Irish Water

Performance Assessment:

Framework of reporting metrics

Decision Paper

Reference: CER/16/308  Date Published: 16/11/2016

Regulating Water, Energy and Energy Safety in the Public Interest
Executive Summary

The Commission for Energy Regulation (CER) is the independent economic regulator of Irish Water. As part of this role, the CER sets appropriate revenue allowances which Irish Water can recover in order to finance its regulated activities. As the single national utility responsible for public water and wastewater services Irish Water is tasked with operating, improving and investing in the systems in order to provide safe, reliable and high quality services to customers.

It is important that the CER ensures this revenue is spent appropriately to improve services. In this context, this paper outlines the framework of key performance metrics against which the CER will monitor Irish Water’s performance and progress over time. The framework for the performance assessment outlined in this paper is consistent with that used by water regulators in England and Wales, Scotland and Northern Ireland. The performance assessment will facilitate an evaluation of the utility’s performance over time and also ensure that transparent data on the utility’s performance becomes available to customers following the publication of performance data at agreed intervals.

The metrics cover customer service, environmental performance, quality of service for water supply, security of water supply and sewerage service. They have been put in place following a public consultation process undertaken by the CER, initiated on 06 July 2016. The suite of metrics which will be used for monitoring purposes are outlined in the below table.

<table>
<thead>
<tr>
<th>Irish Water Performance Assessment metrics:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Customer Service</strong></td>
</tr>
<tr>
<td>▪ Response to billing contacts;</td>
</tr>
<tr>
<td>▪ Response to complaints;</td>
</tr>
<tr>
<td>▪ Billing of metered customers;</td>
</tr>
<tr>
<td>▪ Ease of telephone contact: the call abandonment rate;</td>
</tr>
<tr>
<td>▪ Ease of telephone contact: a customer call-back survey;</td>
</tr>
<tr>
<td>▪ Ease of telephone contact: speed of telephone response;</td>
</tr>
<tr>
<td>▪ Ease of telephone contact: first contact referral;</td>
</tr>
<tr>
<td><strong>Environmental Performance</strong></td>
</tr>
<tr>
<td>▪ Pollution incidents relating to wastewater;</td>
</tr>
<tr>
<td>▪ Sludge disposal;</td>
</tr>
<tr>
<td>▪ Wastewater treatment works meeting requirements;</td>
</tr>
<tr>
<td><strong>Water Supply – Quality of Service</strong></td>
</tr>
<tr>
<td>▪ Properties subject to unplanned interruptions;</td>
</tr>
<tr>
<td>▪ Water quality;</td>
</tr>
<tr>
<td>▪ Water supplies on boil water notices and/or water restrictions;</td>
</tr>
<tr>
<td><strong>Security of Water Supply</strong></td>
</tr>
<tr>
<td>▪ Leakage;</td>
</tr>
<tr>
<td>▪ Security of supply – Absolute performance;</td>
</tr>
<tr>
<td>▪ Security of supply – Performance against target;</td>
</tr>
</tbody>
</table>
These metrics co-exist alongside other metrics or requirements which the CER has put in place in order to ensure Irish Water is providing appropriate service to customers. Other metrics include those outlined in the customer handbook which sets out standards to which Irish Water must comply in a wide range of areas including customer service commitments, complaint handling, billing and network operations.

Given that Irish Water has taken over responsibility for the public water and wastewater services from 34 (now 31) separate local authorities, gathering consistent data on a countrywide basis is a major task in itself. For many metrics it will take time for Irish Water to put appropriate systems and processes in place to measure those metrics robustly. For others, the utility has already begun monitoring and gathering data which will be provided to the CER for review and publication during 2017.

Next steps:

1. The CER will engage with Irish Water regarding target dates for provision, and then publication, of data on these metrics. It is envisaged that data will be published on an annual basis with more frequent publications where appropriate. Also, where data is not yet available on specific metrics, the CER intends to publish, on a six-monthly basis, a progress report regarding the collection of data on those metrics.

2. Where relevant, the CER will engage with Irish Water to ensure appropriate definitions and methodology are developed and that robust verifiable data is being provided. This process of engagement will include agreeing the specifics of metrics outlined at a high level in relevant sections of this paper.

3. Separately, the CER has recently consulted on proposed revenue allowances relating to Irish Water’s expenditure over the next two years on the public water and wastewater systems. Through that process the CER will decide whether to place financial incentives on Irish Water in relation to the metrics outlined in this paper.
Public/ Customer Impact Statement

Irish Water is a regulated utility responsible for the delivery of public water and wastewater services to customers. The CER, as independent economic regulator, sets the level of revenue it can earn in order to meet these responsibilities. For the next revenue control period, which covers the years 2017-2018, Irish Water will be allowed to recover revenue from customers and through Government subvention to finance its regulated activities. In order to ensure that Irish Water uses the revenue it receives in the best interests of its customers, the CER has initiated this framework for monitoring the utility’s performance, progress and efficiency across a wide range of metrics.

At present the billing of domestic customers has been suspended until at least 31 March 2017. However, as Ireland’s national water utility, Irish Water still has the responsibility for the development and delivery of water and wastewater services to homes and businesses. Whether domestic charges are in place or suspended, any property that is connected to and supplied by the public water main for water supply and/or connected to and uses the public sewer for wastewater removal is a customer of Irish Water and should expect a certain level of service.

Following a public consultation, this decision paper details the metrics against which the CER will monitor Irish Water’s performance going forward. This is to ensure that the utility targets service improvements, efficiency and effectiveness of water and wastewater service delivery to customers for revenues received. From a customer perspective the performance assessment serves two purposes. Firstly, it will inform Irish Water stakeholders of the current overall performance of the utility through appropriate quantifiable metrics. The performance assessment is aimed at providing a level of transparency as to how Irish Water is performing over time in a similar manner to utilities in other jurisdictions. Secondly, it will incentivise the utility to continually strive to improve their performance and maintain services as data gathered on available metrics will be published regularly by the CER. Domestic and non-domestic customers of Irish Water will realise the benefits of the performance assessment through:

- The delivery of continuous improvements in how Irish Water handles customer queries and complaints;
- The supply of clean, safe and reliable drinking water to customers;
- Improved compliance with the highest environmental standards as set out by the Environmental Protection Agency (EPA);
- A more robust security of supply of water to homes and businesses;
- Effective management of the wastewater system; and
- Scope for social and economic growth within communities in relation to water and wastewater services.
TABLE OF CONTENTS

EXECUTIVE SUMMARY ............................................................................................................. 1

PUBLIC/ CUSTOMER IMPACT STATEMENT ........................................................................... 3

GLOSSARY OF TERMS AND ABBREVIATIONS ..................................................................... 7

1. INTRODUCTION .................................................................................................................... 8
   1.1 THE COMMISSION FOR ENERGY REGULATION ......................................................... 8
   1.2 PURPOSE OF THIS PAPER ......................................................................................... 8
   1.3 LEGISLATIVE BASIS ..................................................................................................... 9
   1.4 STRUCTURE OF THIS PAPER ...................................................................................... 9

2. BACKGROUND AND CONTEXT ............................................................................................ 11
   2.1 INTRODUCTION ............................................................................................................ 11
   2.2 BACKGROUND ............................................................................................................. 11
   2.3 OVERALL PERFORMANCE ASSESSMENT: GENERAL ................................................ 12
   2.4 OVERALL PERFORMANCE ASSESSMENT: DETAIL .................................................... 14
   2.5 INCENTIVES / PENALTIES ............................................................................................ 15
   2.6 ELECTRICITY AND GAS IN IRELAND .......................................................................... 16
   2.7 SUBMISSIONS RECEIVED ............................................................................................ 16
   2.8 SUMMARY .................................................................................................................... 17

3. CUSTOMER SERVICE ............................................................................................................ 18
   3.1 INTRODUCTION ............................................................................................................ 18
   3.2 RESPONSE TO BILLING CONTACTS ........................................................................... 18
   3.3 RESPONSE TO COMPLAINTS ..................................................................................... 19
   3.4 BILLING OF METERED CUSTOMERS .......................................................................... 19
   3.5 EASE OF TELEPHONE CONTACT ............................................................................... 20
   3.6 SUMMARY .................................................................................................................... 22

4. ENVIRONMENTAL PERFORMANCE .................................................................................... 23
   4.1 INTRODUCTION ............................................................................................................ 23
   4.2 POLLUTION INCIDENTS RELATING TO WASTEWATER .............................................. 23
   4.3 SLUDGE DISPOSAL ....................................................................................................... 23

