

## OUTPUT MONITORING GROUP

### OUTPUT MONITORING REPORT: Quarter 4 2016-17

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#### 1. Introduction

This document summarises what has been achieved for customers against Scottish Water's Delivery Plan for the 2015-21 period and confirms the position up to the end of March 2017 (Quarter 4 2016/17). It has been prepared for the Output Monitoring Group (OMG) which was set up by Ministers to monitor and report on the delivery of their [Objectives](#).

The OMG comprises the main stakeholders in Scotland's water industry: Scottish Government, Scottish Water, Citizens Advice Scotland, Scottish Public Services Ombudsman and the regulators (the Water Industry Commission for Scotland, the Scottish Environment Protection Agency and the Drinking Water Quality Regulator). It is chaired by Scottish Government and operates under a Terms of Reference agreed by Ministers.

#### 2. What We Monitor

Each quarter the OMG assesses Scottish Water's progress with the delivery of outputs using a metric, Overall Measure of Delivery (OMD), to measure Scottish Water's progress against targets agreed in its Delivery Plan.

Delivery progress is also monitored against the outputs agreed for individual programmes in Scottish Water's Delivery Plan, as shown in the following Appendices:

- Appendix A: Providing continuous high quality drinking water (includes drinking water quality, reliability and security of supply).
- Appendix B: Protecting and enhancing the environment (includes flood risk management).
- Appendix C: Supporting economic development (includes climate change and improving the long term cost of service).
- Appendix D: those outputs and customer service measures that are reported annually at the end of each financial year.

Each Appendix highlights where a programme area or service measure is ahead or behind target; and, if behind, the reason and remedial actions being taken by Scottish Water. The year end status for each programme area has been measured against Scottish Water's Delivery Plan update approved by the Scottish Government in March 2017.

The Output Monitoring Group also monitors Scottish Water's progress in completing those projects due but not delivered by 31 March 2015 so that the benefits to customers can be delivered as quickly as possible.

### 3. Key points

The key points to report on Scottish Water's output delivery in the period up to the end of March 2017 (Quarter 4 2016/17) are:

- The overall measure of delivery (OMD) position was 108 points in Quarter 4, against a March 2017 target of 83 points. This is an increase of 14 points from the Quarter 3 2016/17 position of 94 points.
- Providing continuous high quality drinking water: of the 10 output programmes in this category, 10 were on or ahead of target at the end of Quarter 4. Scope and third party risks identified previously in the drinking water quality compliance programme area have materialised which has resulted in two projects not meeting committed Regulatory Undertaking delivery dates. All projects in the water treatment programmes are being managed closely.
- Protecting and enhancing the environment: of the 10 output programmes in this category, 10 were on or ahead of target at the end of Quarter 4.
- Supporting economic development: of the 6 output programmes in this category, 2 were ahead of target and 4 underway but demand driven at the end of Quarter 4.
- Annual measures: with the exception of the wholesale KPI the annual measures are all at or improved from the levels committed to in Scottish Water's Delivery Plan.
- Projects due to have been completed by March 2015: by the end of Quarter 4 Scottish Water had completed 29 of the 37 projects that were outstanding at March 2015. Scottish Water is forecasting all projects to complete by 2019/20.

### 4. Overall Measure of Delivery (OMD)

The [Overall Measure of Delivery](#) provides a high level measurement of Scottish Water's progress against its Delivery Plan; it assesses the progress of the investment outputs monitored by OMG across each of the five key delivery milestones, combining this information to give an overall score. Progress with delivering late projects from previous investment periods and demand led schemes (such as new capacity to support economic development) are not included in the OMD.

At the beginning of the programme the OMD score starts at zero and at 31 March 2021 should reach 250<sup>a</sup> points confirming that all milestones and outputs due to be delivered by that date have been delivered. At the end of March 2017 Scottish Water's OMD position was 108 points, against an OMD target of 83 points. This is an increase of 14 points from the Quarter 3 2016/17 position of 94 points as illustrated in Figure 1.

