

# A cross-sector review of outcomes frameworks

A report for the ORR

Aprihan16Insight Ltd 2016





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## 1. Executive summary

This report, prepared for the ORR, sets out a cross-sector comparison of outcomes frameworks. The main purpose of this is to inform the approach that Highways Monitor (a function within the ORR) should take when providing advice on future outcomes for Highways England, as part of the next Road Investment Strategy.

The overarching findings from our work are:

- (i) The design of any outcomes framework turns on four key questions: (i) what is its role and purpose? (b) what outcomes and measures should be included? (c) how prescriptive the outcomes should be? and (d) how should targets be set to balance funding and performance?
- (ii) As in practice we observe wide variation in the detail of outcomes frameworks across sectors, by implication the answers to the above questions also vary across sectors.
- (iii) Consequently, there is no single 'right' approach to establishing an outcomes framework. However, from our review we have identified practical steps and actions the ORR can take in order to answer these key questions with respect to highways.

#### 1.1. Context and aims of our study

The 2015 Infrastructure Act created both Highways England (a government owned company, responsible for managing England's Strategic Road Network) and Highways Monitor (a function within the ORR, with responsibility for monitoring Highway's England's performance).

Under the existing framework for highways, the Secretary of State for Transport stipulates Road Investment Strategies, which Highways England is charged with delivering. These Road Investment Strategies set out: (i) the strategic vision for the network; (ii) the investment plan required to help achieve the vision; and (iii) a performance specification (which describes the outcomes that should be achieved, given the funding provided).

A key aspect of Highways Monitor's role is to provide advice to the Secretary of State for Transport in relation to draft Road Investment Strategies – and in particular, whether the Strategies set for Highways England are both challenging and deliverable. This includes advising on the appropriateness of the outcomes contained in the Performance Specification element of the Strategy – and the related Key Performance Indicators and Performance Measures, which are used to measure performance in the outcome areas.

The first Road Investment Strategy was set in March 2015, covering the period 2015/16 to 2019/20. At present, early work is beginning in relation to the second Road Investment Strategy (RIS2). As part of this, Highways Monitor is giving consideration to how it should approach its advice in relation to the outcomes Highways England will be tasked with.

To help inform this matter, the ORR commissioned Economic Insight to undertake a cross-sector review of existing outcomes frameworks – which is the subject of this report. Our overarching aim is to see what learnings can be drawn from other outcomes frameworks that might be of use to Highways Monitor. Our goal is to draw inferences both in relation to: (i) **the design** of outcomes frameworks themselves; and (ii) **the process** by which they are determined (although it is the design and features of frameworks, more than process, that is our core area of focus).

In addition to this overall aim, there are a number of more specific objectives for our work – which include:

- » Examining what types of outcomes are assessed in other frameworks and, relatedly, whether there is any prioritisation of the outcome areas.
- » Examining what performance metrics are used by other regulators to assess whether outcomes

- are being delivered (and to what extent) **and how prescriptive these metrics are.**
- » Reviewing what specific targets are applied in relation to the performance metrics – and relatedly, how the targets themselves are set.
- » How, within the frameworks we review, the overall 'package' of outcomes is considered and balanced against the overall levels of funding available.
- » In reviewing the 'processes' used to develop outcomes frameworks in other sectors, to specifically understand: (i) how long and resource intensive the process was; (ii) what consultations or other external stakeholder engagements were involved; (iii) what evidence and analysis was developed; (iv) what the related governance structures were; and (v) whether the process allows outcomes to be re-opened at some future point.

#### 1.2. Review of outcomes framework design

In total we reviewed some 15 outcomes frameworks, which included those in the following sectors:

- healthcare;
- water;
- transport;
- energy;
- post; and
- education.

For each framework we reviewed, we compiled information relating to the key topics of interest to the ORR – in line with the objectives listed above. Our review was based on both desk based research (i.e. reviewing public domain documentation relating to the outcomes frameworks) but also direct engagement with various bodies.

In relation to the 'design' of outcomes frameworks applied in other sectors, our key observations were as follows:

- » There is considerable variation in the design of outcomes frameworks, which reflects differences in their objectives.
- When setting outcomes, and when balancing outcomes against funding, organisations make use of benchmarking data.
- » Some bodies have adopted a longer-term approach to assessing outcomes.
- » Some organisations have adopted less prescriptive approaches over time – but where this occurs there are typically direct links between outcomes and funding. The ORR framework does not seem unduly detailed or prescriptive compared to others.

## 1.3. Review of processes for developing outcomes frameworks

In relation to the processes for developing frameworks, our main observations are as follows:

- » The development of outcomes frameworks can be highly resource intensive, but we do find considerable variation in the amount of resource used.
- » The processes tend to be more involved where there are direct links between funding and outcomes, presumably because in these cases there is more scrutiny and importance attached to the design of outcomes.
- » In almost all cases, the development of outcomes frameworks was underpinned by a consultation process and / or stakeholder engagement (and several organisations highlighted the importance of high quality stakeholder engagement).

## 1.4. Summary of our conclusions and recommendations

Based on the evidence we have reviewed, in relation to providing advice regarding RIS2, we would make the following recommendations:

- » The main value of comparing outcomes frameworks across sectors is that it allows one to identify the key questions / issues that must be addressed in order to determine an appropriate framework design – and relatedly, the key practical steps, evidence and analysis required to answer them. From our review, we suggest that there are four overarching questions that determine the design of any outcomes framework:
  - What is the role and purpose of the outcomes framework?
  - What outcomes and related measures should be included?
  - How prescriptive and detailed should the framework be?
  - How should target levels be set, so as to strike an appropriate balance between funding and performance?
- » From our review, we observe material differences in the detail of outcomes frameworks (i.e. variation in what outcomes are measured, the number of measures and prescriptiveness). This would seem to imply that the answers to the above questions differ by sector. Put simply, there is no single 'right' approach to outcomes. Consequently, we have focused on using the review to help identify practical steps that

the ORR can take in order to help answer these questions in relation to highways.

#### Purpose and role of the outcomes framework

- » It is important to align the design of any outcomes framework to its intended goals as a start point we suggest the primary purpose of the Performance Specification in highways is to 'monitor' performance in relation to whether outcomes represent 'value for money.' However, these are 'matters of degree' and we accept are somewhat subjective.
- » Following from the above, in order to robustly assess 'value for money' (and so assess whether outcomes are 'challenging' and 'deliverable,' it is vital that robust benchmarking evidence be developed. We note that the ORR has recently published its Benchmarking Plan, in recognition of this.
- » Because the outcomes framework is more focused on 'monitoring' than 'incentivising' – and because any incentives are limited to 'reputational' ones, the ORR should undertake work to understand what factors help improve the effectiveness of reputational incentives. It should then consider how its approach to identifying outcomes and setting targets might best reflect this.
- When offering advice on the draft RIS, the ORR should consider: (i) the purpose of the outcomes hierarchy; and (ii) whether the various metrics and targets within the RIS are consistent with this.

#### What outcomes and measures should be included

- » Outcomes are only 'appropriate' to the extent that they are: (i) valued by relevant stakeholders; (ii) controllable by Highways England; and (iii) measureable (directly or indirectly through KPIs). Consequently, the ORR ultimately needs to be able to evaluate outcomes and related measures against these three key criteria (supported by evidence).
- » The ORR should take forward a 'gap analysis' to determine for which outcomes it has evidence to help inform its likely value to road users / other stakeholders – and, where gaps exist, develop work to fill them.
- » The design of any future outcomes framework would benefit from an enhanced understanding of the extent to which the outcomes and related KPIs are, or are not, directly influenced by Highways England (i.e. to what extent are the outcomes controllable or not?)
- » The ORR could consider whether mapping outcomes and outputs to individual investments made by Highways England (at a

### detailed level) would improve the robustness of its outcomes and monitoring framework.

That is to say, in addition to the above steps, a detailed review of investment projects against outcomes would most likely further inform an assessment of: (i) which outcomes are appropriate in the first place (i.e. if certain outcomes do not map to any specific investment, it would seem to call into question whether the outcome is relevant); and (ii) the appropriateness of investments (i.e. if an investment does not map to any relevant outcome, this might call into question why that investment is required).

#### The prescriptiveness of the framework

- » From our review, we found that less prescriptive approaches to outcomes tend to be more beneficial where: (i) there are direct links and incentives that connect: users, funding and outcomes; and (iii) where the value attached to outcomes varies by customer groups, and where outcome targets can vary by those customer groups (say, as in multicompany regulated sectors). As neither applies to highways in England at present, we do not think is appropriate to adopt a radically less prescriptive approach.
- » Notwithstanding the above, we consider that there is likely to be real benefits in collaborative working to help take forward the work and analysis required to fill the various evidence gaps.

## How target levels should be set so as to strike an appropriate balance between funding and performance

- » The primary evidence for setting target levels should be benchmarking – but this will not fully remove the need for judgement when providing advice as to whether targets are 'challenging' and 'deliverable.' That is to say, how the benchmarking is both interpreted and applied will be a matter for the ORR to consider.
- » The ORR should consider what the appropriate time period should be for setting and measuring outcomes (and for assessing outcomes against funding) – particularly given the long asset lives and the likely persistence of costs and benefits.
- » When considering its approach to outcomes (and relatedly, efficiency) the ORR should give consideration as to the balance between 'dynamic' and 'static' measures of efficiency.

We consider that there are likely to be real benefits in collaborative working to help to take forward the work and analysis required to fill the evidence gaps.

- » The ORR should consider taking forward work to examine the potential for more radical changes in road user needs over the longer term – and the implications of this for investment and performance. The aim of this should not be to 'second guess' what may be required and plan investment on that basis. Rather, the goal should be to mitigate the risk of 'closing down' or 'making more costly' changes to future network investment that might be required to adapt to those changing needs.
- » In considering whether outcomes are 'challenging' and 'deliverable,' it will be important to take account of legacy effects particularly given the long-term under-investment in highways; and because there may be a 'lag' between investment and improvements in outcomes.
- When evaluating available funding against outcomes, the ORR should consider what measures of funding are most appropriate.

Considering these issues over the longer-term, we would further suggest the following:

- » The ORR, along with other stakeholders and decision-makers, may wish to consider the role for more direct financial incentives to help motivate service delivery in highways.
- » The ORR could consider whether there was scope for more direct customer engagement in shaping the outcomes framework and related targets.



## 2. Introduction

The identification of 'outcomes' and (where appropriate) the setting of related targets, is an important part of the Road Investment Strategy. Accordingly, the ORR wishes to further understand how other regulators and bodies design outcomes frameworks across a range of sectors. This introductory section describes the key context, scope and aims of this study.

The key context to our report is as follows.

- (i) The Infrastructure Act 2015 established Highways England as responsible for managing the Strategic Road Network in England, and also established **Highways Monitor as responsible for monitoring Highways England**.
- (ii) Highways Monitor's role includes providing advice to the Secretary of State for Transport in relation to Road Investment Strategies a key element of which is advising on the extent to which the outcomes Highways England is set are 'challenging and deliverable.'
- (iii) However, it is important to understand that the setting of outcomes, and any associated targets for Highways England, remains a matter for Government as does the setting of Highways England's budget. There is no direct link between funding and outcomes.

This report sets out a cross-sector review of the frameworks applied across a range of sectors for the purpose of setting 'outcomes' targets and incentives (outcomes frameworks). The overarching purpose of this is to help inform Highway Monitor's approach to fulfilling its *advisory role* in relation to the setting of future outcomes for Highways England. The report is structured as follows:

- » The remainder of this introductory section provides further details of the relevant context, scope and aims of the study.
- » Section 3 sets out the findings from our crosssector review of the design of outcomes frameworks.
- » Section 4 provides details of our review of the 'processes' used by bodies to develop outcomes frameworks.
- » Section 5 sets out our conclusions and recommendations for Highways Monitor.

#### 2.1. Context and background

The Infrastructure Act 2015¹ (the Act) formally created Highways England as a government owned company (formerly the Highways Agency) and gave it responsibility for managing England's Strategic Road Network (SRN) consisting of motorways and main 'A' roads. The Act further set out that Highways England should serve two core functions:

- to deliver Road Investment Strategies (RIS) as set out by the Secretary of State; and
- develop proposals for delivering more specific Route Strategies, which may also be set out by the Secretary of State.

Relative to the previous framework, the Act conferred Highways England with a greater degree of autonomy. In addition, it was considered that, by establishing Highways England as a government owned company, it would be better able to secure low-cost finance in order to fund longer-term infrastructure projects. Relatedly, the Department for Transport (DfT) stated that: "Turning the Highways Agency into a government owned Strategic Highways Company will facilitate the development of a flexible and efficient organisation with the ability to realise the government's Strategic Vision for the SRN and become a world-leading network operator."2

- » The creation of a watchdog which must "carry out activities to protect and promote the interests of users of highways." The watchdog is now known as Transport Focus.
- The creation of a monitor which must "carry out activities to monitor how a strategic highways company exercises its functions." The Highways Monitor was the name given to this body.

Following from the above, Highways Monitor is now the independent monitor of Highways England; and is a function within the Office of Rail and Road (ORR). Details of the scope of Highways Monitor's role were set out in a memorandum of understanding (MOU),<sup>3</sup> which described the relationship between the Secretary of State – as represented by the DfT – and the monitor. The MOU identified nine core activities that the Highways Monitor is expected to undertake, which are as follows:

- » Monitoring performance and efficiency of the Company (Highways England) against the objectives and targets set in the different parts of the RIS.
- » Providing advice to support the setting of the RIS, including advice to confirm that the proposition remains challenging and deliverable.
- » Monitoring the Company's compliance with its statutory directions and regard to guidance.
- » Benchmarking the Company's performance and efficiency against comparable organisations in other countries or other sectors.
- Assessing the Company's continued compliance with the assurance arrangements in sections 7.2 to 7.8 of the framework document and delegations letter, and advising whether outstanding requirements have been met.
- » Undertaking enforcement action.
- » Providing advice to the Secretary of State on the activities listed above, and on any other topics where he/she requests advice that are linked to the Monitor's duties.

Recognising the above changes, it was considered important that there should be some form of independent assurance regarding the extent to which Highways England delivers against its functions. The Act, therefore, set out a range of 'provisions' which included:

<sup>&</sup>lt;sup>1</sup> 'The Infrastructure Act.' HM Government (12<sup>th</sup> February 2015).

<sup>2 &#</sup>x27;Road Investment Strategy: Performance Specification.' DfT (2014).

<sup>3 &#</sup>x27;Memorandum of Understanding between the Highways Monitor and the Department for Transport.' DfT (March 2015).

- » Carrying out further investigations that the Monitor believes to be justified.
- » Assuring its own work, to ensure its advice and decisions are of high quality.

By virtue of the fact that Highways Monitor has a role in: (i) advising the Secretary of State in relation to objectives within the RIS; (ii) advising the Secretary of State as to whether the RIS is challenging and deliverable; and (iii) because the RIS itself includes the investment plan and metrics that Highways England should achieve – then, collectively, the framework means that Highways Monitor plays an important role in advising on what outcomes and targets Highways England should be set.

Early work has now begun on developing the next RIS (RIS2), which will cover the period 2020/21 to 2025/26. An important element of this will include determining the relevant outcomes and the related measures and targets (which collectively Highways Monitor refers to as the 'Performance Specification'). Given Highways Monitor's role in advising on how 'challenging' and 'deliverable' any such targets within the next draft RIS might be, it is important to develop evidence and research that can help inform this assessment.

This study has been commissioned in the above context - where, in particular, the scope of this report is to explore how outcomes frameworks have been developed in other sectors in order to help:

- identify both the **design** of those frameworks and the **process** by which they have been developed; and
- consider the relevance and applicability of those frameworks to Highways England. The specific aims and objectives of this study are set out subsequently.

## 2.2. The existing outcomes framework for Highways England

Following from the above, at present the 'outcomes' against which Highways England is expected to deliver are set out in the *Performance Specification*, which is one of three main components of the RIS, as illustrated in Figure 1 below.

Figure 1: The RIS



In summary, the three components of the RIS address the following:

- The Strategic Vision sets out the Secretary of State's longer-term aspirations for the SRN. For example, in RIS1 this was that by 2040 the SRN should be smoother, smarter and sustainable.
- The Investment Plan contains details of 'what' investments will be made in the SRN, and 'where' in order to deliver the strategic vision. In RIS1 this included investment of £15.2bn, covering over 100 major schemes for the period 2015/16 to 2019/20.
- » As indicated above, the Performance Specification is, essentially the outcomes framework for Highways England. This specifies what Government wants Highways England to deliver over the period of the RIS.

The Performance Specification itself has four key dimensions, which are:

- outcomes which relate to the overarching 'areas' for which Government wishes to set an expectation of what Highways England should deliver;
- KPIs which are the high level measures used to track performance across the outcome areas (used because sometimes there is no direct measure of the outcome itself – or because the outcome may not be entirely within the company's control);
- performance indicators as KPIs may not, of themselves, provide a full measure of how Highways England itself is performing, the company is required to provide a more detailed suite of performance measures; and
- requirements these relate to various 'actions' that Highways England must undertake to help

support compliance with the Performance Specification and could include, for example, developing new metrics or providing supporting evidence as to how Highways England's activities have helped contribute to certain outcomes.

Following from the above, Figure 2 provides a summary of the outcomes, KPIs and associated targets for Highways England, as set out in the Performance Specification for RIS1. Relatedly, Table 1 (overleaf) shows the associated Performance Indicators (PIs) and Requirements.

Figure 2: Performance Specification in RIS1

OUTCOMES	KPIs	TARGETS
Making the network safer	Number killed or seriously injured (KSIs) on the SRN	40% reduction in KSIs by 2020 relative to 2005-09 baseline
Improving user satisfaction	The percentage of National Road Users' Satisfaction Survey (NRUSS) respondents who are Very or Fairly Satisfied	Achieve score of 90% by 2017 then maintain or improve
Supporting smooth traffic flows	<ul> <li>Network Availability: the percentage of the SRN available to traffic</li> <li>Incident Management: percentage of motorway incidents cleared within one hour</li> </ul>	<ul> <li>Lane availability &gt;97%</li> <li>85% of motorway incidents cleared within an hour</li> </ul>
Encouraging economic growth	Average delay (time lost per vehicle per mile)	■ No target set
Delivering better environmental outcomes	<ul> <li>Number of Noise Important Areas mitigated</li> <li>Delivery of improved biodiversity, as set out in the Company's Biodiversity Action Plan</li> </ul>	<ul> <li>Mitigate at least 1,150 Noise Important Areas</li> <li>Publish Biodiversity Action Plan</li> </ul>
Helping cyclists, walkers, and other vulnerable users of the Network	The number of new and upgraded crossings	■ No target set
Achieving real efficiency	<ul> <li>Savings on capital expenditure</li> <li>Progress of work, relative to forecasts set out in the Delivery Plan, and annual updates to that Plan, and expectations at the start of RP1</li> </ul>	Total savings of at least £1.212bn over RP1 on capital expenditure
Keeping the Network in good condition	<ul> <li>The percentage of pavement asset that does not require further investigation for possible maintenance</li> </ul>	<ul> <li>Percentage to be maintained at 95% or above</li> </ul>

Table 1: Performance Indicators and Requirements under RIS1

Outcome	PIs	Requirements
Making the network safer	<ul> <li>Incident numbers and causation numbers for motorways.</li> <li>Casualty numbers and causation factors for All Purpose Trunk Roads (ATPRs).</li> <li>International Road Assessment Programme (iRAP) based road safety investigations.</li> </ul>	Work with the Department and other highways authorities to identify the most appropriate road safety assessment rating system rating system, which will build on, but not be limited to, existing iRAP star rating systems such as EuroRAP. Once identified, the Company should develop, and implement, the chosen programme as appropriate, feeding into subsequent Route Strategies and the development of the next RIS.
Improving user satisfaction	Suite of PIs to provide additional information about the factors that influence user satisfaction.	<ul> <li>Demonstrate what activities have been undertaken, and how effective they have been, to maintain and improve user satisfaction.</li> <li>To support the Watchdog as it develops its replacement for the National Road User Satisfaction Survey (NRUSS).</li> </ul>
Supporting smooth traffic flows	Suite of PIs to illustrate the impact of the activities undertaken by the Company and the influence of external factors, on traffic flow. This should include, as a minimum, reliability of journey times.	<ul> <li>Report annually on how the Company has minimised inconvenience to road users .through roadworks over the previous year.</li> <li>Demonstrate that it is working effectively with its partners to improve incidence response.</li> </ul>
Encouraging economic growth	Suite of PIs to help demonstrate what activities have been taken to support the economy. At a minimum include metrics on: (i) being an active part of the planning system; (ii) supporting the business and freight and logistics sectors; and (iii) helping the government support small and medium sized enterprises.	<ul> <li>Report on average delay.</li> <li>Actively support the Construction 2025 goals.</li> <li>Deliver the Roads Academy programme.</li> <li>Develop its approach to innovation, technology and research.</li> <li>Through Route Strategies identify constraints ot economic growth that the performance of the SRN could help to alleviate.</li> </ul>
Delivering better environmental outcomes	Suite of PIs to provide additional information about environmental performance - as a minimum should include: (i) air quality; and (ii) carbon dioxide and other greenhouse emissions for the company and its supply chain.	<ul> <li>Demonstrate what activities have been undertaken, and how effective they have been, to improve environmental outcomes.</li> <li>Develop metrics covering broader environmental performance – including: (i) a new or improved biodiversity metric; and (ii) carbon dioxide or other greenhouse gas emissions arising from the network.</li> </ul>
Helping cyclists, walkers and other vulnerable users of the network	Suite of PIs to demonstrate the safety of the SRN for cyclists, walkers and other vulnerable users.	<ul> <li>Report annually on the number of new and upgraded crossings.</li> <li>New indicators demonstrating improved facilities for cyclists, walkers and vulnerable users.</li> <li>Report on delivery against the Public Sector Equality Duty.</li> </ul>
Achieving real efficiency	Suite of PIs to demonstrate that the portfolio is being developed and the Investment Plan is delivered in a timely and efficient manner.	Demonstrate on an annual basis how efficiencies have been achieved.
Keeping the network in good condition	Suite of PIs to provide additional information on the asset condition of the SRN as a whole.  hts abbreviated for summary purposes – for full detail.	<ul> <li>Produce an implementation plan to show how asset quality information will be improved.</li> <li>Develop new condition indicators for: (i) pavements and structures; and (ii) technology, drainage, and geotechnical works.</li> </ul>

Note: PIs and requirements abbreviated for summary purposes – for full details see: 'The Performance Specification' of RIS1

## 2.3. The development, key features and purpose of the existing framework

In order to evaluate the relevance of outcomes frameworks in other sectors to highways in England, it is important to understand:

- the basis on which the Performance Specification is developed; and
- its key features and purpose.