CER
Commission for Energy Regulation
An Oireachtas and Local Authority
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>Wastewater Treatment Works Meeting Requirements</td>
<td>24</td>
</tr>
<tr>
<td>4.5</td>
<td>Summary</td>
<td>24</td>
</tr>
<tr>
<td>5.</td>
<td>Water Supply – Quality of Service</td>
<td>26</td>
</tr>
<tr>
<td>5.1</td>
<td>Introduction</td>
<td>26</td>
</tr>
<tr>
<td>5.2</td>
<td>Properties Subject to Unplanned Interruptions</td>
<td>26</td>
</tr>
<tr>
<td>5.3</td>
<td>Water Quality</td>
<td>26</td>
</tr>
<tr>
<td>5.4</td>
<td>Water Supplies on Boil Water Notice and/or Water Restrictions</td>
<td>27</td>
</tr>
<tr>
<td>5.5</td>
<td>Summary</td>
<td>28</td>
</tr>
<tr>
<td>6.1</td>
<td>Introduction</td>
<td>29</td>
</tr>
<tr>
<td>6.2</td>
<td>Leakage</td>
<td>29</td>
</tr>
<tr>
<td>6.3</td>
<td>Security of Supply</td>
<td>30</td>
</tr>
<tr>
<td>6.4</td>
<td>Summary</td>
<td>30</td>
</tr>
<tr>
<td>7.</td>
<td>Sewerage Service</td>
<td>32</td>
</tr>
<tr>
<td>7.1</td>
<td>Introduction</td>
<td>32</td>
</tr>
<tr>
<td>7.2</td>
<td>Sewer Incidents (Overload)</td>
<td>32</td>
</tr>
<tr>
<td>7.3</td>
<td>Sewer Incidents (Other Causes)</td>
<td>33</td>
</tr>
<tr>
<td>7.4</td>
<td>Sewer Incidents (At Risk)</td>
<td>33</td>
</tr>
<tr>
<td>7.5</td>
<td>Summary</td>
<td>33</td>
</tr>
<tr>
<td>8.</td>
<td>Summary and Next Steps</td>
<td>35</td>
</tr>
<tr>
<td>8.1</td>
<td>Summary</td>
<td>35</td>
</tr>
<tr>
<td>8.2</td>
<td>Next Steps:</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td><strong>Appendix A: Customer Call-Back Survey</strong></td>
<td>37</td>
</tr>
<tr>
<td></td>
<td><strong>Appendix B: Environmental Impact Assessment Criteria</strong></td>
<td>38</td>
</tr>
<tr>
<td></td>
<td><strong>Appendix C: Response to Comments</strong></td>
<td>39</td>
</tr>
<tr>
<td>Abbreviation or Term</td>
<td>Definition or Meaning</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------</td>
<td></td>
</tr>
<tr>
<td>BWN</td>
<td>Boil Water Notice</td>
<td></td>
</tr>
<tr>
<td>CER</td>
<td>Commission for Energy Regulation</td>
<td></td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency</td>
<td></td>
</tr>
<tr>
<td>IRC2</td>
<td>Second revenue control for Irish Water covering the years 2017-2018</td>
<td></td>
</tr>
<tr>
<td>IVR</td>
<td>Interactive Voice Recognition</td>
<td></td>
</tr>
<tr>
<td>KPI</td>
<td>Key Performance Indicator</td>
<td></td>
</tr>
<tr>
<td>NIAUR</td>
<td>Northern Ireland Authority for Utility Regulation</td>
<td></td>
</tr>
<tr>
<td>ODI</td>
<td>Output Delivery Incentive</td>
<td></td>
</tr>
<tr>
<td>Ofwat</td>
<td>Economic regulator of the water sector in England and Wales</td>
<td></td>
</tr>
<tr>
<td>OPA</td>
<td>Overall Performance Assessment</td>
<td></td>
</tr>
<tr>
<td>RBMP</td>
<td>River Basin Management Plan</td>
<td></td>
</tr>
<tr>
<td>SIM</td>
<td>Service Incentive Mechanism</td>
<td></td>
</tr>
<tr>
<td>SoSI</td>
<td>Security of Supply Index</td>
<td></td>
</tr>
<tr>
<td>THM</td>
<td>Trihalomethanes</td>
<td></td>
</tr>
<tr>
<td>TSF</td>
<td>Telephone Service Factor</td>
<td></td>
</tr>
<tr>
<td>WICS</td>
<td>Water Industry Commission for Scotland</td>
<td></td>
</tr>
<tr>
<td>WR</td>
<td>Water Restriction</td>
<td></td>
</tr>
<tr>
<td>WSZ</td>
<td>Water Supply Zone</td>
<td></td>
</tr>
</tbody>
</table>
1. Introduction

1.1 The Commission for Energy Regulation

The Commission for Energy Regulation (CER) is Ireland’s independent energy and water regulator. The CER was established in 1999 and has a wide range of economic, customer protection and safety responsibilities in the energy and water sectors.

The CER’s primary economic responsibilities in energy cover electricity generation, electricity and gas networks, and electricity and gas supply activities. The overall aim of the CER’s energy economic role is to protect the interests of energy customers. The CER has an important related function in customer protection by resolving complaints that customers have with energy companies.

The CER’s core focus in safety is to protect lives and property across a range of areas in the energy sector. This includes safety regulation of electrical contractors, gas installers and gas pipelines. In addition the CER is the safety regulator of upstream petroleum safety extraction and exploration activities, including on-shore and off-shore gas and oil.

In 2014, the CER was appointed as the economic regulator of Irish Water, the national utility for the provision of public water and wastewater services. The CER’s role is to protect the interests of water and wastewater customers, ensure water services are delivered in a safe, secure and sustainable manner and that Irish Water operates in an economic and efficient manner in the delivery of water and wastewater services to customers.

Further information on the CER’s role and relevant legislation can be found on the CER’s website at www.cer.ie.

1.2 Purpose of this Paper

The purpose of this paper is to outline the CER’s decision with regard to the framework of key metrics against which it will monitor Irish Water. This facilitates an assessment of the utility’s performance over time. The CER will publish the information gathered on an annual basis with more frequent publications where appropriate. Also, where data is not yet available on specific metrics, the CER intends to publish, on a six-monthly basis, a progress report regarding the collection of data on those metrics.

This decision follows on from a public consultation process. The CER has considered all submissions received as part of that process prior to finalising this decision.
1.3 Legislative Basis

Under Sections 39 to 43 of the Water Services (No. 2) Act 2013 ("the Act"), the CER is tasked with the economic regulation of Irish Water. Those sections of the Act set out the functions and powers of the CER as the independent economic regulator of Irish Water. The CER’s role is to protect the interests of water customers, ensure public water services are delivered in a safe, secure and sustainable manner and that Irish Water operates in an economic and efficient manner.

Section 22 of the Act provides information on the approval of a Water Charges Plan (WCP) for the delivery of water and wastewater services, following submission of the WCP from Irish Water to the CER. That section outlines that, in doing so, the CER would have regard to the costs likely to be incurred by Irish Water in the performance of its functions.

The Water Services Act 2013, Section 27, states that the CER may do all such things as may be necessary or expedient for the purposes of the performance by it of water regulatory functions. Therefore, following precedents set by regulators in other jurisdictions the CER has put in place a framework of metrics to monitor key aspects of Irish Water performance over time.

This decision paper outlines metrics which allow the CER to ensure that the revenue allowances it sets for Irish Water (under the WCP) are being spent appropriately to improve service to customers.

1.4 Structure of this Paper

The structure of this decision paper is outlined in this section.

- **Section 1.** details background information on the CER and the context for this paper;
- **Section 2.** details the background to the performance assessment and the monitoring processes in other jurisdictions;
- **Section 3.** outlines the metrics that the CER will monitor Irish Water’s performance on with regard to customer service;
- **Section 4.** outlines the metrics that the CER will monitor Irish Water’s performance on with regard to environmental performance;
- **Section 5.** outlines the metrics that the CER will monitor Irish Water’s performance on with regard to the quality of water supply;
- **Section 6.** outlines the metrics that the CER will monitor Irish Water’s performance on with regard to the security of water supply;
- **Section 7.** outlines the metrics that the CER will monitor Irish Water’s performance on with regard to sewerage service; and
- **Section 8.** provides a conclusion and outlines the next steps.

The CER has also published three responses received following the consultation on this matter alongside this paper. Please see Section 2.8 and Appendix C for details.
2. Background and context

2.1 Introduction

This section provides context to the approach which the CER will use to monitor Irish Water’s performance:

- Section 2.2 provides general background information. It also covers the rationale for putting performance metrics in place.
- Section 2.3 provides information on an approach known as the Overall Performance Assessment, or OPA, which was developed to monitor the performance of utilities in other jurisdictions.
- Section 2.4 provides more detailed information on the OPA in England and Wales, Scotland and Northern Ireland.
- Section 2.5 provides information on a monitoring approach which is now in place in England and Wales.
- Section 2.6 provides information on how Irish Water could be incentivised to improve its performance relative to the metrics outlined by the CER in this decision paper.
- Section 2.7 provides information on the approach taken for energy networks in Ireland.

