underlying activity. The proportionality score is the percentage of respondents reporting that the metric is proportionately complex to report.

The results show that for the majority of metrics, the complexity of reporting is proportionate to the complexity of the underlying activity (Figure 7).

Figure 7 Proportionality of reporting



The metric with the lowest score and the only one where fewer than 60% of respondents considered reporting proportionately complex was W8.1, concerning mains construction within target.

The spread of proportionalities reported could indicate differences between companies' systems, with those reporting that an activity is proportionate simply reflecting that a company's systems are more integrated. However, these differences could also stem from differences in respondent perspective.

### 3.2.2 Main findings on complexity

- Water companies do not consider any of the metrics to be disproportionately complex for reporting. Therefore, we conclude this is not an important consideration in selecting which metrics to include in D-MeX
- Complexity of activity delivery is more important to consider within D-MeX metric selection than the complexity of reporting.
- Water companies are of the opinion that focus should be placed on the importance of the end to end process across the differing customer types, regardless of delivery complexity. We note this view is consistent with what developer service customers have said in their responses to the question of what aspects of service are most important to them.

## 3.3 Consistency

### 3.3.1 Findings from consistency

In short, we have not been able to independently review the consistency of reporting against metrics across the companies. We understand from the Water UK sub-group, that inconsistency issues identified by them have been addressed by individual companies through detailed discussions. As these metrics have not been subject to independent third-party assurance it is our opinion that there remains the risk of inconsistencies of approach and data quality across the companies in the current metric data. We understand that for D-MeX PC submissions, an appropriate level of internal and external assurance, in line with the approach for Annual Performance Reporting, will be expected to be put in place by the water companies. This may highlight areas of inconsistency.

### 3.3.2 Main findings on consistency

- We were not able to review any data associated with the Water UK consistency analysis due to confidentiality issues.
- We highlight the lack of independent assurance on both process and data for the current metric data and note that when this is implemented for PC reporting this could highlight areas of inconsistency.
- We are not able to use consistency as a measure within our Evaluation Assessment.

## 3.4 Clarity

### 3.4.1 Findings from the Water UK sub-group discussions

The Water UK sub-group believe they have addressed all potential areas of ambiguity within definitions for metrics.

The sub-group suggested that metrics representing the whole process of service delivery should be included in D-MeX, which was also reflected in the D-MeX working group interaction and feedback.

### 3.4.2 Findings from Jacobs' review of clarity

We found that all of the recommendations from the 2017 CH2M review have been acted upon. We also note that since that assessment was undertaken a number of metrics have been retired and a number of new metrics introduced.

We reviewed all 43 of the current metrics and found no metrics that are considered to be 'Red' or where significant scope for ambiguity remains. However, we have identified 15 metrics where there is some minor potential for ambiguity that may warrant some further consideration for clarity improvements. Further details of the metrics and areas for consideration by Water UK for additional clarity are included in Appendix C. We do not consider any of these to represent show-stoppers to the use of the metrics for D-MeX but recommend that these points of potential ambiguity are considered by all stakeholders.

Of the 15 highlighted metrics with minor ambiguity, 2 of these were the newly drafted NAV metrics (NAV2 and NAV7). The same comments as above apply, in that whilst we have highlighted some potential opportunities for further refinement, do not consider these to be material to the use of these metrics within D-MeX

### 3.4.3 Main findings on clarity

- Water UK has revised definitions where it identified potential areas of inconsistency. The August 2019 definitions include this work.
- From our own further review of definitions we identified:
- there are no metric definitions where there are significant clarity concerns which rule them out of use in D-MeX, including the newly drafted NAV metrics.
- there are a small number of metrics where further work to remove any remaining, albeit minor, ambiguities is recommended.
- The benefit of ensuring selected metrics cover the range of customer types as well as the key elements of service delivery is highlighted.

## 3.5 Stretch

### 3.5.1 Findings on stretch

Overall performance against all metrics is very high with average performance across the industry having improved from just below 89% to over 97% since their introduction. Whilst this data has not been subject to the same level of assurance expected of current PC reporting, it does indicate that customer service has improved. On face value this could indicate that water companies are delivering a high level of service against many of the metrics, and/or that these metrics are not particularly stretching. However, caution is required when considering this assessment in isolation. These quantitative metrics only consider service against a timeframe target, and do not pick up any qualitative elements. Customers have raised concerns that if timeframes are reduced, they do not want there to be an associated risk to quality of output.

Table 5 summarises the average compliance score across all companies for the individual metrics – based on data over the period Aug 2018 to July 2019. In addition, the actual number of data points that inform that percentage are noted.

Table 5 Summary of water company average compliance

Metric Ref	2018/2019		2017/2018	2016/2017
	Total Company Average	No of data points	Total Company Average	Total Company Average
W1.1	96.26%	3458	92.74%	93.96%
W2.1	97.65%	42874	98.54%	99.02%
W3.1	98.19%	294198	98.16%	98.48%
W4.1	95.85%	123628	94.62%	95.35%
W5.1	95.37%	4410	98.06%	97.63%
W6.1	92.28%	4076	92.55%	93.84%
W7.1	94.84%	69	87.82%	85.19%
W8.1	90.66%	3549	90.65%	93.02%
W16.1	96.22%	2109	92.88%	92.93%
W17.1	92.40%	940	93.26%	95.52%
W17.2	90.18%	34	68.33%	56.35%
W18.1	88.17%	328	93.23%	91.24%
W19.1	96.85%	1543	91.94%	100.00%
W20.1	87.90%	2052	83.47%	92.03%
W21.1	99.58%	42	96.43%	0.00%
W22.1	99.07%	996	94.99%	94.73%
W23.1	88.43%	1075	83.68%	84.73%
W24.1	85.71%	21	100.00%	85.71%
W25.1	91.29%	808	90.27%	90.06%
W26.1	81.92%	561	93.59%	88.35%
W27.1	98.51%	511	90.33%	88.01%
W28.1	90.70%	2237	81.26%	77.21%
W29.1	85.88%	1491	86.72%	94.52%
W30.1	99.05%	66616	99.79%	98.99%
S1.1	99.57%	6837	99.18%	98.90%
S2.1	99.30%	171	97.00%	97.02%
S3.1	95.71%	95	95.00%	87.72%
S4.1	75.83%	58	88.83%	94.44%
S5.1	99.48%	4016	99.73%	99.57%
S6.1	99.36%	3763	99.03%	99.50%

	2018/2019		2017/2018	2016/2017
Metric Ref	Total Company Average	No of data points	Total Company Average	Total Company Average
S7.1	99.54%	2189	99.69%	98.96%
S8.1	99.75%	11885	99.75%	99.78%
S9.1	99.93%	4187	99.85%	99.92%

We observe that some percentage compliance scores are based on a significantly greater number of data points compared to others. As a result, whilst there are clearly a number of metrics that companies on average score very highly against, the number of data points is a consideration. Compliance or failure against a metric with a low number of data points is likely to lead to bigger percentage impact, than for those metrics that report against a much greater number of data points. For example, W7.1 (Mains design >500 plots) has a much smaller data set than W6.1 (Mains design <500 plots), and hence the potential to impact the percentage score by an individual pass or fail is greater. Similarly, from the underlying data set against W26.1, one company scored 0% as it missed the target on the only two data points in this metric.

Based on the information we have gathered during this project we observe the following comments on stretch:

- For a number of measures (S4.1 and W8.1 being examples) the current targets do not align well with customer needs.
  - For W8.1 (mains construction within 90 days) customer feedback highlights their desire to mobilise on site (post grant of planning permission) in a tighter timeframe
  - For S4.1 (sewer requisition within 180-day target, unless agreed otherwise with the developer), this timescale is regularly significantly longer and the developer has little option but to agree a longer timeframe. In this scenario a service failure may not be registered against metric S4.1, but the level of service provided to the customer is far from ideal. We note that in 2018/19 S4.1 was, on average across the companies, the lowest scoring metric.
- For W1.1 and S1.1, (pre-development enquiries within 21 days), water company compliance is generally very good. However, customers caution that if this timeframe were to be tightened too far in response to driving stretch, the quality of the reported material (and hence its value to the customer), could be put at risk.
- Performance within a single metric cannot be differentiated. For example, two separate companies may achieve compliance with a metric's target, but one may deliver significantly ahead of the deadline, whilst the second may only just meet the deadline.
- A number of the metrics relate to the provision of information or service which is entirely within the control of the water companies e.g. pre-development enquiry details, point of connection reports and technical vetting. These metrics measure only company performance; improvements are within a company's control.
- A number of metrics are dependent on wider external factors, such as the physical delivery of mains constructions on site. Where the ability to work in collaboration with customers and other stakeholders is required it may be more difficult for a company to drive improvement. Conversely, for these aspects of service the incentive to improve may be considered greater.

It is not within the remit of this project to recommend changes to individual metrics. Our scope for stretch relates to developing a view on the overall set of metrics and whether as a set they are sufficiently stretching to differentiate between companies' performance and provide customers with an excellent level service.

It is our view that the introduction of the metrics has driven transparency in service provision and has driven some improvements to date. There are certainly a number of metrics where greater stretch could be considered but equally there are some where it is not at all clear that customer benefits would arise from greater stretch. Overall, we consider the set of metrics to provide sufficient stretch at this point in time. When context is considered i.e. the metrics are relatively new, the definitions have been evolving, the data set is not consistent,

the data is not subject to third party assurance and some of the metric timescales are likely to be impacted by the Code for Adoption Agreements review, we consider that a period of stability to establish a level playing field for reporting and confidence in consistency of reporting is important before changes to stretch are considered. It is likely that a review of the quantitative metrics would be appropriate at a future point in time to ensure that they continue to drive improvements in the level of service customers receive. In doing so, we caution the need for any stretch review to take into account the qualitative elements of service provision, as the quantitative timeframes ought not to be separated from these qualitative considerations.

Our findings and judgements relating to stretch must be considered within the context that the Water UK metrics are still relatively new measures introduced in 2014, the definitions have been evolving since then, some metrics have been retired and new ones added, therefore the data set is not consistent, and the data is not subject to third party assurance. We also note that some of the metric timescales are likely to be impacted by the Code for Adoption Agreements review currently ongoing, see section 3.7 for further comment.

### 3.5.2 Main findings on stretch

- Water company performance against the current Water UK metrics is generally very high (albeit the associated data may not have been subject to the same levels of assurance expected of current PC/ODI reporting).
- We note that for metrics with low volumes of data, there is more volatility in % terms, than those with a significant number of data points.
- The metrics represent a simple pass/fail compliance against a set timeframe and as such do not allow for any differentiation of performance. Whilst this does not represent an issue for inclusion within D-Mex, this should be an area for consideration in future.
- The Code for Adoption Agreements changes are likely to impact the current metric delivery targets.
- Overall we consider the set of metrics to provide sufficient stretch at this point in time.
- When context is considered i.e. the metrics are relatively new, the definitions have been evolving, the data set is not consistent and the data is not subject to third party assurance, we consider that a period of stability to establish a level playing field for reporting and confidence in consistency of reporting is important before changes to stretch are considered

## 3.6 Interaction between quantitative and qualitative metrics

### 3.6.1 Findings on interaction

There appears to be little scope for duplication between the qualitative and quantitative elements of D-MeX, as principally they measure different elements of service. However, whilst the quantitative metrics are relatively one dimensional, there remains the scope for an interrelationship with the qualitative elements. For example, adherence to targets associated with the quantitative metrics will in part drive a perception of quality; where customers receive the service when promised, they are more likely to be satisfied.

Conversely the potential for inadvertent perverse impact between qualitative and quantitative components can be foreseen. This has been touched on in other sections of this report where customer views have recorded concern that more stretching quantitative metrics have the potential to impact quality. Reducing the timescale for an activity still needs to preserve the accuracy and appropriateness of output to maintain quality, else the perverse impact of reducing timescales may be one of reduced quality.

Also, where timescales are considered too long by customers, there is the potential for perception of poor quality. Sewer requisitions is an often-cited example of a process that takes too long from the customers' point

of view. Whilst there is understanding of the associated challenges, customers can face additional cost and work arounds associated with delivering against their own development programmes.

In summary, there is little risk of duplication or adverse interaction between the quantitative and qualitative elements of D-MeX. However, should future consideration be given to stretch (adjustments to the associated metric timeframes) there is a risk of driving perverse impacts if quantitative components are considered in isolation to their qualitative impact.

Communication is not directly measured via the quantitative metrics, and therefore does not directly overlap. Clearly there is significant evidence for the need and benefit of effective, timely and proactive communication, often preventing service failure in other areas. Ease of contact, water company comprehension of customer needs and regular progress updates all feature heavily on qualitative feedback but really only translate to the quantitative metrics via delivery against target.

### 3.6.2 Main findings on interaction

- There is little duplication between qualitative and quantitative components of service.
- There is interaction between qualitative and quantitative elements of D-MeX, but overall we consider that the quantitative elements of D-MeX will not duplicate qualitative elements.
- There is a risk of perverse impacts between the two, but only if opportunities for stretch (tightening of timescales) of individual metrics were to be considered in isolation to their qualitative impact.

## 3.7 Welsh companies' dimension plus codes changes

### 3.7.1 England versus Wales

We note that the Developer Services regulatory requirements are generally aligned between England and Wales. However, there are some differences in Wales, in particular mandatory requirements on sewer adoption activities and progress with Ofwat's sector documents that support the Code for Adoption Agreements.