## 2.3.1. The development of the Performance Specification

As the Performance Specification is part of the RIS, it is developed as an element of the overall process for producing the RIS itself, which was set out by the DfT in 2014.<sup>4</sup> This process consists of five main stages, as illustrated in Figure 3 below.

Figure 3: Process for setting the RIS

- for the next Road Period, including requirements specified by the Secretary of State.
- Stage 4 efficiency review. The Secretary of State will decide whether the draft SBP will deliver an appropriate level of performance for the funds invested, and whether the overall programme offers value for the taxpayer. As part of this, the Secretary of State may ask Highways Monitor to carry out an efficiency review. If the Secretary of State agrees the SBP, the process will move onwards to formal confirmation. Otherwise, Highways England may be required to amend their SBP.
- Stage 5 final RIS and SBP. In the fifth stage, the Secretary of State will issue the final RIS together with Highways England. The RIS will contain the finalised Performance Specification. Following this, Highways England will embark on a period of 'mobilisation,' involving supply chain negotiation in advance of the SBP coming into force.



The five stages above involve the following:

- Stage 1 initial SRN report. The Strategic Highways Company (Highways England) produces an initial report on the SRN, which provides a vision for the network and an assessment of its future state. It also identifies maintenance and enhancement priorities for government consideration.
- » Stage 2 draft RIS. Starting from the SRN Initial Report, government (DfT) produces a draft of the RIS, containing the elements described earlier, including the available funding - and the Performance Specification (i.e. the outcomes framework).
- » Stage 3 draft SBP. Highways England will produce a draft Strategic Business Plan (SBP) outlining their planned activities and deliverables

Finally, it should be noted that the existing process allows for the possibility of a RIS (and therefore the Performance Specification) being re-opened. Specifically, the framework sets out that, in circumstances where changes in transport policy in response to external factors are so fundamental that

Relating to any inferences we draw from our assessment of outcomes frameworks in other sectors, it is important to also highlight Highways Monitor's role in the above process. In particular, Highways Monitor plays an *advisory role* in relation to stage 2 (the draft RIS), where it provides advice to the Secretary of State in relation to whether the RIS is "deliverable and challenging." As noted earlier, this clearly implies a need for Highways Monitor to provide advice in relation to the *suitability of the outcomes* and associated KPIs, PIs and requirements.

<sup>&</sup>lt;sup>4</sup> <u>'Setting the Road Investment Strategy - Now and in the future.'</u> DfT (2014).

the current RIS cannot continue, the Secretary of State retains the option to reopen the RIS.

## 2.3.2. Our assessment of the key features and purpose of the existing framework

Following from the above, in considering the relevance of other outcomes frameworks to highways (and specifically to Highways Monitor's role) it is important to understand the key features and purpose of the existing outcomes framework for highways.

Here it is important to clarify that, by this, we are primarily referring to <u>our assessment</u> of the underlying economics of the framework and what this implies for issues such as: (i) the incentives placed on Highways England; and therefore (ii) the role(s) that the framework may be fulfilling in practice. This matters because in order to draw accurate inferences from outcomes frameworks applied elsewhere, we need to understand where they differ from, or are similar to, the existing outcomes framework for highways.

In our view, the important features of the current outcomes framework for highways are as follows:

- » The outcomes framework itself does not provide any direct financial incentives to Highways England to deliver against any particular targets. This is because the funding allocated to Highways England by the DfT is not directly conditional on performance against outcomes (i.e. there is no formulaic link between funding and delivery).
- » Related to the above, within the scope of its current role, Highways Monitor itself cannot apply any direct financial incentive for outcomes delivery. This is because, whilst Highways Monitor plays a crucial role in advising on how 'deliverable' and 'challenging' the RIS is, ultimately both the amount of available funding and the outcomes themselves are a matter for Government. This is in contrast to most sectors that are subject to formal economic price regulation, which are typically characterised by: (i) privatised regulated companies (with shareholders); (ii) an independent economic regulator - where, critically, the regulator determines (directly or through incentives) 'what' outcomes should be provided and the funding available to achieve them in totality by virtue of setting a price control; and finally (iii) where the regulator can also determine, at a more detailed level, 'how much' funding should be at risk, conditional on specific outcome measures (some of which it might set, some of which might be proposed by companies).
- '<u>ORR's enforcement policy for Highways England.</u>' ORR (December 2015).

- » There may, however, be some indirect financial incentives linked to Highways England's performance against the outcome measures. These might include the following:
  - Highways England staff may have elements of their remuneration explicitly or implicitly linked to metrics aligned to the Performance Specification.
  - Over the longer-term, how Highways England performs against outcomes may influence Government's views as to the appropriate level of funding that should be provided in return for delivery. However, it is not clear how this incentive might function in practice. For example, a consistent under-delivery of targeted outcomes relative to budget would not necessarily create a strong rationale for DfT to cut subsequent budgets and vice-versa (in-fact the incentives could work the opposite way around).
  - Under Highways Monitor's enforcement powers, it retains the ability to levy fines against Highways England. Recognising that Highways England is publically owned, Highways Monitor's enforcement policy states that: "we will generally impose fines at a level which will have a <u>reputational</u> as opposed to a punitive [financial] impact on Highways England."5 However, in the case of very serious contraventions, Highways Monitor could levy fines of up to £25m. One might liken this to providing an indirect financial incentive of a 'binary' nature, that incentivises Highways England to avoid 'very bad' outcomes. A summary of the scale of fines Highways Monitor could level is set out in Table 2.

Table 2: Summary of fines levels

Seriousness of contravention	Indicative level of fine
Technical or de minimis	Zero
Less serious	<£0.5m
Moderately serious	<£1.0m
Serious	<£2.5m
Very serious	<£25m

Source: ORR's enforcement policy for Highways England



- » Following from the above, in relation to creating 'incentives' for Highways England to deliver outcomes, the existing framework should be more characterised as creating 'reputational incentives.' That is to say, whilst under or outperformance against outcomes may not directly influence the amount of funding available to Highways England, it will impact the reputation of the organisation and its staff. Subject to a number of factors, reputational incentives can be highly effective – and this is something we discuss further subsequently.
- Finally, we would suggest that the primary role of the outcomes framework is to allow for the transparent monitoring of Highways England, so as to help provide assurance that it is delivering the stipulated outcomes. That is to say, whilst the framework may create *some* incentives for Highways England (as described here) its current design and features mean that it is, first and foremost, a monitoring regime.

We should emphasise that the above observations do not imply any criticism of the current framework. As we describe subsequently, outcomes frameworks can be developed to fulfil a wide range of objectives, and the appropriate framework very much depends on the goals at hand. Relatedly, as a publically owned company with no private shareholders, in practice it would in any case be more challenging to create direct financial incentives for Highways England (at least over the immediate term).

The purpose of these observations is to help identify and understand key similarities and differences between outcomes frameworks applied in other sectors.

#### 2.4. Aims and objectives of this study

As noted previously, the overarching aim of this study is to see what learnings can be drawn from other outcomes frameworks that might be of use to Highways Monitor in relation to providing advice on the Performance Specification within RIS2. Here our aim is to draw inferences both in relation to: (i) **the design** of outcomes frameworks; and (ii) **the process** by which they are determined (although it is the design and features of frameworks, more than process, that is our core area of focus).

In addition to this overall aim, there are a number of more specific objectives for our work – which include:

» Examining what types of outcomes are assessed in other frameworks and, relatedly, whether there is any prioritisation of the outcome areas.

- » Examining what performance metrics are used by other regulators to assess whether outcomes are being delivered (and to what extent) and how prescriptive these metrics are.
- » Reviewing what specific targets are applied in relation to the performance metrics – and relatedly, how the targets themselves are set.
- » How, within the frameworks we review, the overall 'package' of outcomes is considered and balanced against the overall levels of funding available.
- » In reviewing the 'process' used to develop outcomes frameworks in other sectors, to specifically understand: (i) how long and resource intensive the process was; (ii) what consultations or other external stakeholder engagements processes were involved; (iii) what evidence and analysis was developed; (iv) what the related governance structures were; and (v) whether the process allows outcomes to be re-opened at some future point.



# 3. Cross-sector review of outcomes frameworks

This section sets out our cross-sector review of outcomes frameworks. Here our focus is on the design and features of those frameworks. In total we review 15 comparators, including: water, energy, transport, health and education.

The key findings from this review are as follows.

- (i) There is considerable variation in the design of outcomes frameworks, which reflects differences in their objectives.
- (ii) When setting outcomes, and when balancing outcomes against funding, **organisations can make use of benchmarking data.**
- (iii) Some bodies have adopted a longer-term approach to assessing outcomes.
- (iv) Some organisation have adopted less prescriptive approaches over time – but where this occurs there are typically direct links between outcomes and funding. The ORR framework does not seem unduly detailed or prescriptive compared to others.

#### 3.1. What is an outcomes framework?

Before setting out our review of outcomes frameworks in other sectors, we should firstly clarify what we mean by an 'outcomes framework.' In practice, there is no single agreed definition of an outcomes framework, and different bodies describe them in slightly different terms, as illustrated in the following quotes:

"An outcomes framework is a structure, often displayed in a table or short document, to help you define the most important outcomes, which might be achieved from an initiative or programme of initiatives, linking them with supporting research." 6 - Cabinet Office

"A set of... indicators which measure performance... designed to be the primary assurance mechanism to assess progress." - The Department of Health / NHS England

"An outcomes framework is a resource to help link what you do (activities) with what you want to achieve (outcomes)."8 - NHS Scotland

"A hierarchical relationship between inputs, outputs and outcomes... [where] the regulator should only concern itself with inputs or outputs to the extent that it is necessary to incentivise outcomes." - Ofwat

For the purpose of our study, we think it is helpful to define outcomes frameworks in relatively broad terms. As such, we suggest that outcomes frameworks have three main dimensions:

- the identification of a specific set out outcomes that are considered to be desirable;
- a mapping of how those desired outcomes connect to activities that can be undertaken to help achieve them; and
- a means by which performance against those outcomes can be measured or observed (either directly or indirectly).

At a detailed level, outcomes frameworks may be designed to fulfil a wide range of objectives. However, **conceptually** we suggest that there are typically two overarching aims:

- Whelping to focus on the "right" things. By this we mean helping to increase the likelihood that the outcomes and outputs delivered reflect an implicit or explicit assessment of the "value" or benefit associated with achieving those outcomes. This is closely linked to the notion of allocative efficiency in economics. Namely, when there are only limited resources, how do we identify what outcomes should be delivered? For example, the decision to include outcome A within a framework, but not outcome B, could be viewed as a choice to allocate resource to achieving one, but not the other. This logic is extended where there is a prioritisation of the various outcomes included within a particular framework.
- » Helping to achieve or evaluate value for money. In addition to helping determine which outcomes are relevant, and their ordering, outcomes frameworks can help determine what overall levels of outcomes should be delivered, relative to the funds available. This can be considered both in relation to the "overall package" of outcomes relative to total funds; and / or in relation to specific outcomes. So, for example, if one determined that outcome X is a priority and should be included within a framework, one must then consider what "level or target" should be achieved / is appropriate relative to the cost. This concept is more closely linked to technical efficiency in economics - namely, for a given budget or inputs, how is output maximised? (or vice versa).

The above aims are not necessarily mutually exclusive, and in some instances the distinction between them may be somewhat subjective.

In more practical terms, outcomes frameworks relate to the above issues by helping achieve two objectives:

- » Helping to drive changes in behaviour that deliver better prioritisation and value for money by creating incentives for the organisations to which the framework applies.
- » Helping to improve our understanding of current performance and the extent to which the
- <sup>8</sup> 'Building Better Health Outcomes.' NHS Scotland.
- <sup>9</sup> 'Inputs, outputs and outcomes: what should price limits deliver? A discussion paper.' Ofwat (2011).

<sup>3.2.</sup> What role do outcomes frameworks' fulfil?

<sup>6 &#</sup>x27;Outcomes Frameworks: a guide for providers and commissioners of youth services.' The Cabinet Office (2014).

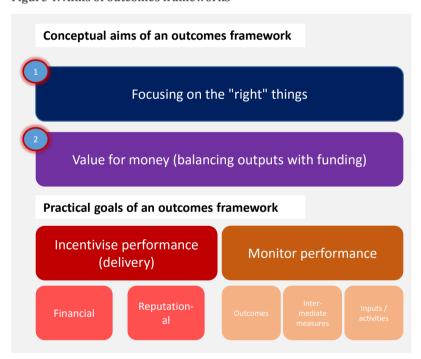
<sup>&#</sup>x27;The NHS Outcomes Framework 2015/16.' The Department for Health (2015).

right factors are being prioritised today – and whether value for money is being achieved – both of which are done through forms of **monitoring**.

Again, the above two practical objectives are not mutually exclusive. For example, outcomes frameworks could be intended both to help understand and monitor current performance (to inform prioritisation and value for money) in addition to helping to incentivise changes in behaviour to improve future performance. Importantly, both of these are 'matters of degree' and it may be that some frameworks have been designed with more weight placed on 'incentives,' with others designed with more weight placed on 'monitoring.' As noted previously, the existing framework for Highways England is primarily intended to fulfil a monitoring function. Figure 4 provides an overview of the aims and objectives described here.

which the frameworks apply; and / or (iii) across the sector of relevance more widely.

Figure 4: Aims of outcomes frameworks



In addition to the main aims and objectives that outcomes frameworks are typically intended to fulfil, there may be a wider range of goals that they can contribute towards – including:

- helping to create an evidence-led culture;
- encouraging a culture of greater transparency;
- helping to drive a greater focus on customers / users; and
- helping to encourage a greater consideration of wider social and / or environmental factors.

Importantly, outcomes frameworks may help achieve the above in relation to: (i) the organisations that develop the frameworks; (ii) the organisations to

#### 3.3. Outcomes frameworks included in our review

In total we have included 15 outcomes frameworks within our review, as summarised in Table 3 below. We are aware, of course, that a vast number of outcomes frameworks exist – all of which may contain valuable lessons for the ORR. However, within the scope of this study, we have had to be selective. The precise choice of comparators is subjective, and has been guided by discussions with the ORR. The following factors were taken into consideration: (i) an assessment of whether the framework is likely to help inform the issues currently under consideration by the ORR in relation to its future approach to highways; (ii) the extent to which the frameworks are applied to organisations with similar characteristics and incentives as to those that apply to Highways England; and (iii) whether there has been recent reform of the framework.

Table 3: Comparator outcomes frameworks included within our review

Table 3. comparator outcomes frameworks included within our review		
Sector	Organisation (i.e. owner of outcomes framework)	Outcomes framework
Health	Public Health England	Public Health Outcomes Framework 2015-16
Health	NHS England	NHS Outcomes Framework 2015-16
Water and wastewater	Ofwat	PR14 water and wastewater price control 2015-20
Water and wastewater	NIUR	Water and sewerage services price control 2015-21
Water and wastewater	WICS	Strategic Review of Charges 2015-21
Water and wastewater	CER (Irish Water)	Water (CER Interim Price Control 1 - to 2016)
Transport	Transport Scotland	National Transport Strategy Framework - January 2016
Transport	Welsh Government	The Wales Transport Strategy 2008
Transport	ORR (Rail)	Network Rail's outputs and funding 2014-19
Transport	TfL	Monitoring under the Mayor's Transport Strategy
Transport	NZ Transport Agency	NZ Transport Agency Statement of Intent 2013-16
Energy	NIUR	Energy
Energy	Ofgem	T1 - electricity and gas transmission
Post	Ofcom	Annual monitoring update on the postal market: 2015
Education	Department for Education	Secondary School Accountability System 2013

#### 3.4. Our cross-sector review

The remainder of this section sets out our cross-sector review of the key features and design of the comparator outcomes frameworks listed above. As noted previously, this part of our analysis is focused on the **design** of the frameworks – that is to say, "what they do" and "how." The subsequent section of this report addresses the **process** by which the relevant organisations developed the frameworks in the first instance.

Our summary and assessment of the frameworks was informed by evidence gathered in two main ways:

- » Desk based research. In each case we reviewed the relevant public domain documentation relating to the frameworks. For example, in relation to outcomes frameworks associated with regulatory price controls, we reviewed the relevant regulatory determination documents, but also documentation relating to the development of the control methodology, plus all other documentation we considered relevant to the outcomes framework.
- » Direct engagement with the relevant framework owners. As part of our study, the organisations identified previously were given the opportunity to respond to a short questionnaire; and a sub-set was also given the opportunity to hold a conference call with us – in order to further explore the above issues. As summarised in the table overleaf, there was excellent engagement from the organisations, and we thank them for their participation.

To help better enable comparison, in each case we organised the relevant information across a common template, addressing the following three key topics:

- » Topic 1: purpose and scope of the outcomes framework. In particular, understanding what objectives the framework is intended to fulfil, the specific outcomes included within it, and whether there is any prioritisation of outcomes.
- » Topic 2: Measures and targets within the outcomes framework. What specific metrics are used to assess performance in the outcomes areas and, if relevant, what targets might apply. Where targets do apply, understanding on what basis they were set – and what evidence and analysis was used to inform the setting of them.
- » Topic 3: how the outcomes were balanced against funding. Understanding whether, and if so how, the overall package of outcomes was assessed relative to available funding. Relatedly, exploring whether any specific measures or targets also had direct financial incentives attached.

Organisations were given the opportunity to respond to a short questionnaire; and / or to hold a conference call with us... there was excellent engagement from the organisations.

For each of the 15 outcomes frameworks we reviewed, a detailed completed template can be found in Annex A of this report. In the following we highlight our key observations following our review.

Table 4: Summary of engagement

Organisation	Responded to questionnaire	Direct discussion / conference call
Public Health England	YES	YES
NHS England / Department of Health	YES	YES
Ofwat	YES	YES
NIUR*	NO	YES
WICS	YES	YES
CER (Irish Water)	YES	YES
Transport Scotland	YES	YES
ORR (Rail)	YES	NO
TfL	YES	NO
NZ Transport Agency	YES	NO
Ofgem	YES	NO
Department for Education	YES	NO

NB; we reviewed a total of 15 outcomes frameworks and had direct engagement with the above 12 organisations.
\*we reviewed two frameworks overseen by the NIUR, one in relation to water, on in relation to energy.

#### 3.5. Key themes and observations

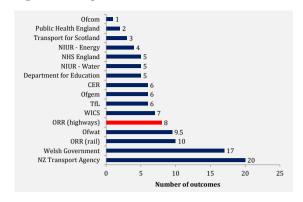
Following our review, below we set out our key observations and emerging themes. In the conclusions and recommendations section of this report, we consider the potential implications of these for the ORR in the context of its approach to outcomes for Highways England.

Our main observations and themes are as follows:

- » There are considerable differences in the intended aims of the various outcomes frameworks reviewed - and this is very much reflected in differences in the detail of "how" they are designed. For example, outcomes frameworks in sectors where independent economic regulation applies, and where there are privately owned delivery companies, typically seek to both incentivise and monitor delivery. For example, Ofgem's approach to outcomes in relation to transmission operators is reflective of this, where there are explicit incentives associated with efficiency and innovation. In contrast, where the delivery company is publically owned, and / or where the framework owner does not have an economic regulation remit, the emphasis tends to be more about monitoring (for example, the NIUR's approach to outcomes for Northern Ireland Water reflects its publically owned status).
- » There is also substantial variation in how "detailed" the frameworks are. For example, at one end of the spectrum, the New Zealand Transport Agency (NZTA) framework has a total of 20 associated outcomes with 45 metrics or targets. On the other hand, Ofcom's framework in relation to Royal Mail Group has only one outcome with, 11 metrics and measures.

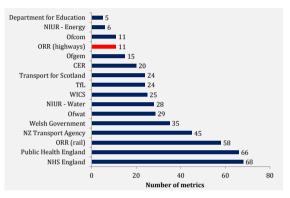
Further to the above, the following figures compare: (i) the number of outcomes; (ii) the number of metrics; and (iii) the ratio of metrics to outcomes across the comparators we have reviewed.

Figure 5: Comparison of number of outcomes<sup>10</sup>



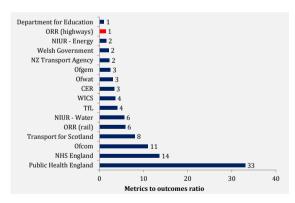
Source: Economic Insight analysis

Figure 6: Comparison of number of metrics



Source: Economic Insight analysis

Figure 7: Comparison of ratio of metrics to outcomes



Source: Economic Insight analysis

In relation to the above, it is important to emphasise that having 'more' or 'less' outcomes or metrics is neither necessarily 'better' or 'worse,' as the appropriateness very much depends on: (i) the goals of the framework; and (ii) the characteristics of the sector in question. For example, in determining the suitability / appropriateness of outcomes, regulators and outcomes owners tend to focus on three main

number of outcomes by the total number of companies, i.e. 171/18 = 9.5.



In order to derive a number of outcomes for Ofwat that is comparable to the other ones, we have divided the total

criteria: (a) whether it is a **priority / is of value** to customers; (b) whether it is within the **control** of the delivery company; and (c) whether it is **measureable**. Following from this logic, if in one sector there were 20 outcome areas that demonstrably met these criteria, then defining 20 outcomes would be appropriate. In contrast, if in another sector, there was only one outcome area that met those criteria, then one might only set one outcome.

Notwithstanding the above, we note that **the current outcomes framework for highways does not appear to be detailed in comparison to approaches elsewhere.** Specifically, in relation to the ratio of 'outcome areas' to 'metrics' (which we consider to be the most meaningful comparison) the approach in highways would appear to be relatively 'light touch.'

» Related to the above, the ORR was interested in whether or not there was a relationship between the detail of outcomes / KPIs and the overall regulatory model. Accordingly, the table below sets out the three governance structures and the average number of outcomes and KPIs associated to each of three groups.

Table 5: Average number of outcomes by model

Regulatory model	Company ownership	Average number of outcomes	Average number of KPIs
Independent regulator	Private company	6	18
Independent regulator	,	8	32
Government	Publically owned	8	38

Source: Economic Insight analysis

- Whilst the number of observations is too small to draw any overly firm conclusions, there are, on average, less metrics under models that are subject to independent regulation / apply to privately owned companies (relative to public ownership and / or government supervised).
- » There is also considerable variation in terms of how 'flexible' the various frameworks are – specifically in relation to whether the approach to outcomes can be 'reopened.' In broad terms, there are three main ways in which outcomes can be 'reopened' – which are:
  - automatic reopeners (where there is a natural 'break' in which either the outcomes specifically, or a related wider determination

- that includes those outcomes, <u>must</u> be reconsidered);
- reopener mechanisms (where there is the possibility of the outcomes framework, or again a wider determination it is associated with, being reconsidered subject to certain criteria being met); and
- ongoing review (where there is no formal 'determination' that bounds the existence of the outcomes framework – so that the framework's owner retains discretion to consider and amend the approach as it deems appropriate).

