PC13 Information Requirements
Chapter 4 – Outputs
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Chapter 4 - Outputs

4.1. Introduction

4.1.1. This chapter sets out the information requirements for NI Water’s submission to the Utility Regulator in respect of the outputs it intends to deliver during the PC13 period.

4.1.2. The PC13 Output submission shall comprise:

- A data submission consisting of four tables setting out the proposed outputs for PC13.
- Supporting information to explain and justify the data entered in the tables.

4.1.3. Outputs submitted for the PC10 period should reflect actual or projected performance as appropriate. The company should provide a clear explanation if the actual or projected performance in PC10 does not achieve the target levels set out in the PC10 Monitoring Plan.

4.1.4. When setting out its proposed targets for PC13 the company should take account of the target levels for PC10 and current or projected performance for PC10. The company should provide an explanation of any target for PC13 which is less than either the target set for the end of PC10 or the actual or projected performance at the end of PC10.

4.1.5. The PC13 outputs proposed by the company should:

- be consistent with the Social and Environmental guidance issued by the Minister for Regional Development;
- reflect the individual drinking water quality, environmental quality improvements agreed by the quality regulators;
- reflect the level of investment proposed for PC13; and,
- take account of other long term planning assessments such as the Water Resource Management Plan and the Economic Level of Leakage assessment.

4.2. The Data Submission

Format

4.2.1. The data submission consists of four tables.
Table 1 – PC13 Output Submission Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Water Provision and Service Outputs</td>
</tr>
<tr>
<td>4.2</td>
<td>Sewerage Provision and Service Outputs</td>
</tr>
<tr>
<td>4.3</td>
<td>Overall Performance Assessment</td>
</tr>
<tr>
<td>4.4</td>
<td>Outputs delivered by PC13 Capital Projects and Programmes of Work</td>
</tr>
</tbody>
</table>

Tables 4.1 and 4.2 – Water and Sewerage Provision and Service Outputs

4.2.2. The tables comprise of four blocks of information.

Table 2 – Information Blocks in Output Submission Tables 4.1 and 4.2

<table>
<thead>
<tr>
<th>Block</th>
<th>Title</th>
<th>Covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Consumer Service</td>
<td>Level of service outputs and sustainability outputs.</td>
</tr>
<tr>
<td>B</td>
<td>Quality</td>
<td>Water Quality and Environmental outputs.</td>
</tr>
<tr>
<td>C</td>
<td>Outputs</td>
<td>Water and sewerage activity outputs and nominated outputs</td>
</tr>
<tr>
<td>D</td>
<td>Serviceability</td>
<td>Serviceability for above and below ground assets</td>
</tr>
</tbody>
</table>

4.2.3. Data is to be submitted for both the PC10 and the PC13 periods.

4.2.4. The data entered in Tables 4.1 and 4.2 against the outputs listed in Table 5 of this Chapter should equal the totals of the individual entries in Table 4.4 of the submission.

4.2.5. For serviceability, the company should enter its estimation of the trend in serviceability for infrastructure and non-infrastructure assets in each service area during the period. A ‘stable’, ‘improving’ or ‘deteriorating’ categorisation should be used for this assessment.

4.2.6. The wastewater treatment works compliance measures in Block B of Table 4.2 have not yet been defined. The UR will work with NIEA, NI Water and other stakeholders to agree these measures.

Table 4.3 - Overall Performance Assessment

4.2.7. Table 4.3 sets out the information required to calculate the OPA score. It replicates Table 44 of the Annual Information Return. Outturn and projected data is to be submitted for both the PC10 and the PC13 periods.
4.2.8. The table comprises five blocks of information.