In discussion with Welsh Water, we confirmed that currently there are no substantial differences between England and Wales in terms of complying with and reporting against the Water UK metrics. However, new New Connection charging rules came into force in April 2018 such that charging policies are defined on the basis of companies that are wholly, or mainly, in England. The consequence of which is differing charging policies between English and Welsh companies; English companies are able to provide reinforcement costs to developers typically within the 21-day timescale because through the charging rules these costs are effectively standard infrastructure charges. In the absence of charging rules in Wales, Welsh companies have to continue to provide specific details of reinforcement activities and costs which they claim means achieving the 21-day target is challenging. We note, however, that the Water UK data returns for 2018-19 indicate that whilst Welsh Water report a compliance rate of 85.71% for metric W20.1 (Self lay point of connection reports), this compares favourably with the overall company average of 87.9%. Whilst there are a majority of companies that score 100% compliance against this metric, there are also companies that achieve a lower score than Welsh Water. Welsh Water does therefore not appear to be a significant outlier in this regard.

Ofwat is working with water and sewerage companies to introduce the sector documents that are required by the Code for Adoption Agreements and there is currently no such code that applies in Wales as Welsh Government has not commenced the relevant legislation to enable that to happen. It is currently unknown whether Water UK will look to align any of their current metrics with the Code for Adoption Agreements. The implication of aligning the metrics to the Code for Adoption Agreements could remove the ability to directly compare performance between English and Welsh companies, particularly in relation to sewer adoptions for which the process will differ between the countries. The implication for D-MeX being that data will have been

compiled on the basis of differing charging rules and adoption codes for companies wholly, or mainly, in England compared to those in Wales.

We therefore highlight to all stakeholders that if the current metrics are aligned with the Code for Adoption Agreements, there is a need to consider that direct comparison of Welsh companies with those in England in relation to sewer adoptions will not be possible as activities will be delivered on a differing basis between the countries.

**3.7.2 Main finding on Code for Adoption Agreements**

- If the current metrics are ultimately aligned with Code for Adoption Agreements, future consideration will need to be given as to how company performance can be compared across the England/Wales border if activity (and therefore data) is undertaken against a differing rule base.

**3.8 Ofwat D-MeX Working Group’s Views**

On the 11<sup>th</sup> September 2019 we attended the D-MeX Working Group meeting to present the detail of our findings as available at the time. Output from this session is discussed in more detail in Table 6, where the feedback from attendees was used to inform a view on the relative ranking of the assessment criteria and the appropriate weightings between the criteria. We have considered this input in our Evaluation Framework for each metric.

A full list of detailed observations made by the group is included in Appendix D, however the following table pulls out the key points raised.

**Table 6 D-MeX Working Group insights and responses.**

Item	Working Group observation	Response
Importance	BMG verbatim comments will be dominated by home owners as opposed to larger developer customers. Working group observation is that these comments may therefore not be indicative of developers as they form a limited portion of the sample.	We consider, regardless of size, all respondents are customers of the developer services offering and therefore their opinions of service priorities are valid. We also understand a number of householder responses were actually submitted by builders on behalf of customers, which in turn adds weight to their consideration. The survey results were anonymised, and did not indicate relative size of respondent, however as a result of some additional information provided to us we observed that larger developers form approx. 10% of respondents

<p>Importance</p>	<p>Water companies use term ‘developer’ to mean house builders only. They were concerned that the views on important aspects of service would be skewed by home owners.</p>	<p>Jacobs use of the term ‘developer customer’ to refer to all end users of the water company developer services process, regardless of size. As noted above we consider, regardless of size, all respondents are customers of the developer services offering and therefore their opinions of service priorities are valid.</p>
<p>Range of metrics to include in D-MeX</p>	<p>Water companies’ have a view on the metrics they would like to see within D-MeX. They believe D-Mex should include metrics which cover all customer types and the full scope of the developer services process. It is broadly agreed that acknowledgements are not an important measure of service.</p>	<p>These views have been considered in our selection of the metrics to recommend for inclusion in D-MeX.</p>
<p>Clarity</p>	<p>Group note that if Code for Adoption Agreements changes are built into D-MeX, this will present a consistency issue between England and Wales, particularly as the adoption process differs.</p>	<p>We will highlight the need for Ofwat to continue to consider this implication in future D-MeX changes.</p>
<p>Stretch</p>	<p>Group advised caution against target amendments.</p>	<p>We have confirmed it is outside the scope of this project to revise any Water UK definitions or targets.</p>

### 3.9 Limitations to approach

For reference, it is worthy of note that this project has been subject to a small number of necessary limitations. Whilst we do not believe these have unduly prejudiced the outcome, we note the following for reference:

Whilst we have endeavoured to engage with as many stakeholders as possible, the sample size for some components has not been as large as we would have ideally liked. Specifically, a smaller number of developer 1:1 discussions replaced the cancelled customer workshop. We were able to put a number of contingencies in place including sourcing some additional 1:1 interviews with both developer and industry-body representatives, plus direct liaison with the Water UK sub group and the provision by Ofwat of their anonymised verbatim survey comments.

## 4. Metric assessment

### 4.1 Evaluation Assessment design

In order to consider the components of review in combination, we developed an Evaluation Assessment. We have taken each of the key areas of review; namely Importance; Complexity, Clarity; and Stretch and assessed each of the metrics against these areas. The initial intention was to include insight from Water UK's consistency analysis, but as discussed in section 2.6 and 3.3, this data was not available to the project.

However, we have taken the output from each of the data sources as described in Section 2 for the following areas:

**Table 7 Summary of data sources used in Evaluation Assessment**

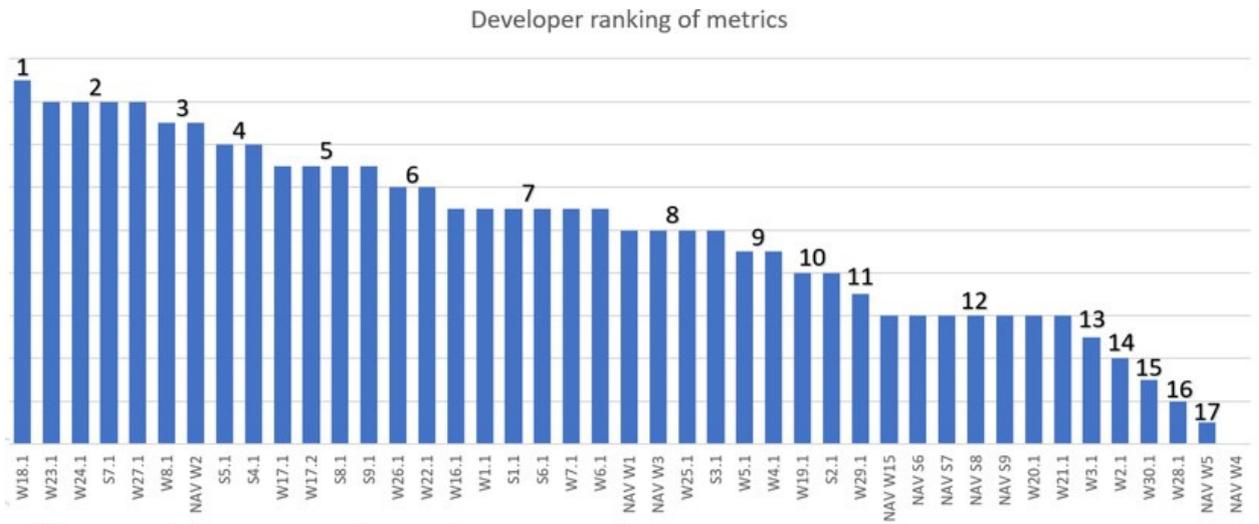
Area	Data sources
Importance	Developer online survey Developer 1:1 calls/interviews Customer (anonymised) verbatim comments
Complexity	Water company online survey
Clarity	2017 CH2M horizontal review and current Water UK definitions
Stretch	Water UK performance data

#### 4.1.1 Importance

Our assessment of customer importance of the individual metrics is based on three sources of information, as identified in table 6 above.

- 1) We have taken data from the **Developer customer online survey** and ranked the metrics in order of importance as identified by the respondents to the survey.

Figure 8 Relative metric importance from Developer survey



For the purposes of the evaluation framework, we have assigned a score of 5 points for the metrics ranked between 1 and 5 in the order of most importance; for those ranked between 6 and 10 we have assigned 3 points; and for those ranked lower than 10, we have assigned 1 point.

Table 8 Scoring framework for Developer online survey

<b>Evidence / source of assessment</b>	Developer online survey		
<b>Metric</b>	High = 5 pts	Medium = 3 pts	Low = 1 pt
<b>Rationale</b>	Ranked 1-5	Ranked 6-10	Ranked 10+
<b>Weighting</b>	1	1	1

- In addition, we have utilised the developer 1:1 calls insight, such that those metrics flagged as important during these calls were scored 5 and a default value of 3 is given to the remainder.

Table 9 Scoring framework for Developer 1:1 feedback

<b>Evidence / source of assessment</b>	1 to 1 calls and ad hoc developer feedback		
<b>Metric</b>	High = 5 pts	Medium = 3 pts	Low = n/a
<b>Rationale</b>	Developer highlighted	Default	
<b>Weighting</b>	1	1	1

- Finally, for importance, we have also used our assessment of the anonymised verbatim comments from the BMG customer survey, working on behalf of Ofwat, to highlight metrics which correspond to areas flagged as important in the survey results. For those metrics corresponding to an area of importance, a score of 5

was allocated for those frequently in the top 3; for those sometimes in the top 3 a score of 3 applied and for the remainder, a score of 1 applied.

**Table 10 Scoring framework for Customer verbatim comments**

Evidence / source of assessment	Customer (anonymised) verbatim responses		
Metric	Frequently in top 3 = 5 pts	Sometimes in top 3 = 3 pts	Remainder = 1pt
Rationale	Cons delivery	Default	
Weighting	1	1	1

#### 4.1.2 Complexity

We have used the water company online survey responses to identify those areas where water companies consider the underlying nature of the service is complex to deliver. This is plotted on the y-axis in the graph below, where we have scaled the activity from 'minimal' to 'significant'.

In addition, the survey asked companies to identify those metrics for which the reporting requirements were considered disproportionately complex. This is captured via the colour coding on the graph below, where we highlight an increasing percentage of companies finding a particular metric reporting to be complex.

Table 11 Water company online survey results

Percentage of respondents believing the complexity of reporting the metric is disproportionate to the complexity of the physical activity.	%	> 0 and ≤ 10	> 10 and ≤ 20	> 20 and ≤ 30	> 30 and ≤ 40	> 40 and ≤ 50
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In our consideration of complexity, we have explored the inherent link to both clarity and importance with both water company representatives and customer representatives.

Stakeholders are generally of the view that focus should be placed on the importance of the end to end process regardless of delivery complexity.

Water company representatives were also of the opinion that reporting complexity was often linked to having appropriate corporate data systems that allow for easy capture, collation and reporting of data verses the need for manual manipulation; and has an inherent link to metric definition clarity, i.e. where a metric retains ambiguity in its definition, this leads to complexity in reporting. Metric definition clarity is discussed in more detail in Section 4.1.3.

Stakeholders were also of the view that the complexity of reporting is of lesser consideration than the complexity of delivering the activity.

For the purposes of D-MeX, the primary importance is the complexity of delivery, as opposed to reporting. As a result, only activity complexity is considered in the Evaluation assessment, and not complexity of reporting. Those activities considered to be more than 'moderately complex' (i.e. water company respondents scored the activity a 3 or greater in the survey) have been scored more highly than those activities considered less complex to deliver; for complex activities a score of 5 has been applied, for less complex activities a default score of 3 has been applied. Activities that are consider not to be complex to deliver were not scored.

**Table 12 Scoring framework for water company online survey**

Complexity		
Water Company online survey		
High	Medium	Low = n/a
Complex activity (>3) = 5 pts	Default = 3pts	Nil
1	1	1

### 4.1.3 Clarity

Based on our desk top review of both the 2017 CH2M horizontal audit, and the current Water UK assessment of definition clarity, we have identified a small number of metrics for which some further work to remove ambiguity might be considered. This is discussed in more detail in Sections 2.8 and 3.4.

For the purposes of the evaluation assessment, all metrics have been given a default score of 3, unless they have been identified as still having minor issues of ambiguity. In the latter case, they have been allocated a score of 1.

**Table 13 Scoring framework for desktop clarity review**

Evidence / source of assessment	Desk based review (CH2M horizontal review and Water UK definitions)		
Metric	High	Medium	Low
Rationale	n/a	Default = 3 pts	Potential issue = 1 pt
Weighting	1	1	1

We have discussed this issue with the Water UK sub-group, who as a result of their consistency analysis have already looked to address issues of definition clarity (see also section 4.1.4). Our findings, detailed in Appendix C highlight, where in our opinion, there are still some areas of potential ambiguity. We are satisfied these are of a minor nature, and do not represent a risk to metric inclusion in D-MeX, but we recommend Water UK continues to review the metric definitions to ensure all areas of ambiguity are resolved where possible. Refer to Sections 2.8 for further detail.

**4.1.4 Consistency**

Our intention was to use insight gained from the comparative analysis work undertaken by Water UK to include within the framework assessment. We have been able to discuss the findings of Water UK’s sub-group review of consistency (as discussed in more detail in Section 2.6), however as we were not able to access any specific data consistency does not form part of the Evaluation assessment.

However, our wider findings into consistency issues are included in our overall consideration of metric selection, namely that the need for water companies to ensure that any data collated and reported against the D-MeX is appropriately assured will in itself drive consistency of approach. Furthermore, we have also made some further, albeit minor, recommendations to improve metric definitions, contained within Section 2.8 and Appendix C.

**4.1.5 Stretch**

As described in section 2.9 above, we have analysed the Water UK data returns. We have taken the total number of compliant scores for each company and summed to an industry total to provide an average compliance figure for each metric. This is presented in Figure 9 in Section 3.5.1.