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<sup>a</sup> 19 points relate to outputs that will be confirmed in the investment review 2018 (IR18).

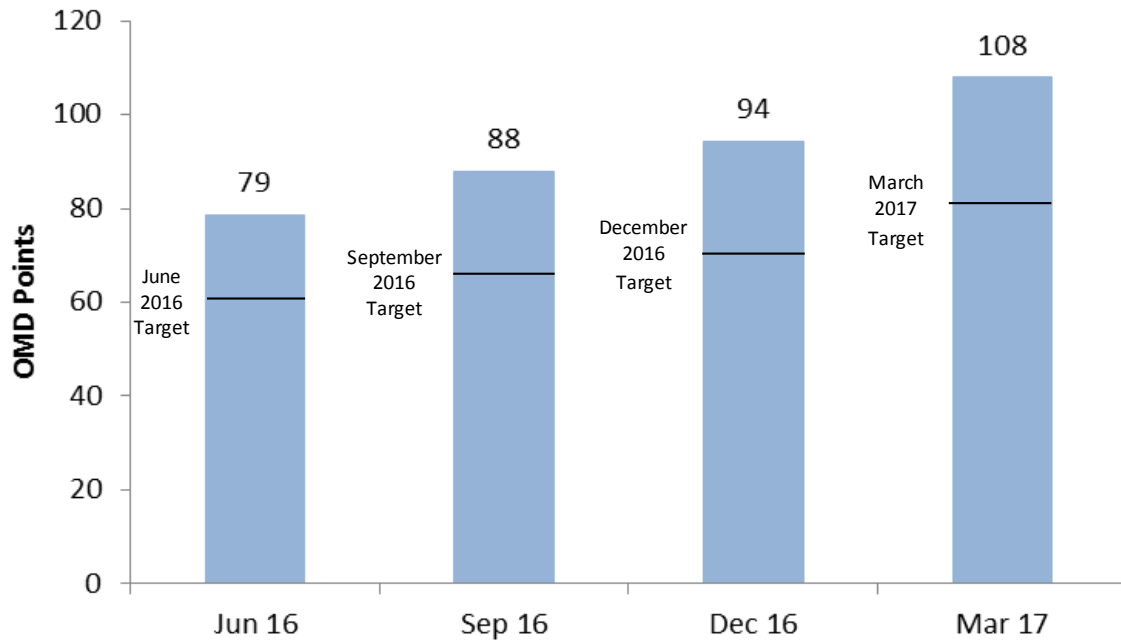


Figure 1 – Overall Measure of Delivery to Quarter 4 2016-17

### 5. Progress against milestones

To demonstrate the progress being made through each of the 5 programme milestones monitored by OMG, Figure 2 below shows the cumulative % budget through each milestone for the reported programmes. Of particular note is that over half (53%) have started on site.