Table 3 - Information Blocks in Output Submission Table 4.3

<table>
<thead>
<tr>
<th>Block</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Water Supply</td>
</tr>
<tr>
<td>B</td>
<td>Sewerage Service</td>
</tr>
<tr>
<td>C</td>
<td>Security of Supply</td>
</tr>
<tr>
<td>D</td>
<td>Customer Service</td>
</tr>
<tr>
<td>E</td>
<td>Environmental Performance</td>
</tr>
</tbody>
</table>

4.2.9. NI Water should enter the data used to calculate the Overall Performance Assessment scores, reported on line 11 and 11a of Table 4.1 of the submission, in Table 4.3. The methodology for calculating the overall performance score is as detailed in Annex A of the reporting requirements for Table 44 of the Annual Information Return.

4.2.10. Data entries for Table 4.3 are generally defined as ‘inputs’ despite the commonality with certain data in Tables 4.1 and 4.2. In Table 4.3, NI Water should enter the most likely outturn of the individual performance measures rather than the target level included in Tables 4.1 and 4.2. NI Water should provide its assessment of the most likely outturn for each measure and provide a clear explanation of why any target in Tables 4.1 or 4.2 is set at a lower level than the most likely outturn.

4.2.11. PC10 targets and current or projected performance figures should be entered for Leakage and Security of Supply for PC10. It is recognised that the ‘actual’ and ‘target’ figures entered for PC13 may be the same. Any differences between ‘target’ and ‘actual’ figures for PC13 should be explained in the supporting information submitted by the company.

Table 4.4 - Outputs delivered by PC13 Capital Projects and Programmes of Work

4.2.12. Table 4.4 should be used to record the outputs that are being delivered by NI Water’s capital investment programme. Data is to be submitted for both the PC10 and the PC13 periods.

4.2.13. In addition, NI Water should record any outputs it expects to deliver in the first two years of PC15 as a consequence of the completion of schemes started in PC13 or ongoing expenditure on programmes of work.

4.2.14. The table comprises two blocks of information.
Table 4 - Information Blocks in Output Submission Table 4.4

<table>
<thead>
<tr>
<th>Block</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Project Information</td>
</tr>
<tr>
<td>B</td>
<td>Project Outputs</td>
</tr>
</tbody>
</table>

4.2.15. For the PC13 Information Requirements, common reference codes have been introduced to allow outputs associated with individual capital projects or programmes of work to be identified. These should be completed by the company to allow a clear link to be established between:

1. nominated outputs required by stakeholders;
2. individual outputs and activities proposed by the company;
3. the detailed capital investment programme at project and sub-programme level; and,
4. the summary outputs and service levels proposed in Tables 4.1 and 4.2 of the Business Plan submission.

4.2.16. Project information should be entered in Block A. This information should be consistent with that entered in Table 3.3 of the capital investment submission.

4.2.17. The information requirements for Block A, including those for beneficial use date, are defined in Chapter 3. Table 3.3 in Chapter 3 lists the capital investment sub programme identifiers.

4.2.18. The company should enter the outputs associated with each capital project or programme of work in column 8 to 14 of Block B. Information, including that associated with programmes of work, should be disaggregated as far as possible for the purposes of completing this table.

4.2.19. Output reference codes should be entered in column 6 of Block B to define each output. Table 5 below lists the outputs that are to be recorded in Table 4.4 and their associated reference codes. It also defines the units of measurement to be entered in column 7 of Table 4.4 for each output and the number of decimal places to be used.

4.2.20. A separate line should be completed for each type of output that a project or sub-programme of work will deliver. More than one ‘output’ line may therefore be required for each project or sub-programme of work. Where this is necessary, the same project information should be repeated in Block A for each ‘output’ line. For example: a sewerage project might deliver multiple outputs including sewerage replacement, sewerage renovation, UID improvement and DG5 improvement. In these circumstances at least one line entry should be provided in Table 4.4 of the submission for sewerage replacement, sewerage renovation and DG5 improvement; and, one line entry would be completed for each UID improved. Where possible, further detailed information on aggregated outputs should be included in the relevant project or sub-programme.
Business Case. For example: in the sewerage example outlined above, the individual properties on the DG5 register improved as a result of the scheme should be identified in the Business Case providing a clear link from the DG5 register to the investment programme.