The following table summarises the split of the frameworks we reviewed across the above approaches to reopeners.

Table 6: Summary of reopener mechanisms used

Regulatory model	Number
Automatic reopener	1
Reopener mechanism	5
Ongoing review	3
No formal mechanism	6
Total	15

Source: Economic Insight analysis

- » In relation to the above, the main reopener mechanisms we identified included: (i) triggers based on differences between actual and expected costs in totality; (ii) triggers based on differences between actual and expected costs in relation to specific cost items or investments; (iii) triggers linked to unexpected changes in funding (revenues) typically linked to unexpected changes in volume / demand; (iv) triggers linked to material / more robust new evidence / data becoming available; and (v) unexpected events that result in the delivery company having to undertake new / additional tasks that were not originally planned for.
- » A number of organisations explicitly emphasised the advantages of outcomes frameworks being more flexible and less prescriptive. For example, Ofwat highlighted the fact that its less prescriptive approach to outcomes at PR14 gave companies more freedom to tailor outcomes to reflect the specific needs and preferences of their customers (which Ofwat

- indicated is a particular benefit where there are multiple delivery companies, serving differing customers, whom may attach differing values to outcomes).
- » As another example of a flexible approach, the NHS Outcomes Framework is refreshed every year, which allows it to become a tool that reflects the *current* health care system and to better tackle the challenges it faces. Moreover, it does not set any specific outcomes targets, giving it very high flexibility. Similarly, the Public Health Outcomes Framework is also revisited annually for these same reasons.
- » In addition, there is a general impression that there has been a shift towards 'less prescriptive' approaches over time – a point which was emphasised by the WICS in relation to the setting of outcomes in the Scottish Water industry.
- » The level of 'flexibility / prescriptiveness' is closely linked to the extent to which the incentives of delivery companies are (or can be) aligned to outcomes. Based on our observations, more flexible approaches to outcomes would seem to be both more practical and more beneficial in cases where there are direct links between: (i) the outcomes delivered; (ii) the agents who benefit from those outcomes being delivered (i.e. customers / users); and (iii) the funding available to deliver the outcomes (i.e. charges levied on customers / users). This is because, in such cases, a 'flexible' approach creates strong incentives for delivery companies / agents to think carefully about what outcomes their customers want, develop good evidence to understand this, and then deliver them to the level desired by customers in an efficient manner.
- Without these linkages, it would seem likely that the incentives required for a flexible approach to be effective and beneficial are likely to be less strong. For example, the targets that Ofcom set Royal Mail are very prescriptive, as Royal Mail is a de facto monopoly for the universal postal service (but is not subject to a formal economic price control that links revenues to outcomes) and as such, its preferred outcomes and the consumers' may be less aligned to one another.
- » Relatedly, even where the necessary conditions to support less prescriptive approaches exist, they are not a panacea and have a number of associated challenges. For example, at PR14 when water companies first proposed their own outcome incentives, Ofwat found that these did not properly balance risk and reward for customers; and that companies had taken an overly conservative approach. As a consequence, Ofwat had to

- intervene extensively in some cases to modify company proposals. This included, for a number of outcomes where comparative analysis was possible, Ofwat imposing target levels (performance commitments) based on upper quartile performance. Ultimately, where this occurred, in effective the outcome was 'prescriptively set.' Accordingly, as part of its work to design the PR19 price controls, Ofwat is taking forward work to determine the balance between bespoke (i.e. non-prescriptive) and comparator (prescriptive) outcomes. Here, therefore, the implication is that one cannot assume that either more or less prescriptiveness is universally 'better' or 'worse' - as it depends both on one's aims and the features of the sector.
- » Following from the above, relevant observations for the ORR would seem to be that: (i) with less prescriptive approaches, one might be concerned that outcomes targets may not be sufficiently challenging; and / or (ii) in order ensure that a less prescriptive approach was delivering appropriate results, one would need good evidence and data that would allow the proposed outcomes and targets to be 'stress tested.' Importantly, this would most likely be benchmarking type data, of the kind that would be needed under a more prescriptive approach in any case.
- Incentives are closely linked to the concept of 'controllability.' Further to the above, where outcomes are outside of a delivery company's control, then clearly there is no relevant incentive power for the delivery company. On the other hand, where outcomes are entirely within a delivery company's control, the opposite is true. In practice, it is almost always the case that controllability is a matter of 'degree.' Our review suggests that less prescriptive approaches, focusing more on outcomes, are likely to be more practical and effective where controllability is higher, and less so where controllability is lower.
- » Related to the above, we find that, in a number of cases, outcomes frameworks are supported by considerable evidence and analysis to help determine the degree to which outcomes are controllable or not. For example, in developing its approach to monitoring Royal Mail's performance, Ofcom has undertaken a range of work to understand how variations in both cost and outcome performance may or may not be within the company's control. This has included taking into consideration exceptional circumstances e.g. force majeure events, such as severe weather, but also examining cost-

- controllability in the context of sharp volume declines.
- » The degree of prescriptiveness also seems to vary with how 'observable' and 'measureable' the outcomes are. Specifically, where outcomes are easy to observe and measure, our review indicates that it is more practical to apply a less prescriptive approach (i.e. one that focuses primarily on the outcomes, rather than inputs, activities or outputs). Where this is not the case, greater prescription tends to be applied.

The balance of outcomes and available funding is typically informed by benchmarking evidence and analysis.

- Where organisations explicitly or implicitly considered the balance of outcomes and available funding, this is typically informed by benchmarking evidence and analysis either: (i) analysis of historical outcomes performance relative to funding; and / or by (ii) comparative analysis (often across companies within the same sector where possible). For example, at the PR14 Price Control, Ofwat used comparator checks and resulting interventions as a safeguard for customers', by proposing that all companies should be achieving an upper quartile performance, for specific areas of service delivery such as:
  - duration of supply interruptions;
  - number of contacts from customers regarding water quality;
  - compliance with DWI water quality standards;
  - number of sewerage pollution incidents; and
  - number of properties impacted by internal sewer flooding.

Similarly, in the Scottish water industry, the WICS made use of comparative analysis both in relation to outcomes and the related costs associated with delivering those outcomes.



A number of frameworks explicitly recognise the need to assess funding and outcomes over the longer term.

- » A number of frameworks explicitly recognise the need to assess funding and outcomes over the longer-term. For example, TfL's Mayor's Transport Strategy focuses on long-term outcomes. As such, the outcome indicators are used to quantify progress, rather than to measure performance against short term targets.
- » In relation to both assessing efficiency and balancing funding against outcomes, a number of bodies have moved to a broader measure of cost. For example, Ofgem, Ofwat and the WICS now use a measure of total operating expenditure (totex) rather than assessing operating and capital expenditure separately.
- In setting 'targets' for outcomes metrics, a number of organisations have increasingly taken into account a broader perspective. Specifically, the assessment of what outcomes 'levels' are appropriate (whether that is in relation to cost efficiency and / or service performance) there are examples where the evidence has taken into account international comparators and / or other sectors. For example, the Northern Ireland Utility Regulator (NIUR) used evidence from: (i) stakeholder engagement; (ii) other regulators; and (iii) the performance of both within sector and out of sector companies, particularly where customer service targets were concerned, in order to set appropriate targets for Northern Ireland Electricity (NIE).
- When setting targets, outcomes frameworks can also take into consideration the implications of "extreme" outcomes. That is to say, separate from any targeted level of performance, sometimes regulators / bodies are concerned about what might happen if service delivery falls below a certain threshold. There may also be instances where extreme outperformance is considered problematic. This may matter for two reasons: (i) for practical / operational reasons (say, because performance below a certain level might jeopardise safety); and / or (ii) from a 'value

for money' perspective, the benefit of delivering certain outcome levels may not vary linearly. For example, customers / users may only value service improvements up to a certain point, above which further enhancement may not be of value to them (clearly this second factor is most relevant where there are direct links between customers, funding and outcomes).

- » In sectors / instances where the available funding for delivering outcomes is derived directly from charges levied on customers / users (e.g. water regulation in England and Wales) there is a strong emphasis on outcomes being closely linked to customer preferences and willingness to pay (typically supported by evidence, including direct customer engagement).
- » Where funding is not directly linked to charges levied on customers / users, we typically observe less use of customer research (especially willingness to pay) to inform outcome setting – as summarised in the table below.

Table 7: Summary of use of customer engagement

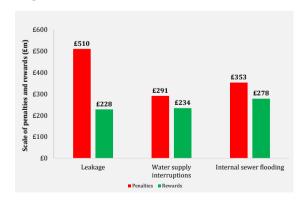
	Total	Extensive direct customer engagement used to set outcomes (% in brackets)	Modest / no customer engagement used to set outcomes (% in brackets)
Frameworks with direct link between outcomes and funding	4	4 (100%)	0 (0%)
Frameworks with <u>no</u> direct link between outcomes and funding	11	4 (36%)	7 (64%)
Total	15	8	7

Source: Economic Insight analysis

- » Related to the above, where there is an explicit 'prioritisation' of outcomes, this tends to arise through two alternative mechanisms:
  - Where there is a direct link between funding and outcomes (such as where regulatory price controls are applied) a prioritisation occurs by virtue of the amount of funding associated with specific outcomes. This can occur directly, such as through financial outcome incentives, or indirectly through the broader regulatory framework.
  - Where there is no direct link between funding and outcomes, the outcomes framework

- owner can itself 'set' a prioritisation of objectives (often this is done by Government). This can occur through various mechanisms, including collaborative / stakeholder workshops and other forms of engagement.
- » Related to the previous discussion, there is no 'right' mechanism for prioritisation. However, we would tend to suggest that approaches that prioritise based on the 'value' users attach to outcomes would tend to be more appropriate when the users pay for the service directly. In contrast, where the outcomes are funded through general taxation, the rationale for the framework owner / government setting priorities would be that they implicitly represent the priorities of the public.
- » Where regulators / bodies set priorities through the use of financial incentives, this is typically done by developing evidence as to the relative value that stakeholders (primarily customers / users) attach to those outcomes (i.e. their willingness to pay). For example, this was largely the approach adopted in the water industry in England and Wales at PR14. The resulting 'value' associated with the outcomes then provides an implicit prioritisation. In this case, and as shown in the figure below, this would suggest that Ofwat (in effect, customers) prioritised outcomes associated with: leakage, water supply interruptions and sewer flooding (all of which had material potential financial awards and penalties associated with them).

Figure 8: Potential financial penalties and rewards associated with key outcomes at the PR14 price control



Source: Ofwat

» There are a range of research techniques that can be used to measure customer / user value (and so determine financial outcome incentives that drive prioritisation). The main techniques use include:

- Revealed preference using analysis of actual user / customer data (most relevant where you can observe customers 'paying' for a service; and where they can actively 'choose' between different options with different associated outcomes);
- Revealed preference using analysis based on choice experiments (most relevant where you cannot observe customers exercising 'real world' choices, but where simulated choices can be monitored – a form of experimental economics); and / or
- Stated preference typically done through the use of willingness to pay surveys (widely used in part because revealed preference techniques are often difficult or costly to implement).

The following table summarises the use of the various methods listed above across the frameworks we reviewed.

Table 8: Summary of valuation methods used to inform prioritisation

Approach to determining customer value	Number of instances technique used in frameworks reviewed
Revealed preference - actual customer data	0
Revealed preference - choice experiments or similar	0
Stated preference - willingness to pay	4
Stated preference - qualitative survey	3
No approach taken	8
Total frameworks reviewed	15

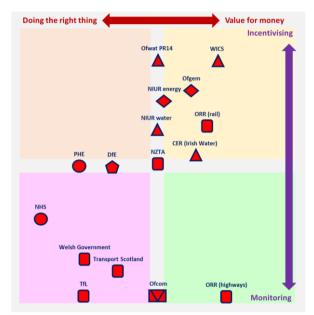
Source: Economic Insight analysis

- » In practice, it is clear that understanding customer preferences is challenging. In particular, even where customer research / willingness to pay is used to inform target setting and funding, recent cases show that the reliability of this research can be varied. For example, in the PR14 Price Control, Ofwat observed large variations across companies in relation to the implied customer valuations of outcome delivery. This resulted in Ofwat having to make changes to company plans in order to re-calibrate outcome incentives.
- between monitoring and the setting of outcomes. As set out previously, the suitability of outcomes is generally driven by an assessment of: value, controllability and measurability. However, sometimes it might be the case that good evidence to evaluate outcomes against these does not exist (e.g. it may take time to develop as sectors and regulatory approaches evolve). In such cases, information might be gleamed over time by monitoring the activities (in particular the investments) of a delivery company at a granular level, so that the outputs and outcomes / benefits that each investment is intended to deliver are separately identified then:
  - in cases where an investment is not contributing to a desired outcome, it facilitates the *scrutiny of the rationale for that investment*; and / or
  - if none, or few, of the outputs generated by individual investments map to a particular outcome, it *might call into question the rationale* for that <u>outcome</u> in the first place.

This approach is perhaps best illustrated by role of the Technical Expression within the outcomes framework for the water industry in Scotland. Here the Technical Expression provides a breakdown of specific investments, identifying their purpose, expected output (and its associated value) at a detailed level.

» Finally, the following figure provides a diagrammatic representation of how the objectives / roles of the outcomes frameworks we reviewed compare. We recognise that this is somewhat subjective, but nonetheless consider it helpful to show how the various approaches diverge.

Figure 9: Overview of the differing objectives of frameworks





## 4. Processes for developing outcomes frameworks

This section contains our review of the 'processes' by which the comparator outcomes frameworks were developed. The main aim of this is to help inform the ORR's more practical considerations relating to its future approach to outcomes in highways (such as the appropriate governance arrangements, and the related time and resources required to develop a robust outcomes framework).

The key findings from this aspect of our review are as follows:

- (i) The development of outcomes frameworks can be highly resource intensive, but we do find considerable variation in the amount of resource used.
- (ii) In almost all cases, the development of outcomes frameworks was underpinned by a consultation process and / or stakeholder engagement (and several organisations highlighted the importance of high quality stakeholder engagement).

## 4.1. Why the process for developing outcomes frameworks matters

Whilst the main focus of this study is on identifying elements of the design of outcomes frameworks from elsewhere that the ORR can draw lessons from, we are also interested in understanding the **processes** by which those frameworks were developed in the first place. The main motivation for reviewing these processes is that:

- » Firstly, it seems that a more robust and well developed process is itself likely to result in a more robust outcomes framework that is appropriate to the objectives it is seeking to fulfil.
- » Secondly, as part of considering its role in relation to providing advice on RIS2, the ORR understandably needs to take into consideration the practical requirements associated with outcomes frameworks – including, for example, the amount of internal and external resource that might be needed.

#### 4.2. The scope of our review of processes

In relation to 'processes,' the main topics of interest include:

- » The time and resource the organisations had used in order to develop their outcomes frameworks.
- » The extent to which the frameworks had been subject to consultation – and relatedly, whether any other forms of stakeholder engagement had been used to develop them.
- » What evidence and analysis had been commissioned or undertaken in order to support outcomes framework development.
- » Whether there had been scope for expert / third party review of the frameworks.
- What governance arrangements had been in place to oversee the development of the frameworks.
- » The extent to which the design of the outcomes frameworks themselves was within the control of the organisations, or was (to some degree) determined or influenced by other stakeholders or factors, such as Government or primary legislation.

As the above matters cannot always be readily determined from public domain documentation, we developed a short questionnaire, which contained a series of questions exploring these issues further. The questionnaire was sent to all the organisations included within our list (as set out previously). To meet the timescales for this study, organisations were given ten working days to respond. In total we received 11 responses. As described previously, we also held conference calls with a sub-set of the

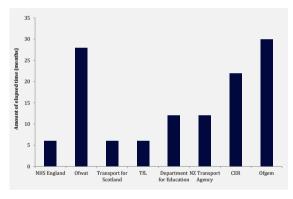
organisations included within our review. In those cases information gathered in these discussions also helped inform our view on process. In the remainder of this section we summarise the main findings from our review of process.

#### 4.3. Our review of process

### 4.3.1. Elapsed time required to develop outcomes frameworks

The amount of time taken to develop an outcomes approach varied across the organisations, with Ofgem's approach requiring the longest time of 30 months, and NHS England, Transport Scotland and Transport for London requiring the least amount of time, taking around 6 months to finalise their approach to outcomes. This is shown in the figure below.

Figure 10: Total elapsed time given to outcomes approach



Source: Economic Insight

## 4.3.2. Amount of internal resource utilised to develop outcomes frameworks

Organisations generally used less than four Full Time Equivalent (FTEs) employees when developing their outcomes frameworks, with the exception of Ofwat who, during their peak period, had up to 20 staff working on their outcomes methodology. This is summarised in the following table.

Table 9: Resources used to develop outcomes frameworks

Organisation	Internal resources used
NHS England	Senior policy – 1.5 FTE Analyst – 1 FTE Admin – 0.5 FTE
Ofwat	Formulating approach – 2-3 FTEs plus consultancy support. Risk base review – 14-20 FTEs
CER (Water)	Research and development of metrics – 2 FTEs using 20% of their time.
Transport Scotland	4-5 FTEs
ORR - rail	8 FTEs using 30% of their time
TfL	2 FTEs
NZ Transport Agency	Accountability reporting team 4-6 FTEs 3 business representatives on 10 year programme (informed SOI Outcomes) NB: 50% of the above time allocated to these activities.
Ofgem	12 FTEs + additional consultancy support
Department for Education	1 Project Manager – 70% of time 1 Deputy Director – 20% of time 1 Analyst – 50% of time

Source: Economic Insight

The overall message from the above table and previous figure is that, whilst developing outcomes frameworks can be highly resource intensive, there is considerable variation. In general, we also note that the development of outcomes frameworks seems to be more resource intensive where there are direct links between outcome delivery and funding. This can perhaps be explained by the fact that, where such links to funding apply, there is more attention and importance attached to the setting of outcomes.

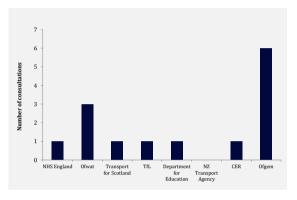
Specific areas organisations identified as being particularly resource intensive included:

- identifying, reviewing outputs and their associated indicators;
- coordinating and balancing views; and
- stakeholder engagement.

## 4.3.3. The use of consultations and other stakeholder engagement

The majority of outcomes frameworks included in our review were subject to at least one consultation process, which typically gave stakeholders and regulated companies an opportunity to engage with, and provide their views on, the proposed approaches to setting outcomes (or the design of the framework itself). The exception to this was the NZTA, who did not conduct any consultations.

Figure 11: Number of consultations undertaken



Source: Economic Insight

Where organisations predominately developed frameworks in-house, stakeholder engagement typically involved presentations to Boards and the use of internal groups. Alternatively, where there was engagement with external stakeholders, it tended to be with other statutory organisations within the industry. For example, the CER engaged extensively with the Environmental Protection Agency.

In addition to this, where outcomes frameworks were a feature of price controls, customer views were important. In these cases customer engagement typically took the form of:

- direct engagement via surveys (typically willingness to pay or similar);
- focus groups; and / or
- more indirect engagement via customer representative groups (such as advisory panels or customer challenge groups).

Importantly, in a price control context it is typically the delivery company that retains responsibility for customer engagement.

#### 4.3.4. Expert / third party review

Organisations that we talked to used expert and third party reviews to assess and scrutinise their approaches to outcomes. This predominately included special reference groups, which included:

customer representative groups; and

 technical reference groups, for example the NHS used a reference group consisting of: key academics; health economists; and statisticians to advise on indicators.

#### 4.3.5. Governance arrangements

Outcomes frameworks typically required Board or Commissioner endorsement and approval. This is usually (at least in part) due to the likely fact that the development of most outcomes frameworks have been part of wider processes, such as price controls, and will not have their own Governance arrangements. For example, Ofgem's Board make all key decisions on their approach to outcomes; and additionally in the CER's case, internal development of outcomes by CER staff are subject to approval by the CER's Commissioners. Similarly, Transport Scotland's NTS sits within the wider Economic Strategy for Scotland

#### 4.3.6. The degree of control

The degree of control over the development of outcomes was varied amongst the organisations. On the one hand, some organisations had very little control over the development of their outcomes frameworks, as these were largely determined by legislation, or influenced by directives laid down by Government. This was the case for the NHS, whereby the main elements of the framework are specified in legislation - the Health and Social Care Act 2012 - for how the NHS measures quality. On the other hand, other organisations had full control (in which case their approach was mainly driven by their wider duties, goals and objectives), as was the case with Ofwat, who predominately had control of their outcomes framework, while also recognising the recommendations of the Gray Review of Ofwat 2011.

# 4.3.7. Organisation's view on what aspects of their processes worked well, and where there was scope for improvement

Developing an outcomes framework tends to work well when there is early and wider engagement with stakeholders, both internal and external, as this ensures the framework has a clear direction and considers the views of all interested parties. Several organisations indicated this as an area that worked well. Similarly, others emphasised the importance of engagement by citing it as an area that could have worked better.

Relatedly, collaboration (both internally and with regulated companies) is beneficial in order to refine ideas and outcomes, ensuring the right information can be provided.

Areas where organisations indicated there was scope for improvement included:

- limited evidence to test how challenging targets are:
- achieving consistency and standardisation across measures;
- length of the control period, as rewards / penalties are only paid out at the end of the period which can occur long after the out / under performance occurs;
- concerns over the reliability and comparability of certain customer research used to inform the setting of outcomes.

## 4.4. Key observations from our review of process

- » The development of outcomes frameworks can be very resource intensive – but equally, there are examples where such frameworks have been developed with relatively modest resource. This is likely to reflect, as noted earlier, the wide variation in the purpose and aims of the frameworks.
- » Outcomes frameworks tend to be more resource intensive where they relate to instances where outcome delivery is specifically tied to funding (such as under regulatory price controls) as this naturally gives rise to: (i) there being a need to ensure there is very high quality evidence and analysis to support the outcomes, as this is often closely linked to regulators' primary statutory duties and companies own internal governance and Board assurance and; (ii) a natural process of critique and challenge (between the regulators and companies) sometimes underpinned by the threat of regulatory decisions being cross-referred to the Competition and Markets Authority.
- » In most instances, the process to develop frameworks included consultations and / or other forms of stakeholder engagement.
- Prescriptiveness of the outcomes framework.