Each of these are discussed in turn below. The individual metrics are then discussed in Sections 3 to 7 of this decision paper.

2.2 Background

Irish Water was established as the single national body responsible for public water and wastewater services in early 2013. This work was previously carried out by 34 (now 31) local authorities. A significant amount of work is still carried out by those local authorities on behalf of Irish Water through Service Level Agreements.

The CER is the economic regulator of Irish Water, while the Environmental Protection Agency (EPA) regulates the utility from an environmental perspective. The CER and the EPA work closely in the interest of the public to ensure effective and transparent regulation is in place from both an economic and environmental perspective.

The CER, as economic regulator, sets appropriate revenue allowances which the utility spends on operating and improving the public water and wastewater systems in Ireland. It is important that the CER ensures this revenue is spent appropriately to improve services. For this reason the CER previously outlined its intention to put in place a set of performance metrics against
which it would monitor Irish Water’s performance\(^1\). This approach was consistent with that used by water regulators in neighbouring jurisdictions. It facilitates an assessment of the utility’s performance and also ensures that transparent data on the utility’s performance is available to customers over time.

The CER reviewed approaches for monitoring performance used in neighbouring jurisdictions and the Irish energy sector, and also engaged with the EPA and Irish Water, prior to publishing its proposals for public consultation on 06 July 2016. Following consideration of all submissions received, the CER is now publishing its decision on the framework of metrics against which it will monitor Irish Water’s performance.

It is important to note that the metrics outlined in this decision paper are not the only way in which the CER monitors Irish Water. Other metrics include those within the customer handbook\(^2\) which was put in place by the CER and sets out standards to which Irish Water must comply. The handbook covers a wide range of areas including customer service commitments, complaint handling, billing and network operations. The metrics outlined in this decision paper co-exist alongside the customer handbook as a means of monitoring Irish Water’s performance.

### 2.3 Overall Performance Assessment: general

#### 2.3.1 Regulators and Utilities

Water regulators presiding over utilities in England and Wales, Scotland and Northern Ireland have all, at various stages of development, adopted a method of performance monitoring known as the Overall Performance Assessment (OPA). The OPA is a quantitative suite of metrics against which data is gathered, assessed and converted into an overall score. This score can be used by both regulators and utility stakeholders to benchmark individual utility performance against others.

Each of the three water regulators with responsibility for the water and wastewater services in the UK have been regulating established water utilities for many years;

- Ofwat, the water regulator for England and Wales, has been in operation since 1989 following ownership change and the introduction of incentive based regulation.

- The Water Industry Commission for Scotland has had the responsibility of regulating the water and sewerage services since 2005. Prior to 2005, the sector was regulated by the Water Industry Commissioner.

\(^1\) This was outlined within a previous CER decision (CER/14/454) which is available [here](#).

\(^2\) The Irish Water Customer Handbook (CER/15/010) can be found [here](#).
− The Northern Ireland Authority for Utility Regulation took on the responsibility of regulating the water and wastewater standards of service since 2007 and took on further responsibilities in 2010.

Over time, both regulators and utilities across the UK became well established in terms of data collection and standard of services. Any model of performance measurement adopted by the CER has to consider Irish Water’s stage of development and the relevant standards and regulations in Ireland as opposed to the UK or any other jurisdiction.

### 2.3.2 Detail on original Ofwat OPA

Developed by Ofwat (the economic regulator of the water sector in England and Wales) in 1999, the purpose of the OPA was to provide a defined set of measurable, observable output measures against which to measure customer service levels. It also acted as a communication tool for customers and other stakeholders to inform them about the overall performance of their local water company compared with other water companies.

The OPA consisted of 17 metrics covering a broad range of services provided to customers. The key areas are:

- Customer service (written complaints, billing contacts, meter reading, telephone answering, telephone access);
- Sewerage service (sewer flooding incidents and risk of flooding);
- Water supply (leakage, water pressure, interruptions to supply, hosepipe bans and drinking water quality);
- Security of supply (absolute performance and performance against a set target); and
- Environmental performance (wastewater treatment works, pollution incidents from water and sewerage activities and sludge disposal).

Each metric was monitored and data collected and reported to the regulator on a regular basis. For benchmarking purposes, an overall OPA score was generated. The better the performance a company achieved, the higher the score it received.

In England and Wales, the OPA provided an incentive to utilities to maintain services and where possible improve on OPA scores from the previous year. Not only did the OPA act as a reputational incentive i.e. OPA scores were published and available to customers to view, but it was also linked to the unit prices that the companies were allowed to charge for their service. A company that provided good service was allowed to charge customers slightly more than it could have otherwise done, while a company providing poorer service had to charge less. Given the greater number of water and wastewater utilities across England and Wales, the OPA allowed customers assess how well each utility performed against one another in each category.
by comparing OPA scores. Similarly Ofwat used OPA scores to benchmark companies against each other in order to drive further performance improvements in utilities at the lower end of the scale.

The CER has considered how to put in place an appropriate system for Ireland in order to monitor metrics over time. While the CER will monitor metrics which are similar to those covered by the OPA in other jurisdictions, because the metrics are altered to align with reporting requirements currently in place in Ireland a fully complete OPA score may not be achievable. However, for benchmarking purposes it may be useful to, where possible, add up metrics and provide a composite and comparative score to compare performance to Northern Ireland, Scotland, England and Wales. This may be done on either an individual metric level or on a partially complete overall OPA score level.

### 2.4 Overall Performance Assessment: detail

A brief synopsis of the OPA in each jurisdiction is given below.

#### 2.4.1 England and Wales

The OPA system was in place for utilities in England and Wales until 2009 when it was replaced by a new Service Incentive Mechanism (SIM) framework. The SIM focuses on the quality of service rather than simply reliability and response times. Alongside this, the utilities are also expected to report on a wider set of KPIs (key performance indicators).

Following a review of utility performance it was felt that the OPA had reached its limits i.e. companies had converged in reaching acceptable levels across all of the performance areas. Therefore, Ofwat changed its approach by putting in place a SIM framework and individual KPIs which have been in place now for over 5 years.

The SIM measures two aspects of customer service:

- Where customers have made contact when something has gone wrong – for example, phoning about a billing error or writing to the company to complain; and
- How well the companies have handled all types of customer contacts, not just when things have gone wrong (measured using a customer survey).

While the SIM focuses solely on customer service measures, utilities are also required to report to the regulator on a number of KPIs. Ofwat introduced “Output Delivery Incentives” or ODIs which replicate many of the OPA measures. While these ODIs include factors such as greenhouse gas emissions and financial indicators of the business they also include many of the
same metrics as the OPA such as leakage performance, pollution incidents and security of supply.

2.4.2 Scotland

The Water Industry Commission for Scotland (WICS) adopted the Ofwat OPA framework in 2006, but reported on a partial set of OPA measures from 2003/04. Initially only twelve metrics were included. This has grown to a full set of metrics although it was necessary to alter some metrics slightly from the Ofwat model in order to reflect local circumstances.

As the OPA was discontinued in England and Wales in 2009, benchmarking comparisons between Scottish Water and utilities in England and Wales are calculated using Ofwat ‘frozen-in-time’ data i.e. 2009 OPA scores.

2.4.3 Northern Ireland

The Northern Ireland Authority for Utility Regulation (NIAUR) adopted the OPA in 2007. Similar to Scotland, some metrics were initially excluded due to absent, unavailable, or poor quality base data. Since 2007, the NI OPA has grown to include 11 of the original 17 metrics used by Ofwat.

As per what is done in Scotland, benchmarking comparisons of OPA scores for Northern Ireland Water against England and Wales are derived using 2009 Ofwat OPA scores.

2.5 Incentives / penalties

Incentives are an important area of regulation for monopoly utilities. Identification and monitoring of performance against a measureable target is a useful tool when assessing progress achieved for monies spent in utility regulation. Incentives are intended to align the interests of the regulated companies with those of their domestic and non-domestic customers, by encouraging organisations to deliver an appropriate level of service. In order to ensure that Irish Water’s allowed revenues impose a genuine efficiency challenge, it is important to set clear and observable customer services levels such that Irish Water’s expenditure can be measured against a defined and tangible set of improvements for customers.

For the purpose of the metrics outlined below, there can be two types of incentives against the finalised metrics. These can either be reputational incentives, where performance against key metrics is published, or financial incentives/penalties. For financial incentives, if the utility achieves above a certain target set by the CER, it could receive additional allowed revenue in the following year. Alternatively, if the utility falls below a certain target set by the CER, penalties (i.e. a reduction in the following year’s allowed annual revenue) could be implemented.
The CER has recently consulted on proposed revenue allowances relating to Irish Water’s expenditure over the next two years on the water and wastewater systems. Through this consultation and decision process the CER will decide whether to place financial incentives on Irish Water in relation to the metrics outlined in this paper. If financial incentives were put in place as part of a revenue control process, any exemptions to those financial incentives would also be decided as part of that process.