Table 5 – PC13 Output Reference Codes

<table>
<thead>
<tr>
<th>PC13 Output Description</th>
<th>Table</th>
<th>Line</th>
<th>PC13 Output Ref Code</th>
<th>Unit</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>DG2 Properties at risk of low pressure removed from the risk register by company action</td>
<td>4.1</td>
<td>1</td>
<td>01</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>DG5 Properties at risk of flooding-number removed from 1 in 10 and 2 in 10 risk register by company action</td>
<td>4.2</td>
<td>1</td>
<td>02</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Water mains activity - Length of new water mains</td>
<td>4.1</td>
<td>19a</td>
<td>02</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Water mains activity - Length of renovated water mains</td>
<td>4.1</td>
<td>19b</td>
<td>03</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Water mains activity - Length of replaced water mains</td>
<td>4.1</td>
<td>19c</td>
<td>04</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Completion of nominated trunk main schemes to improve security of supply</td>
<td>4.1</td>
<td>20</td>
<td>05</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Completion of nominated water treatment works schemes to improve water quality</td>
<td>4.1</td>
<td>21</td>
<td>06</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Completion of nominated improvements to increase the capacity of service reservoirs and clear water tanks</td>
<td>4.1</td>
<td>22</td>
<td>07</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Sewerage activity - Length of new sewers</td>
<td>4.2</td>
<td>7a</td>
<td>09</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Sewerage activity - Length of sewers renovated</td>
<td>4.2</td>
<td>7b</td>
<td>10</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Sewerage activity - Length of sewers replaced</td>
<td>4.2</td>
<td>7c</td>
<td>11</td>
<td>km</td>
<td>2</td>
</tr>
<tr>
<td>Delivery of improvements to nominated UIDs as part of a defined programme of work</td>
<td>4.2</td>
<td>8</td>
<td>12</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Delivery of improvements to WWTW through nominated schemes as part of a defined programme of work</td>
<td>4.2</td>
<td>9</td>
<td>13</td>
<td>nr</td>
<td>0</td>
</tr>
<tr>
<td>Number of small wastewater treatment works delivered as part of the rural wastewater investment programme</td>
<td>4.2</td>
<td>10</td>
<td>14</td>
<td>nr</td>
<td>0</td>
</tr>
</tbody>
</table>
4.2.21. The blank table issued with these information requirements has 10 data rows. NI Water should insert sufficient additional rows to ensure that all outputs associated with capital investment projects or programmes of work are captured.

4.2.22. When summed, the individual entries for each type of output in Table 4.4 should equal the associated entries in Tables 4.1 and 4.2. Summary programme lines should be used where appropriate to ensure that this is the case.

4.2.23. For nominated output lines, the number “1” should be entered in the column relating to the year that ‘beneficial use’ is to be achieved.

4.2.24. Nominated outputs should include any work delivered as a consequence of Quality Regulator requirements, irrespective of whether the associated investment is categorised as ‘Quality’ or ‘Capital Maintenance’.

4.3. **Supporting Information**

4.3.1. The company shall provide all information necessary to explain its assessment of the proposed outputs and the links between the proposed outputs and the capital programme in its submission. The company should demonstrate that the investment proposed represents the least cost balance of capital and operational expenditure required to deliver the proposed outputs.

4.3.2. The supporting information provided by the company should include:

- all the base data, assumptions and calculations that are necessary for the derivation of the data entries to be clearly understood;
- reference to any historic activity rates, expenditure and outputs used to support the derivation of future outputs; and,
- reference to any comparative industry data used to support the derivation of future outputs.

4.3.3. The format of the supporting information submission is a matter for the company to decide. The format used should be proportionate to the need to set out the company’s assessment of the proposed output and how it links to the capital and operational activities and expenditure proposed.

4.3.4. It is anticipated that the supporting information will consist of calculations and explanatory text. NI Water is asked to submit calculations in the form of spreadsheets, so that the submission can be more easily analysed. Where the calculations include a statement of the base data, assumptions made and clearly demonstrate the calculations made, it is not necessary to repeat this information in the supporting text.