  That is to say, less perspective outcomes frameworks typically allow for more discretion for the delivery companies themselves to help design and drive the engagement process (i.e. design and commission customer research to inform the selection of outcomes). More prespective frameworks are typically characterised by the regulator having more direct influence or control of stakeholder engagement.
- » There are examples of innovative approaches to stakeholder engagement. For example, the

Department for Education pursued a detailed engagement with a relatively small number of influential educationalists (ca. 15-20), whereas NHS England ran engagement events across the country with the public, clinicians and other stakeholders.

» The extent to which there is expert / third party review as part of the process varies. Where it is used, its scope typically includes: (i) providing expert industry advice (such as engineering) in relation to the practicality of delivering certain outcomes and what might be involved, including (in some cases) feeding in to an assessment of the costs of delivering those outcomes; and / or (ii) providing analytical support (often economic or statistical) in order to help further validate the achievability and cost efficiency associated with the identified outcomes. In most cases, there were not extensive separate governance arrangements in place to support the development of outcomes frameworks - as these were often part of wider processes themselves. However, we did find instances in which there were some 'outcomes framework' specific arrangements in place. This included Transport Scotland, who set up a National Transport Strategy (NTS) Reference Group to ensure the quality of outcomes produced were of high standard, and stakeholders' views were considered, in order to assist the Scottish Government with developing the NTS.

## Features of good governance arrangements to support outcomes frameworks.

Based on our review, governance arrangements that appeared most supportive of developing robust outcomes frameworks had the following features:

- Focus on the organisation's purpose and outcomes for customers / users;
- Work together to achieve a shared purpose with clearly defined roles and functions;
- Promote and demonstrate these values of good governance by upholding high standards of conduct and behaviour;
- Make informed and open decisions and manage risks;
- Develop the ability and skills of the governing body; and
- Involve stakeholders and make accountability real.



## 5. Conclusions and recommendations

This final section of our report draws on the content and evidence set out in the preceding parts in order to identify a set of conclusions and recommendations for the ORR to take into consideration. Given that stakeholders are in the early stages of preparing RIS2, these findings should be regarded as indicative, where the primary aim is to help give the ORR a clear sense of direction for future work and thinking.

Our main recommendations include:

- (i) The ORR should take forward work that allows it to assess outcomes and related measures against: value, controllability and measurability.
- (ii) Consistent with its recent Benchmarking Plan, the ORR should develop evidence that allows it to robustly assess value for money based on analysis. It should also consider the relevant time period and cost measures for any such assessment.
- (iii) The ORR should take forward work to increase the sector's understanding of the controllability of outcomes.
- (iv) It is most likely not appropriate for the ORR to adopt a less prescriptive approach to outcomes, but collaborative working is likely to be valuable.

## 5.1. Our findings and recommendations in relation to the ORR's approach to RIS2

The main value from the cross-sector review is that it allows one to: (i) identify the 'key questions' and 'issues' that the ORR will need to answer and address; and (ii) the related evidence and analysis required, in order to determine an appropriate outcomes framework.

We suggest that an appropriate outcomes framework for Highways England depends on answering four key questions:

- » What is the role and purpose of the outcomes framework?
- » What outcomes, and related measures, should be focused on?
- » How perspective / detailed should any related outcome measures or targets be?
- » How should any target levels be set, so as to strike an appropriate balance between funding and performance?

Our cross-sector review of outcomes frameworks revealed significant variation in the detail of those frameworks – the implication of this is that the answers to the above questions vary by sector.

We find material differences in: (i) what outcomes are being measured; (ii) the number of outcomes and KPIs being measured; and (iii) the extent of prescriptiveness across outcomes frameworks.

Consequently, we think it reasonable to infer that this indicates that there is variation in the answers to the questions identified above – not least, differences in the goals and purposes of the outcomes frameworks, which we might broadly characterise as having two dimensions:

- » The extent to which the framework is about 'focusing on the right thing' (i.e. prioritisation, or allocative efficiency in economics) versus 'value for money' (doing more for less, or technical efficiency in economics).
- » The extent to which the framework is intended to help 'measure' outcomes, versus 'incentivise' changes in behaviour to deliver better future outcomes.

We further noted that the above are not mutually exclusive; but, rather, are matters of degree.

As a consequence of the above, it is not possible (or appropriate) to draw hard conclusions as to what the specific design of an outcomes framework for Highways England should be based on observing the features of outcomes frameworks elsewhere.

For example, the fact that one framework has many outcome measures and KPIs and another has few, does not imply that one outcomes framework is 'superior' to another. Similarly, one framework being more 'prescriptive' than another does not imply one or is more or less appropriate.

Therefore, the recommendations we set out here focus on identifying practical steps, informed by our review, that will assist the ORR in answering these questions and, consequently, arrive at an appropriate approach to outcomes for RIS2.

In the following, we therefore set out our recommendations to the ORR organised under these four questions.

## 5.1.1. Recommendations relevant to the goals and objectives of the outcomes framework

We suggest that the role and purpose of any outcomes framework is fundamentally determined by:

- what the 'owner' of the outcomes framework is seeking to achieve through it; and
- what is possible within the relevant prevailing legal, regulatory and governance arrangements of the sector.

With the above in mind, our view is that the role of any outcomes framework in relation to Highways England is primarily to serve a 'monitoring' function, where the focus is primarily to help assess the 'value for money' associated with the balance between funding and outcomes. As noted previously, however, we note that this assessment is subjective, because outcomes frameworks can serve multiple ends, but to differing 'matters of degree.' For example, the outcomes framework for Highways England can still serve an 'incentive' role, it is just that this is limited (for now) to primarily reputational incentives.

From the above, a number of practical recommendations follows:

In order for the framework to robustly inform an assessment of 'value for money' (i.e. to determine whether outcomes are 'challenging' and 'deliverable') it is essential that the ORR develops benchmarking type evidence.

Our review shows that, when balancing outcomes against funding, organisations make use of some form of benchmarking. In broad terms, such benchmarking can be:

- cross sectional within sector (and potentially internationally);
- cross sectional looking at wider (i.e. nonhighways) sectors; and / or
- over time (in this case, looking at the historical balance of outcomes and funding for highways in England).

In practice, the appropriate form of outcomes benchmarking might vary by outcome type, and / or will be affected by the availability of evidence (i.e. benchmarking may be more practical in some areas than others). Regardless, without a robust benchmark of outcomes, and how they balance against funding, it will be difficult to:

- objectively determine the extent to which targets are 'challenging' and 'deliverable';
- assess whether specific targets are 'stretching' or not; and therefore
- evaluate whether value for money is being provided.

Here it is important to distinguish this from benchmarking solely used to inform the setting of efficiency targets – although the two can be related.

The ORR should further ensure that, wherever possible, there are explicit linkages between benchmarking analysis and any outcomes targets set. To the extent that any such benchmarking is already undertaken, linkages to targets should also be identified.

Consistent with our recommendation, we note that the ORR already recognises the important role that benchmarking evidence can play in outcomes frameworks. Accordingly, in April 2016 the ORR published a Benchmarking Plan, 11 setting out a programme of work and approach to developing benchmarking evidence and data. The key features of this included:

» A set of short term priorities, focused on developing evidence that could be of use to RIS2. This included: capturing datasets of network characteristics; carrying out internal benchmarking of Highways England's regions and areas; more detailed benchmarking of safety; working with Transport Focus to consider benchmarking of user satisfaction; performing cost benchmarking; developing improved data to benchmark the cost and effectiveness of Highways England's support functions; and investigating the potential for bottom-up cost benchmarking. » Over the longer term, an aspiration to develop a 'benchmarking network' of highways authorities that will develop and share comparable data (including data on performance).

The ORR should undertake work to understand what factors help improve the effectiveness of reputational incentives, and should then consider how its approach to identifying outcomes and setting targets might best reflect this.

Specifically, for so long as Highways England remains a publically owned company, there will be natural limits on the extent to which financial incentives can be developed. Therefore, to the extent to which the Performance Specification has incentive power then (as described previously) this will primarily be via reputational effects. In light of this, it would seem important that the ORR and other stakeholders take forward work to help understand:

- what factors determine when reputational incentives are, and are not, effective;
- to what extent do these factors apply in relation to the current outcomes, KPIs and targets;
- how can outcomes, KPIs and targets be adapted for RIS2 to help maximise reputational incentives (where appropriate).

When offering advice on the draft RIS, the ORR should consider: (i) the purpose of the outcomes hierarchy; and (ii) whether the various metrics and targets within the RIS are consistent with this.

In addition to thinking about the implications of the outcomes framework in totality, it is also important to consider the purpose and role of <u>its individual</u> <u>elements</u> (i.e. the various layers of any outcomes hierarchy).

Currently, the Performance Specification within RIS1 contains an outcomes hierarchy, consisting of:

- » The outcomes areas themselves which relate to the issues / areas that are deemed to be 'important' in order to deliver the DfT's longerterm vision for highways in England.
- » KPIs which are the measures used to track performance across the outcomes areas. Some of these more closely align to the outcomes themselves than others, and some do – and some do not – have associated targets for Highways England.
- » Performance indicators which are intended to provide more detailed measures of the

<sup>&#</sup>x27;Benchmarking Highways England: our plan for benchmarking Highway's England's performance and efficiency'. ORR (April 2016).

performance of the company (Highways England) and network.

Our review of outcomes frameworks elsewhere showed that some form of hierarchical structure, such as that contained in RIS1, is commonplace. This is for a number of reasons, including: (i) the fact that outcomes sometimes cannot be observed or measured directly (giving rise for the need for a separate tiers of 'measures'); (ii) the fact that the overall outcome may only be partially within the delivery company's control (which might mean that is more appropriate to identify a metric that is more within the firm's control); and / or (iii) that separate to the overall outcome, one may independently be interested in the inputs / outputs of the delivery company to help inform an assessment of its effectiveness and efficiency.

Again, in practice we found variation in how outcomes hierarchies were developed and applied. However, our assessment is that they are more likely to be useful and effective where there is: (a) clarity as to exactly what the purpose and rationale is for each level of the hierarchy; and (b) consistency in how specific measures and metrics and targets are identified for each tier and the stated purpose.

Whilst RIS1 achieves the above to a reasonable degree, we think the approach to RIS2 might benefit from a more explicit evaluation of potential measures and targets against the stated hierarchy rationale. For example, at present within the 'environment' outcome, a 'target' in relation to the biodiversity KPI is for Highways England to "publish a biodiversity plan." This would not seem to be consistent with the aforementioned definition of the hierarchy.

Figure 12: The purpose of an outcomes hierarchy



Further to the above, as practical step, the ORR could, for each tier of its hierarchy, take forward an action to: (i) identify a relevant objective / goal for the tier; and (ii) list its existing measures / metrics; and (iii) evaluate the extent to which those measures / metrics

properly align to the goal or objective – as illustrated in the following table.

Table 10: Illustration of how ORR could evaluate appropriateness of hierarchy

Hierarchy tier	Purpose of the tier	Measures	Assessment of whether measure is appropriate to 'purpose'
Outcomes	?	?	YES / NO
KPIs	?	?	YES / NO
PIs	?	?	YES / NO

# 5.1.2. Recommendations relevant to determining what outcomes and measures should be included within the outcomes framework

Our review revealed large variations in the numbers of outcomes, KPIs and targets across sectors. As noted previously, there is no a priori reason to suppose that any absolute number of outcomes or measures is appropriate, given the large differences in objectives, and sectoral characteristics, observed.

Notwithstanding the above, from our review, we suggest that there are **three key criteria** relevant to determining the appropriateness of an outcome:

- whether customers / users or other stakeholders 'value' the outcome (where here this includes both road user preferences, but also statutory obligations imposed by Government);
- whether the outcome (and associated measure) is controllable (i.e. the extent to which Highways England's activities directly influence the outcome); and
- whether the outcome is measureable (either directly or indirectly through relevant KPIs).

With the above issues in mind, we have identified the following recommendations for the ORR:

The ORR should develop a gap analysis to determine which of its existing outcomes, KPIs and targets are supported by evidence of users attaching 'value' to those outcomes – and where there are gaps, consider the appropriateness of the outcome / KPI / target (and / or develop new evidence).

For any target, KPI or associated outcome to be appropriate, it is essential to have good evidence that stakeholders 'value' the outcome sufficiently. Here we mean both: (i) the value road users themselves attach

to the outcome; but also (ii) the 'implied' value associated with outcomes that are mandated by other stakeholders, such as statutory obligations imposed by Government.

From our review, we suggest that 'good practice' approaches to designing outcomes frameworks typically include extensive evidence on the extent to which stakeholders (primarily customers) attached value to the outcome in question. Indeed, even in less prescriptive approaches to outcomes, regulators typically do not 'allow' outcome incentives without there being extensive, robust, evidence of there being genuine customer value.

Whilst we think it likely that there will be 'value' in the existing outcomes associated with RIS1, what is less clear is how extensive and robust the evidence base is for each particular outcome area. Consequently, as a first step we would recommend that the ORR examines what the existing evidence base is in relation to each individual outcome. This could include:

- » Firstly, simply mapping out whether there is, or is not, any evidence relevant to determining the 'value' stakeholders place in the outcome – and where there is evidence, scoring the quality of that.
- » Secondly, where possible, using the existing evidence to determine the likely 'extent' of the value (where data permits, using £s, or otherwise qualitatively 'scoring' the outcome as being of 'high,' 'medium' or 'low' value).
- » Thirdly, setting out which outcomes are driven by factors other than road user value.

Following from the above, we would recommend that the ORR sets out a 'gap' analysis between the existing and 'ideal' evidence base, and considers what work or activities could be undertaken to fill the gap.

The ORR should take forward work to better understand the extent to which the outcomes and related KPIs are, or are not, directly influenced by Highways England.

Our review of outcomes frameworks highlighted the importance of understanding 'controllability' and, specifically, the extent to which delivery companies contribute to outcomes. For example, if the delivery company makes no contribution to a particular outcome, this suggests the outcome is irrelevant. Similarly, if one cannot identify a measure (KPI) that both: (i) provides a good indication of the extent to which the outcome is being achieved; and (ii) is also

within the control of the delivery company to some degree, then equally KPIs would be irrelevant.

Whilst it is clear that the issue of controllability has (quite rightly) influenced the Performance Specification in RIS1, we think that future outcomes frameworks for RIS2 would benefit from a more systematic approach, and a greater evidence base to help ensure consistency. For example, within RIS1 in relation to economic growth, the KPI is "average delay," for which no target is set. The rationale for the absence of any target is that: "there are many factors that influence average delay... some of which are not within the company's control."12 In comparison, in relation to safety the KPI is the number "killed or seriously injured on the SRN" (KPIs) where an explicit target is set. However, it is not clear whether the number of KSIs is more, or less, within Highways England's control than the average time of delay - and if so, on what evidential basis this has been determined.

The above is not a criticism of the approach in RIS1 per se. Rather, our review shows that understanding controllability is complex, and often requires a journey – with regulators and bodies improving their understanding over time, as better data and evidence becomes available. Nonetheless, following from the above, we think there would be real benefit in a more systematic appraisal of the extent to which evidence can:

- help ORR map out the means by which it Highways England contributes to the identified outcomes (which in principle should help identify the most relevant KPIs and PIs in the first place); and
- the extent to which Highways England directly or indirectly contributes to the identified outcomes via the channels identified through the mapping exercise; and
- the extent to which Highways England's contribution is within its control.

Without this, there would seem to be a risk that: (i) inappropriate outcomes measures, KPIs or PIs might be selected; (ii) that there may be inconsistencies across outcome areas regarding the rationale for, and setting of, targets; and / or (iii) that targets might be unduly challenging or unduly deliverable. To give a very simplified example, if the number of KPIs is primarily driven by car safety technology, and if this expected to continue to improve at a rate consistent with (or even greater than) the past, then the target might be met irrespective of Highways England's own performance and activities. If that were the case,

<sup>12 &#</sup>x27;Road Investment Strategy for the 2015/16 – 2019/20 period.' DfT (2015) 'Performance Specification,' page 20.

meeting the target would actually provide little information relevant to assessing value for money.

In practice, there are a range of analytical techniques that could be used to help inform the 'controllability' of outcomes and related KPIs. Most obviously, forms of statistical and econometric analysis could be utilised to examine the relationships between Highways England's activities, outputs and outcomes, controlling for factors that are outside of its control. We recognise that the feasibility of this may vary across the outcomes areas – but consider it to be sufficiently important that we would <a href="strongly">strongly</a> recommend the ORR explore this topic further.

# The ORR could consider whether mapping outcomes and outputs to individual investments (at a detailed level) would improve the robustness of its outcomes and monitoring framework.

Whilst identifying the appropriate set of outcomes, KPIs and measures fundamentally rests on addressing the issues outlined above, there are complimentary analyses and processes that the ORR could undertake to further inform this issue.

In particular, an identification of a suitable set out outcomes and measures might be aided by recording and analysing the outcomes / outputs that Highways England's investments are expected to contribute towards. For example, if a specific investment / activity made no contribution to a particular outcome, this might suggest that greater scrutiny should be applied to that investment. Similarly, if there was a certain outcome to which no specific investment seemed to materially contribute, this would seem to call into question the validity of the outcome itself. This approach is reflected in the way in which the Technical Expression is used in the Scottish Water industry.

## Finally, drawing on the above, the ORR should set out a clear method that 'scores' outcomes, KPIs and targets according the three criteria of: value, controllability and measurability.

Generally, to give advice during RIS2 as to the appropriateness of the outcomes framework (Performance Specification) we think it vital that the ORR is able to set out how each outcome 'scores' against the three criteria outlined above. By definition, this will only be possible to the extent that work is undertaken in line with the prior recommendations.

### 5.1.3. Recommendations relating to determining the appropriate prescriptiveness and detail of the framework

In addition to determining which outcomes (and related measures) are appropriate, the ORR may need to consider how 'perspective' any approach should be. Here, by prescriptive we primarily mean the extent to which the outcomes framework is set or imposed by its owner (in this case the DfT, subject to advice from the ORR) versus is proposed by the organisation(s) it applies to. We also note that the extent of prescriptiveness can apply both to:

- which outcomes / measures are included in any framework; and
- the setting of any associated targets / metrics.

Here our key recommendations are as follows:

### We do not think it would be feasible, nor appropriate, for the ORR to adopt a radically less perspective approach to outcomes.

Our review of other outcomes frameworks revealed considerable variation in how 'prescriptive' and 'detailed' they were. In particular, Ofwat's approach to the PR14 Price Control in water stands out as an example of a more flexible approach, where companies themselves had freedom to propose outcomes and related targets and incentives. However, looking across the piece, we found that the Performance Specification for RIS1 was not particularly prescriptive or detailed compared to other approaches.

Furthermore, our review found that less perspective approaches were more likely to be beneficial where:

- there are direct linkages between: (i) end customers / users; (ii) the funding delivery companies receive; and (iii) outcomes (meaning that there are strong incentives for companies to understand what outcomes customer value and to therefore develop outcome measures that align to customer needs); and
- there may be differences in the outcomes valued by different groups of customers (which is only relevant where one can set outcome incentives differently across those customer groups, say in the case of multi-company regulated industries).

Given that neither of the above apply under the current model for highways management in England, it is not clear that a less prescriptive, more flexible, approach (where, presumably, Highways England itself would have latitude to propose outcomes and outcome measures) would be beneficial.

Furthermore, we note that less prescriptive approaches are not uniformly 'better' even where the above criteria are met. For example, at PR14 Ofwat made to make material interventions with regard to company proposed outcome incentives (as noted earlier).

### Industry stakeholders should still seek to work collaboratively where possible in order to arrive at an appropriate outcomes framework.

The fact that, in our view, a materially less prescriptive approach is not suitable for highways at this time, does not imply that an outcomes framework should merely be 'imposed' top down. In fact, our review showed that regulators (and other outcomes framework owners) invest considerable time and resource in stakeholder engagement during the development of any framework.

Relatedly, when considering the various recommendations set out in the previous sub-section, it is clear that input from a wide range of stakeholders is likely to result in better evidence being developed. Therefore, we see genuine merit in a collaborative working between ORR, DfT, Highways England and other relevant stakeholders.

### 5.1.4. Recommendations relevant to determining an appropriate approach to setting target levels for performance

# The primary evidence base for setting targets should be benchmarking – but the ORR will still need to consider what 'philosophy' it applies when determining the level of challenge.

As set out previously, we think that benchmarking must be a central component to assessing 'value for money' in any outcomes framework. Accordingly, this therefore implies that such analysis must also form a central part of any target setting. However, even where benchmarking evidence exists, policy discretion remains as to exactly 'how' that benchmarking analysis should be used. For example, one might benchmark based on:

- average performance;
- upper quartile performance;
- dynamic upper quartile performance; or
- frontier performance.

Here there is no single 'correct' approach; and so this choice will largely be a matter of judgement for the ORR as it seek to provide advice as to whether targets are sufficiently 'challenging' and 'deliverable.' However, there are a number of related considerations that can help inform this. These are addressed by a number of our further recommendations below.

### The ORR should consider what the appropriate time period is for setting and measuring outcomes (and for assessing outcomes against funding).

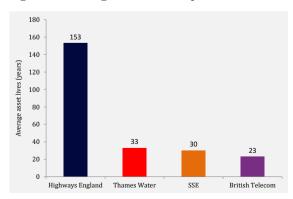
Our review of outcomes frameworks elsewhere identified that other regulators and bodies are examining the potential for 'multi-period' outcomes (and have / or are considering, extending the regulatory periods themselves). For highways, this would seem to be highly relevant because:

- the benefits that the SRN delivers are themselves likely to be long-lasting, meaning that there is an 'intergenerational' dimension to 'trading-off' funding, which needs to be taken into account; and
- the investment required to maintain and enhance the SRN is itself long-term in nature.

This has two important implications for Highways Monitor with regard to its role: (i) firstly, that it raises the question of whether outcomes (and KPIs and targets) should, in some instances, be measured and set over longer periods of time (i.e. beyond the RIS); and (ii) secondly, when considering the question of 'value for money' whether, again, a longer-term perspective may be required in order to provide a more complete picture when making this assessment.

To highlight the above issue we calculated the ratio of the gross book value of assets to annual depreciation for Highways England, which provides an indication of average asset lives. As a point of comparison, we also did this for three infrastructure companies: Thames Water, SSE (formerly Scottish and Southern Energy plc) and British Telecom. The results, shown in the following figure, reveals that the implied average asset life for Highways England is 153 years, substantially longer even than the capex-heavy infrastructure industries of telecoms, energy and water, which have average asset lives of around 20 – 30 years.