### 2.6 Electricity and Gas in Ireland

Some of the metrics outlined in this decision paper are similar to those monitored by the CER for the energy sector in Ireland. This means that the CER will be able to compare performance across these sectors where appropriate. This is especially true for customer service metrics relating to call centres, complaints, etc.

For information, the metrics against which the CER monitors ESB Networks are outlined in the CER decision paper, CER/10/198.

The metrics against which the CER will (and/or currently does) monitor Gas Networks Ireland were recently consulted on by the CER. The CER will be developing this further over the coming months.

### 2.7 Submissions received

The CER received five submissions to the consultation paper on this subject, published 06 July 2016. Two of those submissions related to specific points which were not directly related to the topic covered by the consultation.

The remaining three were provided by:

- The EPA;
- The Public Water Forum; and,
- Irish Water.

These submissions are discussed further in Appendix C of this decision paper. The CER’s response to the issues raised is also provided in that Appendix.

---

3 That separate consultation, CER /16/167, is available [here](#). A decision will be published later in 2016.

4 For example, similar to those in place for ESB Networks where it can request that certain periods can be excluded from certain incentives e.g. severe storms that impact on the service provided by the utility.

5 CER/10/198 is available [here](#).

6 That consultation paper, CER/16/243, is available [here](#).
2.8 Summary

This paper outlines key performance metrics against which the CER will monitor Irish Water. The approach outlined in this paper is consistent with that used by water regulators in neighbouring jurisdictions. It facilitates an assessment of the utility's performance and also ensures that transparent data on the utility's performance is available to customers.

The individual metrics are covered in each of the following sections:

- Section 3: Customer Service
- Section 4: Environmental Performance
- Section 5: Water Supply – Quality of Service
- Section 6: Security of Water Supply
- Section 7: Sewerage Service

The intention is to monitor Irish Water’s performance against these metrics to ensure the revenue allowances set by the CER are spent appropriately by Irish Water to improve services.

Where possible, the CER has outlined metrics which will facilitate comparison with utilities in other jurisdictions and Ireland.
3. Customer Service

3.1 Introduction

This section outlines key metrics relating to customer service against which the CER has decided to monitor Irish Water’s performance. Monitoring this type of data aims to improve the service provided to customers when dealing with communications, complaints, queries, etc. Over time, by monitoring and gathering the data detailed below, Irish Water will be in a position to pinpoint specific areas within their customer service performance to target and improve upon. In Irish Water’s Water Service Strategic Plan\(^7\) the utility aspires to “deliver a consistent, functional and ultimately satisfying customer communication experience”.

While the metrics listed below are intended to monitor Irish Water’s customer service performance over time, the CER also has a customer handbook in place that sets out the required customer service standards that the utility must uphold. The customer handbook outlines Irish Water’s requirements for its codes of practice including customer service commitments, complaint handling, billing and network operations. The customer handbook will co-exist alongside the performance assessment as a means of protecting the customer on a day-to-day basis.\(^8\)

For Irish Water, currently all calls go immediately into the Interactive Voice Recognition (IVR) system and are then successfully completed, abandoned within the IVR or go into a queue to speak to an agent. For the metrics listed below it may not be possible to monitor calls that are closed within the IVR, as it may not be possible to determine whether these have been successfully resolved or abandoned.

3.2 Response to billing contacts

The CER will monitor the number of billing contacts answered and closed out within five working days as a percentage of billing contacts received.

Billing contacts are contacts from customers (domestic and non-domestic where and when charges apply) that relate to bills, for example, regarding making a payment or changing billings details, etc. They do not include contacts from customers which are complaints, as these are covered in Section 3.3 below.

---

\(^7\) The Water Services Strategic Plan can be found on the Irish Water website [here](https://www.irishwater.ie/).

\(^8\) The CER is also responsible for individual complaints. Customers can submit complaints to the CER once they have been through the Irish Water complaint handling process. Further information is available on the CER website [here](https://www.cer.ie/).
The CER is aware that at present the billing of domestic customers has been suspended until at least 31 March 2017. However, this metric will apply to non-domestic customers following the completion of the billing migration project in 2017 when Irish Water bill non-domestic customers directly, as opposed to local authorities billing on Irish Water’s behalf.

Monitoring this metric will facilitate improvements in customer satisfaction through quicker response times when customers contact Irish Water.

### 3.3 Response to complaints

The CER will monitor the number of complaints:

- responded to within five working days, with either a resolution or an outline plan of the proposed resolution; and,
- to which a final decision is issued within two months.

These metrics line up with the requirements under the customer handbook and Irish Water’s customer charter which was approved by the CER\(^9\) (five working days) and is generally in line with metrics for which data is available for water utilities in England & Wales, Scotland and Northern Ireland (10 working days).

Irish Water currently categorises each complaint by the channel received (phone, post, email, social media, etc.). The CER will monitor the total number of complaints broken down by channel received.

### 3.4 Billing of metered customers

In general, customers (domestic and non-domestic) that have meters installed should receive bills that are based on a meter read as opposed to an estimated bill. Bills based on meter reads ensure that customers are billed accurately. Accurate bills reduce the fluctuations that customers are subject to when bills are based on estimated consumption.

Irish Water cannot issue a bill based on a meter read if the customer does not have a meter. Therefore the CER will monitor the number of bills based on a meter reading as a percentage of metered accounts.

---

\(^9\) The Irish Water Customer Handbook (CER/15/010) can be found [here](#).
3.5 Ease of telephone contact

3.5.1 Call abandonment rate

The CER will measure the percentage of calls that are abandoned while a caller is waiting in the queue to speak to an agent having been directed through the IVR system.

This metric is designed to shorten the length of time the customer spends in the queue waiting to speak to an agent.

This metric will apply under all conditions (i.e. periods of high volume of calls to call centre) to ensure that Irish Water is always incentivised to improve performance.

3.5.2 Customer call-back survey

The CER will monitor Irish Water’s performance in a survey conducted by an independent research company\(^{10}\) engaged by Irish Water. Monitoring this type of metric will give the CER a clear view of how Irish Water operates its call centre in terms of helpfulness and efficiency from a customer perspective.

In order to efficiently monitor performance the CER will ensure:

- That an appropriate number of call-backs are completed (so that results taken from the sample are representative).
- That the calls are selected randomly; subject to the (reasonable) inclusion of calls by:
  - time of day when call was made (morning, afternoon, evening, night);
  - purpose of call (for example, supply problem, meter reading); or,
  - handling of call (on-call resolution, requiring referral).

3.5.3 Speed of telephone response

Two separate Telephone Service Factor (TSF) metrics will be monitored for this element of Irish Water’s customer satisfaction incentive mechanism. Method 1 is intended to improve the time taken to pick up calls that are in the queue. Method 2 is intended to improve the quality of service in the IVR system. They are defined as in turn below:

\(^{10}\) As listed in Appendix A
TSF Method 1

Calls picked up by agent within 20 secs in queue
-------------------------------
Total number of calls

Points of note for TSF Method 1 are as follows:

- Calls picked up by an agent within 20 seconds in the queue result in an increased score under this metric.
- It encourages the utility to reduce the number of calls that have to wait for more than 20 seconds in the queue to speak to an agent.
- It does not look at the service within the IVR (which takes place separate to or in advance of the queuing system).

TSF Method 2

Picked up by IVR and do not progress to queue + Picked up by agent within 20 secs in queue
---------------------------------------------------------------
Total number of calls

Points of note for TSF Method 2 are as follows:

- This metric looks at both time in the queue and the service within the IVR.
- Calls that are picked up by IVR and which do not progress to the queue automatically contribute to an increased score under this metric.
- This encourages the utility to increase the number of calls that are dealt with through IVR and to make the IVR more customer-friendly (otherwise the customers are likely to ultimately end up in the queue and increased resources would be required to ensure the increased number of calls in the queue are picked up within the required 20 seconds).
- Calls picked up by an agent within 20 seconds in the queue also result in an increased score under this metric.
- Including this second element also incentivises the utility in relation to IVR, as if less calls go through to the queue then it will be easier to answer them within 20 seconds.

These two methods are similar to what is in place for the electricity distribution system operator in Ireland. Having similar metrics will assist comparisons between the utilities. While each utility deal with separate issues and are at a different stage of development, it may be of benefit to benchmark Irish Water against other Irish utilities where appropriate.
3.5.4 First contact referral

The CER will monitor the percentage of calls that are dealt with within one call, that is, without Irish Water needing to call the customer back.

This is intended to improve the experience for customers and also contribute to operational efficiencies within the business.