For the purposes of the Evaluation assessment, if the industry average score for a metric is less than 95% compliant (selected as a point of differentiation), we have applied a score of 3. For those metrics scoring greater than 95% a score of 1 has been used.

For the purposes of including performance in the Evaluation assessment, we have selected a threshold of 95%. This is not to be interpreted as greater than 95% compliance represents a threshold for considering stretch, but more as a means of ensuring that the selection process does not just focus on those metrics which appear to have high levels of performance at the expense of lower performing metrics.

**Table 14 Scoring framework for Water UK metric performance**

<b>Evidence / source of assessment</b>	Water UK performance data	
<b>Metric</b>	Yes	No
<b>Rationale</b>	<95% avg company compliance = 3 points	Room for stretch >95% average compliance = 1 point
<b>Weighting</b>	1	1

As noted in Section 3.5, the potential for stretch is more complex than this quantitative element in isolation. However, when taken in combination with the other metrics, they have a contributory role to play in metric selection.

**4.1.6 Interaction between qualitative and quantitative components**

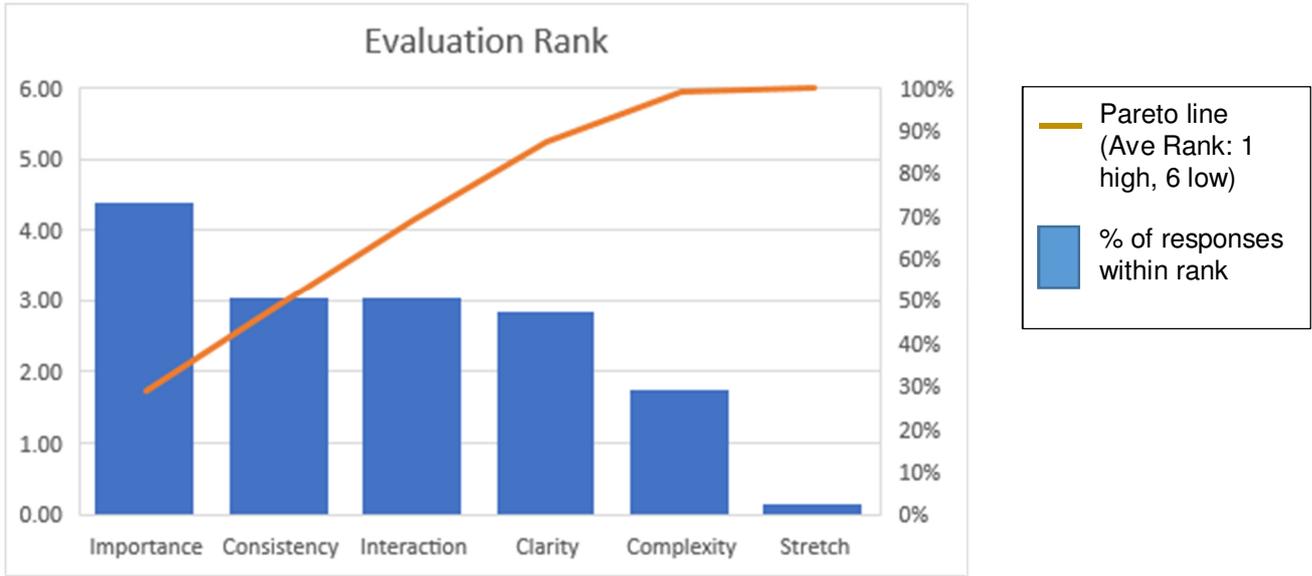
Our assessment of the potential links between qualitative and quantitative components identifies areas of interaction between the two overall D-MeX elements. However, whilst this flags potential areas of either perverse impact or duplication, it is not possible to translate this to a score to apply to individual metrics.

#### **4.1.7 Weighting of components**

The framework has the functionality to assign differing weightings to each of the components.

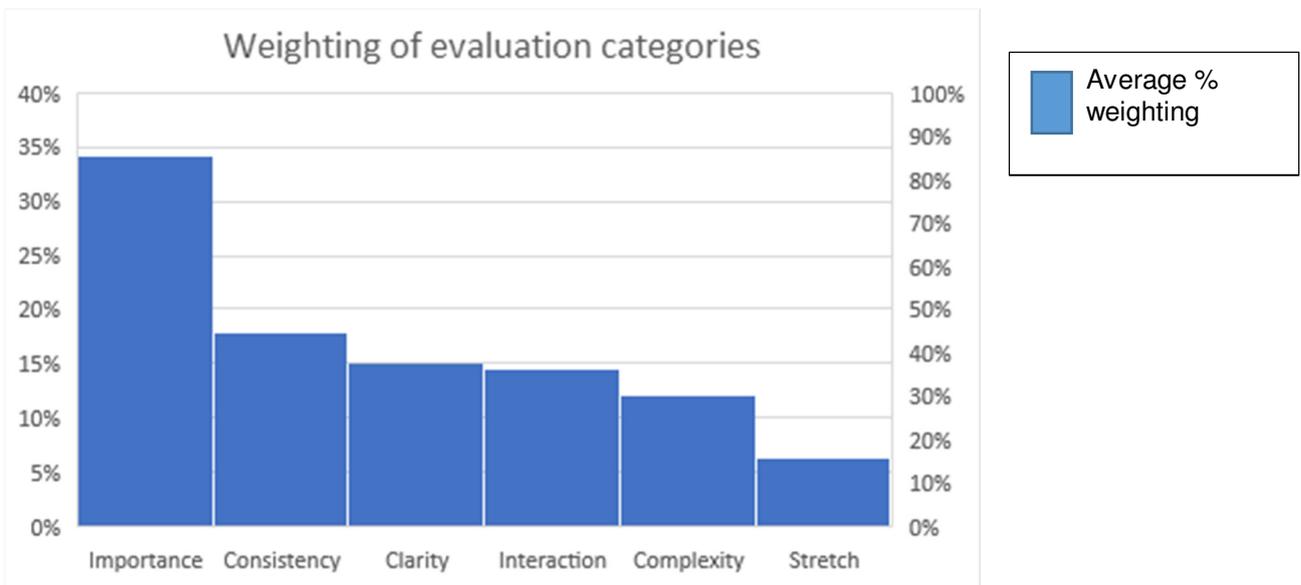
Our views on relative weighting between the areas of assessment has in part been informed by the responses given by water company representatives (plus a customer representative) during the D-MeX working group session. Here each member of the group was asked to rank the assessment criteria and to also weight that assessment.

Table 15 D-MeX working group ranking of assessment areas



The D-MeX working group ranked a metric’s importance as being the highest area of consideration, followed by consistency and interaction, and then clarity. This aligns with feedback from customer representatives which highlight the need to focus on key areas of delivery and importance to the pragmatic elements of service provision ahead of issues of complexity and notification. The working group also offered a view on the relative weightings of these components, with a significant bias towards the importance assessment over consistency, clarity, interaction and complexity.

Table 16 D-MeX working group weighting of assessment areas



In addition to the D-MeX working group, customer feedback confirms the D-MeX PC should focus on areas considered of greatest importance. Importance has three criteria associated with its assessment and each has a weighting factor of 1.0. As the other components have a maximum of one criterion each, the effect is that important is weighted x3 more than other criteria reflecting both customer and company expectations that priority be given to those metrics considered ‘most important’.

Water companies assigned stretch the lowest weighting, however as discussed already in this report, stretch is considered important by customers, who want a quality service delivered as quickly and efficiently as possible. As a result, we have retained a factor of 1.0 for this component of the assessment.

Complexity and clarity also have a factor of 1.0 assigned. The complexity component applies to the complexity of delivering the activity only, and not the complexity of reporting.

## 4.2 Evaluation Assessment output

### 4.2.1 Evaluation assessment output

For each component of the assessment, a total score has been summated, and the appropriate weighting factor applied. An overall summation is then undertaken for each metric, which in turn allows the metrics to be ranked relative to each other.

Table 17 Evaluation assessment framework

	Importance			Clarity	Complexity	Stretch	Total Points Score	Rank
Weighting	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
W1.1	score x weighting	$\Sigma$	1					
W2.1	(As above)							
etc								

Further detail of the evaluation assessment scoring and ranking can be found in Appendix E.

### 4.2.2 Evaluation assessment limitations

There are limitations to using the evaluation assessment in isolation. By its nature it is a product of the types of responses received. We acknowledge that the NAV representation in the underlying data used within the evaluation matrix is limited, and this leads to a potential under representation of the needs of this customer group. The NAV metrics have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market, as a result their consideration for inclusion within D-MeX is important so as not to overlook this customer cohort

Neither does the Evaluation Assessment allow for consideration of work volumes. Stakeholders have confirmed that there is significant variance in the volumes of work measured by individual metrics. For example, the majority of self-lay activity occurs within the <500 property category, with only a limited volume of activity in the >500 categories. As a consequence, a direct comparison of metrics regardless of volume could lead to unintentional bias.

As a result of these inherent limitations we do not consider it appropriate to base the selection of D-MeX metrics solely on the output of the Evaluation Assessment. In section 5 we explain how we have taken these limitations into account in the final selection of metrics.

### 4.2.3 Evaluation assessment outcomes

Table 18 shows the ranking that results from the evaluation assessment. There is very little differentiation in scores, to the point that we were able to differentiate 10 individual scores and rank accordingly. In order to identify the relative spread of these ranks across the end to end delivery process, Table 19 below highlights the relative location of the metrics and highlights those metrics assessed as being in the top seven ranking positions.

**Table 18 Evaluation assessment ranking**

Rank	Metric Code	Metric Description
1	W18.1	Mains diversions - construction/commissioning within target
1	S4.1	Sewer requisition - constructed and commissioned within agreed extension
1	W8.1	Mains construction within target
2	W23.1	Self-lay design and terms request <500 plots etc - quotations within target
2	W17.1	Mains diversions (without constraints) - quotations within target
2	W24.1	Self-lay design and terms request >500 plots etc - quotations within target
2	W17.2	Mains diversions (with constraints) - quotations within target
2	W4.1	s45 service pipe connections - within target
3	W26.1	Self-lay water for pressure/bacteriological testing - provided within target
3	W27.1	Self-lay permanent water supply - provided within target
3	W7.1	Mains design >500 plots - quotations within target
3	S5.1	Technical vetting of adoptions & diversions-acknowledgements within target
3	S1.1	Pre-development enquiry - reports issued within target
3	W6.1	Mains design <500 plots - quotations within target
3	W20.1	Self-lay Point of Connection report < 500 plots etc - reports issued within target
3	W1.1	Pre-development enquiry - reports issued within target
4	2 Water	NAV new connection - % of bulk supplies completed within target period
5	W25.1	Self-lay signed agreement - acknowledgements within target

Rank	Metric Code	Metric Description
5	S6.1	Technical vetting of adoptions & diversions - approval or rejection letters within target
5	S8.1	s106 sewer connection - approval letters issued within target
5	W3.1	s45 quotations - within target
5	S3.1	Sewer requisition design - offers issued within target
6	15 Water	Provision of permanent supply of water for NAV mains — % of supplies made available within the target period
7	S7.1	Adoption legal agreement - draft agreements issued within target
7	W5.1	Mains design - written acknowledgement within target
7	W19.1	Self-lay point of connection applications - written acknowledgements within target
7	W22.1	Self-lay design approval and terms request application - written acknowledgements within target
7	W28.1	Self-lay vesting certificates - issued within target
7	W29.1	Self-lay Asset Payments - issued within target
7	S2.1	Sewer requisition - written acknowledgement of applications within target
7	S9.1	s106 sewer connection - rejection letters issued within target
7	4 Water	Off-site mains construction — % of main laying schemes constructed and commissioned within the target period
8	1 Water	% of written acknowledgements of a bulk supply application issued within target period
8	3 Water	NAV signed agreement - % of written acknowledgements of receipt issued within target period.
8	8 Sewerage	Off-site mains construction — % Of main laying schemes constructed and commissioned within the target period
8	5 Water	Provision of supply of water for pressure/bacteriological testing of NAV mains— % Of supplies provided within target period
8	7 Sewerage	NAV new connection — % of quotations completed within target period
9	W2.1	s45 applications - written acknowledgements within target
9	W16.1	Mains diversions - written acknowledgements within target

Rank	Metric Code	Metric Description
9	W21.1	Self-lay Point of Connection reports >500 plots etc - reports issued within target
9	W30.1	Self-lay plot references and costing details - issued within target
10	6 Sewerage	% of written acknowledgements of a bulk discharge application issued within target period
10	9 Sewerage	NAV signed agreement - % of written acknowledgements of receipt issued within target period.

Table 19 Top 7 (out of 10) ranked metrics

	Point of Connection	Acknowledgement	Quotation	Acknowledgement	Construction	Certificates/Vetting
<b>Water</b>	W1.1	W5.1	W6.1 & W7.1		W8.1 & W18.1	
		W2.1	W3.1		W4.1	
	(W1.1) & W20.1 & W21.1	W19.1 & W22.1	W23.1 & W24.1	W25.1	W26.1 & W27.1	W28.1, W29.1
			W30.1			
		W16.1	W17.1 & W17.2			
<b>Sewer</b>	S1.1	S2.1	S3.1		S4.1	S5.1
		S8.1				S6.1
		S9.1				S7.1
<b>NAV</b>	NAV 1 (W)		NAV 2 (W)	NAV 3 (W)	NAV 4 (W)	
					NAV 5(W)	
					NAV15 (W)	
	NAV6 (S)		NAV 7 (S)	NAV 9 (S)	NAV 8 (S)	

## 5. D-MeX metric selection

### 5.1 Further refinement

The output of the Evaluation Assessment allows for a ranking of the metrics, informed by the combination of importance, clarity, complexity and stretch. However, due to the limitations of the Evaluation Assessment we do not consider that this can be used alone to identify which metrics to recommend for use in D-MeX.