Figure 13: Average asset life comparison



 $Source: Economic\ In sight\ analysis\ of\ company\ accounts$ 

In practice, the implied average asset life for Highways England reported above might not give a 'true' reflection of the life of its assets because:

- to the extent that there has been historical under-investment in the SRN, it may be that the depreciation charge in the accounts is 'understated;' and / or
- the sub-structure of the SRN is assumed to have a perpetual asset life, and so is not depreciated at all.

To examine the impact of the above, we re-calculated the average asset life for Highways England based just on its buildings, plant and machinery assets (i.e. excluding the SRN). Based on this, the average asset life reduces to 28 years, which is more in line with those seen in the above comparators.

Whichever measure is used, the evidence is consistent with highways being characterised by long lived investments – which deliver long-lasting benefits. Consequently, we suggest that it would be appropriate to give consideration as to whether outcomes should, in some cases, be assessed over longer periods of time. Here, it is important to understand that this recommendation stands independently of whether future Road Investment Strategies themselves continue to be set over periods of 5 years.

## When considering its approach to outcomes (and relatedly, efficiency) the ORR should give consideration as to the balance between 'dynamic' and 'static' measures of efficiency.

A number of the outcomes frameworks we reviewed explicitly recognise that there can sometimes be a trade-off between achieving cost efficiencies in the short run (static efficiency) and those achieved in the longer run, arising as a result of technological change and innovation (dynamic efficiency).

Given this, we would recommend that the ORR gives explicit consideration to the balance between these. Further, it is important that this balance is reflected in the setting of outcomes, KPIs and any related targets – to ensure that any trade-offs are explicitly identified. This will help reduce the risk that, for example, there is a focus on short term cost reduction without prior consideration of whether that might adversely impact longer-term efficiency.

# One way of practically addressing the above issue would be for the ORR to explicitly take forward work to consider what fundamental changes might arise in relation to road user needs over the long term.

Whilst more speculative in nature, additional work to examine how road user needs might change in a more fundamental sense might provide further evidence as to how investment should best be targeted and, relatedly, how investment and performance should be assessed. This could include, for example: (i) identifying what main features of the SRN most closely drive the need for investment and / or impact performance; and then (ii) considering what key potential technological changes, or changes in road user demand, might in turn affect the required features of the SRN.

The aim of any such work should not be to 'second guess' what might be needed over a period of decades, and attempt to manage investment prescriptively to meet that need (as this would be highly uncertain). Rather, the aim would be to reduce the likelihood that, any decisions made over the relatively short run do not unduly 'close down' or increase the cost of, meeting those future requirements. That is to say, it is about helping to maximise the option value of having increased flexibility in any approach to outcomes.

### In considering whether outcomes are 'challenging' and 'deliverable,' it will be important to take account of legacy effects.

The long lived nature of investments and assets means that current observed highways performance across the outcomes areas will, in no small part, reflect legacy investment. It may also be that there is a 'lag' between investment and changes in performance against outcomes. Related to this, it is important to highlight the fact that RIS1 identified the historical under-investment in the SRN as a key issue. Consequently, if one simply compared outcomes with current, or expected future spend over a RIS (without consideration of legacy effects) there would be a risk that:

- one either over, or under-states the extent to which current performance represents value for money; and / or
- that one's assessment of target levels on a forward looking basis is either unduly ambitious or unduly achievable.

Given the above, when offering advice on outcomes targets, we recommend that the ORR takes explicit account of legacy investment effects. In practical terms, for example, if the ORR were to undertake benchmarking of the type we recommend (described

above) it would be important to consider how historical investment had varied across any comparators. It will also be important to see what quantitative evidence could be developed to help inform the likely "lag" between new investment and improved performance to help inform the assessment of target levels.

Our review of outcomes frameworks in other sectors found that, in a number of instances, legacy effects were taken into account. For example, Ofwat's cost assessment 'smoothed' capital expenditure over a number of years as part of its measure of total expenditure.

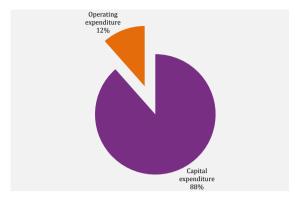
### When evaluating available funding against outcomes, the ORR should consider what measures of funding are most appropriate.

At present the current efficiency framework for highways focuses on capital spend. Our review reveals that a number of regulators have moved towards a 'total expenditure' measure for the purpose of setting outcomes (such as efficiency targeting, or when evaluating value for money associated with outcomes).

This is for a number of reasons but, in part, is because - if incentives or measures are focused on only certain categories of cost - this can distort decision-making in a way that leads to less efficient outcomes. Therefore, when providing advice on whether outcomes for RIS2 are 'deliverable' and 'challenging,' the ORR should give explicit consideration as to 'what' the right measure of funding is.

To help illustrate why the above point matters, Figure 14 shows the split of Highways England's RIS1 expenditure between 'operating' and 'capital.' This reveals that, whilst capital expenditure is the most significant (accounting for 88% of total spend over the period) operating expenditure is not a trivial amount, account for the remaining 12%. To put this into context, over the RIS1 period, total operating expenditure is expected to be some £1.5bn – and so is substantial in absolute terms.

Figure 14: Split of Highways England's projected RIS1 expenditure (operating and capital)



Source: Economic Insight analysis of Highways England Strategic Business Plan

Choosing an appropriate measure will be particularly important to the extent that the ORR undertakes 'benchmarking' to inform its assessment of whether the outcomes are 'challenging' and 'deliverable.' This is because, to the extent that Highways England, or any comparators used to inform the ORR's assessment, are able to substitute between capital and operating expenditure, a measure that looks only at one may not provide a true 'like-for-like' comparison.

Here it is important to note that the ability to 'substitute' between operating and capital spend could arise either:

- because in reality, highways providers can in some cases choose between opex and capex solutions; and / or
- because for the purposes of recoding accounting data, there may be some discretion as to what expenditure is treated as operating and capital.

Our starting point, therefore, is that it might be most appropriate for the ORR to undertake benchmarking using a total expenditure approach.

### 5.2. Our longer-term recommendations and considerations

# The ORR, along with other stakeholders and decision-makers, may wish to consider the role for more direct financial incentives to help motivate service delivery in highways.

As set out previously, the current legislative framework, governance and funding arrangements for highways is such that there are no direct financial incentives for delivery performance. Whilst in the short term, we understand that this is likely to remain the case, there may be merit in considering the scope for making use of direct financial incentives over the more medium term.

For so long as Highways England remains publically owned, any such tool would most likely need to apply to its staff, rather than the organisation itself, in order for it to have any incentive power. For example, one way in which this might be applied was identified by the RAC Foundation in its response to the ORR's consultation on enforcement policy:

"We would be more supportive of an approach that was explicitly aimed at incentivising individuals. Although it is not in ORR's gift to create or impose a link between the imposition of enforcement measures and senior executive remuneration, it is only through such a link that the imposition of a fine would start to make sense as a genuine sanction/performance incentive. For example, if Highways England created a 'performance fund' from which bonuses were paid, fines could relate to the sums available or could even be drawn down directly from that fund." 13

Within the scope of our work we have not given any consideration to the advantages and disadvantages of any specific mechanism for creating direct financial incentives. In the event that one were to develop and evaluate options for doing so, careful consideration would have to be given as to the various factors that might impact the likely strength, and therefore effectiveness, of any such financial incentives – and which of those it may (or may not be) be feasible or desirable to change.

This includes giving consideration to the funding model itself and the extent to which the public ownership of Highways England fundamentally impedes any such incentives. In practice, a spectrum of options is likely to exist, where some form of direct financial incentives could perhaps be created without fundamental change.

#### The ORR could consider whether there was scope for more direct customer engagement in shaping the outcomes framework and related targets.

Our review found a number of instances where regulators and other bodies had fundamentally shaped their outcomes frameworks – and related targets and funding – based on extensive direct customer engagement. Notable examples of this included Ofwat in relation to PR14, but also Ofgem's use of a Customer Challenge Group (CCG) during the RIIO-T1 process.

Relatedly, we therefore think there may be scope for the ORR to make more extensive use of direct customer engagement in order to identify, and where appropriate, prioritise and set targets for outcomes. However, at present we are minded to suggest that more detailed engagement of this kind should perhaps be considered in a more longer-term context, rather than being a priority for RIS2. This is because, as noted earlier, the likely benefits of this kind of customer research would be much greater if there were more direct financial linkages between customers, funding and outcomes. In the absence of such links, more detailed customer engagement would be costly, but would not deliver the same extent of benefits as seen in other sectors.

<sup>&#</sup>x27;RAC Foundation response to ORR consultation – the exercise of enforcement powers.' RAC Foundation (September 2015).



# 6. Annex A: detailed summaries of outcomes <u>frameworks</u>

This annex contains detailed summaries of the various outcomes frameworks we reviewed, organised around a common template to aid comparability.

#### 6.2. Health

#### 6.2.1. Public Health England

Public Health England (PHE) is an executive agency of the Department of Health (DH) and its formation came as a result of the reorganisation of the NHS in England outlined in the *Health and Social Care Act 2012*.

Table 11. Public Health Outcomes Framework 2015-16, PHE

Issues / criteria	Description	
Topic 1: purpose and scope of the outcomes framework		
Overview of the outcomes framework	Through the <i>Health and Social Care Act 2012</i> Government created a new, integrated and professional public health system designed to be more effective and to give clear accountability for the improvement and protection of the public's health. The new system embodies localism, with new responsibilities and resources for local government, within a broad policy framework set by the Government, to improve the health and wellbeing of their populations.  The Public Health Outcomes Framework (PHOF) sets the strategic direction in this new system. Local authorities have been allocated ringfenced public health budgets, and the delivery of some outcomes is incentivised through a health premium.  The framework focuses on two outcomes and has a set of 66 indicators, grouped into four domains, that measure performance in what matters most to public health at a local authority level.	
Key objectives / purpose of the outcomes framework	The PHOF seeks to refocus the whole public health system around achieving positive health outcomes for the population and reducing inequalities in health, rather than focusing on process targets.  The PHOF focuses on the respective role of local government, the NHS and Public Health England (PHE), and their delivery of improved health and wellbeing outcomes for the people and communities they serve.  The PHOF sets the context for the Public Health System, from local to national level.  Vision:  "To improve and protect the nation's health and wellbeing, and improve the health of the poorest fastest."	
Summary of the key outcomes included in the framework	The PHOF focuses on two high level outcomes, that should be achieved across the public health system and beyond:  1. Increased healthy life expectancy – taking account of the health quality as well as the length of life  2. Reduced differences in life expectancy and healthy life expectancy between communities – through greater improvements in more disadvantaged communities	
Whether there was any explicit or implicit prioritisation of the different outcome areas	PHOF does not prioritise between the two high level outcomes. Some indicators may be more robust than others due to data availability issues.	
Topic 2: Measures and targets within the outcomes framework		

The Department of Health (DH) developed a set of supporting public health indicators that help focus their understanding of how well they are doing year by year nationally and locally on those things that matter most to public health, which they know will help improve the outcomes stated above.

The indicators have been grouped into **four domains**:

- 1. improving the wider determinants of health;
- 2. health improvement;
- 3. health protection; and
- 4. healthcare public health and preventing premature mortality.

Summary of objectives and the key indicators across the four domains.

summary of objectives and the key indicators across the four domains.				
Domain	Objective	Indicators		
Improving the wider determinants of health	Improvements against wider factors that affect health and wellbeing and health inequalities.	<ul> <li>Children in poverty</li> <li>School readiness</li> <li>Pupil absence</li> <li>First time entrants to the youth justice system</li> <li>16-18 year olds not in education, employment or training</li> <li>Adults with a learning disability / in contact with secondary mental health services who live in stable and appropriate accommodation</li> <li>People in prison who have a mental illness or a significant mental illness</li> <li>Employment for those with longterm health conditions including adults with a learning disability or who are in contact with secondary mental health services</li> <li>Sickness absence rate</li> <li>Killed and seriously injured casualties on England's roads</li> <li>Domestic abuse</li> </ul>		

Description of the key metrics used to measure performance in the outcome areas

	ı	-
		Violent crime (including sexual violence)     Re-offending levels     The percentage of the population affected by noise     Statutory homelessness     Utilisation of green space for exercise/health reasons     Fuel poverty     Social isolation     Older people's perception of community safety
Health improvement	People are helped to live healthy lifestyles, make healthy choices and reduce health inequalities.	<ul> <li>Low birth weight of term babies</li> <li>Breastfeeding</li> <li>Smoking status at time of delivery</li> <li>Under 18 conceptions*</li> <li>Child development at 2-2½ years (under development)</li> <li>Excess weight in 4-5 and 10-11 year olds*</li> <li>Hospital admissions caused by unintentional and deliberate injuries in children and young people aged 0-14 and 15-24 years</li> <li>Emotional wellbeing of looked after children</li> <li>Smoking prevalence - 15 year olds (placeholder)</li> <li>Self-harm</li> <li>Diet</li> <li>Excess weight in adults</li> <li>Proportion of physically active and inactive adults</li> <li>Smoking prevalence - adult (over 18s)</li> </ul>

		2 23
		Successful completion of drug treatment  People entering prison with substance dependence issues who are previously not known to community treatment  Recorded diabetes  Alcohol-related admissions to hospital  Cancer diagnosed at stage 1 and 2  Cancer screening coverage  Access to non-cancer screening programmes  Take up of the NHS Health Check Programme – by those eligible*  Self-reported wellbeing  Falls and injuries in people aged 65 and over
Health protection	The population's health is protected from major incidents and other threats, while reducing health inequalities.	Fraction of mortality attributable to particulate air pollution     Chlamydia diagnoses (15-24 year olds)*     Population vaccination coverage     People presenting with HIV at a late stage of infection     Treatment completion for Tuberculosis (TB)     Public sector organisations with board-approved sustainable development management plan     Comprehensive, agreed inter-agency plans for responding

			to health protection incidents and emergencies*
	Healthcare, public health and preventing premature mortality	Reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities.	Infant mortality Tooth decay in children aged 5 Mortality from causes considered preventable Mortality from all cardiovascular diseases (including heart disease and stroke) Mortality from liver disease Mortality from liver disease Mortality from respiratory diseases Mortality from communicable diseases Excess under 75 mortality in adults with serious mental illness Suicide rate Emergency readmissions within 30 days of discharge from hospital Preventable sight loss Health-related quality of life for older people Hip fractures in people aged 65 and over Excess winter deaths Estimated diagnosis rate for people with dementia
Summary of what 'targets' were set in relation to the above metrics (where relevant)	There are no set targets. The PHOF monitors health outcomes for LAs / CCGs over time and tracks improvements.		
Description of how prescriptive / detailed the targets were	N/A		
Description of the rationale underlying the proposed targets	N/A		

#### Description of the methodology and evidence used to determine the targets (where relevant)

The development of the PHOF has been based on a set of principles that were developed through consultation with stakeholders.

There are no specific targets or levels of ambition. There is a methodology that follows a 'green-card rating system', which captures whether something is going in the good direction.

Indicators can be:

- on trend:
- better than trend; and
- worse than trend.

The PHOF allows to benchmark indicators to different peer-groups, for example, LAs in the same region, or LAs in the same deprivation decile.

#### Topic 3: how the outcomes were balanced against funding

There is a strong link between the PHOF and the Health Premium Incentive Scheme (HPIS). Building on the breadth of the outcomes framework, the health premium highlights, and incentivises action on, a small number of indicators that reflect national or local strategic priorities.

#### **HPIS**

- Fifty-one PHOF indicators or sub-indicators were deemed suitable for use as part of the incentive scheme, based on a set of criteria;
- Notwithstanding technical difficulties with measuring progress on smoking, alcohol and substance misuse, any credible scheme should have the potential to include indicators relating to these areas;
- Alongside nationally set indicators, local authorities should have the flexibility to select a small number of indicators from those meeting the criteria, different to that selected nationally;
- Local authorities should have further local flexibility to select locally relevant indicators, provided they could demonstrate they were suitably robust:
- suitably robust;
  Progress should be considered to have been made if a threshold is met. Ideally this would be set at a statistically significant level, but
- Local authorities should seek to incentivise the reduction in health inequalities;
- Indicators chosen should cover the four PHOF domains; and

this might not always be possible;

 Benefits criteria and an evaluation methodology to be developed in conjunction with key stakeholders.

The scheme described above that the DH is proposing for payment in 2015-16 is based on only two indicators, supported by a modest available incentive budget of £5 million. This careful roll-out gives the DH practical experience and the opportunity to gather early feedback from local authorities about the operation of the scheme and its potential impact.

#### Indicators

- National indicator: 'Successful completion of drugs treatment' with combined PHOF data for opiate and non-opiate users; and
- Local indicator: selected by local authorities from the list approved indicators produced by ACRA. If a local authority did not select their own indicator a default indicator 'Smoking prevalence over 18s' will be assigned.

How / whether the overall package of outcomes was evaluated relative to the available funding

The health premium rewards progress, rather than the attainment of a set (arbitrary) target. When it comes to rewarding payment, all indicators both national and those chosen locally will be weighted the same. For 2015/16 this would mean:

• If a local authority made progress on both indicators they would

- If a local authority made progress on both indicators they would receive the maximum reward for that authority;
- If they made progress on only one out of the two indicators, they
  would only receive payment for one indicator only (i.e. half of the
  available reward); and
- If they did not make progress on any of the indicators, they would not receive any payment.

Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?

For each measure, where a local authority demonstrates it has made an improvement by the end of March 2015 they will receive a share of the total available incentive. The share will be proportional to their target allocation, as recommended by the Advisory Committee on Resource Allocation (ACRA). When all the shares are known, the incentive will be fully distributed among the LAs based on the allocation formula for 2014/15.

Payment will be made in 2015/16 as soon as possible after necessary data become publicly available. £5m has been allocated for this first year of the incentive. Each authority's share of the £5m will be proportional to its 2014-15 target allocation, and also dependent on the authority passing their threshold for payment. So, an authority demonstrating progress on both measures can expect provisionally to receive a minimum of around £1.79k per 2014-15 £1m target allocation. The exact amount will depend on the number of local authorities passing the thresholds for payment of the incentive.

Whether there are conditions under which under which target outcomes could be re-opened.

The PHOF is a multi-year framework, with a built- in expectation that it should be updated each year as data quality improves, technical capability across the public health system develops, and as the DH maintains an aligned approach across the NHS, local authorities and PHE.

#### 6.2.3. NHS England

Table 12. NHS Outcomes Framework 2015-16, NHS England

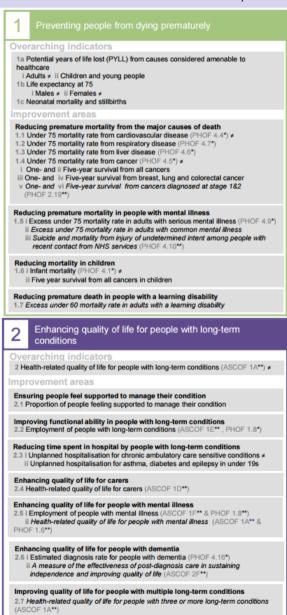
Issues / criteria	Description	
	Topic 1: purpose and scope of the outcomes framework	
Overview of the outcomes framework	<ul> <li>The NHS Outcomes Framework:</li> <li>provides a national overview of how well the NHS is performing;</li> <li>is the primary accountability mechanism, in conjunction with the mandate, between the Secretary of State for Health and NHS England; and</li> <li>improves quality throughout the NHS by encouraging a change in culture and behaviour focused on health outcomes not process.</li> <li>The framework is a set of 68 indicators which measure performance in the health an care system at a national level.</li> <li>The NHS Outcomes Framework, alongside the Adult Social Care and Public Health Outcomes Frameworks, sits at the heart of the health and care system. They overlap some areas, but serve different purposes in the health and social care remit.</li> </ul>	
Key objectives / purpose of the outcomes framework	The NHS Outcomes Framework forms an essential part of the way in which the Secretary of State for Health holds NHS England to account. It has been designed to be the primary assurance mechanism to assess the progress of NHS England at a national level, meaning that the limited number of indicators and the type of data collected by them must represent the NHS service users, and the challenges faced by the NHS, as effectively as possible.  The NHS Outcomes Framework is based on the Review by Lord Darzi, which identified quality, patient experience and safety as key areas for the NHS to focus on. It was conceived as an accountability tool and it also monitors performance of the NHS.	
Summary of the key outcomes included in the framework	Indicators in the NHS Outcomes Framework are grouped into five domains, which set out the high level national outcomes that the NHS should be aiming to improve. For each domain, there are a small number of overarching indicators followed by a numbe of improvement areas. Overarching indicators are designed to cover the domain as broadly as possible. Improvement area indicators are included to target those groups not covered by the overarching indicators and/or where independent emphasis is merited.  Domains / high level national outcomes:  1. Preventing people from dying prematurely. 2. Enhancing quality of life for people with long-term conditions. 3. Helping people to recover from episodes of ill health or following injury. 4. Ensuring that people have a positive experience of care. 5. Treating and caring for people in a safe environment and protecting them from avoidable harm.	
Whether there was any explicit or implicit prioritisation of the different outcome areas	There are overarching indicators, which seek to measure outcomes across the whole 'domain' and improvement indicators for specific areas within the domain, which require improvement in outcomes. This, in effect, sets priorities for key areas to improve upon.	
To	opic 2: Measures and targets within the outcomes framework	

**Overarching indicators:** indicators of outcomes across the breadth of activity covered by each domain. These indicators cover the whole population (e.g. years of life lost) and are "permanent fixtures" of the framework.