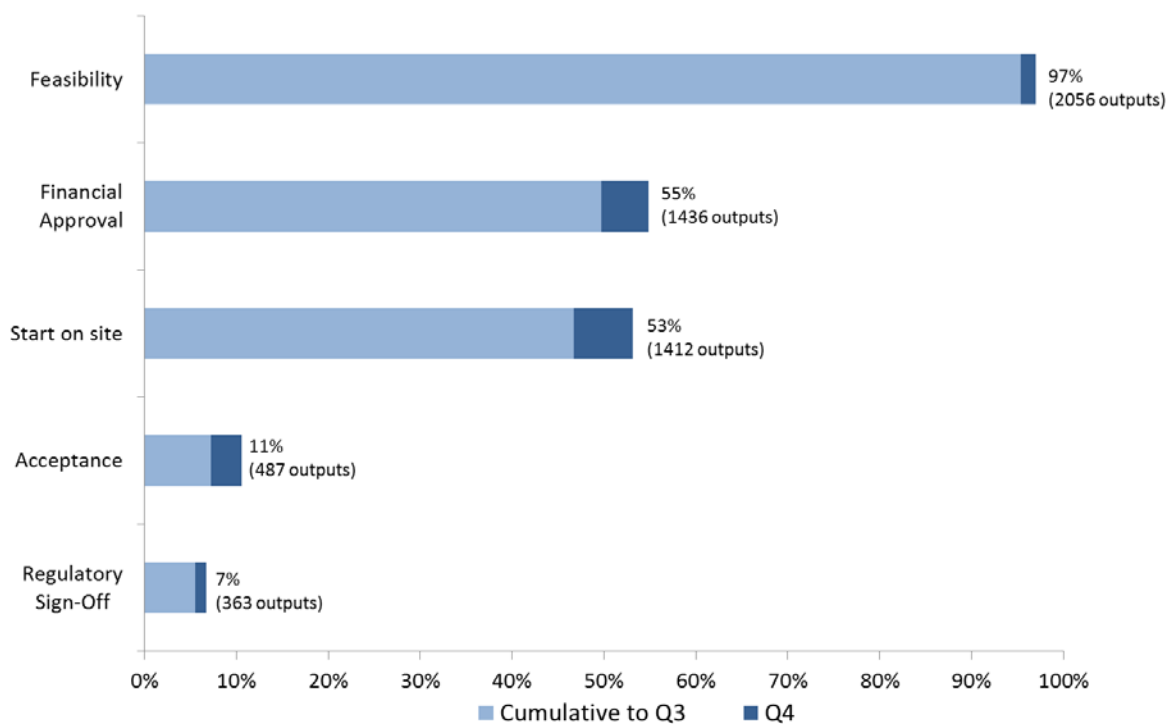


Figure 2 – Reported output programmes – cumulative % budget through each milestone

## 6. Projects due but not delivered by 31 March 2015

Scottish Water started the 2015-21 period with 37 projects from the previous programme which were due but not completed by March 2015. Scottish Water has achieved regulatory sign-off for 29 of these projects at the end of March 2017, the upper end of its forecast range. Annisdale WTW – Water Quality Upgrade project achieved regulatory sign-off in Quarter 4 2016/17. Scottish Water remains focussed on delivering the projects due to have been completed by March 2015.

	2016/17	2017/18	2018/19	2019/20	2020/21
Planned completion	26 - 29	31 - 33	33 - 36	36	37
Latest forecast completion range	29	32 - 34	35 - 36	37	37

## 7. Conclusion

The OMG notes the good progress made to March 2017, Quarter 4 2016/17, of the 2015-21 regulatory period with the delivery of outputs required by Ministers, as measured through the Overall Measure of Delivery and programme milestones.

Ministers have stressed to Scottish Water the importance of maintaining and achieving those milestones due in 2017/18 and beyond.

## RAG Status

The following colour coding is applied to the forecast in the output delivery tables (Appendices A to C), using the definitions outlined below:

<b>Red</b>	Progress is behind target and there is no prospect of recovery over the year
<b>Amber</b>	At risk of not delivering the output within the year
<b>Green</b>	On or ahead of programme, or if off track will recover within the year
<b>Blue</b>	Output complete

## Appendix A: Providing continuous high quality drinking water

Scottish Water is undertaking work associated with the 10 programme areas in the table below.

Objective	Quarterly monitored programme areas	Q3 2016/17 Actual	2016/17 Year end Target	2016/17 Year end Actual	Total number of outputs over the regulatory period
Drinking water quality and reliability	Number of water treatment works improved	1	1	1	27
	Number of zones made compliant with iron & manganese standards	No outputs planned to be delivered in 2016/17			88
	Number of improvements to reliability of supply (catchments and treatment)	2	1	3	47
	Number of improvements to reliability of supply (networks and storage)	10	9	11	82
	Distribution mains cleaned (km)	No outputs planned to be delivered in 2016/17			5,928
	Number of water quality etc studies to inform future periods	37	44	86	344 <sup>b</sup>
	2010-15 outputs planned to complete in the 2015-21 period	3	2	6	22 <sup>c</sup>
Drinking water security of supply	Water supply resilience strategy and improvements made	6	3	7	18
	Number of zones with improved security of supply (SOSI)	1	1	1	11
	Number of security measures and improvements to the infrastructure of critical reservoirs	41	30	77	689
<b>Total</b>		<b>101</b>	<b>91</b>	<b>192</b>	<b>1,328<sup>d</sup></b>

<sup>b</sup> Total number of outputs increased from 341 to 344 due to the removal of 6 and addition of 9 WG4a outputs (TE change SR15-045).