We have identified a number of main findings throughout section 3: Findings. A number of these insights are important to feed into the selection of the final set of metrics to recommend for inclusion in D-MeX. Table 20 summarises all the main insights and highlights those that we have considered most relevant in further refining the selection of metrics.

**Table 20 Summary of main findings**

Assessment	Main findings Aspect	Further intervention required
<b>Importance</b>	<ul style="list-style-type: none"> <li>Take up for the planned developer workshop was too low to be effective and it was therefore cancelled. A very limited number of 1 to 1 discussions replaced this. The findings from these cannot be considered statistically robust but they provide further weight to the findings from other sources.</li> </ul>	x
	<ul style="list-style-type: none"> <li>The response rate for NAVs was very low and this is a limiting factor in drawing differential conclusions between the views of Developers and NAVs</li> </ul>	x
	<ul style="list-style-type: none"> <li>Acknowledgements are not considered as important as other aspects of service, with a clear developer steer to focus on the physical elements of service delivery</li> </ul>	✓
	<ul style="list-style-type: none"> <li>Whilst developers place more importance on physical elements of the developer services process than others e.g. acknowledgements, there is no suggestion the information/acknowledgement metrics do not add value, but that D-MeX should focus on metrics which measure aspects of service considered to be more important. Whilst some metrics may not be selected for use in D-MeX, customers recognise they have an inherent value in measuring customer service provision that should be maintained.</li> </ul>	x
	<ul style="list-style-type: none"> <li>Developer customers are of the opinion that for specific work areas, the current timescales do not align with their needs or drive good customer service. They do however, recognise the pragmatic elements associated with delivering on-site activities.</li> </ul>	x
	<ul style="list-style-type: none"> <li>Analysis of the qualitative survey verbatim responses indicates that qualitative and quantitative elements of service provision are valued equally; communication and timeliness are valued above cost and quality.</li> </ul>	x
	<ul style="list-style-type: none"> <li>D-MeX should include metrics that cover a range of customer types, including NAVs and Self-Lay, and should focus on the physical end to end delivery process. D-MeX should focus on driving customer service improvements across all customer and work types, regardless of associated work volumes.</li> </ul>	✓

<p><b>Complexity</b></p>	<ul style="list-style-type: none"> <li>Water companies do not consider any of the metrics to be disproportionately complex for reporting. Therefore, we conclude this is not an important consideration in selecting which metrics to include in D-MeX</li> <li>Complexity of activity delivery is more important to consider within D-MeX metric selection than the complexity of reporting.</li> <li>Water companies are of the opinion that focus should be placed on the importance of the end to end process across the differing customer types, regardless of delivery complexity. We note this view is consistent with what developer service customers have said in their responses to the question of what aspects of service are most important to them.</li> </ul>	<p>✘</p> <p>✘</p> <p>✓</p>
<p><b>Consistency</b></p>	<ul style="list-style-type: none"> <li>We were not able to review any data associated with the Water UK consistency analysis due to confidentiality issues.</li> <li>We highlight the lack of independent assurance on both process and</li> <li>Data for the current metric data and note that when this is implemented for PC reporting this could highlight areas of inconsistency.</li> <li>We are not able to use consistency as a measure within our Evaluation Assessment.</li> </ul>	<p>✘</p> <p>Outside metric selection but important</p> <p>✘</p>
<p><b>Clarity</b></p>	<ul style="list-style-type: none"> <li>Water UK has revised definitions where it identified potential areas of inconsistency. The August 2019 definitions include this work.                         <ul style="list-style-type: none"> <li>From our own further review of definitions we identified:                                 <ul style="list-style-type: none"> <li>there are no metric definitions where there are significant clarity concerns which rule them out of use in D-MeX, including the newly drafted NAV metrics.</li> </ul> </li> </ul> </li> <li>there are a small number of metrics where further work to remove any remaining, albeit minor, ambiguities is recommended.</li> <li>The benefit of ensuring selected metrics cover the range of customer types as well as the key elements of service delivery is highlighted.</li> </ul>	<p>✘</p> <p>✘</p> <p>Outside metric selection but important</p> <p>✓</p>
<p><b>Stretch</b></p>	<ul style="list-style-type: none"> <li>Water company performance against the current Water UK metrics is generally very high (albeit the associated data may not have been subject to the same levels of assurance expected of current PC/ODI reporting).</li> <li>We note that for metrics with low volumes of data, there is more volatility in % terms, than those with a significant number of data points.</li> <li>The metrics represent a simple pass/fail compliance against a set timeframe and as such do not allow for any differentiation of</li> </ul>	<p>✘</p> <p>✘</p> <p>Outside metric selection but important</p>

	<ul style="list-style-type: none"> <li>performance. Whilst this does not represent an issue for inclusion within D-Mex, this should be an area for consideration in future.</li> <li>The Code for Adoption Agreements changes are likely to impact the current metric delivery targets.</li> <li>Overall we consider the set of metrics to provide sufficient stretch at this point in time.</li> <li>When context is considered i.e. the metrics are relatively new, the definitions have been evolving, the data set is not consistent and the data is not subject to third party assurance, we consider that a period of stability to establish a level playing field for reporting and confidence in consistency of reporting is important before changes to stretch are considered.</li> </ul>	<p>Outside metric selection but important</p> <p>x</p> <p>x</p> <p>x</p>
<b>Interaction</b>	<ul style="list-style-type: none"> <li>There is little duplication between qualitative and quantitative components of service.</li> <li>There is interaction between qualitative and quantitative elements of D-MeX, but overall, we consider that the quantitative elements of D-MeX will not duplicate qualitative elements.</li> <li>There is a risk of perverse impacts between the two, but only if opportunities for stretch (tightening of timescales) of individual metrics were to be considered in isolation to their qualitative impact.</li> </ul>	<p>x</p> <p>Outside metric selection but important</p> <p>x</p>
<b>Code for Adoption Agreements</b>	<ul style="list-style-type: none"> <li>If the current metrics are ultimately aligned with Code for Adoption Agreements, future consideration will need to be given as to how company performance can be compared across the England/Wales border if activity (and therefore data) is undertaken against a differing rule base.</li> </ul>	<p>Outside metric selection but important</p>

Consistent stakeholder feedback has indicated that D-MeX should focus on the key elements of service delivery across the customer types and across the process. Acknowledgement metrics remain important but are considered of less importance to customers than the physical elements of service. It is considered by stakeholders that the key elements of ‘point of connection’, ‘quotation’ and ‘construction’ across the service areas of water, SLP, waste and NAV should form the basis of an appropriate D-MeX PC in order to appropriately represent the full range of service provision.

In line with our findings we have undertaken the following additional steps to fine tune the ultimate selection of the metrics for D-MeX:

- 1) De-selected those metrics which focus on measuring acknowledgements within the process. This is not to under-estimate the importance of acknowledgments, but is in line with focussing on the key elements of physical service delivery
- 2) De-selected those metrics which relate to an approval/technical vetting element. This is not to underestimate the importance of these steps, but is in line with focussing on the key elements of physical service delivery
- 3) Reviewed metrics selection across customer types and the process

After applying 1 and 2 to the metrics selected using only the Evaluation Assessment (Table 21) the following metrics remain selected. The exception is S7.1 which relates to the sewer adoption legal agreement as opposed to a specific acknowledgement process.

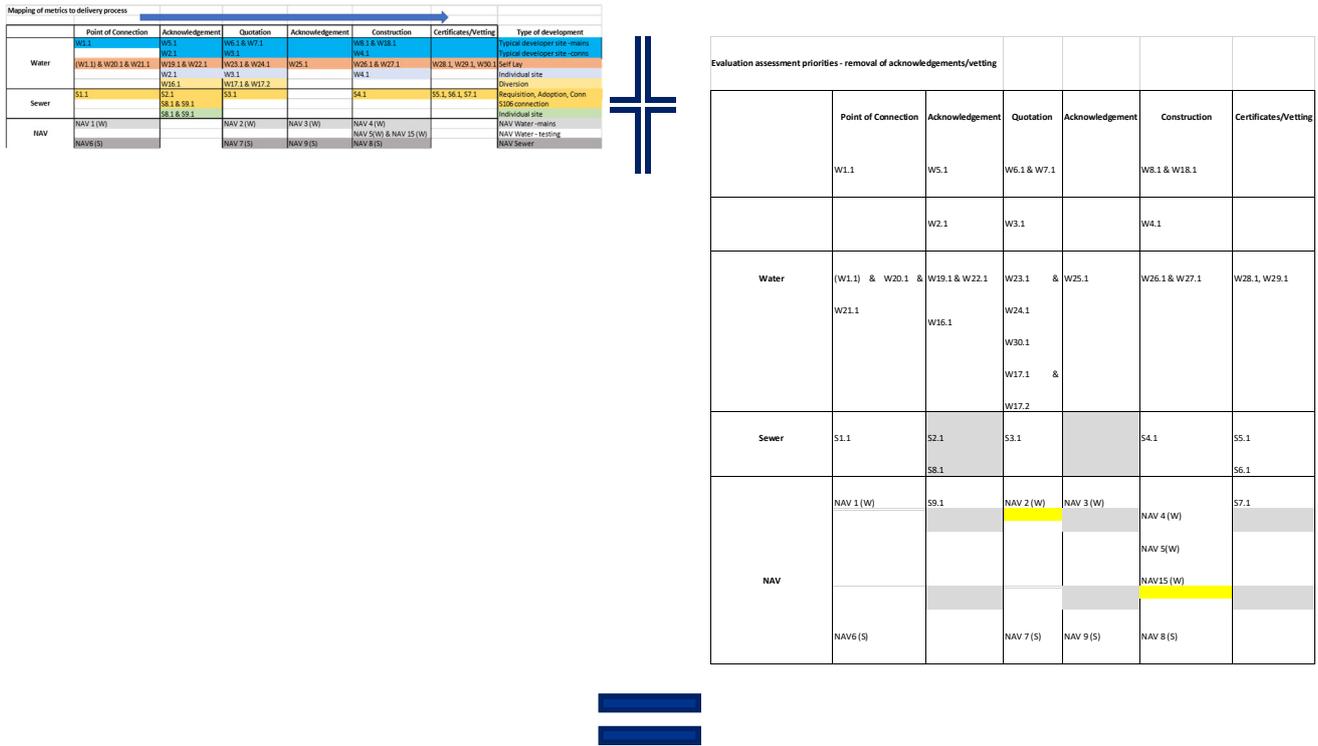
**Table 21 Highest scoring metrics (highlighted in yellow) from the Evaluation Assessment mapped to process after removal of acknowledgments and approval/technical vetting**

	Point of Connection	Acknowledgement	Quotation	Acknowledgement	Construction	Certificates/Vetting
Water	W1.1	W5.1	W6.1 & W7.1	W25.1	W8.1 & W18.1	W28.1, W29.1
		W2.1	W3.1		W4.1	
	(W1.1) & W20.1 & W21.1	W19.1 & W22.1	W23.1 & W24.1		W26.1 & W27.1	
			W30.1			
		W16.1	W17.1 & W17.2			
Sewer	S1.1	S2.1	S3.1		S4.1	S5.1
		S8.1				S6.1
		S9.1				S7.1
NAV	NAV 1 (W)		NAV 2 (W)	NAV 3 (W)	NAV 4 (W)	
					NAV 5(W)	
					NAV15 (W)	
	NAV6 (S)		NAV 7 (S)	NAV 9 (S)	NAV 8 (S)	

The final step in the selection process was to ensure that there are representative metrics across both the delivery process and customer types. Here we have had to include in particular NAV metrics, which on the face of the Evaluation Assessment feature lower down the ranking, but as already observed, is in part a result of the under representation of these customer types in the data available. These metrics have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market, as a result their inclusion within D-MeX is important so as not to overlook this customer cohort.

Ultimately there is a balance to be struck between including those metrics that cover the key elements of service provision and ensuring the appropriate customer types are accounted for. As a result, there are a small number of candidate metrics which may have received a similar Evaluation Assessment ranking, where one metric has been included and another not selected. An example of this is W30.1, which has been selected ahead of W28.1 and W29.1, as it is considered a key enabler in the physical process of SLP service connections. We have applied our judgement to ensure an adequate coverage of process stages and customer types.

Figure 9 Metrics mapping and evaluation assessment combined to form D-MeX metric selection



## 5.2 Recommended metrics

The end result is one that highlights 26 metrics for inclusion in D-MeX, which are essentially formed of those metrics which represent the key elements of delivery, across the customer types and that have been prioritised within the evaluation assessment. In general, the de-prioritised metrics from the evaluation framework, and those focussed on acknowledgement activity alone have not been selected.

The metrics recommended for inclusion are:

Table 22 Level of Service metrics recommended for inclusion in D-MeX

	Water metrics		Sewer metrics		NAV metrics
W1.1	Pre-dev enquiry	S1.1	Pre-dev enquiry	NAV 1 (W)	Bulk supply application
W3.1	S45 quotes	S3.1	Sewer req design	NAV2 (W)	New connection
W4.1	S45 serv pipe conns	S4.1	Sewer req constr	NAV4 (W)	Off-site mains constr'n
W6.1	Mains design quote <500 plots	S7.1	Adoption legal agmt	NAV6 (S)	Bulk discharge applic'n

	Water metrics		Sewer metrics		NAV metrics
W7.1	Mains design quote >500 plots			NAV7 (S)	New connection
W8.1	Mains construction			NAV8 (S)	Off-site mains constr'n
W17.1	Diversion quotes				
W17.2	Diversion quotes				
W18.1	Diversion construction				
W20.1	Self-lay PoC <500 plots				
W21.1	Self-lay PoC >500 plots				
W23.1	Self-lay design <500 plots				
W24.1	Self-lay design >500 plots				
W26.1	Self-lay water for testing				
W27.1	Self-lay perm water				
W30.1	Self-lay ref and costing				

### 5.3 Potential for aggregation of metrics

We have considered the potential to aggregate some of the Water UK metrics to allow for the potential differential weighting of certain categories of metric. However, as there is inherent weighting in our evaluation assessment approach, we are of the opinion there is little additional benefit to be gained by aggregation, above and beyond our approach to evaluating the relative importance of the individual metrics.