3.6 Summary

This section outlines key metrics relating to customer service against which the CER will monitor Irish Water’s performance. The aim of this performance assessment in relation to customer service is to, over time, promote and provide for continually improving customer satisfaction through outcomes such as quicker response times. The CER expects Irish Water to provide a consistent level of service that is appropriate and functional when dealing with queries and complaints in a manner expected of a professional, modern and efficient utility.

Monitoring these metrics will allow the CER to ensure that the revenue allowances set by the CER are spent appropriately by Irish Water to improve services.

Summary of metrics:

As part of this performance assessment the CER will monitor Irish Water’s performance against the following customer service metrics:

- Response to billing contacts;
- Response to complaints;
- Billing of metered customers;
- Ease of telephone contact: the call abandonment rate;
- Ease of telephone contact: a customer call-back survey;
- Ease of telephone contact: speed of telephone response;
- Ease of telephone contact: first contact referral.
4. **Environmental Performance**

4.1 **Introduction**

This section outlines key metrics relating to environmental performance against which the CER will monitor Irish Water.

Where possible the CER has chosen metrics which will facilitate comparison with utilities in other jurisdictions. However, given that Irish Water is required to report to the EPA on environmental matters, the CER has tailored some of the metrics to align with environmental regulations in Ireland and reporting requirements already in place. Following this decision, the CER will engage with both Irish Water and the EPA to finalise the exemptions, categories of incidents to be covered, definitions, etc.

4.2 **Pollution incidents relating to wastewater**

The CER will monitor the number of pollution incidents resulting from wastewater collection and treatment activities.\(^\text{11}\)

This metric is designed to assist the CER in ensuring that Irish Water utilises the revenue it receives to deliver solutions and infrastructure that over time lead to a reduction in pollution incidents relating to wastewater collection or treatment activities.

Under the EPA Wastewater Discharge Licences and Certificates of Authorisation, there are requirements on Irish Water to report to the EPA on the number of pollution incidents resulting from wastewater collection and treatment activities. The metrics chosen by the CER align with this requirement and have been discussed with the EPA.

The CER will also monitor the number of recurring incidents (which reflect longer term issues) closed out within this metric. This metric aligns with current EPA incident monitoring.

4.3 **Sludge disposal**

The CER will monitor the percentage of drinking water and wastewater sludge that is disposed of in an unsatisfactory manner.

---

\(^{11}\) Broken down by category (as listed in Appendix B).
Wastewater sludge is residue that remains following the treatment of wastewater. Inappropriate disposal of this residue could cause harmful environmental impacts. It requires safe disposal or re-use where possible. Drinking water sludge arises from the treatment of water, particularly surface water, to remove solids and other dissolved organic material. The sludge is different to wastewater sludge in that it has no nutrient value and must therefore be managed differently.

This metric is designed to assist the CER in ensuring that Irish Water utilises the revenue it receives to invest in appropriate assets and facilities to aid the management of high volumes of sludges and to operate in a manner that ensures that sludge is disposed of appropriately.

The CER is aware that Irish Water has recently published its National Wastewater Sludge Management Plan which sets out Irish Water’s strategies for wastewater sludge management over the next 25 years. Also in development is a National Water Treatment Plant Sludge Management Plan which will aim to reduce the environmental impacts from water treatment processes. The CER intends to engage with Irish Water during the implementation of these plans in order to put in place appropriate verifiable metrics in relation to water and wastewater sludge disposal.

### 4.4 Wastewater treatment works meeting requirements

The CER will monitor the total number of:

- Agglomerations with no wastewater treatment or preliminary treatment only;
- Agglomerations not meeting the Urban Wastewater Treatment Directive standards.

Monitoring these will assist the CER in ensuring that Irish Water uses the revenue it receives to deliver improvements and increased compliance with European and Irish law while providing appropriate service to customers. By complying with environmental regulations, this ensures that Irish Water is carrying out its duties in the safest and least environmentally harmful way.

### 4.5 Summary

This section outlines key metrics relating to environmental performance against which the CER will monitor Irish Water’s performance for monies spent.

---

12 Further information on the National Sludge Wastewater Management Plan is available on Irish Water’s website here.
The metrics outlined above are all metrics that are dealt with and monitored by the environmental regulator, the EPA. The EPA impose reporting requirements on Irish Water to ensure that the utility is maintaining environmental standards and complying with Irish and EU regulations regarding the environment as it carries out its duties.

The CER’s role in terms of monitoring environmental metrics is to ensure that money recovered by Irish Water, through customer charges and government subvention, is spent in a way which maintains or ensures a clean environment for the future.

**Summary of metrics:**

As part of this performance assessment the CER will monitor Irish Water’s performance against the following environmental performance metrics:

- Pollution incidents relating to wastewater;
- Sludge disposal;
- Wastewater treatment works meeting requirements.
5. Water supply – Quality of service

5.1 Introduction

This section outlines key metrics relating to water supply against which the CER will monitor Irish Water’s performance. It focuses on matters which impact on the standard of the supply (pressure and interruptions) experienced by customers and the quality of the water which they receive. Clean and reliable water supplies are essential to public health and safety and therefore must be monitored and maintained to high standards as set out in Irish and European law.

This decision allows the CER to monitor metrics which will facilitate comparison with utilities in other jurisdictions. However, given the EPA’s role as the environmental regulator of Irish Water and the fact that Irish Water is required to report to the EPA on environmental matters, the CER has tailored some of the metrics to align with environmental regulations in Ireland and reporting requirements already in place.

5.2 Properties subject to unplanned interruptions

The CER will monitor the number of properties experiencing unplanned interruptions to their supply in excess of 4, 12 and 24 hours.

The time periods used for monitoring purposes within this metric align with the requirements within the customer handbook under which Irish Water must carry out certain actions following incidents of interruptions to water supply. For this reason the time periods outlined do not align exactly with those utilised in other jurisdictions.

Monitoring this metric alongside the customer handbook will assist the CER in ensuring that Irish Water operates in a manner that reduces the number of interruptions to customers’ water supply. Unfortunately some supply interruptions are inevitable (i.e. planned interruptions and force majeure) but by monitoring Irish Water’s performance and progress over time, unplanned interruptions can be minimised.

5.3 Water quality

Safe and clean drinking water supplied to homes and businesses requires the abstraction, treatment, storage and delivery of millions of litres of water a day. The risk of contamination is mitigated by rigorous monitoring and testing of water samples along its journey from source to  

---

14 All requirements under the Customer Handbook are monitored separately by the CER.
tap. Irish Water has the responsibility of monitoring all public water supplies. The EPA produces an annual Drinking Water Report based on these results. From a performance assessment perspective the CER has chosen to monitor two high level overall compliance metrics and three specific metrics that are of concern to Irish Water customers at present.

The CER will monitor the level of:

- Percentage microbiologic compliance - the sum of all compliant test results for E. coli and Enterococci divided by the sum of all test results undertaken for E. coli and Enterococci.
- Percentage chemical compliance - The sum of all compliant test results for all chemical parameters (as defined in Drinking Water Regulations) divided by the sum of all test results undertaken for all chemical parameters.
- Percentage Trihalomethane (THM) compliance\(^{15}\) - The sum of all compliant test results for the THM parameter divided by the sum of all test results undertaken for the THM parameter.
- Percentage lead compliance\(^{15}\) - The sum of all compliant test results for the lead parameters divided by the sum of all test results undertaken for the lead parameter.
- Percentage E. coli compliance\(^{16}\) - The sum of all compliant test results for the E. coli parameter divided by the sum of all test results undertaken for the E. coli parameter.

The above parameters are included amongst the 48 parameters specified in the *European Union (Drinking Water) Regulations (S.I No. 122 of 2014)*, which Irish Water is required to monitor in public water supplies and report to the EPA. The EPA Drinking Water Reports include information on the above parameters, alongside many others. Monitoring these metrics rather than creating new ones will avoid increasing the regulatory burden on Irish Water.

### 5.4 Water supplies on boil water notice and/or water restrictions

The CER will monitor:

- The number of public supplies on Boil Water Notices\(^{17}\) (BWNs) for greater than 200 days;

\(^{15}\) Note that THMs, lead & pesticides are a sub-set of metric No. 2 above – chemical compliance.

\(^{16}\) Note that E.coli is a sub-set of metric No. 1 above – microbiological compliance.

\(^{17}\) BWNs are notices which the HSE recommends that Irish Water issues when the HSE considers the quality of water intended for human consumption constitutes a potential danger to human health.
- The number for public supplies on Water Restrictions (WRs); and,
- The population served by public supplies on BWNs and WRs.

The 200 days outlined above align with commitments under the Irish Water business plan. In the future the CER may decide to monitor BWNs in place for a shorter period of time.

The CER may also consider an amalgamation of the measures above when publishing data in this area. For example, this data could be combined into a single indicator which would be used to compare the average number of people on a BWN/WR in a standardised manner year on year.