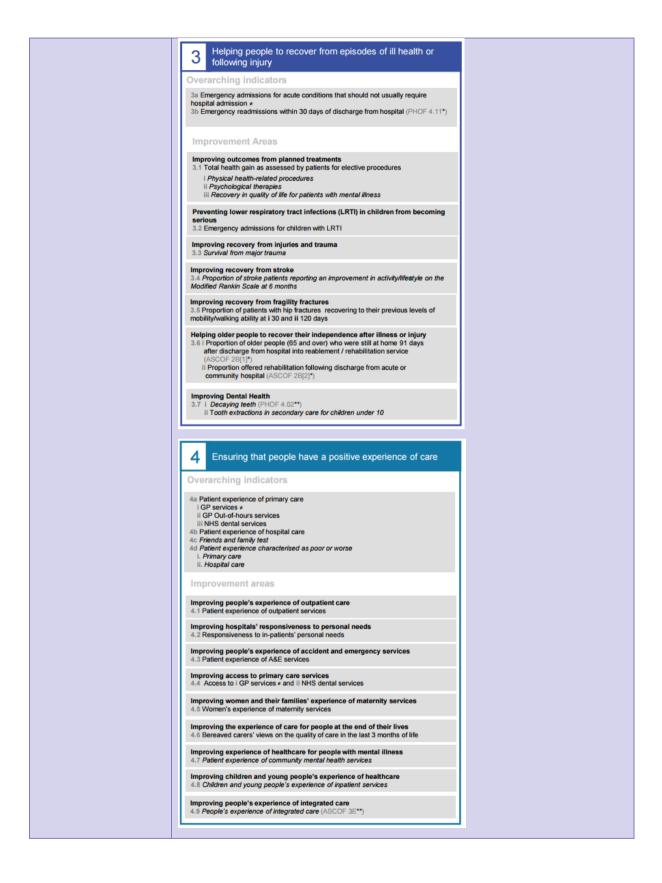
**Improvement areas**: these indicators cover specific sub-groups (e.g. years of life lost due to cancer). These indicators reflect the current priorities for NHS England and may come in and out of the framework. There are two types of improvement area indicator:

- **Sub-indicators**: indicators that represent outcomes that are already largely captured by the overarching indicators but which merit emphasis;
- Complementary indicators: indicators which complement the overarching indicators by extending the coverage of the domain.

The following tables summarise the overarching as well as the improvement areas indicators across the five domains for the 2015/16 NHS Outcomes Framework.



Description of the key metrics used to measure performance in the outcome areas



	Treating and caring for people in a safe environment and protecting them from avoidable harm  Overarching indicators  5a Deaths attributable to problems in healthcare 5b Severe harm attributable to problems in healthcare Improvement areas  Reducing the incidence of avoidable harm 5.1 Deaths from venous thromboembolism (VTE) related events 5.2 Incidence of healthcare associated infection (HCAI)  i NRSA i C. difficile 5.3 Proportion of patients with category 2, 3 and 4 pressure ulcers 5.4 Hip fractures from falls during hospital care  Improving the safety of maternity services 5.5 Admission of full-term babies to neonatal care  Improving the culture of safety reporting 5.6 Patient safety incidents reported  There was one public consultation on the purpose, principles and shape of the framework. There were also engagement events across the country with the public, clinicians and other stakeholders.  For subsequent frameworks, research has been commissioned to develop specific indicators where there were placeholders. There is a well-established set of criteria to add in new indicators to the framework. There needs to be a robust understanding on what can be measured and it needs to be ensured that it is only measuring outcomes, bearing in mind that there shouldn't be too many outcomes overall.	
Summary of what 'targets' were set in relation to the above metrics (where relevant)	The NHS Outcomes Framework forms an essential part of the way in which the Secretary of State for Health holds NHS England to account. The mandate to NHS England sets an objective to 'demonstrate progress against the five parts [domains] and all the outcome indicators in the [NHS Outcomes] framework'.  The DH is continually reviewing progress made against the mandate objectives.	
Description of how prescriptive / detailed the targets were	N/A	
Description of the rationale underlying the proposed targets	There is an issue around the timing of <b>when</b> health outcomes materialise, and as such it is difficult to attribute certain outcomes to certain interventions. Initially, the outcomes should have quantified levels of ambition i.e. targets. However, due to the complexities of the health care system and the difficulty in attributing changes in an outcome to the NHS alone, there are no set targets. The NHS only has to show improvement i.e. that it is going in the right direction.  There is an attempt to 'tease out' the amount of difference in an indicator which is a result of NHS intervention for the overarching indicators, in order to set realistic long-term ambitions. For example, 'potential years of life lost from causes considered amenable to healthcare' can be directly attributed to NHS intervention.	
Description of the methodology and evidence used to determine the targets (where relevant)	There are no specific targets or levels of ambition. There is a methodology that follows a 'green-card rating system', which captures whether something is going in the good direction.  Indicators can be:  on trend; better than trend; and worse than trend.	

<sup>14</sup> http://www.hscic.gov.uk/nhsof

	This 'flag-rating' works bottom-up from indicators within a specific domain, to the overall domain, to the overall system. So for example, if one indicator is flagged as 'red' it is unlikely that the domain will have a positive flag or the overall system.  The DH is also working with the Organisation for Economic Co-operation and Development (OECD) to understand the differences between countries' data systems and to improve the comparability of the OECD's Health Care Quality Indicators.
	Topic 3: how the outcomes were balanced against funding
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A
Whether there are conditions under which under which target outcomes could be re-opened.	The framework was developed in December 2010, following public consultation, and is updated annually.  Refreshing the framework every year allow it to become a tool which reflects the current landscape of the health care system, and to be better suited to approach the many challenges that the system faces.  The framework will remain stable this year and next. Nonetheless, if new data or new indicators become available it can be updated.

#### Water and wastewater

#### 6.2.4. Ofwat

Ofwat is the economic regulator of water and wastewater services in England and Wales. It is responsible for setting price limits for 18 (privately owned) water only and water and wastewater companies.

Table 13. PR14 water and wastewater control 2015-20, Ofwat

#### Issues / criteria **Description** Topic 1: purpose and scope of the outcomes framework A key feature of Ofwat's most recent price control (PR14) was a greater emphasis on company ownership of their business plans, where there was a greater focus on what companies deliver for their customers (i.e. outcomes) rather than how they deliver it. A key distinguishing feature of Ofwat's outcomes framework, therefore, was that it was not prescriptive, but rather allowed companies to identify and propose outcomes and associated performance commitments and delivery incentives, based on extensive customer engagement. Accordingly, Ofwat's role was (in most cases) not to set the outcomes themselves, but rather, to develop the overall outcomes framework, and subsequently scrutinise the suitability of the outcomes, performance commitments and delivery incentives proposed by companies. Focusing on delivery Wholesale controls Retail controls Household Non-household (England) Non-household (Wales) Wastewater Focusing on deliver Outcome-based commitments Outcome delivery incentives Overview of the outcomes At PR14, water and sewerage companies proposed 171 outcomes, 515 performance framework commitments and 321 financial outcome delivery incentives. The outcomes framework consisted of the following main components: **Outcomes** – are what are valued by customers and society and are the objectives that companies want to achieve e.g. safe drinking water. Outcome delivery incentives (ODIs) - associated with performance measures, which includes penalties and rewards for failure to deliver and outperformance. These are either financial or reputational. Performance commitments - what each company committed to delivering. Service incentive mechanism (SIM) - a national incentive for customer service (this was a performance commitment specified by Ofwat, rather than proposed by companies). Ofwat is currently engaged in the process of developing its approach to the next price control (PR19). Of relevance to outcomes, key issues currently being considered by Ofwat are: (i) whether it is appropriate / beneficial to have certain outcomes set over a longerterm basis, given the long asset lives in the industry; and (ii) whether there is scope for a richer / wider evidence base in relation to customer needs and preferences; and (iii) what the appropriate balance should be between comparator (more prescriptive) and bespoke (more flexible) outcomes. Key objectives / Create strong financial and reputational incentives for companies to deliver purpose of the outcomes that align to customer preferences.

the outcome areas

#### outcomes Relatedly, allow flexibility so that outcomes could vary across companies to reflect framework differences in the priorities / needs of their customers. Also allow for an objective 'monitoring' of performance against outcomes. Give company board's ownership of, and accountability for, their proposals. All of the companies proposed outcomes covering the essential elements of their services that customers value highly, such as: water quality compliance; supply interruptions; water quality contacts; leakage; and asset health. As well as these essential outcomes, some companies also proposed innovative outcomes Summary of the that their customers value (for example, outcomes relating to customer satisfaction in their key outcomes dealings with the company, and fair billing). included in the framework While the outcomes put forward by companies varied according to what their customers value, there were some common outcomes proposed by the majority (not all) of the companies, these are as follows: consumption of water / water efficiency; water quality events; customer perception of performance; supply restrictions; security of supply; resilience; biodiversity / SSSIs; and impact of abstraction. Company proposed ODIs were implicitly ranked, because some outcomes had more associated 'value' than others. This, again, reflected companies' own customer engagement and research, used to determine customer needs and preferences in their respective supply Whether there areas. Consequently, the prioritisation largely reflected companies' customer research. was any explicit However, in areas where Ofwat made interventions in company plans to effectively 'set' the or implicit performance commitment (e.g. for outcomes where Ofwat felt comparative analysis was prioritisation of appropriate, the regulator set commitment levels based on upper quartile performance) the different arguably the regulator also influenced the prioritisation. outcome areas As Ofwat retained the service incentive mechanism (SIM - an incentive linked to customer service) this suggests it considered this to be a priority area. Similarly, Ofwat mandated a leakage ODI, again arguably this suggests this was a considered a priority area. Topic 2: Measures and targets within the outcomes framework We set out below what we consider to be the key metrics proposed by water companies or required by Ofwat at PR14. The nature of Ofwat's outcomes framework is that companies do not use the same definition for all of the measures, and not all companies use all of the Description of the measures listed below. key metrics used The SIM is used to measure the performance of companies with regards to consumer to measure experience. The consumer experience measures from the SIM include: performance in

contacts that the companies receive.

service they receive from their company.

Quantitative measures - which reflect the number of complaints and telephone

Qualitative measure - reflects how satisfied consumers are with the quality of

The SIM is both a reputational and financial incentive. Ofwat collects and publishes a comparative assessment of the companies' performance against the measures above, allowing consumers to identify which companies offer the best and worst services. It also imposes financial rewards and penalties based on companies' overall performance.

Drinking water quality - mean zonal compliance.

Pollution – dilution factor (measure of the volume of the sewage discharge) compared to the receiving body of water.

Indicator	Description	Measure		
Customer experience				
SIM	The level of customer concern with company service and how well the company deals with them.	Score		
Internal sewer flooding	Number of incidents of internal sewer flooding for properties that have flooded within the last ten years.	Number of incidents		
Water supply interruptions	Number of hours lost due to water supply interruptions for three hours or longer, per property served.	Hours per total properties served		
Reliability and availab	ility			
Serviceability water non-infrastructure	Assessment of the recent historical trend in serviceability to customers, as measured by movements in service and asset performance indicators	Stable / improving / marginal / deteriorating		
Serviceability water infrastructure	Assessment of the recent historical trend in serviceability to customers, as measured by movements in service and asset performance indicators.	Stable / improving / marginal / deteriorating		
Serviceability sewerage non- infrastructure	Assessment of the recent historical trend in serviceability to customers, as measured by movements in service and asset performance indicators.	Stable / improving / marginal / deteriorating		
Serviceability sewerage infrastructure	Assessment of the recent historical trend in serviceability to customers, as measured by movements in service and asset performance indicators	Stable / improving / marginal / deteriorating		
Leakage	Total leakage measures the sum of distribution losses and supply pipe losses in megalitres per day (Ml/d). It includes any uncontrolled losses between the treatment works and the customer's stop tap. It does not include internal plumbing losses	Megalitres a day (MI/day)		
Security of supply index	Indicates the extent to which a company is able to guarantee provision of its levels of service for restrictions of supply. The	Index score		

	indicator measures security of supply for two scenarios (where relevant) – under dry year annual average conditions and peak demand conditions.	
Environmental impact		
Greenhouse gas emissions	Measurement of the annual operational GHG emissions of the regulated business.	Kilo tonnes of carbon dioxide equivalent (ktC02e)
Pollution incidents (sewerage)	The total number of pollution incidents (categories 1 to 3) in a calendar year emanating from a discharge or escape of a contaminant from a sewerage company asset.	Category 1-3 incidents per 10,000 km of sewer
Serious pollution incidents (sewerage)	The total number of serious pollution incidents (categories 1 and 2) in a calendar year emanating from a discharge or escape of a contaminant from a sewerage company asset.	Category 1-2 incidents per 10,000 km of sewer
Discharge permit compliance	Performance of sewerage assets to treat and dispose of sewage in line with the discharge permit conditions imposed on sewage treatment works	Percent (%)
Satisfactory sludge disposal	Companies determine their own definitions of satisfactory sludge disposal; as a minimum, we expect companies to adhere to the Safe Sludge Matrix and comply with any legal obligations.	Percent (%)

Companies proposed their own targets / performance commitments in their business plans. However in summary, during the period of 2015-20 companies in aggregate have committed to:

- Reducing the time lost to supply interruptions greater than three hours by 32%.
- Reducing the number of internal sewer flooding incidents by 1,450 a year a 33% reduction.
- A target of zero serious (category 1-2) pollution incidents for those companies with commitments.
- A 22% drop in the number of other pollutions incidents (category 3 and 4).
- Reducing leakage levels from 3,281 million litres a day (Ml/d) to 3,123 MI/d (that is, by 158 Ml/d by 2020) equivalent to a drop of about 5%.
- Measures to encourage water efficiency, which are forecast to save around 215 MMI/day by 2020.
- A target of 100% compliance on drinking water quality for all companies (currently 99.97%).
- Reducing customer contacts around problems such as the odour, colour or taste of water by 34%.
- Increasing the level of metering from 48% in 2014-15 to about 61% by 2019-20.

#### Summary of what 'targets' were set in relation to the above metrics (where relevant)

Ofwat assessed companies' business plans to determine whether they needed to intervene using a detailed check of interventions which are set out in its final determination policy chapter A2 on outcomes. For example, Ofwat intervened to adjust performance commitments: deadband adjustments; review of incentive ranges and rates; review of performance commitment and incentive coverage; and remove normalisation to produce company – specific interventions.

For 5 performance commitments Ofwat applied an upper quartile challenge to companies' proposals (internal sewer flooding is not listed due to the number of different sewer flooding metrics companies proposed).

Measure	Units	UQ
Interruptions	Min/property	12
Pollution incidents	No/1,000km	42
Water quality contacts	Rate per 1,000 pop	1.23
Water quality compliance	MZC %	99.97

Ofwat did not intervene with companies' proposals if they had already proposed better performance commitments than the upper quartile.

Ofwat did not give detailed guidance on business plans and **its approach could be characterised as being highly flexible, rather than prescriptive.** Companies put forward their proposed outcomes, targets (performance commitments) and incentives that reflect their customers' and wider stakeholders' views and priorities, as per Ofwat's guidance about business plans.

Ofwat specifically required companies to include:

- **Leakage** reflecting its importance to customers and the potential environmental and efficiency benefits of its reduction; and
- **SIM** which has successfully incentivised substantial improvements in performance across all companies.

Ofwat's high level guidance included the four key areas they assessed in the risk-based review.

#### Description of how prescriptive / detailed the targets were

- **1. Outcomes** what the company is proposing to deliver for customers (incorporating current and future customers and the environment), including how:
  - it has engaged with customers in developing its proposals and how those proposals reflect customer views and priorities;
  - its proposals deliver the best long-term, sustainable solution for customers (including current and future customers and the environment);
  - its proposals include appropriate incentives to secure delivery and value for money for customers; and
  - it has met, and intends to meet, its statutory obligations.
- **2. Costs** the company's proposed costs for delivering its outcome commitments, including how these proposals reflect the efficient cost of delivery.
- **3. Risk and reward** the company's approach to risk and reward, including how it has determined:

- an efficient distribution of risk between customers and the company; and
- returns that provide appropriate rewards for the level of risk it is bearing.
- **4. Affordability and financeability** the impact of its proposals on customers' bills, and on the company (and its investors). We would expect this to include discussion of the companies' approach to financing long-term investment.

In practice, however, Ofwat had a number of concerns regarding the ODIs proposed by companies; and so ultimately had to make substantial interventions. This was driven by a number of factors – but included concerns relating to outcomes that, in principle, were 'comparable' across the companies – but where the company proposed incentives implied material differences in what customers might pay for delivering similar performance levels. As a result, Ofwat is now taking forward work to consider the balance between comparative (which might tend to be more prescriptive) outcomes, and bespoke outcomes, to inform its approach to PR19.

#### Description of the rationale underlying the proposed targets

The above targets / commitments are backed by financial penalties or reputational incentives if they are not met, and in some cases, financial rewards for delivering stretching performance improvements beyond the commitments.

ODIs are directly linked to the performance commitments which deliver outcomes encouraging strong performance on a continuous basis.

Companies have the flexibility to deliver outcomes at lowest cost and to focus resources on what local customers most value – by asking companies to propose key outcome commitments rather than detailing hundreds of outputs.

It will also incentivise delivery of outcomes and enable companies to manage risks – by asking companies to propose their own delivery incentives.

#### Description of the methodology and evidence used to determine the targets (where relevant)

Companies had to provide evidence to justify the performance levels to which they were committing. This usually involved demonstrating that these levels represented an improvement on past performance (i.e. historical data on relevant performance levels was analysed).

For 5 performance commitments Ofwat used comparative analysis to check companies' proposals were at least as good as the historical upper quartile performance of all water companies (i.e. comparator benchmarking analysis was used).

Detailed data / evidence on customer willingness to pay was also a key input.

The SIM is a comparative measure – therefore quantitative and qualitative elements are weighted to produce the combined customer experience measure. This score is then used to compare performance and apply rewards / penalties.

#### Topic 3: how the outcomes were balanced against funding

How / whether the overall package of outcomes was evaluated relative to the available funding Ofwat's approach to the PR14 Price Review more widely meant that companies were effectively funded in line with delivering an upper quartile level of performance (based on historical data). Subject to achieving upper quartile performance, Ofwat's assessment was therefore that companies would be able to deliver against their performance commitments. In simple terms, as an economic regulator, Ofwat effectively determined both the total funding available and evaluated the associated outcomes (as part of setting the price limits).

In practice, Ofwat drew on a range of analysis to inform the above assessment. In particular, Ofwat set funding in part by benchmarking costs across the companies using a range of efficiency models. Importantly, at PR14 Ofwat assessed costs (funding) based on total expenditure (totex), rather than operating and capital expenditure separately. This was for a variety of reasons, but not least because the regulator was wary of potential incentives

that might 'bias' companies towards capex if the two cost categories were assessed separately.

Specifically in relation to proposed rewards and penalties associated with outcomes, companies had to justify these in relation to their costs of delivering service improvement and customers' willingness to pay, calibrating the rewards and penalties with the totex efficiency sharing contained in the price controls. Ofwat also compared (benchmarked) rewards and penalties across the companies to some extent, so that they could understand how the implications of out-and-under performance might vary across their customers.

To help inform the above, Ofwat examined the likely impact of a company's package of ODIs on overall returns, by assessing the return on regulatory equity (RoRE), impacts of maximum penalties / rewards, and also anticipated P10 and P90 levels of performance. This found that aggregate RoRE exposure from ODIs (excluding SIM) would not normally be expected to be beyond the  $\pm$ -2% range.

The 'value' of any ODI is determined by the performance commitment and the incentive rate that applies to any out or under performance. In the main, these were informed by the willingness to pay evidence.

Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?

Reflecting the fact that ODIs were new for PR14, however, Ofwat further determined to 'limit' the overall exposure by applying aggregate caps and collars on the total value associated with ODIs. The aggregate caps and collars were set at +/-2% of the return on regulatory equity (RORE) range, calculated over five years. This took into account historical evidence in the water sector, as well as other sectors (energy). The five year period allows netting off between years, so that companies aren't incentivised to distort the delivery of their outcomes between years.

In some areas material value was allocated against the relevant outcome. For example:

- **Leakage** maximum penalties which companies in aggregate could incur if they under deliver is £510 million and the maximum reward companies in aggregate earn for delivering stretching performance is £228 million.
- **Water supply interruptions** companies can be penalised up to £291 million and can earn a reward of up to £234 million if they deliver stretching performance.
- Internal sewer flooding companies collectively face a penalty of up to £353 million if they do not deliver on their commitment to reduce the number of properties affected. They can earn a maximum reward of £278 million if they deliver stretching improvements beyond their committed performance levels.

Whether there are conditions under which under which target outcomes could be re-opened. It is possible for companies and / or customer challenge groups (CCGs) to apply to Ofwat to alter the aggregate cap within the period, if they provide convincing evidence that the arrangement was working against the long-term interest of customers.

The default approach is that the performance commitments and ODIs are set for the control period. Ofwat has made some corrections to the final determinations where genuine errors were found.

#### 6.2.6. NIUR

The Northern Ireland Utility Regulator (NIUR) is responsible for regulating electricity, gas, water and sewerage industries in Northern Ireland. In the water and sewerage industry, NIUR regulates Northern Ireland Water (NI Water). NI Water has dual status as a government owned company and a non-departmental public body.

Table 14. PC15: water and sewerage services price control 2015-21, NIUR

Issues / criteria	criteria Description				
Topic 1: purpose and scope of the outcomes framework					
	NIUR's outputs framework is an overall package which consists of outputs that have been assessed for PC15 in line with the level of investment.				
	Output tables form the basis of the monitoring plan the NIUR asks NI Water to publish.  The tables contain targets for which NI Water is expected to meet or exceed.				
Overview of the	Outputs are monitored throughout the period and there is a process of sign off for compliance reports of outputs.				
outcomes framework	Outputs are categorised under 3 headings:				
	Service level outputs – measure the impact of investment on the level of service experienced by customers.				
	<ol><li>Nominated outputs – specific items identified by the regulators and / or NI Water itself.</li></ol>				
	<ol><li>General activities – these are outputs where a clear link between activity and service level outputs in the short term could not be determined.</li></ol>				
Key objectives / purpose of the outcomes framework	The purpose of the outcomes framework is to monitor the performance of NI Water and to achieve greatest benefits for consumers.				
Summary of the leave	There are <b>five headline outcomes</b> and 28 KPIs for water; and five headline outcomes and 17 KPIs for sewerage, here we set out the headline outcomes that apply to both water and wastewater:				
Summary of the key outcomes included in the framework	<ul><li>Customer service;</li><li>Quality of water / sewerage;</li></ul>				
in the framework	<ul><li>Nominated outputs and activities;</li><li>Serviceability; and</li></ul>				
	New output measures.				
Whether there was any explicit or implicit	When determining the appropriate outcomes, the views of customers on the type and level of service they expect, and how they prioritise the delivery of those service levels was given significant weighting.				
prioritisation of the different outcome areas	Additionally, there is an agenda setting process that NIUR goes through, in which outcomes are essentially signed off by the minister, ensuring the alignment of priorities.				
	Topic 2: Measures and targets within the outcomes framework				
Description of the key metrics used to measure performance in the	The monitoring plan sets KPIs and targets for both water and wastewater in the five headline output categories set out above. Here we summarise the output measures for water:				
outcome areas	Consumer Service				

Consumer response measure outputs

- DG6 % billing contact dealt with within five working days
- DG7 % written complaints dealt with within ten working days
- DG8 % metered customers received bill based on a meter reading
- Call handling satisfaction score (1-5)
- DG9 % calls not abandoned
- DG9 % calls not receiving the engaged tone

Properties at risk of low pressure

- DG2 properties at risk of low pressure removed from the risk register by company action
- DG2 properties receiving pressure below the reference level at end of year
- Properties experiencing interruptions of supply
- DG3 Supply interruptions > 12hrs (unplanned and unwarned)
- DG3 Supply interruptions (overall performance score)
   Leakage
- Total leakage

Security of supply

• Security of supply index

Power usage

- Percentage of NI Water's power usage derived from renewable sources
- Power usage

#### • Quality of water output measures

Drinking water quality compliance

- % overall compliance with drinking water regulations
- % compliance at consumers tap
- ullet % iron compliance at consumer tap

Water quality at service reservoirs

% Service Reservoirs with coliforms in >5% samples

#### Nominated outputs and activities

Water mains activity

• Water mains activity – length of new, renewed, or relined mains *Trunk main schemes* 

• Completion of nominated trunk main schemes

Water treatment works schemes

• Completion of nominated water treatment works schemes

Service reservoirs and clear water tanks

 Completion of nominated improvements to increase the capacity of service reservoirs and clear water tanks

#### Serviceability

- Water infrastructure serviceability
- Water non-infrastructure serviceability
- New output measures proposed by NI Water at PC15

- Number of Catchment Management Plans
- Number of lead communication pipes replaced
- Number of school visits
- Number of events
- % Service Reservoirs where sample taps have been assessed, and if necessary upgraded to the appropriate standard

In addition to monitoring individual outputs the NIUR also assess the company's progress against a composite OPA score.