<sup>c</sup> Total number of outputs decreased from 23 to 22 due to the removal of Inverness & Nairn (TE change SR10-109).

<sup>d</sup> Excludes 5,928km of mains cleaning as this programme area is measured on a per km basis rather than on the number of outputs or improvements made.

## Appendix B: Protecting and enhancing the environment

Scottish Water is undertaking work associated with the 10 programme areas in the table below.

Objective	Quarterly monitored programme areas	Q3 2016/17 Actual	2016/17 Year end Target	2016/17 Year end Actual	Total number of outputs over the regulatory period
Protecting and enhancing the environment	Number of WWT Ws improved to meet UWWTD	7	7	7	25
	Number of waste water networks improved to meet UWWTD	7	7	17	60
	Number of improvements required to meet UWWTD - Glasgow completion	29	26	36	94
	Number of improvements required to meet the Water Framework Directive	1	1	1	21
	Studies and improvements under the revised Bathing Waters Directive	No outputs planned to be delivered in 2016/17			11 <sup>e</sup>
	Number of environmental studies to inform future periods	0	0	5	130
	Number of improvements required by the Compliance Assessment Scheme; odour reduction and sludge management	10	10	19	42
2010-15 outputs planned to complete in the 2015-21 period	8	7	8	15 <sup>f</sup>	
Flood risk management	Reservoirs Act - Number of improvements to dams	9	7	11	57
	Flood Risk Management Act - models and integrated catchment studies	7	0	13	218
<b>Total</b>		<b>78</b>	<b>65</b>	<b>117</b>	<b>672</b>

<sup>e</sup> Total number of outputs increased from 9 to 11 due to the addition of Gairloch Ww TW Disinfection (TE change SR15-036) and the addition of Portobello West & Fisherrow Sands (1 output) (TE change SR15-053)

<sup>f</sup> Total number of outputs decreased from 16 to 15 due to the removal of Portobello West (TE change SR10 -110)

## Appendix C: Supporting economic development

Scottish Water continues to support the Scottish economy by meeting the demand for water and waste water connections to new households and businesses and where necessary has initiated projects to increase strategic capacity. Connections have been made to 41,796 new household and businesses within the first two years of the 2021 – 27 period. Scottish Water has also installed over 7,380 first time wholesale meters and replaced 18,170 wholesale meters as shown in the table below.

Objective	Quarterly monitored programme areas	Q3 2016/17 Actual	2016/17 Year end Target	2016/17 Year end Actual	Total number of outputs over the regulatory period
Supporting economic development	Number of new connections to households and businesses	32,115	Demand driven	41,796	56,500 <sup>9</sup>
	Delivery of new waste water capacity for 58,000 people	2,111	Demand driven	2,143	58,000
	Number of first time wholesale meters installed	6,533	Demand driven	7,382	18,000
	Number of wholesale meters replaced	15,132	Demand driven	18,170	75,500
Climate change	Number of climate change vulnerability assessments	54	4	54	122
Long term cost of service	Improvements in renewable power and energy efficiency (GWh)	7.9	7.0	9.29	17.5

<sup>9</sup> Target of 56,500 new connections is for 2018, target for 2021 will be confirmed as part of IR18.