### 5.5 Summary

The metrics within this section are of utmost importance to public health and safety. Monitoring Irish Water’s performance in these areas over time will help to reduce the number of customers receiving poor quality water services that are not acceptable to the customer. One of the aims of monitoring and reporting on this data is to ensure that all customers receive a reliable and clean supply of drinking water to their home or business.

#### Summary of metrics:

As part of this performance assessment the CER will monitor Irish Water’s performance against the following quality of water supply metrics:

- Properties subject to unplanned interruptions;
- Water quality;
- Water supplies on boil water notices and/or water restrictions.

6.1 Introduction

This section outlines key metrics relating to the security of water supply to customers against which the CER will monitor Irish Water’s performance over time.

In Ireland, while water sources may not be in short supply, the delivery of clean, safe and secure water to homes and businesses around the country can be challenging. Many years of underinvestment in the water and wastewater services have compromised the reliability and security of the water network. Ageing and unsuitable infrastructure, alongside the lack of standby water supplies in densely populated areas, have the potential to impact on the security of the water supply that Irish Water provide to homes and businesses.

Irish Water is continuing to target areas which pose a threat to water supply within its business plan and has committed to replacing and maintaining infrastructure where issues have been identified. Alongside this, the CER will monitor Irish Water’s performance against specific metrics to ensure that Irish Water is utilising the revenue it receives so that improvements in security of supply can be seen over time.

By addressing security of water supply issues early on in the development of the water sector, it will facilitate the assessment of water resources, leakage rates and supply demand management across the network.

6.2 Leakage

The CER will monitor leakage rates relating to the Irish Water network.

Currently it is estimated that up to 47% of treated water is not used by customers but instead leaks from the distribution system, either across the Irish Water network or within customers’ properties. While this figure is based on estimates, it indicates that there is a high level of wastage in this area.

Within its business plan, Irish Water has committed to reducing leaking rates to below 38% by 2021 with the overall goal of reaching a sustainable economic level of leakage by 2040. An economic level of leakage is the balance between the costs of fixing leaks against the value of water saved i.e. it is unachievable for any water utility to eliminate leakage completely from its network.
Monitoring this area will assist the CER in ensuring that water sources are conserved and that revenue is not spent treating large quantities of water that are ultimately leaked and not used by customers.

Following this decision the CER will engage with Irish Water regarding the specifics of this metric (for example, whether the leakage rates monitored should relate to Irish Water’s network only or should also encompass some measurement relating to leakage on the customers’ side of the network).

6.3 **Security of Supply**

In other jurisdictions a Security of Supply Index (SoSI) assists in assessing water resource availability and leakage issues within a wider security of supply context, and to track changes in the service offered to customers over time. A SoSI is an indicator of the extent to which a utility is able to guarantee to provide its planned level of service. The index gives an indication of the available headroom (and the target headroom) in each water supply zone.

Headroom is the difference between the amount of water the utility can supply and the expected amount of water to be distributed to meet demand. Target headroom is the minimum amount of headroom that is needed in each water supply zone to meet demand, taking supply and demand uncertainties into account. This spare capacity on the system is used in the event of emergencies, planned maintenance or unplanned incidents such as equipment failures.

Having a SoSI in place will assist in ensuring the resilience of water supplies as it will help indicate areas under pressure which can then be targeted in advance.

The CER will monitor:

- An overall Security of Supply Index and the changes in this SoSI over time; and
- An assessment of how the SoSI performance compares to a target (which is agreed in advance).

The CER will engage with Irish Water regarding its development of an index which facilitates reporting on these metrics.

6.4 **Summary**

In summary, the CER will monitor three metrics regarding the security of supply for customers of Irish Water.
Metrics within this section may be monitored on a country wide basis as well as per each water supply zone (WSZ). This will facilitate an analysis of Irish Water’s performance over time and relative to other comparable utilities.

**Summary of metrics:**

As part of this performance assessment the CER will monitor Irish Water’s performance against the following security of water supply metrics:

- Leakage;
- Security of Supply – Absolute performance;
- Security of Supply – Performance against target.

The high level outline of each metric has been outlined above. The CER will engage with Irish Water following publication of this decision to agree, in more detail, the specifics of each metric.
7. **Sewerage service**

7.1 **Introduction**

This section outlines key metrics relating to sewerage service against which the CER will monitor Irish Water. It focuses on incidents which impact on the customer where wastewater enters a building. Many areas of the network at present do not have the capacity to cope with either actual effluent load or large volumes of water as the result of heavy rainfall. Ageing networks and unsuitable infrastructure mean that wastewater in some areas is not treated to an acceptable standard before being discharged back into the environment. Monitoring and reporting on the metrics outlined below will help to bring the wastewater treatment plants and network up to a standard where they can be operated correctly, safely and efficiently.

The metrics outlined below are in respect of both domestic and non-domestic properties. It is intended that properties which are normally occupied and used for residential, public, commercial, business or industrial purposes will be monitored.

Data gathered through these metrics will help identify areas of the sewerage network that need maintenance and/or replacement in order to mitigate against flooding incidents. Over time, this data will assist Irish Water in its duties in improving and maintaining the system so that it is capable of coping with drainage requirements and can effectively handle sewer loads in each area. The CER may exclude those incidents resulting from severe weather as exceptional circumstances.

7.2 **Sewer incidents (overload)**

The CER will monitor the number of properties affected by incidents where wastewater enters a building due to the overload of a sewer.

Sewers and drains are designed to take sewage away from properties. A large portion of the urban sewer network in Ireland combines both wastewater and surface water which has run off

---

18 Or passes below a suspended floor.
19 The metrics in this section relate to incidents of internal flooding. However, the CER may examine whether external incidents (i.e. gardens, roads, footpaths, public open space etc.) should be monitored by the CER, either in addition to internal incidents or as a combined metric of both.
from roads, footpaths, roofs of buildings etc. Adverse weather conditions can cause internal flooding incidents due to excess rain overloading combined sewers.

### 7.3 Sewer incidents (other causes)

The CER will monitor the number of properties affected by an incident where wastewater enters a building caused by equipment failure in a sewer, blockage or collapse of a sewer.

In many parts of the country lack of investment has resulted in outdated wastewater infrastructure which is under increasing pressure. Sewer failures such as equipment failure and collapse can be the cause of incidents where wastewater enters a building. Sewer blockages due to the accumulation of grease or non-biodegradable material can also cause incidents and/or disruption of wastewater services.

### 7.4 Sewer incidents (at risk)

The CER will monitor the number of properties considered to be at risk of having wastewater enter their premises, caused by overload, more frequently than once in 10 years. These properties are defined as properties that have suffered or are likely to suffer incidents due to wastewater from public foul or combined sewers.

The data gathered over time from the previous two metrics will help to inform the risk register for sewer incidents. Monitoring properties at risk will help inform the utility of areas in need of maintenance and/or new assets in order to mitigate against the severity of wastewater incidents and to minimise the number of incidents occurring.

### 7.5 Summary

The metrics within this section are intended to reduce and mitigate the risk of sewer flooding incidents experienced by domestic and non-domestic customers.

While it may take time to gather data regarding the sewerage network and implement modelling systems in order to assess this metric, over time the monitoring and reporting of sewer incidents will assist the utility in reducing the risk and impact of sewer flooding incidents.

---

**Summary of metrics:**

As part of this performance assessment the CER will monitor Irish Water’s performance against the following sewerage service metrics:
- Sewer incidents (overload);
- Sewer incidents (other causes);
- Sewer incidents (at risk).

The high level outline of each metric has been outlined above. The CER will engage with Irish Water following publication of this decision to agree, in more detail, the specifics of each metric.
8. Summary and Next Steps

8.1 Summary

The CER has decided to put in place key metrics against which Irish Water’s performance will be monitored. This will ensure that the revenue allowances set by the CER are spent appropriately by Irish Water to improve services.

The approach which will be used by the CER is consistent with that used by water regulators in neighbouring jurisdictions. It facilitates an assessment of the utility’s performance and also ensures that transparent data on the utility’s performance is available to customers.

The metrics cover customer service, environmental performance, quality of service for water supply, security of water supply and sewerage service and are outlined in the below table. They have been put in place following a public consultation process which was initiated on 06 July 2016.