Water companies already have the processes and systems in place to report against the individual Water UK metrics and will still need to measure the individual metrics to aggregate. Therefore, there would be an additional level of complexity for reporting and potentially a reduction in transparency if aggregation were introduced.

Therefore, we recommend that D-MeX uses the subset of Water UK metrics as identified in 5.2 above, and as currently defined by Water UK. We consider the status quo of comparing company performance against the individual, selected metrics represents the most appropriate construct for D-MeX.

### 5.4 Reporting requirements for companies

D-MeX will be effective from April 2020. Some of the metrics have not been reported on to date (NAV metrics in particular) and some of the definitions may continue to evolve. None of the metrics have been subject to third party assurance this far.

As with any data provided as part of APR reporting companies may choose to provide commentary to assist stakeholders' understanding of the data and trends. In addition, it is recommended that companies provide commentary to outline the assurance they have undertaken and the findings.

## 6. Conclusions and recommendations

*Clarity:* In assessing whether there is sufficient clarity in the latest set of Water UK metric definitions (as of August 2019) we have confirmed that there are no significant areas of remaining ambiguity in the metric definitions and that the issues identified as part of the 2017 CH2M horizontal audit have been addressed. We have identified a small number of minor opportunities that we consider are worthy of further clarification but do not represent a risk to the use of the associated metrics within D-MeX.

This review included the newly defined, but as yet unreported, NAV metrics. Whilst we have highlighted the potential for some minor refinement to the definitions of two of these new metrics, in common with the established metrics we do not consider these issues to be material to their use within D-MeX. Furthermore, we are of the view that these new metrics designed to help deliver good customer service across a newly emerging element of the developer services customer, are suitable and should have appropriate representation within D-MeX.

*Stretch:* It is our view that the introduction of the metrics has driven transparency in service provision and has driven some improvements to date. There are certainly a number of metrics where greater stretch could be considered but equally there are some where it is not at all clear that customer benefits would arise from greater stretch. Overall, we consider the set of metrics to provide sufficient stretch at this point in time. When context is considered i.e. the metrics are relatively new, the definitions have been evolving, the data set is not consistent, the data is not subject to third party assurance and some of the metric timescales are likely to be impacted by the Code for Adoption Agreements review, we consider that a period of stability to establish a level playing field for reporting and confidence in consistency of reporting is important before changes to stretch are considered. As a consequence, there is no suggestion that the quantitative element of D-MeX, would warrant any reduced weighting over the qualitative elements.

We also note, that the metrics represent a simple pass/fail compliance against an associated timescale. This does not allow for any differential off performance i.e. where one water company may significantly deliver ahead of the required timeframe, where as another company delivers just in time. Whilst this does not represent a shortcoming associated with the use of metrics for D-MeX, consideration may be given by all stakeholders to future refinement to allow for this differential level of service.

*Importance:* Whilst developers place more importance on physical elements of the developer services process than others e.g. acknowledgements, there is no suggestion the information/acknowledgement metrics do not add value. All stakeholders concur that D-MeX should focus on metrics which measure aspects of service considered to be more important. Whilst some metrics may not be selected for use in D-MeX, customers recognise they have an inherent value in measuring customer service provision that should be maintained. It is our opinion, supported by stakeholders, that D-MeX should include metrics that cover a range of customer types, including NAVs and Self-Lay, and should focus on the physical end to end delivery process. D-MeX should focus on driving customer service improvements across all customer and work types, regardless of associated work volumes. We have taken this into account in both the evidence sources used, and the relative weighting applied to criteria scoring in the evaluation assessment.

*Complexity:* Complexity of service provision undoubtedly varies across the individual elements, with the more complex construction activities clearly recognised as having both more complex components as well as requiring multiple third-party involvements. Notwithstanding these inherent complexities, water companies are able to deliver developer service customer requirements and concur with our opinion that customer performance metrics should be appropriately challenging and focus on the importance of the end to end process across the differing customer types regardless of delivery complexity. We note this view is consistent with what developer service customers have said in their responses to the question of what aspects of service are most important to them.

We have also discussed the opportunity to aggregate existing metrics to represent service areas. However, we consider the disadvantages of such an approach outweigh the advantages, principally as this risks confusing the current clear metric ownership that lies with Water UK. We therefore recommend the subset of Water UK metrics identified are used without any further aggregation.

We have also considered the impact of some companies being subject to differing charging rules and potential variance of adoption codes, namely as a result of being either wholly, or mainly located in England or Wales. Both Welsh Water and Hafren Dyfrdwy operate wholly or mainly in Wales. Since adoption of sewers is legally different for these companies compared to companies in England if differing levels of service arise from the Codes for Adoption Agreements and are incorporated into D-Mex, this is likely to reduce the ability to compare English and Welsh companies against some metrics.

With respect to potential reporting requirements, it is important to recognise that the existing metrics have been through a period of evolution, and new metrics covering NAVs are about to be incorporated in to the Water UK measures. There is no evidence of a consistent application of third-party assurance on the underlying data for these returns, and we are of the opinion to allow for any robust comparison of company performance this should be in place for the D-MeX PC. As with the established Annual Performance Reporting, there is clear benefit to Ofwat for any D-MeX PC returns to be accompanied with a commentary setting out performance observations and associated assurance in support of data.

In conclusion we are recommending a total of 26 metrics are considered for incorporation into the D-MeX PC. We note that a similar number of metrics have been selected for the purposes of the qualitative element of D-MeX but as these fall outside the scope of our work, we have not undertaken any comparative analysis.

**Table 23 Final D-Mex metrics selection**

Mapping of metrics to delivery process							
	Point of Connection	Acknowledgement	Quotation	Acknowledgement	Construction	Certificates/Vetting	Type of development
Water	W1.1	W5.1	W6.1 & W7.1		W8.1 & W18.1		Typical developer site -mains
		W2.1	W3.1		W4.1		Typical developer site -coms
	(W1.1) & W20.1 & W21.1	W19.1 & W22.1	W23.1 & W24.1	W25.1	W26.1 & W27.1	W28.1, W29.1, W30.1	Self Lay
		W2.1	W3.1		W4.1		Individual site
		W16.1	W17.1 & W17.2				Diversion
Sewer	S1.1	S2.1	S3.1		S4.1	S5.1, S6.1, S7.1	Requisition, Adoption, Conn
		S8.1 & S9.1					S106 connection
		S8.1 & S9.1					Individual site
NAV	NAV 1 (W)		NAV 2 (W)	NAV 3 (W)	NAV 4 (W)		NAV Water - mains
	NAV6 (S)		NAV 7 (S)	NAV 9 (S)	NAV 5 (W) & NAV 15 (W)	NAV 8 (S)	NAV Water - testing
							NAV Sewer

The selection of these 26 metrics is primarily a result of the evaluation assessment undertaken over a number of criteria including importance, clarity, complexity and stretch. In line with stakeholder feedback, we have deselected those metrics which focus on measuring acknowledgements within the process. However, we note that failure to select a metric does not reduce its relevance and importance moving forwards, in the assessment of good developer customer service. We have also de-selected those metrics which relate to an approval/technical vetting element. This is not to under-estimate the importance of these steps but is in line with focussing on the key elements of physical service delivery.

Our recommendation also reflects stakeholder views that the key elements of ‘point of connection’, ‘quotation’ and ‘construction’ across the service areas of water, SLP, waste and NAV should form the basis of an appropriate D-MeX PC in order to appropriately represent the full range of service provision. In addition, therefore to those metrics identified by the evaluation assessment, we have ensured that there are representative metrics across both the delivery process and customer types. We have had to include in particular NAV metrics, which on the face of the Evaluation Assessment feature lower down the ranking, but as already observed, is in part a result of the under representation of these customer types in the data available. These metrics have been newly developed by Water UK as of August 2019, and as yet companies have not reported against these measures. However, they represent an important element of the evolving market, as a result their inclusion within D-MeX is important so as not to overlook this customer cohort.

In addition, whilst we have recommended a sub-section of current metrics are considered for inclusion within the quantitative element of D-MeX, the unselected metrics remain important measures of service provision. Both those metrics that measure the provision of information and acknowledgement, as well as those that also pick up other elements of service delivery remain valid measures of customer service in this sector and we recommend that these non-selected metrics are maintained for this purpose.

## Appendix A. Survey designs

### A.1 Survey of developers

#### A.1.1 Survey metadata

##### Text to accompany email:

The Developer Services market is an important stakeholder for the water sector. Providing a quick, high quality service to customers in this area should be a key focus of water companies and is a key part of facilitating increases in and changes to housing supply. It is also one of the limited number of markets in the water sector in which competition is able to take place.

The purpose of this survey is for you to provide your opinion on which activities measured by a number of metrics are important to your business as a property developer. The results of the survey will assist the water industry regulator Ofwat in finalising its performance expectations.

Item	Value
Audience	Property developers
Name	Your views on measuring water company speed of service to developers
Description	<p>How should water companies' speed of service to developers be measured? As a developer, you have a chance to express your opinion through our survey. The results will be used to help design the new industry developer services measure of experience (D-MeX), which will help to hold water companies to account for their speed of service.</p> <p>This is a survey for the whole of England and Wales and we do NOT seek your views on individual water companies. This survey is solely related to how water company developer services performance should be measured across the entire industry.</p>
Limit responses	Limit responses to one per participant.
Type of participation	Anonymous. Provide one question requesting email address for participation in the incentive.
Results to	Email address provided
Result format	Excel
Start date	23 August 2019
End date	30 August 2019
Incentive	1 x £100 John Lewis voucher to participant selected at random. All email addresses participating in the draw will be placed in an Excel spreadsheet with a unique sequential reference number. A random number generator will be run once to select one of the unique reference numbers and the voucher will be sent to the selected email address.
Circulation	To be sent by Water UK to their developer members who have consented to participating in research.

### A.1.2 Survey questions

#### Respondent classification

Question	Type	Choices	Req.
Are you or do you work for a property developer in England or Wales?	Radio	Yes No Don't know	Yes

[If yes, display the following]

Question	Type	Choices	Req.
How many properties do you develop in a typical year?	Free text		Yes
Do you as a developer require connections to the public water mains and/or sewer?	Radio	Yes No Don't know	Yes

#### Relative importance of metrics

How important to you as a developer is speed of service from water companies in each of these areas?

Question	Type	Choices	Req.
Acknowledgement of applications	Radio	Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Issue of quotation for works	Radio	Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Completion of works	Radio	Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Issue of reports	Radio	Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Acknowledgement of agreements	Radio	Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes

#### Importance of water company speed of service

As a developer, how important is the speed of service from water companies in each of these areas? If you do not require a service from water companies, mark it as 'not required'.

Question	Type	Choices	Req.
Response to pre-development enquiries	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
S45/ service pipe connections	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Mains design	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Mains diversions	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Sewer requisitions	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Vetting of sewer adoptions and diversions	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Adoption agreements	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Section 106 connections	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes

**Importance of speed of service to self-lay providers**

Some works can be undertaken by self-lay providers instead of water companies. Do you use one or more self-lay providers?

Question	Type	Choices	Req.
Do you use one or more self-lay providers?	Radio	Yes, No, Don't know	Yes

[If yes, display the following as well]

As a developer, how important to you is speed of service from water companies **to self-lay providers** in each of these areas?

Question	Type	Choices	Req.
Point of connection reports	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Design approval	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Self-lay agreements	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Pressure and bacteriological testing of mains	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Commissioning of permanent water supply	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Provision of vesting certificates	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Asset payments to self-lay providers	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Provision of plot details and asset references	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes

### Importance of speed of service to New Appointments and Variations (NAVs)

Some new developments have water supplied by a company other than the incumbent (usually dominant) company in the area. These other companies are known as New Appointments and Variations (NAVs). For this arrangement to happen, the NAV must receive a bulk supply from the incumbent.

Examples of NAVs are IWNL, Icosa and Albion Water.

Question	Type	Choices	Req.
Have you or do you plan to use a NAV to supply any developments?	Radio	Yes, No, Don't know	Yes

[If yes, display the following as well]

As a developer, how important to you is speed of service from water companies to NAVs in each of these areas?

Question	Type	Choices	Req.
Acknowledging applications for bulk water supplies.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Quoting to provide a bulk water supply to the NAV.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Acknowledging signed NAV agreements.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Constructing bulk NAV water supply mains.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Supplying water to the NAV for pressure and bacteriological testing.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Making water supplies available to the NAV.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Acknowledging applications for bulk NAV sewage discharge agreements.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Quoting to provide a bulk sewage connection to the NAV.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Constructing bulk NAV sewer connections.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes
Acknowledging bulk NAV sewage discharge agreements.	Radio	Not required. Not important. Somewhat important. Significantly important. Critically important. Don't know.	Yes

**Any other comments**

If you wish to make any comments on the importance of water company speed of service to developers, please make them here.

Question	Type	Choices	Req.
Comments	Free text		No

### Incentive for participation

If you would like a chance to be sent a £100 John Lewis voucher, please enter your email address. Your email address will not be associated with your survey answers and will be used solely for the purpose of selecting a single winner of the voucher and sending it to them. The email address for the voucher will be selected at random on or before 21<sup>st</sup> September 2019.