4.3.5. Where possible, NI Water should provide the supporting information as part of its business case submissions, with appropriate cross-reference to the individual project or sub-programme outputs reported in Table 4.4.
4.4. **Output Definitions**

4.4.1. Individual line entry definitions are set out in Annex A of Chapter 4.

4.4.2. The output information requirements for PC13 are based on other established reporting requirements such as the Annual Information Return, the PC10 Monitoring Plan and the Output monitoring submission. Where appropriate, the more detailed definitions and reporting requirements contained in these documents apply.

4.4.3. Data is to be reported using the same detailed methodologies established for PC10, where appropriate. Where this is not the case the reason for any change in methodology should be provided. In addition, the process for back-casting data to ensure that historic performance has been reported on a consistent basis with any revised methodology should be explained.

4.5. **Output Monitoring during PC13**

4.5.1. Table 4.1 and 4.2 will form the basis of the PC13 Monitoring Plan. The column titled “PC13 MP Target” in Tables 4.1 and 4.2 indicates the targets that will be carried forward into the public facing monitoring plan.

4.5.2. Table 4.4 and the supporting information submitted in the Business Cases will form the basis of monitoring and managing change control in PC13.

4.6. **Reporter Guidance**

4.6.1. The reporter shall base his audit of outputs on the output tables, supporting documentation and Business Cases submitted by NI Water, assessing and commenting on:

- The audit process
- Compliance of the submission with the reporting requirements
- The basis of the company’s output assessments including the link to investment
- The comprehensiveness and consistency of the information submitted by the company.

4.6.2. The reporter shall:

*The audit process*

- Describe how the reporter has assessed the outputs submission. This description should include a table setting out the level of audit of each
Business Case and each set of supporting information provided by the company.

**Company compliance with the reporting requirements**

- Confirm that the company has fully completed the tables in accordance with the information requirements. The reporter shall provide a schedule summarising any gaps identified in the company’s submission or non-compliance with the information requirements.

**The basis of the company’s output assessments including the link to investment**

- Audit the supporting information and calculations provided by the company and:
  - Provide a commentary on the company’s assessment of future output projections, confirming that the future outputs relate to the proposed investment plan or other activities proposed by the company.
  - Identify material assumptions made by the company in its assessment of future outputs and comment on the factual information underpinning these assumptions.
  - Identify any additional information that the Reporter believes the company should submit to provide a clear, robust assessment of future output projections.
  - Comment on future projections of outputs in light of historic trends and current performance as well as any justification provided for any PC13 target that is less than the target or projected performance for the end of PC10.

- Assess and comment on the company’s justification for any changes in methodology adopted compared to PC10 and any processes used by the company to backcast data to ensure that historic performance has been reported on a consistent basis.

- Comment on the company’s assessment of current and projected serviceability trends. The reporter should assess the supporting information for serviceability trends, comment on the parameters used by the company as indicators of serviceability and the link between future trends in these parameters and investment.

- Confirm that the company’s forward projections of service levels in Table 4.3 are a reasonable estimate of the most likely outcome given the proposed level of investment. If the company has proposed a less onerous target in Tables 4.1 and 4.2 for an output also included in Table 4.3, the reporter should assess the company’s explanation of the difference and provide any further commentary necessary to properly explain the difference.

- Comment on any output “balancing item” included in Table 4.4 which is not linked to specific projects. The reporter should provide an opinion on the
assumptions made by the company when calculating any “balancing item” and propose any additional definition of the output to ensure a clear link between the company's investment and outputs identified by the company in its Business Plan.

**Comprehensiveness and consistency of the information submitted by the company**

- Confirm that the information in Table 4.4 sums to the equivalent lines in Table 4.1 and 4.2 and comment on the reason if this is not the case.
- Confirm that the project data (including beneficial use dates) in Table 4.4 correctly links to relevant projects in Table 3.3 and that common information has been reported consistently.
- Challenge and comment on whether the company could have disaggregated the project/programme information in Table 4.4 to a lower level. Confirm that all relevant associated outputs have been reported separately.