<table>
<thead>
<tr>
<th>Irish Water Performance Assessment metrics:</th>
</tr>
</thead>
</table>
| **Customer Service** | • Response to billing contacts;  
• Response to complaints;  
• Billing of metered customers;  
• Ease of telephone contact: the call abandonment rate;  
• Ease of telephone contact: a customer call-back survey;  
• Ease of telephone contact: speed of telephone response;  
• Ease of telephone contact: first contact referral; |
| **Environmental Performance** | • Pollution incidents relating to wastewater;  
• Sludge disposal;  
• Wastewater treatment works meeting requirements; |
| **Water Supply – Quality of Service** | • Properties subject to unplanned interruptions;  
• Water quality;  
• Water supplies on boil water notices and/or water restrictions; |
| **Security of Water Supply** | • Leakage;  
• Security of supply – Absolute performance;  
• Security of supply – Performance against target; |
| **Sewerage Service** | • Sewer incidents (overload);  
• Sewer incidents (other causes);  
• Sewer incidents (at risk). |
The metrics outlined in this paper are intended to be measured for both domestic and non-domestic services. However, in the case of non-domestic customers Irish Water is not yet billing these customers centrally (but is expected to do so during 2017). Full data migration has not yet been completed and non-domestic customers of Irish Water are currently being billed by local authorities on behalf of Irish Water. Similarly Irish Water’s call centre only handles domestic customers at present. Therefore, for non-domestics, it may take time for some information (e.g. customer service) to be fully available in a consistent and robust format.

The metrics outlined within this paper will be kept under review and amended where appropriate in the future. However, the CER is conscious that metrics would need to be in place for a sufficient amount of time in order to see trends in the data.

The CER intends to publish information on Irish Water’s performance against these metrics. However, the fact that Irish Water has taken over responsibility from 34 (now 31) separate local authorities means that gathering consistent data on a countrywide basis is a major task in itself. For many metrics it will take time for Irish Water to put appropriate systems and processes in place to measure those metrics robustly.

8.2 **Next steps:**

1. The CER will engage with Irish Water regarding target dates for provision, and then publication, of data on these metrics. It is envisaged that data will be published on an annual basis with more frequent publications where appropriate. Also, where data is not yet available on specific metrics, the CER intends to publish, on a six-monthly basis, a progress report regarding the collection of data on those metrics.

2. Where relevant, the CER will engage with Irish Water to ensure appropriate definitions and methodology are developed and that robust verifiable data is being provided. This process of engagement will include agreeing the specifics of metrics outlined at a high level in relevant sections of this paper.

3. Separately, the CER has recently consulted on proposed revenue allowances relating to Irish Water’s expenditure over the next two years on the public water and wastewater systems. Through that process the CER will decide whether to place financial incentives on Irish Water in relation to the metrics outlined in this paper.
Appendix A: Customer call-back survey

Two queries currently used by Irish Water as part of the call-back survey it carries out are:

1. Using a scale of 1-10, where 1=Extremely Dissatisfied and 10=Extremely Satisfied, based on your recent experience of Irish Water, how would you rate your recent experience overall?

2. Thinking about the contact centre agent who dealt with your query, on a scale of 1 to 10 where 1 is extremely dissatisfied and 10 is extremely satisfied, how satisfied or dissatisfied were you with their performance?

For complaints, two queries currently used by Irish Water as part of the survey it currently completes are:

1. Overall how satisfied were you with the way your complaint was handled by Irish Water? Using a scale of 1-10 where 1 is extremely dissatisfied and 10 is extremely satisfied.

2. How satisfied were you with the outcome of your complaint? Using a scale of 1-10 where 1 is extremely dissatisfied and 10 is extremely satisfied.
## Appendix B: Environmental Impact Assessment Criteria

These categories are the same as those used in the National Framework for Major Emergency Management. This table is available within the following EPA document: Guidance to Licensees/COA holders on the Notification, Management and Communication of Environmental Incidents.

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Classification</th>
<th>Impact on the environment &amp; health</th>
</tr>
</thead>
</table>
| 1       | Minor          | - *No contamination, localised effects*;  
|         |                | - Minor effect on air quality as evidenced by dust or odour complaint(s);  
|         |                | - Emission Limit Value breaches;  
|         |                | - An emission which does not comply with the requirement of the licence/Certificates of Authorisation (A pattern of repeated minor incidents should be taken into account when considering the level of response); |
| 2       | Limited        | - *Simple contamination, localised effects of short duration*;  
|         |                | - Local limited impact to water, land and air;  
|         |                | - Notification to and short term closure of potable water extractors required; |
| 3       | Serious        | - *Simple contamination, widespread effects of extended duration*;  
|         |                | - Significant effects on water quality;  
|         |                | - Major damage to an ecosystem (e.g. significant impact on fish population);  
|         |                | - Longer term closure of potable water extractors;  
|         |                | - Significant reduction in amenity value;  
|         |                | - Significant damage to agriculture or commerce;  
|         |                | - Significant impact on man; |
| 4       | Very Serious   | - *Heavy contamination, localised effects of extended duration*; |
| 5       | Catastrophic   | - *Very heavy contamination, widespread effects of extended duration*. |
Appendix C: Response to comments

On 06 July 2016, the CER published a Consultation Paper (ref.CER16/173) on proposed key metrics against which it intended to monitor Irish Water’s performance. That paper invited submissions in response to those proposals.

The CER received five submissions following that consultation. Two related to specific points which were not directly related to the topic covered by the consultation. The remaining three were provided by:

- The EPA;
- The Public Water Forum; and,
- Irish Water.

The comments put forward within the three responses are summarised below within this appendix and the CER’s response to each is also provided. Those three responses are also published alongside this decision paper.\(^{22}\)

The CER received comments on the following main issues:

- Customer Service metrics;
- Environmental performance metrics;
- Water supply and quality of performance metrics;
- Security of water supply metrics;
- Sewerage service metrics;
- Other general points CER proposals.

These are discussed in turn below.

Customer service

Comments received

One respondent stated that the metrics proposed regarding customer service seemed reasonable. However, the respondent raised issues regarding the use of the term ‘customer’. The respondent stated that some domestic consumers in particular are more likely to see the service which Irish Water provides as a public service to which they are entitled to as citizens, while recognising that as with all public services, this comes at a cost. The respondent stated that in this sense many do not see themselves as ‘customers’ of Irish Water.

\(^{22}\) Response can be found at CER/16/309, CER/16/310 and CER/16/311
The respondent stated that in an earlier submission to Irish Water, it suggested that the company ‘needs to address the distinction between citizen and customer explicitly in shaping all of its strategies and plans, recognising therein that the experience with other utilities may not be entirely transferable to the issue of water’ (April, 2016).

The respondent also stated that commercial users have a different set of expectations and requirements than is the case with domestic users. They stated that, here, there is a clear contractual relationship upon which the ongoing viability of an enterprise may well depend. They stated that for this group in particular it is important to establish what communication a complainant receives on the status or outcome of the investigation of a complaint and in those cases where a complaint is upheld, what remedy, if any, is provided to the complainant and what, if any, restitution is offered.

CER response

The CER notes the points that some parties may consider that the CER’s use of the term ‘customer’ refers or relates in some way to the payment or not for that service. This was not the CER’s intention. Rather the CER was being consistent with the legislation in this area where parties that are connected to either network are described as customers. The CER will highlight this clarification within the decision paper to avoid any confusion.

The CER also notes the statement that commercial users have a different set of expectations and requirements than is the case with domestic users. The CER does not fully agree with this statement. The CER considers users should receive an appropriate level of service regardless of whether they pay directly for the service or not. However, this paper is focused on choosing the key metrics, rather than setting an appropriate level of service under each metric\textsuperscript{23}, and the CER notes that the respondent was in agreement with the metrics proposed for this area.

Environmental Performance

Comments received

One respondent stated that it recognized the critical importance of each of the three performance indicators that were proposed.

The respondent suggested that the environmental impact of each of these may vary. For example, wastewater treatment plants not meeting requirements most likely have a predictable, ongoing and quantifiable negative impact and bringing such plants up to standard may be more

\textsuperscript{23} Please note that (separate to this paper) the Customer Handbook (put in place by the CER) outlines certain minimum customer service standards which Irish Water must adhere to, for both domestic and non-domestics.
pressing than the elimination of possibly unforeseen or difficult to obviate risks associated with once-off incidents. The respondent stated that the CER may, therefore, wish to look at the relative weighting of each of the three proposed indicators.

The respondent also drew attention to the soon to be published River Basin Catchment Management Plans (RBMP). They stated that all activities by Irish Water with regard to waste water treatment will need to align with these plans and that the CER may wish to monitor the issue with regard to this context as a fourth metric.

Another respondent also suggested that the CER consider the inclusion of a new metric following the publication of the second cycle of the RBMP in 2017. The metric proposed was to monitor and report on the number of wastewater agglomerations identified as pressures on their respective receiving water bodies. The respondent suggested that these agglomerations should be included in a programme of measures for the protection of the receiving waters.

**CER response**

The CER agrees that some of the three metrics outlined above may be more pressing than others. The CER is currently focussing on developing the list of appropriate metrics, but will bear this point in mind if moving to a system where the individual metrics are weighted to produce, for example, overall scores.

The CER also notes that prioritisation of the work that Irish Water is completing (which will lead to improved performance under these metrics) is covered within its capital investment plan.