Question	Type	Choices	Req.
Email address	Free text		No

## A.2 Survey to water companies

### A.2.1 Survey metadata

Item	Value
Audience	Water companies
Name	Complexity of providing and reporting on provision of services to developers
Description	<p>The Developer Services market is an important stakeholder for the water sector. Providing a quick, high quality service to customers in this area should be a key focus of water companies and is a key part of facilitating increases in and changes to housing supply. It is also one of the limited number of markets in the water sector in which competition is able to take place.</p> <p>Ofwat is introducing the Developer Services Measure of Experience (D-MeX) as a financial performance commitment for the 2020-25 period to drive water companies' performance. A key part of D-MeX will be the current Water UK developer services level of service metrics, the level of complexity for companies to provide services to developers and reporting against the metrics. The purpose of this survey is for you to provide your opinion on the level of complexity of developer services activities which are measured by the current metrics. The results of the survey will identify the most complex activities and will assist Ofwat in finalising the design of its D-MeX performance commitment.</p>
Limit responses	Limit responses to one per participant.
Type of participation	Anonymous. Provide one question requesting email address for participation in the incentive.
Results to	Email address provided
Result format	Excel
Start date	23 August 2019
End date	30 August 2019

Incentive	None. Relatively few possible respondents, and they will understand that they stand to gain through participation by attempting to influence the measures which go into D-MEX.
Circulation	All WaSCs

### A.2.2 Survey questions

#### Respondent classification

Question	Type	Choices	Req.
Do you represent or work for a water or sewerage undertaker in England or Wales?	Radio	Yes. No. Don't know.	Yes

[If yes, display the following]

Question	Type	Choices	Req.
Is your role directly connected with provision of developer services?	Radio	Yes. No. Don't know.	Yes

#### Complexity of activity for water connections

Question	Type	Choices	Req.
Does your organisation provide water connections?	Radio	Yes. No. Don't know.	Yes

[If yes, show this:]

For your organisation, how much effort does each of these activities take?

Minimal effort describes activities which are fully automated or which require a simple manual intervention such as sending an email.

Moderate effort describes activities which require significant from a single person or small team, but which are generally routine.

Significant effort describes activities which require substantial planning, cooperation between multiple teams and management of budgets.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
Creating and issuing predevelopment reports for water connections.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

Acknowledging Section 45 (service pipe connection) applications.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing Section 45 (service pipe connection) quotations.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing service pipe connections once all conditions are satisfied and site inspections have been approved.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging mains design applications.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing quotations for mains design for sites of fewer than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing quotations for mains design for sites of more than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Constructing new water mains.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging receipt of mains diversion applications.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing quotations for mains diversions where there are no constraints.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing quotations for mains diversions where constraints exist.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Constructing and commissioning mains diversions.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

**Complexity of activity for water connections- interface with self-lay providers**

Question	Type	Choices	Req.
Does your organisation provide services to self-lay providers?	Radio	Yes. No. Don't know.	Yes

[If yes, show this:]

For your organisation, how much effort does each of these activities take?

Minimal effort describes activities which are fully automated or which require a simple manual intervention such as sending an email.

Moderate effort describes activities which require significant from a single person or small team, but which are generally routine.

Significant effort describes activities which require substantial planning, cooperation between multiple teams and management of budgets.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
Acknowledging self-lay applications for point of connection.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing self-lay point of connection reports for sites of fewer than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing self-lay point of connection reports for sites of more than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging requests for self-lay design approval and terms.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Creating and issuing quotations for self-lay design and terms requests for sites of fewer than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

Creating and issuing quotations for self-lay design and terms requests for sites of more than 500 plots.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging signed self-lay agreements.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing pressure and bacteriological testing to self-lay sites.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing a permanent water supply to self-lay sites.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Issuing self-lay vesting certificates once notification of mains connection has been received.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Making asset payments following receipt of a valid invoice from a self-lay provider.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Issuing self-lay plat of costing details.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

**Complexity of activity for sewage connections**

Question	Type	Choices	Req.
Does your organisation provide sewage connections?	Radio	Yes. No. Don't know.	Yes

[If yes, show this:]

For your organisation, how much effort does each of these activities take?

Minimal effort describes activities which are fully automated or which require a simple manual intervention such as sending an email.

Moderate effort describes activities which require significant from a single person or small team, but which are generally routine.

Significant effort describes activities which require substantial planning, cooperation between multiple teams and management of budgets.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
Issuing reports on predevelopment enquiries for sewer connections.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging applications for sewer requisitions.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing sewer requisition design offers.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Constructing and commissioning sewer requisitions.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Technical vetting of sewer adoptions and diversions.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing approval or rejection letters for technical vetting of sewer adoptions and diversions.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort.	Yes
		Between moderate and significant effort. Significant effort. Don't know.	

**Complexity of reporting water metrics**

[Only display this page if the respondent has indicated that they provide water services]

For your organisation, how complex is it to report performance against each of these metrics?

Proportionately complex describes a level of effort which is appropriate given the significance and complexity of the activity being reported on.

Disproportionately complex describes a level of effort which is excessive given the significance and complexity of the activity being reported on.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
W1.1 - Pre-development enquiry - reports issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W2.1 - s45 applications - written acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W3.1 - s45 quotations - within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W4.1 - s45 service pipe connections - within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W5.1 - Mains design - written acknowledgement within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W6.1 - Mains design <500 plots - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W7.1 - Mains design >500 plots - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W8.1 - Mains construction within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W16.1 - Mains diversions - written acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W17.1 - Mains diversions (without constraints) - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W17.2 - Mains diversions (with constraints) - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W18.1 - Mains diversions - construction/commissioning within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

### Complexity of reporting self-lay provider metrics

[Only display this page if the respondent has indicated that they provide services to self-lay providers]

For your organisation, how complex is it to report performance against each of these metrics?

Proportionately complex describes a level of effort which is appropriate given the significance and complexity of the activity being reported on.

Disproportionately complex describes a level of effort which is excessive given the significance and complexity of the activity being reported on.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
W19.1 - Self-lay point of connection applications - written acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W20.1 - Self-lay Point of Connection report < 500 plots etc - reports issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W21.1 - Self-lay Point of Connection reports >500 plots etc - reports issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W22.1 - Self-lay design approval and terms request application - written acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W23.1 - Self-lay design and terms request <500 plots etc - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W24.1 - Self-lay design and terms request >500 plots etc - quotations within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W25.1 - Self-lay signed agreement - acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W26.1 - Self-lay water for pressure/bacteriological testing - provided within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W27.1 - Self-lay permanent water supply - provided within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W28.1 - Self-lay vesting certificates - issued within target	Radio	Proportionately complex.	Yes

		Disproportionately complex. Don't know.	
W29.1 - Self-lay Asset Payments - issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
W30.1 - Self-lay plot references and costing details - issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

### Complexity of reporting sewage metrics

[Only display this page if the respondent has indicated that they provide services to self-lay providers]

For your organisation, how complex is it to report performance against each of these metrics?

Proportionately complex describes a level of effort which is appropriate given the significance and complexity of the activity being reported on.

Disproportionately complex describes a level of effort which is excessive given the significance and complexity of the activity being reported on.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
S1.1 - Pre-development enquiry - reports issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S2.1 - Sewer requisition - written acknowledgement of applications within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S3.1 - Sewer requisition design - offers issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S4.1 - Sewer requisition - constructed and commissioned within agreed extension	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S5.1 - Technical vetting of adoptions & diversions-acknowledgements within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S6.1 - Technical vetting of adoptions & diversions - approval or rejection letters within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S7.1 - Adoption legal agreement - draft agreements issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S8.1 - s106 sewer connection - approval letters issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
S9.1 - s106 sewer connection - rejection letters issued within target	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

**Complexity of services to NAVs**

Question	Type	Choices	Req.
Does your organisation provide water connections to New Appointment and Variation providers (NAVs)?	Radio	Yes. No. Don't know.	Yes

[If yes, show this:]

For your organisation, how much effort does each of these activities take?

Minimal effort describes activities which are fully automated or which require a simple manual intervention such as sending an email.

Moderate effort describes activities which require significant from a single person or small team, but which are generally routine.

Significant effort describes activities which require substantial planning, cooperation between multiple teams and management of budgets.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
Acknowledging applications for a bulk supply.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Completing bulk supplies.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging receipt of signed NAV agreements.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Constructing and commissioning off-site mains laying schemes.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Provisioning supply of water for pressure and bacteriological testing of NAV mains.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Provisioning permanent supply of water for NAV mains.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

### Complexity of reporting NAV water supply metrics

[Only display this page if the respondent has indicated that they provide water connections to NAVs]

For your organisation, how complex would it be to report performance against each of these service areas?

Proportionately complex describes a level of effort which is appropriate given the significance and complexity of the activity being reported on.

Disproportionately complex describes a level of effort which is excessive given the significance and complexity of the activity being reported on.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
% of written acknowledgements of a bulk supply application issued within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
NAV new connection - % of bulk supplies completed within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
NAV signed agreement - % of written acknowledgements of receipt issued within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
Off-site mains construction — % of main laying schemes constructed and commissioned within the target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
Provision of supply of water for pressure/bacteriological testing of NAV mains— % Of supplies provided within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
Provision of permanent supply of water for NAV mains — % of supplies made available within the target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

### Complexity of sewer connections to NAVs

Question	Type	Choices	Req.
Does your organisation provide sewer connections to New Appointment and Variation providers (NAVs)?	Radio	Yes. No. Don't know.	Yes

[If yes, show this:]

For your organisation, how much effort does each of these activities take?

Minimal effort describes activities which are fully automated or which require a simple manual intervention such as sending an email.

Moderate effort describes activities which require significant from a single person or small team, but which are generally routine.

Significant effort describes activities which require substantial planning, cooperation between multiple teams and management of budgets.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
Acknowledging bulk discharge applications.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Providing quotations for new NAV sewer connections.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Constructing and commissioning off-site sewer mains.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes
Acknowledging signed NAV agreements.	Radio	Minimal effort. Between minimal and moderate effort. Moderate effort. Between moderate and significant effort. Significant effort. Don't know.	Yes

**Complexity of reporting NAV sewer connection metrics**

[Only display this page if the respondent has indicated that they provide sewer connections to NAVs]

For your organisation, how complex would it be to report performance against each of these service areas?

Proportionately complex describes a level of effort which is appropriate given the significance and complexity of the activity being reported on.

Disproportionately complex describes a level of effort which is excessive given the significance and complexity of the activity being reported on.

[Please place the following questions in a matrix]

Question	Type	Choices	Req.
% of written acknowledgements of a bulk discharge application issued within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

NAV new connection — % of quotations completed within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
Off-site mains construction — % Of main laying schemes constructed and commissioned within the target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes
NAV signed agreement - % of written acknowledgements of receipt issued within target period.	Radio	Proportionately complex. Disproportionately complex. Don't know.	Yes

**Comments**

If you wish to make any other comments on the complexity of undertaking and reporting on Developer Services activities, please enter them here.

Question	Type	Choices	Req.
Comments	Free text		No

**A.3 Survey to NAVs**

**A.3.1 Text to accompany survey**

Dear Head of Developer Services

Further to my email earlier regarding Ofwat’s new D-MeX measure for water companies – we would also like to understand your perspective as a NAV on service from incumbent water companies. Please would you fill in the survey in this email and send it back to me. The results will inform the design of the D-MeX incentive. The deadline for responses is 0800 on Wednesday 4<sup>th</sup> September.

For each service, please would you rate **the importance of incumbent water company speed of service to you** by marking the applicable column with a X for each one.

**A.3.2 Survey questions**

Water connection service	Not important	Somewhat important	Significantly important	Critically important	Not sure	Not applicable
Acknowledging bulk supply applications.						
Completing bulk supply connections.						