The NIUR have worked with the Quality Regulators to ensure they have a clear understanding of the nominated outputs that are to be delivered in PC15 in preparing the final determination.

During PC15 the NIUR will continue to work with other stakeholders in the Output Review Group to monitor key outputs. They will also liaise with the Quality Regulators to receive compliance reports; sign off of outputs; and to manage the impact of any changes to quality requirements – including the impact of any emerging issues.

The following table, taken from the PC15 final determination, sets out NI Water's targets in the above metrics for water. Targets were set across all 28 water output measures, some of which were to be met each year of the regulatory period, whereas others just needed to be met by the end of the period.

Table 1: Customer service and water quality outputs

	Line description	Units	PC13	PC15					
A	Consumer Service		2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
1	DG2 Properties at risk of low pressure removed from the risk register by company action	nr	170	92	108	157	159	160	160
2	DG2 Properties receiving pressure below the reference level at end of year	nr	1,132	1,040	932	775	616	456	296
3	DG3 Supply interruptions > 12hrs (unplanned and unwarned)	%	0.19	0.18	0.17	0.17	0.16	0.15	0.15
4	DG3 Supply interruptions (overall performance score)	nr	1.08	1.07	1.05	1.03	1.00	0.98	0.96
5	DG6 % billing contacts dealt with within 5 working days	%	99.90	99.90	99.90	99.90	99.90	99.90	99.90
6	DG7 % written complaints dealt with within 10 working days	%	99.50	99.50	99.50	99.50	99.50	99.50	99.50
7	DG8 % metered customers received bill based on a meter reading	%	99.00	99.00	99.00	99.00	99.00	99.00	99.00
8	Call Handling Satisfaction score (1-5)	nr	4.75	4.65	4.65	4.70	4.70	4.75	4.75
9	DG9 % Calls not abandoned	%	99.00	99.00	99.00	99.00	99.00	99.00	99.00
10	DG9 % calls not receiving the engaged tone	%	99.90	99.90	99.90	99.90	99.90	99.90	99.90
11	Overall Performance Assessment (OPA) score (11 Measures)	nr	215	218	221	224	227	232	236
12	Total Leakage	MI/d	165	163	161	159	157	155	153
13	Security of supply index	nr	100	100	100	100	100	100	100
14	Percentage of NI Water's power usage derived from renewable sources	%	20.0	20.0	25.0	30.0	35.0	40.0	40.0
В	Quality Water								
15a	% overall compliance with drinking water regulations	%		99.79	99.79	99.79	99.79	99.79	99.79
15b	% compliance at consumers tap	%		99.69	99.69	99.69	99.69	99.69	99.69
16	% iron compliance at consumers tap	%		97.10	97.10	97.10	97.10	97.10	97.10
17	% Service Reservoirs with coliforms in >5% samples	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
U	Water Outputs								
18	Water mains activity - Length of new, renewed or relined mains	km	168	130	144	129	167	147	188
19	Completion of nominated trunk main schemes	nr	2	1	0	0	1	0	1
20	Completion of nominated water treatment works schemes	nr	3	1	0	0	1	0	2
21	Completion of nominated improvements to increase the capacity of service reservoirs and clear water tank	nr	1	0	0	1	0	1	1
D	D Serviceability								
22	Water infrastructure serviceability	Text	Stable						
23	Water non-infrastructure serviceability	Text	Stable						
E	E New Output Measures								
24	Number of Catchment Management Plans	nr		6	7	7	6	7	7
25	Number of lead communication pipes replaced (proactive)	nr		1,844	1,844	1,844	1,844	1,844	1,844
26	Number of school visits	nr		176	176	176	176	176	176
27	Number of events	nr		57	57	57	57	57	57
28	% Service Reservoirs where sample taps have been assessed, and if necessary upgraded, to the appropriate standard	%		50.0	100.0	100.0	100.0	100.0	100.0

Summary of what 'targets' were set in relation to the above metrics (where relevant)

#### The targets were set at a very detailed level, as if one were to leave the target level undefined, it would not be comparable to past performance or other key benchmarks. **Description of how** prescriptive / Some targets were set in order to meet requirements of other regulations and / or detailed the targets government targets. For example, the drinking water quality compliance requires a were target to meet the minimum requirement published by the Department for Regional Development's Social and Environment Guidance. The NIUR looked at where they think they can push NI Water to higher performance and additionally considered where NI Water are putting in new investments / transfer business, and how that would impact on performance. In addition to the above, past performance was a key factor used to consider future expected performance levels. This was determined by an annual information return, similar to the June returns Ofwat used to have, used to assess company performance and as such set targets. The Output Review Group also informed the setting of targets and included: a Ministerial Group and the quality regulator. Customer service and stakeholder groups provided governance of targets. Below, we set out the rationale for a sample of targets set by the NIUR to NI Water: Consumer response measure outputs The NIUR compared NI Water's performance in these measures to the most recently reported average performance achieved by companies in England and Wales. NI Water's Description of the performance in these measures was high and the proposed targets for PC15 were based rationale underlying on the company maintaining this high level of comparative performance throughout the the proposed targets price control period. Leakage The company's economic level of leakage assessment and business plan submission had been reviewed by an independent expert on NIUR's behalf. This review had concluded that the methodologies used were broadly in line with industry best practice, that the PC15 business case was robust and that costs represented good central estimates. As such, the NIUR had accepted the company's proposal to reduce leakage by 12Mld during PC15 on this basis. Drinking water quality compliance The targets set for PC15 fell short of the company's statutory obligations in relation to drinking water quality. These targets were not intended to replace or undermine these obligations. They simply reflected the minimum levels of performance that might be expected based on the funding provided and the natural variability in performance associated with the random sampling regime used to assess statutory compliance. Targets were generally determined based on historical performance. In addition, the NIUR also: (i) engaged with stakeholders / customers in order to seek their views on NI Description of the Water's performance; methodology and evidence used to (ii) looked to other regulators / companies (within the sector and also more determine the widely), to determine targets set by other regulators and also how other targets (where companies performance compared to that of NI Water. For example, NI Water's relevant) performance in customer services was benchmarked to the average performance of companies in England and Wales; and (iii) used independent experts to assess the appropriate level of targets, for example

in terms of the appropriate level to reduce leakage.

Topic 3: how the outcomes were balanced against funding				
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A.			
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	Due to the ownership structure (70% revenue from the Department of Regional Development), there are perverse incentives to outperform. NI Water could potentially lose funding should they not spend their annual budget, this could also have flow-on impacts as they may receive less funding the following year. Therefore any financial rewards for outperformance are likely to be taken off them, or cause future budget cuts. In light of the above, there is little scope for the use of financial incentives and therefore reputational effects are the key tool for incentivising NI Water's behaviour.			
Whether there are conditions under which under which target outcomes could be re-opened.	PC15 has a duration of 6 years which is typically longer than traditional regulatory periods (usually 5 years), the NIUR has mid-term review where all of the outputs can potentially: (i) be rebased; (ii) have new developmental objectives; (iii) have new customer satisfaction metrics; and (iv) have new targets to come in and be developed, throughout the period.  The purpose for this mid-term review is to maintain the focus on outcomes and ensure that they are kept up-to-date, and:  • allow a managed change in funding to realign the revenue and outputs with any substantive change to medium term funding levels; and to  • provide an opportunity to implement innovative and sustainable solutions which might develop from the strategic studies which NI Water will carry out in the early part of the price control.			

#### 6.2.8. WICS

The Water Industry Commission for Scotland's (WICS) role is to manage an effective regulatory framework, which encourages the Scottish water industry to provide a high quality service and value for money customers. The WICS does this primarily by setting prices for water and sewerage services provided by Scottish Water every five or six years (the most recent determination of which was the Strategic Review of Charges 2015-2021).

Table 15. Strategic Review of Charges 2015-21, WICS

Issues / criteria	Description				
Topic 1: purpose and scope of the outcomes framework					
	There are a range of stakeholders that, collectively, have responsibility for setting and implementing the outcomes framework for Scottish Water, the key elements of which are as follows:				
	<ul> <li>Firstly, the outcomes themselves, which Scottish Water is expected to achieve for each regulatory period, are set by ministers. These are known as Ministerial Directions (see later). There were eight outcome areas identified in the most recent Ministerial Directions.</li> </ul>				
	<ul> <li>These Ministerial Directions are underpinned by a list of locations at which improvements are required. This is referred to as the <b>Technical Expression</b> and is agreed prior to each regulatory period between Scottish Water and its regulators. This is one of the key documents which informs the Strategic Review of Charges and therefore the charges that customers must pay. The Technical Expression is highly detailed, containing asset specific information on issues such as: the purpose of the investment; the outputs that it will deliver; the expected value of the outputs. It therefore allows for highly granular monitoring.</li> </ul>				
Overview of the outcomes framework	<ul> <li>Ministers have established the Output Monitoring Group (OMG), to ensure that Ministers' Objectives are delivered. The OMG brings together all major stakeholders in the Scottish water industry including: the Scottish Government, Scottish Water, the WICS, the Drinking Water Quality Regulator, the Scottish Environment Protection Agency and Consumer Futures (Scotland). This group is chaired by the Scottish Government and publishes quarterly reports on output monitoring.</li> </ul>				
	<ul> <li>Performance against outcomes is monitored in a number of ways. In particular, the WICS publishes as Annual Performance Report, addressing areas including: value for money; customer service; cost control; investment plan delivery; financial performance; and leakage.</li> </ul>				
	<ul> <li>Scottish Water's customer service performance in monitored using a points- based system, the overall performance assessment (OPA). The OPA encompasses aspects of service that are most important to customers, such as the speed with which customer enquiries are dealt with and the risk of sewer flooding. This forms part of the Annual Performance Report.</li> </ul>				
	<ul> <li>Relating to the above, a key metric used to measure investment performance is the Overall Measure of Delivery (OMD). The OMD was introduced by the WICS in 2008 and is one of the metrics set out in the regulatory contract. The OMD provides a single, comprehensive, measure of Scottish Water's overall progress in delivering its investment programme.</li> </ul>				
Key objectives / purpose of the outcomes framework	The outcomes framework for Scottish Water both serves to help monitor performance, also to help incentivise Scottish Water to deliver the required outcomes, both through reputational and financial mechanisms. For example, Scottish Water operates both an annual outperformance incentive plan (AOIP) and a single long-term incentive plan (LT which provide a clear link between pay and key strategic priorities.				

Following from the above, the outcomes framework therefore plays a critical role in allowing the WICS to assess the extent to which Scottish Water's business plan meets the needs of its customers, whether the outcomes are sufficiently well defined and can be monitored objectively, and whether the plan represents value for money

A particularly noteworthy feature of the outcomes framework in Scotland is how it has evolved over time. For example, in the most recent Strategic Review of Charges, there was a greater focus on outcomes, rather than on the monitoring of inputs and the process of delivery. The rationale for this was that it reduces regulatory bureaucracy, allowing Scottish Water to collect the information it needs to run an efficient business. Therefore, a specific aim could be said to be that the framework encourages and empowers Scottish Water to take full responsibility for delivery.

#### Summary of the key outcomes included in the framework

The Outcomes contained in the Ministerial Directions for the 2015/21 period included the following eight areas:

- drinking water quality;
- environment;
- nature;
- waste;
- climate change adaption;
- climate change mitigation;
- · flood risk management; and
- · security of supply.

#### Whether there was any explicit or implicit prioritisation of the different outcome areas

Customer service was a key priority for outcomes, as well as outcomes required to meet other statues and regulations, such as the Water Framework Directive.

#### **Topic 2: Measures and targets within the outcomes framework**

As mentioned above, the WICS assesses Scottish Water's performance in delivering outcomes for customers and the environment on an annual basis, and sets out its findings in an **Annual Performance Report**. In assessing Scottish Water's performance the WICS compares what was delivered in the assessment period, with Scottish Water's Delivery Plan projections for that year. In the report on **Scottish Water's Performance 2014-15** the WICS sets out a table which provides and overall rating, alongside a summary comment on performance for each of the eight main areas. This is summarised in the following table:

#### Description of the key metrics used to measure performance in the outcome areas

Area of performance	Measure			
Key outcomes for customers				
Levels of service to customers	Overall Performance Assessment (OPA) index;			
Delivery of 2010-15 investment programme	Overall Measure of Delivery (OMD) index; and			
Delivery of projects remaining from pre-2010 investment programmes	Number of completion projects.			
Leakage				
Performance against leakage target	Leakage level in millions of litres per day.			
Costs				

Investment costs	Capital spend in £ millions		
Operating costs	Operating costs in £ millions		
Use of borrowing	Net new borrowing in £ millions		
Financial strength			
I			

The **OPA** is calculated by weighting 17 individual performance measures that can be broken down into four categories:

- water supply levels of service;
- sewerage levels of service;
- · customer service; and
- environmental performance.

In addition to the above, the WICS recommended that Scottish Water should also implement service improvement measures to address priorities identified by customers in relation to:

- external sewer flooding;
- visible leakage;
- reduction in carbon emissions;
- managing responses to extreme weather events; and
- minimising the number of complaints that are escalated up to or upheld by the Scottish Public Services Ombudsman.

The Outputs Monitoring Group (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.

The OMD 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 growth) are not included in the OMD.

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

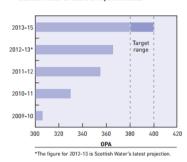
Objective	Quarterly monitored programme areas		
Drinking water	Number of water treatment works improved		
quality and reliability	Number of zones made compliant with iron & manganese standards		
	Number of raw water catchments to improve reliability of supply		
	Distribution mains cleaned (km)		
	Number of water quality etc. studies to inform future periods		
	2010-15 outputs planned to complete in the 2015-21 period		
Drinking water security of supply	Water supply resilience strategy and improvements made;		
	Number of zones which improved security of supply (SOS);		
	Number of security measures and improvements to the infrastructure of critical reservoirs.		

	Protecting and enhancing the	Number of WWTWs improved to meet UWWTD					
	environment	Number of waste water networks improved to meet     UWWTD					
		Number of improvements required to meet UWWTD - Glasgow completion					
		Number of improvements required to meet the Water Framework Directive					
		Number of improvements required to meet the revised Bathing Waters Directive					
		Number of environmental studies to inform future periods					
		Number of improvements required by the Compliance     Assessment Scheme; odour reduction and sludge     management					
		2010-15 outputs planned to complete in the 2015-21 period					
	Flood risk	Number of improvements to dams;					
	management	Number of catchments improved to meet requirements of the Flood Risk Management Act.					
	Supporting economic	Number of new connections to households and businesses					
	development	Delivery of new waste water capacity for 58,000 people					
		Number of first time non-domestic meters installed					
		Number of wholesale meters					
	Climate change	Number of climate change vulnerability assessments					
	Long-term cost of service	Improvements in renewable power and energy efficiency (GWh)					
Summary of what 'targets' were set in	maintain its ov throughout the	rerall OPA score within a target range of 380 to 400 points e period (maximum points available = 419);					
relation to the		2015-16 2016-17 2017-18 2018-19 2019-20 2020-21					
above metrics (where relevant)		upper end 400 400 400 400 400 400 get range					
(where relevant)		lower end 380 381 382 383 384 385 get range					
	Measure to be	e leading UK water companies on the new Customer Experience introduced in March 2015; and eading UK utilities for customer satisfaction.					
Description of how prescriptive / detailed the targets were	This framework is <b>less prescriptive and more adaptive</b> than previous approaches taken by the WICS – the WICs no longer specifies, in detail, what Scottish Water is to include in its business plan. Scottish Water has the freedom to produce a more strategic, customeroriented business plan.						
Description of the rationale underlying the proposed targets	The OPA was originally developed by Ofwat in the late 1990s to compare the customer service performance of the companies in England and Wales. The WICS benefitted from using the same performance assessment framework as is used in England and Wales, in order to compare Scottish Water's performance with the companies in those regions.						

Ofwat stopped collecting data to calculate companies' OPA, yet, the WICS considered it to be beneficial, as it objectively measures Scottish Water's performance and reflects the priorities of Scottish customers.

Scottish Water's level of service performance had improved considerably since 2002 and the company had narrowed the substantial gap in performance with the companies in England and Wales. Scottish Water was on track to achieve the challenge the WICS had set at a previous price review, which was to match upper quartile performance of the industry (for the base year 2007-08) before 2015. In order to achieve this, Scottish Water was required to achieve a score of between 380 and 400 points on the OPA index.

#### Scottish Water's recent OPA performance



The WICS considered there was still significant scope for Scottish Water to improve, and that it expected the company to continue delivering improvements in customer service performance. It invited the Customer Forum and Scottish Water to reach agreement on the levels of service that might be achieved during the forthcoming regulatory control period. To inform their discussion the WICS set out its initial views on what might be achievable.

Scottish Water performance comparison with England and Wales

•	•	-		
Component of OPA		matches the best		
	best in England			
Inadequate water pressure				-
Supply interruptions				
Hosepipe bans		•		
Drinking water compliance				•
Security of supply				
Sewer flooding	-			
Customer contact	•			
Assessed customer service				
STW compliance			•	
Sludge disposal		•		
Achievement of leakage target		•		
Pollution incidents				

At the time that the WICS set that challenge, the threshold of 380 points was significantly higher than the median score across the companies of 373. By 2012 the median had increased to around 380 points. The WICS commented that the lower threshold for Scottish Water should also be raised in response – its initial view being that there was scope to increase the lower threshold to 385 points.

In relation to the upper threshold, the WICS noted that little had changed in England and Wales and explained that its analysis indicated that a target score of 400 was likely to be a challenging upper threshold.

The WICS considered how, occasionally, events wholly or partially beyond a company's control have an impact on performance measures, resulting in adverse effects on the OPA score. It suggested that this should be taken into account when reviewing performance across a full price review period and when agreeing future performance targets.

Description of the methodology and evidence used to determine the

Targets / commitments typically based on past performance and / or current or forecast activity and are proposed by Scottish Water to the WICS, who then determines whether they are challenging or not.

#### targets (where The WICS also regularly compares Scottish Water's performance to companies in England relevant) and Wales. Topic 3: how the outcomes were balanced against funding By virtue of setting the price control, the WICS plays an important role in evaluating outcomes relative to available funding. Specifically, Scottish Water prepares its long-term strategic vision. Following this, the WICS with support / input from the OMG, then comments on how Scottish Water's business plan meets the needs of its customers, whether the outcomes are sufficiently well defined and can be monitored objectively, and whether the plan represents value. A key element of the above is the use of benchmarking analysis and evidence. In particular, where possible, outcomes themselves for Scottish Water are compared to other relevant companies (such as in relation to SIM, but also work is ongoing to further explore benchmarking in relation to issues such as leakage; external flooding; and complaints to the ombudsman). In addition, delivery costs are also benchmarked (primarily against water and wastewater companies in England and Wales) in order to help determine How / whether the Scottish Water's relative efficiency. The assessment of outcomes is effectively overlaid overall package of onto this in order to inform 'value for money.' outcomes was evaluated relative To further illustrate the role of benchmarking, within Scottish Waters resources, it is to the available expected to improve its service performance over the regulatory period so that: funding it ranks among the leading UK water companies on the CEM; and it ranks among the leading UK utilities for customer satisfaction. Also of relevance, and consistent with Ofwat's approach, the WICS no longer regulates operating and capital expenditure separately, but rather sets prices using a cash based approach. The commission sets price limits based on Scottish Water's overall cash requirements, consistent with maintaining a level of financial strength, in particular it targets a suite of financial ratios (cash interest cover, the ratio between funds from operations to net debt etc.). Financial tramlines are used to monitor Scottish Water's financial performance [see Customer Forum note 7]. **Leakage** – Scottish Water will be permitted to recover in the next regulatory period the £10 million of one-off transition costs required to reach the lower end of the assessed range of the 'economic level of leakage', provided this is achieved by 2019-20. The incentive scheme allows for an additional £5 million of recoverable costs if the target is achieved a year earlier, or a reduction of £5 million if it is a year later. Due to the increasing focus on outcomes that matter for customers and the environment, Where individual the WICS financed unallocated investments in enhancing the industry's performance. This outcomes / metrics allows for timely responses to be made when there is an urgent need to invest and to meet important needs. had explicit financial Scottish Water proposes to use outperformance until 2018 in order to support the annual incentives, how nominal household prices increase of 1.6% from 2018-2021 and / or investment in further was the extent of improvements to improve resilience of water suppliers and to reduce the risk and 'value' associated incidence of sewer flooding. with them determined? **Managerial incentives** Scottish Water's overall performance against KPI's is directly linked to director and staff incentive schemes. Scottish Water operates an annual incentive scheme (AOIP) and a long-

term incentive scheme (LTIP) reflecting performance over the 5 year regulatory period. These incentives are built into the individual staff employment contracts and pay awards

of directors and staff.

 AOIP: the potential maximum annual incentive attainable for outperformance by the Executive Members is 40% of base salary and is non-pensionable. The Delivery Plan targets, outperformance targets, and actual performance for each measure in 2014/15 are set out below.