The CER notes the points from two respondents regarding monitoring Irish Water against the RBMP. The CER considers that it would be difficult to produce one defined metric which would adequately capture the level of alignment of Irish Water’s activities with this plan (and facilitate comparison over time and against other utilities). Therefore the CER does not intend to include a metric on this at this time. The appropriateness of Irish Water’s activities, including with respect to these plans, will however feed through into the CER’s other work, for example, on approving revenue allowances for Irish Water’s work.

However, the metrics outlined within this paper will be kept under review and amended where appropriate in the future.

**Water Supply/Quality of Service**

**Comments received**

One respondent stated that there was an absence of any focus in the Consultation document - other than with regards to THMs - on the processes involved in water treatment. Another
respondent suggested that the CER should consider including a metric regarding the percentage pesticide compliance on the basis that pesticides in drinking water are a priority issue affecting an increasing number of public water supplies.

One respondent stated that the public has inadequate information on the chemical and other processes involved in treating raw water for drinking purposes. It also stated that it is concerned with the prevalence in Irish Water on ‘end of pipe’ solutions to water treatment and considers that Irish Water should be required to approach the issue of providing quality drinking water with an emphasis on source protection and prevention of contamination and a correspondingly reduced emphasis on treatment.

The respondent also stated that it considers that the metrics proposed regarding water quality should take account of the relative seriousness of different contamination risks. It stated that, for example, lead in pipes is a particularly serious health risk and that this needs to be reflected in the monitoring of Irish Water’s plans to remove this hazard.

One respondent raised an issue surrounding the number of days that the CER has proposed to measure supplies on boil water notices. The respondent considers 30 days to be a more appropriate target than the 200 days proposed by the CER in the consultation. The respondent stated that 30 days is in line with the definition of a trivial non-compliance in the Drinking Water Directive.

**CER response**

When putting in place metrics to monitor Irish Water with respect to water quality the CER was conscious that, as the economic regulator of Irish Water, expertise in the area of environmental matters lies with the environmental regulator of Irish Water. Irish Water is required to report to the EPA on matters related to water quality. The EPA analyse and publish annual reports with the data provided by the utility. From an economic perspective, the CER will monitor a subset of this data in order to ensure that the revenue allowances set for Irish Water are being spent appropriately to improve service to customers. For this reason the CER chose two high level overall compliance metrics and three specific metrics that are of concern to Irish Water customers at present. While the CER agrees that pesticides are a priority issue, the CER considers that this issue is not fully within the control of Irish Water. While Irish Water should work with other stakeholders to improve that issue, the CER at this time is focussed on metrics that are (to a larger degree) within Irish Water’s control. Therefore the CER does not intend to include a metric on this at this time.

With respect to the process and chemicals used to treat water, the CER’s consultation paper proposed to include a metric relating to chemical compliance, which includes chlorine and other chemicals used to treat water. It also, as mentioned by one respondent, included THMs as a
The CER considers that this covers the inclusion of measurement of the extent to which chemicals used for treatment of water (or by-products of those chemicals) remain in the water after treatment.

The CER notes the point that Irish Water should emphasise source protection and prevention of contamination, with a correspondingly reduced emphasis on treatment. The CER would encourage Irish Water to examine all options to improve its performance. This paper focusses on what KPIs should be measured, rather on what work should be completed in order to improve those KPIs.

The CER also notes the point regarding lead. While this is also covered by the high level chemical compliance metric, the CER has included a specific metric for lead.

Regarding the metric proposed by the CER to monitor the number of public supplies on boil water notices the CER notes that a metric measuring the number of BWNs in place for greater than 30 days was considered by one respondent to be more appropriate. The CER is conscious that under its business plan, Irish Water is currently focusing on reducing the number of boil water notices in place for greater than 200 days. Including a metric for 30 days could have the unintended consequence of diverting expenditure away from improving performance against the 200 day metric. Considering the scale of underinvestment in the network that Irish Water inherited, it is prudent that the utility targets its expenditure appropriately. The CER considers that while all BWNs are important issues which must be addressed, those in place for a longer period generally have the most significant impact on customers and should be prioritised. However, the CER is also conscious that significant BWNs may not be captured under the 200 day metric.

Taking the above factors into account, the CER has decided not to introduce the 30 day metrics at this time, but will consider introducing an additional metric in the future which will monitor BWNs of a shorter duration.

Security of Water Supply

Comments received

One respondent notes the current leakage level (49%) of treated water and stated that it was concerned at the economic, commercial and environmental costs associated with such high leakage levels. It stated that the CER should seek a plan from Irish Water for the ongoing and sustained reduction of leakage. This plan should be costed, subject to cost benefit analysis, have measurable time specific deliverables and be time bound. It should detail a pathway towards either the elimination of leaks or towards a point where the costs of leak repair/detection exceed the returns.
The respondent stated that it notes the concerns of the CER with headroom and considers that this is an important element of the overall discussion regarding security of supply. It proposed that the CER ask Irish Water to conduct a risk assessment exercise within the context of a range of particular scenarios to include adverse events such as breakdown of infrastructure, weather related catastrophic occurrences or attacks on the water supply. The respondent proposed that following this, the CER would request a risk mitigation plan from Irish Water and monitors the implementation of this plan.

The respondent also highlighted the task of future proofing security of supply. It stated that assurances were needed that the future investment plans of Irish Water were cognisant of and aligned with wider social and economic developments in a manner which is integrated, coherent and mutually reinforcing.

**CER response**

The CER notes the point regarding seeking specific plans from Irish Water regarding how it will improve leakage and headroom, and ensuring the Irish Water’s overall investment plans were aligned with developments within the social and economic developments.

The investment plans developed by Irish Water are intended to cover off these points, through outlining work which will ultimately (among other things) improve leakage and headroom, and also cater for growth. These plans are reviewed by CER as part of the process through which it sets revenue allowances, and these revenue allowances were recently subject to a separate consultation.

However, the intention of this paper is to identify the metrics which should be monitored, rather than identifying specific steps needed to improve those metrics. This approach ensures that Irish Water takes all necessary steps to identify and implement actions to improve performance. This allows the CER to monitor the overall level of performance under each metric, rather than the individual tasks that Irish Water undertakes when completing its work.

**Sewerage Service**

**Comments received**

One respondent agreed with the metrics proposed here concerning issues of overload or other sewer incidents. It noted the persistence of raw sewerage discharge and the need to address this issue. It suggests that the CER request an investment plan from Irish Water to address this issue.
CER response

As outlined above, the investment plans developed by Irish Water are intended to cover off this point, through outlining work which will ultimately (among other things) improve these issues. These plans are reviewed by the CER as part of the process through which it sets revenue allowances, and these revenue allowances were recently subject to a separate consultation.

However, the intention of this paper is to identify the metrics which should be monitored, rather than identifying specific steps needed to improve those metrics. This approach ensures that Irish Water takes all necessary steps to identify and implement actions to improve performance. This allows the CER to monitor the overall level of performance under each metric, rather than the individual tasks that Irish Water undertakes when completing its work.

Other

Comments received

One respondent agreed with that the CER that performance measurement and reporting is an important means of communicating with customers and stakeholders and it welcomes the introduction of this Performance Assessment. The respondent noted that the establishment of a robust baseline of performance data over time will be invaluable in setting out Irish Water’s starting point relative to international comparators and prioritise investment needs. However, the respondent noted that there are steps which must be taken before certain performance measures can be fully implemented such as the roll-out of enabling technologies and the development of agreed measurement systems such as agreeing specific metric definitions.

One respondent noted that there appears to be no mechanism outlined for feedback to the Irish public on the performance of Irish Water with regard to each or all of the metrics proposed. The respondent stated that the best way in which to hold any public service to account is through an informed and engaged citizenry and would ask the CER to consider a strategy to optimise such public engagement.

The respondent also noted separate proposals (i.e. not by the CER) for the establishment of an External Advisory Body to monitor Irish Water. It stated that it was concerned that there should be no confusion in the public mind regarding the respective roles of the different agencies involved in this field.

CER response

The CER agrees that there is significant work to be done in order for Irish Water to be in a position to report to the CER on all of the metrics outlined above. However, some metrics have
already been put in place by Irish Water, for example customer service metrics, and the CER will expect the utility to begin reporting on these metrics in the short term.

The CER agrees that reporting on the utilities performance plays a useful role in encouraging that utility to improve its performance. The CER’s intention is to ensure that data, once available in an appropriate format, is published in a transparent manner. It is envisaged that data will be published on an annual basis with more frequent publications where appropriate. Also, where data is not yet available on specific metrics, the CER intends to publish, on a six-monthly basis, a progress report regarding the collection of data on those metrics.

The CER notes the point regarding clarity regarding the roles of all organisations involved in this area. In relation to this specific decision, the CER is monitoring these metrics to ensure the revenue allowance it sets is spent appropriately by Irish Water to improve services. In a wider context the CER will continue to engage with stakeholders and publish documentation to explain its role as economic regulator of Irish Water.