Issuing acknowledgments of signed agreements.						
Constructing and commissioning off-site mains laying schemes.						
Providing water supply for bacteriological and pressure testing.						
Providing permanent water supply following testing.						
Acknowledging bulk discharge agreements.						
Providing bulk discharge quotations.						
Completing off-set mains laying schemes.						
Acknowledging signed agreements.						
<b>Any comments on the importance of water company speed of service:</b>						

## Appendix B. Qualitative verbatim comments analysis

Matrix of comment category against priority assignment (un-weighted):

Overview of the types of comments found within each category.		Developer top three priorities			Totals	
		1st	2nd	3rd		
1	Speed of response from water company	The speed at which companies respond to inquiries.	346	178	57	581
2	Value for money	The value of services provided and overall costs.	152	150	145	447
3	Quote accuracy	The accuracy of the quotes provided or certainty over costs.	12	15	4	31
4	Ease of communication	How easy it is' to talk to the water company, or making it easier.	247	104	67	418
5	Flexibility	Flexibility of the company in relation to on site dates and/or adapting 'standard' services for particular needs.	17	24	21	62
6	Ability to talk to the right/knowledgeable person	The desire to be able to talk to the right person on the first attempt. Availability of specific phone numbers and staff. General desire to speak to someone 'who knows what they're talking about'.	82	67	47	196
7	Progress updates - transparency	Provision of progress updates. Developers wanting to know how their applications are getting on.	84	64	31	179
8	Keeping promises	At the overall level: companies doing what they say they are going to do. This is subtly different to arriving on site at agreed times - which comes under punctuality.	22	22	13	57
9	Website/publication accuracy/clarity	The accuracy and usefulness of website and published information.	23	21	12	56
10	Straightforward online tools / documentation	The ease of use of: online portals and/or documentation and forms.	29	13	15	57
11	Customer service	Overall good service. Polite, helpful and working hard to understand the needs of the client and the specifics of each job.	78	52	64	194
12	Quality of work	The quality of onsite work, and other outputs.	30	48	52	130
13	Clarity of communication/info - setting expectations	Developers wanting to know everything from the beginning. Setting the right expectations from the outset. 'no hidden steps or costs'. The overall clarity of communications.	77	83	35	195
14	Online tracking	A desire for application tracking - online.	0	1	0	1
15	Consistent point of contact	Developers wishing to speak to the same person each time who knows their applications to avoid recounting previous progress with every interaction.	81	35	27	143
16	Meet agreed dates - punctuality	Turning up to site at the times agreed.	88	83	46	217
17	Lead times to site	Specific references to cutting down the time between initial inquiry and onsite work.	9	21	10	40
18	Human interaction	Wanting to talk to a person. Dislike of portals, web forms and emails.	35	17	6	58
19	Getting through first time (e.g. on the phone)	Not wanting to be put on hold, waiting in call queues or being told to phone back. A desire for the companies to be available at any time.	34	21	10	65
20	More products/options	Specific references to limited options on products, communication types, or suggesting features.	5	4	4	13

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21	Overall efficiency or speed - getting it done more quickly	Cut the time down overall. Broad references to speed and timeliness.	273	208	111	592
22	Site visits	A personal service, similar to human interaction above - a desire for a company representative to visit the site during the planning to make quoting easier.	7	7	5	19
23	Advanced notice	More warning deadlines, expiry dates and site visits.	17	23	7	47
24	Simple process	A desire for application processes, forms, payment etc. to be simpler.	35	23	15	73
25	Quality/accuracy of information e.g. mapping	Any expression of frustration with company records, information quality. A desire for full information and a right first time approach.	69	117	59	245
26	Dealing with issues/complaints	Desire for simpler and faster processes when things go wrong.	10	20	14	44
27	Charging clarity	Any expression that the quotations are over complicated, or lack detail.	13	12	9	34
28	Right people on site	Similar to speaking to knowledgeable persons above, this is about having the right people on site to do the work right and links to the overall quality of output.	2	0	0	2
29	Payment process	References to simplifying or speeding up the payments or reimbursements processes.	2	7	3	12
30	Alternatives - providers, info etc. advice...	A desire for the companies to provide support, advice and tips to the developer. This can include information on the regulations, application processes, technical support or even of competitors.	45	37	29	111
Z	Unable to categorise	Not categorised - these will be reviewed separately for any themes.	28	43	30	101

Matrix of comment category against priority assignment (un-weighted):

multiplier	Weighted: Developer top three priorities			Totals
	1.00	0.75	0.50	
	1st	2nd	3rd	
1	346	133.5	28.5	508
2	152	112.5	72.5	337
3	12	11.25	2	25.25
4	247	78	33.5	358.5
5	17	18	10.5	45.5
6	82	50.25	23.5	155.75
7	84	48	15.5	147.5
8	22	16.5	6.5	45
9	23	15.75	6	44.75
10	29	9.75	7.5	46.25

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11	78	39	32	149
12	30	36	26	92
13	77	62.25	17.5	156.75
14	0	0.75	0	0.75
15	81	26.25	13.5	120.75
16	88	62.25	23	173.25
17	9	15.75	5	29.75
18	35	12.75	3	50.75
19	34	15.75	5	54.75
20	5	3	2	10
21	273	156	55.5	484.5
22	7	5.25	2.5	14.75
23	17	17.25	3.5	37.75
24	35	17.25	7.5	59.75
25	69	87.75	29.5	186.25
26	10	15	7	32
27	13	9	4.5	26.5
28	2	0	0	2
29	2	5.25	1.5	8.75
30	45	27.75	14.5	87.25
Z	28	32.25	15	75.25

## Appendix C. Remaining areas of potential ambiguity

The following summary culminates from the review of the 2017 CH2M horizontal audit for Water UK, and their subsequent work to revise metric definitions.

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
W1.1	Performance	Predevelopment enquiry - reports issued within target	21 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	<p>Reports to be provided within the 21 days (non statutory) target time may be of differing level of detail depending on individual company approach to planning for growth and the way the service to the applicant is structured and offered, especially so at the pre-development enquiry stage.</p> <p>e.g. modelling may be an option only done if applicant requests it at time of initial enquiry, reinforcement requirements and timescale for delivery might not therefore be known or known to a consistent level of certainty across companies. Similarly reinforcement cost recovery policy may vary between companies leading to different scope requirement of the report.</p> <p>[As reported for S1.1]</p>	<p>Water UK proposed change to metric definition does not appear to remove the scope for inconsistent reporting identified in CH2M report.</p> <p>Water UK to clarify scope or provide guidelines that show risk of inconsistency has been mitigated.</p>	1
W2.1	Performance	s45 applications - written acknowledgements within	5 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Where re-quotes are required due to material changes in the quotation request (see revised definition to W3), are these to be treated as a separate application and therefore requiring acknowledgment?	Add clarification to the definition on the matter of inclusion/non-inclusion of requotes.	6
W5.1	Performance	Mains design - written acknowledgement within target	5 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	<p>Are requotes (see revised W6 &amp; W7 definitions) requested due to change in design requirements of the application count as a new application worthy of a separate acknowledgement?</p> <p>Guidelines are silent on this matter.</p>	Add clarification to the definition on the matter of inclusion/non-inclusion of requotes.	6

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
W6.1	Performance	Mains design <500 plots - quotations within target	28 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Definition does not mention whether details of any reinforcement needed is required in the quotation - in contrast to W7.1 where it is specifically mentioned.	Add clarification to the definition regarding treatment of reinforcement for this category of mains design application.	3
W16.1	Performance	Mains diversions - written acknowledgements within target	5 days	Strict definition, but reliant on categories which could be interpreted differently across companies.	Are re-quotes (as required to reported for W17.1) due to material changes in the quotation request to be treated as a separate application and thus requiring acknowledgement?  Definition implies that any diversions requested by a developer working under contract to and funded by HS2 or NRW etc are counted. Risk (albeit very low) of ineligible requests being included in the metric.	Add clarification to the definition on the matter of inclusion/non-inclusion of requotes.  Add qualification to the definition regarding the purpose of diversions requested by developers which qualify for inclusion.	4
W19.1	Performance	Self-lay point of connection applications - written acknowledgements within target	5 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Does a re-application / request for revised report for a point of connection count as new application and need to be counted?	Add clarification to the definition on the matter of inclusion/non-inclusion of requotes.	6
W20.1	Performance	Self-lay Point of Connection report < 500 plots etc - reports issued within target	21 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	No mention in definition of treatment of cases where revised reports are required. When should these be counted as new applications/reports?	Add clarification to definition.	6
W21.1	Performance	Self-lay Point of Connection reports >500 plots etc -	28 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	No mention in definition of treatment of cases where revised reports are required. When should these be counted as new applications/reports?	Add clarification to definition.	6

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
		reports issued within target					

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
S1.1	Performance	Predevelopment enquiry - reports issued within target	21 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	<p>Reports to be provided within the 21 days (non statutory) target time may be of differing level of detail depending on individual company approach to planning for growth and the way the service to the applicant is structured and offered, especially so at the pre-development enquiry stage.</p> <p>e.g. modelling may be an option only done if applicant requests it at time of initial enquiry, reinforcement requirements and timescale for delivery might not therefore be known or known to a consistent level of certainty across companies. Similarly reinforcement cost recovery policy may vary between companies leading to different scope requirement of the report.</p> <p>[As reported for W1.1]</p>	<p>Water UK proposed change to metric definition does not appear to remove the scope for inconsistent reporting identified in CH2M report.</p> <p>Water UK to clarify scope or provide guidelines that show risk of inconsistency has been mitigated.</p>	1
S2.1	Performance	Sewer requisition - written acknowledgement of	5 days (Nonstatutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Are re-quotes (counted in S3.1) due to material changes in the quotation request to be treated as a separate application?	Add clarification to the definition on the matter of inclusion/non-inclusion of requotes.	6

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
		applications within target		Strict definition, but reliant on categories which could be interpreted differently across companies.			
S5.1	Performance	Technical vetting of adoptions & diversions-acknowledgements within target	14 days (Nonstatutory)		Resubmissions following technical rejection are not counted in S6.1 - the definition for S5.1 is silent on such resubmissions, whether they require a new application and whether that should be counted.	Add clarification to the definition on the matter of inclusion/non-inclusion of resubmission for congruity with S6.1.	6
S8.1	Performance	s106 sewer connection - approval letters issued within target	21 days (Statutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Definition states "Reporting should include: Domestic housing extension connections". However not all connections from such extensions will communicate directly to the lateral or public sewers depending on the layout in the vicinity. Qualification is required in the definition to avoid doubt as to when to count domestic housing extension connections.	Clarify definition regarding domestic extension connections to public sewers.	5
S9.1	Performance	s106 sewer connection - rejection letters issued within target	21 days (Statutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	Definition states "Reporting should include: Domestic housing extension connections". However not all connections from such extensions will communicate directly to the lateral or public sewers depending on the layout in the vicinity. Qualification is required in the definition to avoid doubt as to when to count domestic housing extension connections.	Clarify definition regarding domestic extension connections to public sewers.	5

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
2 Water	Draft NAV new conn.	NAV new connection - % of bulk supplies completed within target period	Target standard 20 calendar days (Non-statutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	<p>Metric title is misleading - it is a metric for completion of bulk agreements NOT bulk supplies.</p> <p>Two points of possible difficulty on the definition: "This service level applies to applications for site boundary connection(s)". Additional explanation is required. It is not clear that all bulk supply connections are physically at the site boundary, indeed as applications increase the likelihood is increasing that a NAV area is not contiguous but dispersed in nature, or includes within it isolated areas served by the incumbent, resulting in bulk supply connection locations being anywhere and not just at the boundary.</p> <p>Definition advises that Ofwat and the applicant should be advised at the earliest opportunity that the 20 day target is insufficient. Does this infer that an extension of time will apply to such cases?</p> <p>[As reported for 7 Sewerage]</p>	<p>Review wording of metric title.</p> <p>Review reference to and necessity for "boundary" in the description of applications for site connections.</p> <p>Clarify of extensions are granted and whether they are to be allowed for when reporting the metric.</p>	2
7 Sewerage	Draft NAV new conn.	NAV new connection — % of quotations completed within target period	Target standard 20 calendar days (Non-statutory)	Strict definition, but reliant on categories which could be interpreted differently across companies.	<p>Metric title is misleading - it is a metric for completion of bulk agreements NOT bulk supplies.</p> <p>Two points of possible difficulty on the definition: "This service level applies to applications for site boundary connection(s)". Additional explanation is required. It is not clear that all bulk supply connections are physically at the site boundary, indeed as applications increase the likelihood is increasing that a NAV area is not contiguous but dispersed in nature, or includes within it isolated areas served by the incumbent, resulting in bulk</p>	<p>Review wording of metric title.</p> <p>Review reference to and necessity for "boundary" in the description of applications for site connections.</p> <p>Clarify of extensions are granted and whether they are to be allowed for when reporting the metric.</p>	2

Metric Reference	Type	Metric Name	Deadline	Clarity/ unambiguity risk assessment score	Commentary	Suggested action	Ranking / Grouping
					<p>supply connection locations being anywhere and not just at the boundary.</p> <p>Definition advises that Ofwat and the applicant should be advised at the earliest opportunity that the 20 day target is insufficient. Does this infer that an extension of time will apply to such cases?</p> <p>[As reported for 2 Water]</p>		

## Appendix D. D-MeX Working Group notes

### D-MeX Working Group Meeting 11 September 2019

Questions and Points Raised During Jacobs Presentation

#### D.1 Importance

Questions and Points Raised	Responses and Further Requirements
How many developers took part in the online survey and where were these physically located?	30-40 responses from a diverse range of developer organisations of different sizes and locations.
4,500 verbatim comments – were these responses to the Jacobs online survey?	4,500 comments originate from BMG’s qualitative survey during the shadow reporting year.
A large proportion of the 4,500 verbatim comments are likely be from home owners rather than home builder organisations.	Responses are from all ‘customers of the service’. Ofwat to seek details of respondent types from BMG
Issue over terminology - the group tends to use ‘developer’ to mean house builders only. To date Jacobs have used it to mean any developer services customer.	Jacobs to be clear on terminology in final report.

#### D.2 Complexity

In response to a question about why some metrics were more complex to report against than others the following points were noted:

Questions and Points Raised	Responses and Further Requirements
Different systems (manual/automated) are used for reporting against the metrics.	N/A
Corporate systems and processes are generally in place for higher volume activities but not necessarily for smaller volume activities.	N/A
Acknowledgements are simple to produce and straightforward to report.	N/A

Some activities have ‘stop the clock’ components which cannot be automatically recorded in some systems and therefore there is a lot of manual review required.	N/A
Some metrics cover processes outside of companies’ control i.e. activities are delivered by third parties, which are not easy to measure.	N/A
Companies always find a way to measure and report data required despite the complexity involved.	N/A
Large range of customer types makes it difficult to define complexity by metric.	N/A
The group indicated that water companies have a clear view on which metrics should be included in D-Mex.	Jacobs have asked for this to be shared when they meet the Water UK sub-group on Monday 16 September. This may not be consistent with the views of what customers think is important.