## Appendix D: Performance against minimum service levels to customers for 2015-21

Service measure	Minimum for 2015-2021	2016/17 Actual	Year end position
<b>Water service</b>			
Drinking Water Quality compliance at customer taps	99.88%	99.91%	
Number of properties affected by unplanned water supply interruptions:			
• >12 hours	< 1,000	648	
• >6 hours	13,000	6,027	
Drinking water discolouration contacts	10,000	5,973	
Drinking water taste contacts	5,000	2,526	
Properties below reference level for pressure	100	45	
Security of supply index	91	92	
Leakage (M/day)	575	495	
<b>Waste water service</b>			
Annual number of incidents of internal sewer flooding due to blockages and failures (all sewers)	650	308	
Number of properties at risk of internal flooding	370	[315/381]	<b>Note 1</b>
Annual number of incidents of internal sewer flooding due to overloading (all sewers)	95	45	
Annual number of incidents of external flooding due to blockages and failures (all sewers)	13,000	8,565	
Number of properties at risk of external flooding	< 5,000	3,699	
Annual number of incidents of external flooding due to overloading (all sewers)	400	159	
Number of failing waste water treatment works	5	4	
Number of pollution incidents	330	239	
% sludge disposed of satisfactorily	100%	100%	
<b>Customer service</b>			
OPA	380	398	
Household Customer Experience Measure	>82.6	85.8	
Wholesale service key performance indicator	95%	91.9%	<b>Note 2</b>
<b>Other</b>			
Carbon footprint (kg/household)	125	99.8	

**Note 1:** At 31 March 2017 the number of properties on our internal sewer flooding register was 381 (315 if the Oak Mall shopping centre, Greenock was treated as one property). As a result of the number and complexity of additions this year, and particularly the 69 additions at Oak Mall, we expect the number of properties on our 'at risk of internal sewer flooding' register will remain above the expected service level minimum of 370 until at least 2019.

**Note 2:** Although 91.9% for the year, the Wholesale KPI run-rate improved in the latter half of the year, having exceeded 94% in the last 5 months. Overall performance was impacted by challenges affecting metering, de-registrations and connections activity, particularly in the first half of the year. Scottish Water has made changes to its arrangements for scheduling and managing field work, which delivered significantly improved performance in the latter half of 2016/17.



## Glossary of Terms

Assets	Physical plant and equipment used to produce and transfer water, to collect and treat waste water such as water treatment works and water mains, sewers and sewage works etc.
Climate Change Adaption and Mitigation	'Adaptation' is the action taken by Scottish Water to increase the resilience of its assets to climate change variability and extremes whereas 'mitigation' is the steps to permanently eliminate or reduce its carbon emissions associated with its activities.
Delivery Plan	Scottish Water's annual statement of investment outputs and financial targets.
DMA	District meter areas (DMA) help to identify any localised leakage by the installation of online flow monitors.
Intervention Definition Process (IDP)	Scottish Water's process to identify scope options and select preferred option to achieve the outcome required.
IR18	Rolling Investment Review 2018 to consider priorities and outputs for the 2018-21 period and beyond.
Leakage	The water lost from Scottish Water's network of water pipes and its assets (service reservoirs etc.) between putting water into supply and it arriving at customer taps.
Ministerial Objectives	A statement of requirements (deliverables) set out by Scottish Ministers.
Outputs	Tangible deliverables, such as an improved waste water treatment facility, which benefit customers, the environment or both.
Output Monitoring Group (OMG)	Representatives of Scotland's water industry who are accountable for the monitoring the progress of output delivery.
Overall Measure of Delivery (OMD)	The metric used to assess Scottish Water's delivery of its investment-related outputs.
Overall Performance Assessment (OPA) Score	A comparative overview of company performance which is calculated each year. It covers measures of water supply, sewerage service, customer service and environmental performance.
UID	Unsatisfactory Intermittent Discharges. An overflow on the sewer network that requires to be improved so as to meet environmental standards for the water body into which it discharges or which it affects.
UWWTD	The Urban Waste Water Treatment Directive is a European Union directive concerning the "collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors".
WWTW	A waste water treatment works (WWTW) treats waste water before returning it to the environment.