### D.3 Clarity

Questions and Points Raised	Responses and Further Requirements
Observation that NAV 2/7 ‘site boundary’ term is misleading – NAV structure and legal documentation define boundaries. Not considered to be an issue however the guidance for this measure does not agree with the metric definitions in terms of timescales.	N/A
Except for the point above, there was general agreement from the audience on broad areas of ambiguity presented.	N/A
There is a difference between England and Wales in terms of Code for Adoption Agreements timescales. There are changes expected to these codes that could potentially create an additional set of metrics. The new code has a new ‘right day’ metric.	Jacobs to discuss with the Water UK sub-group on Monday 16 September to learn more about this issue.

<p>Desire from the group to not include any ambiguous metrics as part of the D-MeX incentive. Particularly any metrics that are likely to change.</p> <p>Ofwat advised they will use ambulatory metrics in D-MeX i.e. D-MeX will change as metrics change. The attendees suggested this is a problem for transition schemes which might stretch over a number of years.</p>	<p>N/A</p>
<p>The attendees had the view that the Water UK metrics are front-end loaded in terms of the developers services life cycle and do not reflect the full service.</p>	<p>N/A</p>

#### D.4 Consistency

Questions and Points Raised	Responses and Further Requirements
<p>Findings from Water UK’s comparative analysis can be made available for discussion.</p>	<p>Jacobs to meet with appropriate parties to discuss findings in more detail.</p>

#### D.5 Stretch

Questions and Points Raised	Responses and Further Requirements
<p>Activities are generally scheduled so cannot be improved upon. For example, it would not be acceptable for water companies to commence work earlier than agreed.</p>	<p>N/A</p>
<p>Feedback from developers suggests they are not interested in changing timescales as this could have an impact on quality of the service received.</p>	<p>N/A</p>
<p>Ofwat clarified that the scope of the independent review is to recommend metrics for inclusion in the D-MeX incentive, no metrics or their definitions will be altered as a result if this project.</p>	<p>N/A</p>

## Appendix E. Evaluation assessment

Assessment criteria	Importance									Clarity			Complexity			Stretch		Total	Rank
	Evidence / source of assessment			1 to 1 calls and ad hoc developer feedback			Customer (anonymised) verbatim responses			Desk based review (CH2M horizontal review)			Water Company online survey			Water UK performance data			
Metric	High = 5 pts	Medium = 3 pts	Low = 1 pt	High = 5 pts	Medium = 3 pts	Low = n/a	Frequently	Sometimes	in Remainder =	High	Medium	Low	High	Medium	Low = n/a	Yes	No		
Rationale	Ranked 1-5	Ranked 6-10	Ranked 10+	Developer highlighted	Default		top 3 = 5 pts	top 3 = 3 pts	1pt	n/a	Default = 3 pts	Potential issue = 1 pt	Complex activity (-3) = 5 pts	Default = 3pts		<95% ave company compliance = 3 points	Room for stretch >95% average compliance = 1 point		
Weighting	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
W28.1	Mains diversions - construction/commissioning within target	5			5		5				3		5			3		26	1
S4.1	Sewer requisition - constructed and commissioned within agreed extension	5			5		5				3		5			3		26	1
W8.1	Mains construction within target	5			5		5				3		5			3		26	1
W23.1	Self lay design and terms request <500 plots etc - quotations within target	5					3		5					3		3		22	2
W27.1	Mains diversions (without constraints) - quotations within target	5					3				3		5			3		22	2
W24.1	Self lay design and terms request >500 plots etc - quotations within target	5					3				3		5			3		22	2
W27.2	Mains diversions (with constraints) - quotations within target & 45 service pipe connections - within target	5					3				3		5			3		22	2
W4.1																			
W26.1	Self lay water for pressure/bacteriological testing - provided within target		3		5	3	5				3		5	3		3	1	22	2
W27.1	Self lay permanent water supply - provided within target		3				5				3		5					20	3
W27.1	Mains design >500 plots - quotations within target	5					3				3		5				1	20	3
W7.1																			
S5.1	Technical vetting of adoptions & diversions - acknowledgements within target	5	3				3				3		5			3	1	20	3
S1.1	Pre-development enquiry - reports issued within target		3		5		5					1	5				1	20	3
W6.1	Mains design <500 plots - quotations within target		3																

W20.1	Self-Hay Point of Connection < 500 plots etc - reports issued within target		3	1	5				3			3	1	5			3		20	3
W1.1	Pre-development enquiry - reports issued within target		3		5			5					1	5				1	20	3
2 Water	NAV new connection - % of bulk supplies completed within target period	5				3		5					1	5					19	4
W25.1	Self-Hay signed agreement - acknowledgements within target		3			3						3					3		18	5
56.1	Technical vetting of adoptions & diversions - approval or rejection letters within target		3		5							3						1	18	5
58.1	s106 sewer connection - approval letters issued within target	5			5								1					1	18	5
W3.1	Sewer requisition design - offers issued within target		3	1	5	3						3		5				1	18	5
15 Water	Provision of permanent supply of water for NAV mains - % of supplies made available within the target period			1		3		5					3	5					17	6
57.1	Adoption legal agreement - draft agreements issued within target		3			3						3						1	16	7
W5.1	Mains design - written acknowledgement within target		3			3						3						1	16	7
W19.1	Self-Hay point of connection applications - written acknowledgements within target		3			3						3						1	16	7
W22.1	Self-Hay design approval and terms request application - written acknowledgements within target		3			3						3						1	16	7
W28.1	Self-Hay vesting certificates - issued within target			1		3						3					3		16	7
W29.1	Self-Hay Asset Payments - issued within target			1		3						3					3		16	7
52.1	Sewer requisition - written acknowledgement of applications within target		3			3						3						1	16	7
59.1	s106 sewer connection - rejection letters issued within target	5				3							1					1	16	7
4 Water	Off-site mains construction - % of main laying schemes constructed and commissioned within the target period					3		5				3		5					16	7
1 Water	% of written acknowledgements of a bulk supply application issued within target period		3			3						3							15	8

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3	Water	NAV signed agreement - % of written acknowledgements of receipt issued within target period		3			3				3			3				15	8
8		Off-site mains construction - % Of main laying schemes constructed and commissioned within the target period			1		3		5				3					15	8
5	Water	Provision of supply of water for pressure/bacteriological testing of NAV mains - % Of supplies provided within target period			1		3				3			3		5		15	8
7		NAV new connection - % of quotations completed within target period			1		3		5				1		5			15	8
W2.1		s45 applications - written acknowledgements within target			1		3				3			3				14	9
W26.1		Mains diversions - written acknowledgements within target		3			3						1		3			14	9
W21.1		Self Hay Point of Connection reports >500 plots etc - reports issued within target			1		3				3			3				14	9
W30.1		Self Hay plot references and costing details - issued within target			1		3				3			3				14	9
6		% of written acknowledgements of a bulk discharge application issued within target period			1		3				3			3				13	10
9		NAV signed agreement - % of written acknowledgements of receipt issued within target period			1		3				3			3				13	10

## Appendix F. Water UK metrics

### F.1 Water metrics in the scope of this assessment

Reference	Type	Title	Target
W1.1	Performance	Pre-development enquiry – reports issued within target	21 days (Non-statutory)
W2.1	Performance	s45 applications – written acknowledgements within target	5 days (Non-statutory)
W2.1a	Information	s45 applications - refused/returned/questioned	None
W3.1	Performance	s45 quotations - within target	28 days (Non-statutory)
W4.1	Performance	s45 service pipe connections - within target	21 days (Statutory)
W4.1a	Information	s45 service pipe connections - within extended target	None
W5.1	Performance	Mains design - written acknowledgement within target	5 days (Non-statutory)
W5.1a	Information	Mains design - forms refused/returned/questioned	None
W6.1	Performance	Mains design <500 plots - quotations within target	28 days (Non-statutory)
W7.1	Performance	Mains design >500 plots - quotations within target	42 days (Non-statutory)
W7.1a	Information	Mains designs >500 plots - as % of total mainlaying jobs	None
W7.1b	Information	Mains designs >500 plots - % where extension agreed	None
W8.1	Performance	Mains construction within target	90 days (Statutory)
W8.1a	Information	Mains construction within extended target - as % of all mainlaying jobs	None
W16.1	Performance	Mains diversions - written acknowledgements within target	5 days
W16.1a	Information	Mains diversions- applications returned/refused/questioned	None
W17.1	Performance	Mains diversions (without constraints) - quotations within target	42 days

Reference	Type	Title	Target
W17.2	Performance	Mains diversions (with constraints) - quotations within target	By agreement
W17.2a	Information	Mains diversion quotations - % where agreed extension	None
W18.1	Performance	Mains diversions - construction/commissioning within target	90 days or by agreement (Non-statutory)
W19.1	Performance	Self-lay point of connection applications - written acknowledgements within target	5 days (Non-statutory)
W20.1	Performance	Self-lay Point of Connection report < 500 plots etc - reports issued within target	21 days (Non-statutory)
W21.1	Performance	Self-lay Point of Connection reports >500 plots etc - reports issued within target	28 days (Non-statutory)
W22.1	Performance	Self-lay design approval and terms request application - written acknowledgements within target	5 days (Non-statutory)
W23.1	Performance	Self-lay design and terms request <500 plots etc - quotations within target	14 days (Non-statutory)
W24.1	Performance	Self-lay design and terms request >500 plots etc - quotations within target	28 days (Non-statutory)
W25.1	Performance	Self-lay signed agreement - acknowledgements within target	5 days (Non-statutory)
W26.1	Performance	Self-lay water for pressure/bacteriological testing - provided within target	28 days (Non-statutory)
W27.1	Performance	Self-lay permanent water supply - provided within target	14 days (Non-statutory)
W28.1	Performance	Self-lay vesting certificates - issued within target	7 days (Non-statutory)
W29.1	Performance	Self-lay Asset Payments - issued within target	35 days (Non-statutory)
W30.1	Performance	Self-lay plot references and costing details - issued within target	14 days (Non-statutory)

## F.2 Wastewater metrics in the scope of this assessment

Reference	Type	Title	Target
S1.1	Performance	Pre-development enquiry – reports issued within target	21 days (Non-statutory)
S2.1	Performance	Sewer requisition - written acknowledgement of applications within target	5 days (Non-statutory)

Reference	Type	Title	Target
S2.1a	Information	Sewer requisition - applications refused/returned/questioned	5 days (Non-statutory)
S3.1	Performance	Sewer requisition design – offers issued within target	Period agreed between undertaker and customer (Non-statutory)
S4.1	Performance	Sewer requisition – constructed and commissioned within agreed extension	180 days (Statutory)
S4.1a	Information	Sewer requisition – constructed and commissioned - extensions agreed	None
S5.1	Performance	Technical vetting of adoptions & diversions– acknowledgements within target	14 days (Non-statutory)
S5.1a	Information	Technical vetting of adoptions & diversions – applications refused/returned/questioned	14 days (Non-statutory)
S6.1	Performance	Technical vetting of adoptions & diversions – approval or rejection letters within target	28 days (Non-statutory)
S6.1a	Information	Technical vetting of adoptions & diversions – extensions agreed	None
S7.1	Performance	Adoption legal agreement – draft agreements issued within target	14 days (Non-statutory)
S8.1	Performance	s106 sewer connection - approval letters issued within target	21 days (Statutory)
S9.1	Performance	s106 sewer connection - rejection letters issued within target	21 days (Statutory)

### F.3 NAV metrics in the scope of this assessment

Reference	Type	Title	Target
NAV1	Performance	% of written acknowledgements of a bulk supply application issued within target period	Target standard 5 calendar days (Non-statutory)
NAV2	Performance	NAV new connection - % of bulk supplies completed within target period	Target standard 20 calendar days (Non-statutory)
NAV3	Performance	NAV signed agreement - % of written acknowledgements of receipt issued within target period.	Target standard 5 calendar days (Non-statutory)
NAV4	Performance	Off-site mains construction — % of main laying schemes constructed and commissioned within the target period	Target standard 90 calendar days (Statutory)

Reference	Type	Title	Target
NAV5	Performance	Provision of supply of water for pressure/bacteriological testing of NAV mains— % Of supplies provided within target period	Target standard 21 calendar days (Non-statutory)
NAV15	Performance	Provision of permanent supply of water for NAV mains — % of supplies made available within the target period	Target standard 14 calendar days (Non-statutory)
NAV6	Performance	% of written acknowledgements of a bulk discharge application issued within target period	Target standard 5 calendar days (Non-statutory)
NAV7	Performance	NAV new connection — % of quotations completed within target period	Target standard 20 calendar days (Non-statutory)
NAV8	Performance	Off-site mains construction — % Of main laying schemes constructed and commissioned within the target period	Target standard 90 calendar days (Statutory)
NAV9	Performance	NAV signed agreement - % of written acknowledgements of receipt issued within target period.	Target standard 5 calendar days (Non-statutory)

#### F.4 Metrics not in the scope of this assessment

Reference	Type	Title	Target
W9.1a	Information	Self-lay applications - refused / returned/ questioned	5 days
W9.1	Performance	Self-lay application – written acknowledgements within target	5 days (Non-statutory)
W10.1	Performance	Self-lay new connection - quotations within target	28 days (Non-statutory)
W11.1	Performance	Self-lay <500 plots - written terms (quotations) within target	28 days (Non-statutory)
W12.1	Performance	Self-lay design >500 plots - written terms (quotations) within target	42 days (Non-statutory)
W12.1a	Information	Self-lay design >500 plots - % of written terms (quotations) extended by agreement	None
W13.1	Performance	Self-lay signed agreement - written acknowledgement of receipt	5 days (Non-statutory)
W14.1	Performance	Water provision for testing self-lay mains - within target	21 days (Non-statutory)
W14.1a	Information	Water provision for testing self-lay mains - within extended target	None
W15.1	Performance	Provision of permanent supply for self-lay mains – within target	14 days (Non-statutory)

END OF REPORT.