Measure	Weighting	Delivery Plan target	Out-performance target	Actual performance
Profit before tax excluding depreciation (measured on a regulatory accounting basis)	40%	£390m	Up to £20m ahead of Delivery Plan, payment on a sliding scale 0% to 100%	£427m (+£37m)
Customer service OPA performance	40%	381 points	Score in the range 381 to 400 with payment on a sliding scale of 30% to 100% (zero for any score below 381)	400 points
Investment delivery: Q&53b & Q&54 early start overall measure of delivery (OMD) score (ii)	20%	Q&S3b 242.6 points Q&S4 27.4 points	Exceed the combined targets for 50%; exceed each individually for 100%, no sliding scale	239.1 points 32.7 points

- (i) Excluding benefit of a rates refund on the water undertaking of £15 million
- (ii) For any OMD related payment to be made, forecast capital programme cost at March 2015 must be inside the regulatory allowance (fully sustained contributions).
- LTIP: this has been agreed with the Scottish Government and provides clear targets for outperformance of the WICS's Final Determination for the 2010–15 period. Payments under this scheme will be made to Executive Members for their service during 2010 to 2015 in January 2016. The LTIP will only be payable if there is overall financial outperformance of the Final Determination. The plan is structured as follows and is funded by 12% of annual salary being accumulated each year during the 5 years to March 2015, ultimately vesting as determined by the below performance targets and being paid as a single sum in January 2016. Any LTIP payment is funded from financial outperformance after payment of any incentive awards to employees.

Measure	Weighting	Basis of calculation	Target
Growth in financial reserve, measured as debt less cash, relative to the Final Determination $^{(\!1\!)}$	50%	Straight line sliding scale	£0 to £100m above Final Determination target
OPA – measured over the average performance in 2013–14 and 2014–15 $^{\mbox{\tiny (2)}}$	50%	Straight line sliding scale	380 to 400 points

- (1) The financial target is the extent to which adjusted net debt is lower in March 2015 than was assumed in the Final Determination. Maximum LTIP would be payable for at least £100 million out-performance (after adjusting for 2010 rates revaluation and lower charge increases than allowed under the Final Determination).
- (2) Out-performance of OPA targets above those set out in the Final Determination is measured as the average performance in 2013/14 and 2014/15. Maximum LTIP will be payable for an OPA score of at least 400, 20 points higher than the Final Determination target of 380.

# Whether there are conditions under which under which target outcomes could be reopened.

Outcomes may be reopened during a price control under certain circumstances:

- changes in legal obligations, such as a new water and environmental quality obligations; and
- substantial changes in costs and revenues that are outside the control and influence of management.

The process for adjusting charge caps between Strategic Reviews is known as an 'interim determination' (or IDoK).  $^{15}$ 

<sup>15</sup> http://www.watercommission.co.uk/UserFiles/Documents/4-Interim%20Determinations.pdf

### 6.2.10. CER (Irish Water)

The Commission for Energy Regulation (CER) has responsibility for the economic regulation of the electricity and gas sectors, and public water and wastewater services in the Republic of Ireland. Irish Water is Ireland's national water utility that is responsible for providing water and wastewater services throughout Ireland.

Table 16. Water (CER Interim Price Control 1 - to 2016), CER (Irish Water)

Issues / criteria	Description			
Topic 1: purpose and scope of the outcomes framework				
Overview of the outcomes framework	The CER began the project to put in place an outputs framework for Irish Water in early 2015.  It is expected that the CER will consult on the metrics in Q3 2016 with a decision in Q4 2016. This consultation will form part of the process to put in place the next revenue control for the water and wastewater utility (Irish Water).			
Key objectives / purpose of the outcomes framework	The objectives of the outcomes framework are yet to be determined. Initially, it would be desirable to have baseline data which allows the CER to monitor Irish Water.  There is a choice regarding using the framework to:  • simply publish the data and compare it to other utilities in other jurisdictions or in other sectors; and / or  • have financial incentives / penalties as part of the next revenue control.			
Summary of the key outcomes included in the framework	The framework will be based on the OPA framework and will use outcomes already being measured by either Irish Water or the Environmental Protection Agency (EPA), for example:  • customer service (already in place by Irish Water)  • environmental outcomes (already in place through the EPA)  It may take a number of years before other outcomes, which are part of the OPA but not currently being measured by Irish Water, can be monitored.			
Whether there was any explicit or implicit prioritisation of the different outcome areas	The CER is currently focusing on developing the metrics, rather than applying weightings.  Currently there is no explicit prioritisation of outcomes. However, where data is available, as for customer services and environmental outcomes, these outcomes will be focussed on, as it is possible to measure them and set targets for them in the short to medium term.			
Topic 2: Meas	ures and targets within the outcomes framework			
Description of the key metrics used to measure performance in the outcome areas	The CER drew from the Overall Performance Assessment (OPA) from other jurisdictions as a basis for the outputs framework that the CER would monitor Irish Water on. While the CER is not intending to implement a full OPA framework in Ireland, the metrics behind the OPA were used as a starting block for the CER's research. The CER also reviewed metrics which are in place for energy utilities in Ireland.  The CER intend to include the key metrics that measure outcomes performance within the next revenue control for Irish Water, covering the			

	period 2017-18. This consultation is intended to be published in Q3 2016.  The CER has to date engaged with Irish Water and the Environmental Protection Agency (EPA), the environmental regulator of Irish Water, during the development process. It is intended that there will be one main round of consultation with a decision scheduled to be published in Q4 2016. However, there may be additional consultations if necessary.
Summary of what 'targets' were set in relation to the above metrics (where relevant)	The CER has not yet made a decision on targets for any of the outputs in the framework.
Description of how prescriptive / detailed the targets were	N/A
Description of the rationale underlying the proposed targets	N/A
Description of the methodology and evidence used to determine the targets (where relevant)	N/A
Topic 3: hov	w the outcomes were balanced against funding
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	The framework is not in place yet. It may have reputational incentives only or financial incentives / penalties only or a combination of both.
Whether there are conditions under which under which target outcomes could be re-opened.	The approach for revisiting the metrics / incentives in the future has not been decided, but it may form part of each revenue control process.  There is a desire to maintain the same key metrics over time, in order to be able to undertake temporal comparisons.

# 6.4. Transport

# 6.4.1. Transport Scotland

Transport Scotland is the national transport agency for Scotland, delivering the Scottish Government's vision for transport.

Table 17. 2016 National Transport Strategy, Transport Scotland

Issues / criteria	Description			
Topic 1: pu	irpose and scope of the outcomes framework			
	The 2006 National Transport Strategy (NTS) sets a framework for transport in Scotland up to around 2026 – one transport vision, five high level objectives and three key strategic outcomes.			
Overview of the outcomes framework	The 2016 NTS is a "refreshed" NTS, sitting within a current strategic context that has changed significantly since 2006 and highlighting specifically:			
	<ul> <li>Government's distinct One Scotland approach.</li> <li>Since 2007, the Scottish Government has invested over £15bn in transport at the national level.</li> </ul>			
	The 2006 NTS ensures that transport acts as an enabler of economic growth – to support businesses in achieving their local, national and international objectives and to improve the lives of individuals and communities by connecting them with their economic future.			
	It is aimed at providing sub-policy areas and sub-national levels with a framework to refer to when they develop and implement their own plans / policies / strategies and monitor and report on their delivery.			
	Vision:			
Key objectives / purpose of the outcomes framework	"An accessible Scotland with safe, integrated and reliable transport that supports economic growth, provides opportunities for all and is easy to use; a transport system that meets everyone's needs, respects our environment and contributes to health; services recognised internationally for quality, technology and innovation, and for effective and well-maintained networks; a culture where transport providers and planners respond to the changing needs of businesses, communities and users, and where one ticket will get you anywhere."			
	Five High Level Objectives:			
	<ol> <li>promote economic growth by building, enhancing managing and maintaining transport services, infrastructure and networks to maximise their efficiency;</li> <li>promote social inclusion by connecting remote and disadvantaged communities and increasing the accessibility of</li> </ol>			
	the transport network; 3. protect our environment and improve health by building and investing in public transport and other types of efficient and sustainable transport which minimise emissions and consumption of resources and energy;			
	4. improve safety of journeys by reducing accidents and enhancing the personal safety of pedestrians, drivers, passengers and staff; and			
	<ol> <li>improve integration by making journey planning and ticketing easier and working to ensure smooth connection between different forms of transport.</li> </ol>			

#### There are three **Key Strategic Outcomes** (KSOs): improved journey times and connections, to tackle congestion and lack of integration and connections in transport; Summary of the key outcomes reduced emissions, to tackle climate change, air quality, health included in the framework improvement; and improved quality, accessibility and affordability, to give choice of public transport, better quality services and value for money, or alternative to car. Whether there was any explicit or implicit prioritisation of the No, all outcomes are equal. different outcome areas Topic 2: Measures and targets within the outcomes framework The NTS identifies a few key performance indicators, mostly collected through the Scottish Household Survey that relate to each of the three KSOs. The achievement of three transport-specific National Indicators is tracked by the National Performance Framework through Scotland Performs: 1. reduce traffic congestion; 2. increase the proportion of journeys to work made by public or active transport; and reduce death on Scotland's roads. The Strategic Transport Projects Review (STPR), committed by the 2006 NTS, aimed to identify a range of interventions that will make a significant contribution towards delivering the strategic outcomes of the NTS. For each KSO, key questions about the performance of the network have been posed and performance indicators, both quantitative and qualitative, have been developed to present an evidence base that provides answers to the questions summarised in the table below. Performance Indicators for KSOs: Description of the key metrics used to measure performance in **KSO** Question **Performance Indicator** the outcome areas Data on delays for Improved journey Where are the road traffic delays and time and Average speeds when do they connections Available capacity occur? (rail and roads, time Where will they & space) be in the future? • Journey time Is the network variability (rail and operating roads) efficiently? Average speeds Is the network throughout the day, reliable? comparison between Does the congested and network offer uncongested competitive conditions. journey times? Comparison of public transport v car journey times. Comparison of times between corridors. Assessment of

changes in times

	Reduced emissions	What emissions are generated and what are their impacts?	between existing and future years.  How do journey times compare with selected international benchmarks?  CO2 emissions per person km Total CO2 emissions NO2 emissions Number of Sensitive Receptors	
	Improved quality, accountability and affordability	Is public transport provision matched to demand? How competitive is public transport compared with the car? How integrated is the transport network? Is public transport capacity constrained? Is the network safe?	Mode share between key attractors/generators     Accessibility     Frequency of service     Quality of service     Pricing issues     Journey time     Physical integration     Fares integration     Journey times, delays, physical constraints     Security and safety of users     Accident rates	
Summary of what 'targets' were set in relation to the above metrics (where relevant)	One transport-specific National Indicator – reduce deaths on Scotland's roads - has a target, set by the Scottish Road Safety Framework to 2020:  • a 40% reduction in the number of people killed in road accidents;  • a 55% reduction in the number of people seriously injured in road accidents;  • a 50% reduction in the number of children killed in road accidents;  • a 65% reduction in the number of children seriously injured in road accidents; and  • a 10% reduction in the slight casualty rate, expressed as the number of people slightly injured per 100 million vehicle kilometres.			
Description of how prescriptive / detailed the targets were	Transport Scotland took an approach to target setting that was based of the methodology applied by Transport Research Laboratory (TRL), who had worked on the previous GB targets, in the report linked below but with specific use of data for Scotland:  http://www.trl.co.uk/reports-publications/trl-reports/road-safety/report/?reportid=2542			
Description of the rationale underlying the proposed targets	See above.			

Description of the methodology and evidence used to determine the targets (where relevant)	N/A
Topic 3: hov	w the outcomes were balanced against funding
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A
Whether there are conditions under which under which target outcomes could be re-opened.	The 2016 NTS "refresher" recommended a full review of the NTS in the next Parliament. This can include a review of the outcomes framework, for example, assessing whether the current outcomes are still valid and whether there should be a prioritisation of outcomes.

# 6.4.3. Welsh Government

Table 18. The Wales Transport Strategy 2008, Welsh Government

Issues / criteria	Description			
Topic 1	purpose and scope of th	e outcomes framework	τ	
Overview of the outcomes framework	The Wales Transport Strategy was published in 2008 and is a statutory strategy required by the Transport (Wales) Act 2006. It sets the policy framework for transport in Wales and the outcomes that transport interventions should contribute to. The National Transport Plan sits within the framework provided by the Strategy and sets out in more detail how the policies and objectives in the Strategy will delivered.  The new National Transport Plan 2015 (not yet published) will set out in more detail how the Welsh Government proposes to deliver in those areas of transport for which it is responsible, to achieve the outcomes as set out in the Wales Transport Strategy from 2015 and beyond.  The Wales Transport Strategy 2008 consists of 17 outcomes with 35 associated indicators.			
Key objectives / purpose of the outcomes framework	The goal of the Wales Transport Strategy is to promote sustainable transport networks that safeguard the environment while strengthening Wales' economic and social life.			
Summary of the key outcomes included in the framework	the steps to their deliver	_	Environmental  increase the use of more sustainable materials reduce the contribution of transport to greenhouse gas emissions adapt to the impacts of climate change reduce the contribution of transport to air pollution and other harmful emissions improve the impact of transport on the local environment improve the impact of transport on our heritage improve the impact of transport on our heritage improve the impact of transport on biodiversity	

# Whether there was any explicit or implicit prioritisation of the different outcome areas

Some actions deliver more than one outcome. A number of key areas for progress have been identified:

- 1. Reducing greenhouse gas emissions and other environmental impacts from transport;
- 2. Integrating local transport;
- 3. Improving access between key settlements and sites;
- 4. Enhancing international connectivity; and
- 5. Increasing safety and security.

Topic 2: Measures and targets within the outcomes framework

The i	indicators	for the V	Wales '	Transpo	rt Strategy	are the	followi
11101	marcators	TOT CITC 1	vuics	II allopo	i i bu aic 5 y	ar c arc	101101

Outcome	What it means	Indicators
Improve access to healthcare	People are able to access the health services that they need (including hospitals, GPs, dentists and specialist facilities) at the times they need, thereby contributing to reduced social exclusion, particularly for the most disadvantaged groups.	Access to key health services and facilities. Measured by accessibility mapping.
Improve access to education, training and lifelong learning	People of all ages are able to access education and training to increase their skills base, thereby contributing to reduced economic inactivity and social exclusion and helping raise opportunities in the labour market, particularly for	Access to key education, training and lifelong learning services.  Measured by accessibility mapping for public and private access to further education premises.

Description of the key metrics used to measure performance in the outcome areas

		disadvantaged groups.	
	Improve access to shopping and leisure facilities	People can get to a reasonable range of shopping and leisure facilities at convenient times, so enhancing social interaction and reducing social exclusion, particularly for disadvantaged groups.	Access to shops selling a defined range of goods. Measured by accessibility mapping.
	Encourage healthy lifestyles	Higher levels of walking and cycling	<ul> <li>Number of people walking or cycling to work or education.</li> <li>Numbers of people walking and cycling for trips of under 5 miles.</li> </ul>
	Improve the actual and perceived safety of travel	Reduced injury accident rates, particularly for vulnerable road users, as well as improved safety for all modes of transport	<ul> <li>Total number of Killed or Seriously Injured (KSI) casualties, by mode of travel.</li> <li>Total number of child KSI casualties.</li> <li>Total number of child pedestrian casualties in socially deprived areas.</li> <li>Rate of slight casualties per 100 million vehicle kilometres.</li> <li>Percentage of rail stations with 'secure station' status.</li> <li>Incidents of notifiable and nonnotifiable offences on the rail network</li> </ul>
	Improve access to employment opportunities	People can get to a reasonable range of employment opportunities at the times needed, helping to reduce economic inactivity and social exclusion, particularly for disadvantaged groups.	<ul> <li>Accessibility of working age population to key employment centres and education and training facilities.</li> <li>Key centres as defined in the Wales Spatial Plan. To be measured by accessibility mapping.</li> </ul>
	Improve connectivity	Transport networks	Domestic and international connectivity. A measure of the

within Wales and internationally  Improve efficient, reliable and sustainable movement of people	support economic prosperity within Wales and across its borders.  People can plan journeys more reliably owing to better management of the transport network.	<ul> <li>Passenger levels on the public transport network, as well as the frequency, reliability and suitability of services offered.</li> <li>Travel time variance on key sections of the road network.</li> <li>Traffic flow over key sections of the road network.</li> </ul>
Improve the efficient, reliable and sustainable movement of freight	A significant increase in the freight moved in and out of Wales by rail and coastal shipping. Improvements to the existing road network ensuring free flowing, safe movement of freight traffic. Enhanced rest facilities for freight drivers in Wales. Improved modal connections.	<ul> <li>The number of goods vehicle kilometres and associated CO<sub>2</sub> saved through the transfer of operations from road to rail in Wales.</li> <li>Travel time variance on key sections of the road network serving freight.</li> </ul>
Improve sustainable access to key visitor attractions	People have the opportunity to experience Wales' coast and countryside, and the associated visitor attractions and appreciate their distinctiveness, so raising economic prosperity and the social and cultural well-	Access to countryside and key visitor attractions, including modal choice

		being of people in Wales.	
	Increase the use of more sustainable materials in our country's transport assets and infrastructure	More sustainable transport assets, with materials used more efficiently, minimisation of waste and the use and reuse of recycled and secondary materials where possible	<ul> <li>Percentage use of sustainable resources in maintaining transport assets.</li> <li>Percentage use of sustainable resources in constructing new transport infrastructure.</li> <li>Proportion of new transport schemes with Civil Engineering Environmental Quality Award (CEEQUAL award).</li> </ul>
	Reduce the impact of transport on greenhouse gas emissions	Reduced contribution from transport to greenhouse gas emissions.	Target to be developed for the greenhouse gas emissions apportioned to transport.
	Adapt to the impacts of climate change	Transport networks are adapted to cope with the impacts of climate change and support increased resilience.	<ul> <li>Proportion of transport network protected against future flood risk.</li> <li>Proportion of transport network able to cope with predicted temperature increases.</li> </ul>
	Reduce the contribution of transport to air pollution and other harmful emissions	Reduction of transport's contribution to pollutants identified within the UK Air Quality Strategy as harmful to human health and the environment.	<ul> <li>Emissions of harmful air pollutants attributed the transport sector.</li> <li>Number of Air Quality Management Areas where transport is the primary cause.</li> </ul>
	Improve the positive impact of transport on the local environment	Reduction in the individual and cumulative impact of transport on communities and the built and natural environment.	<ul> <li>Number of recorded land and water pollution events where transport is the primary cause.</li> <li>Number of targeted noise action plans related to transport.</li> <li>Proportion of noise sensitive areas with noise protection measures.</li> </ul>

			Number of light pollution complaints where transport is the main cause.
	Improve the effect of transport on our heritage	The choice and design of transport measures to have a neutral impact, or where appropriate, enhance Wales' natural and built heritage.	The impact of new transport schemes on the historic environment and landscape/townscape.
	Improve the impact of transport on biodiversity	Biodiversity, both for land and marine environments, to be protected and enhanced when improving or developing transport measures. Mitigation and compensatory measures to be provided where transport has a significant negative effect.	The impact of new and renewed transport schemes on biodiversity.  Number of Trunk Road Estate Biodiversity Action Plan (TREBAP) targets achieved.
Summary of what 'targets' were set in relation to the above metrics (where relevant)	N/A		
Description of how prescriptive / detailed the targets were		ut of 3% in annual c competence by 201	earbon equivalent emissions in areas of 11.
Description of the rationale underlying the proposed targets	N/A		
Description of the methodology and evidence used to determine the targets (where relevant)	N/A		
Topic 3: h	now the outcomes v	vere balanced aga	inst funding
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A		

Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A
Whether there are conditions under which under which target outcomes could be re-opened.	N/A

# 6.4.5. ORR (Rail)

The Office of Rail and Road (ORR) is the independent safety and economic regulator for Britain's railways and monitor of Highways England. Part of the ORR's role is to regulate Network Rail including setting the targets it has to achieve and report regularly on its performance.

Table 19. Network Rail's outputs and funding 2014-19, ORR

Issues / criteria	Description		
	Topic 1: purpose	and scope of the outcomes framework	
Overview of the outcomes framework	The CP5 determination sets Network Rail's funding and the outputs the ORR expects the company to deliver during the five years from 2014-15 to 2018-19. It sets Network Rail stretching but achievable goals in meeting the challenges and opportunities facing the rail industry as a whole: a safe railway, raising standards for customers, improving efficiency, and sustaining growth.  The ORR's output framework consists of outputs which Network Rail must deliver for the money it receives. It defines outputs and also defines indicators which they use for specific monitoring purposes. In addition, they also define enablers which assess the company's capability to deliver future improvements (not just within, but beyond, the current control period) in outputs and / or efficiency. It is this combination of outputs, indicators and enablers that the ORR call the output framework.  The ORR have set 58 outputs and given passenger operators and Network Rail the flexibility to agree further annual outputs for punctuality (PPM) and cancellations (CaSL). The indicators for CP5 will help the ORR to identify emerging issues with the delivery of outputs in time to take appropriate steps where necessary.		
Key objectives / purpose of the outcomes framework	The ORR needs to decide what Network Rail should deliver - what are the company's outputs in return for the money it receives? - while giving Network Rail flexibility to work with the industry to deliver in a way which maximises value for money.		
	The ORR set outputs in the areas that matter most to passengers, freight customers and the industry.  All national outputs include franchised and open access operators.  Summary of CP5 outputs:		
	Area / outcomes	Output / targets	
Summary of the key outcomes included in the framework	Train service reliability	<ul> <li>PPM for England &amp; Wales (annual and CP5 exit of 92.5%), Scotland (annual 92% and CP5 exit of 92.5%) and franchised TOCs in England &amp; Wales (rolling annual output JPIP, no TOC to exit CP5 below 90%, except East Coast and Virgin who must not exit CP5 with PPM below 88% or CaSL above 4.2% and 2.9% respectively). In addition First Great Western high speed services must not exit CP5 with PPM below 88%.</li> <li>CaSL for England &amp; Wales (annual and CP5 exit of 2.2%) and rolling annual output JPIP.</li> <li>Freight Delivery Metric (National annual 92.5%)</li> </ul>	
	Enhancements	Enhancement projects to be delivered. Scheme delivery milestones (set in an enhancements delivery plan).     Milestones for delivery of projects in ring-fenced funds.	

		Development milestones for early	ly stage projects.	
	Health and safety	• Network Rail required to deliver a plan to maxim reduction in risks of accidents at level crossings, u £99m ring-fenced fund		
	Network obligation to reduce disruption to passengers and freign from engineering work (possessions).			
	Environment	Carbon dioxide emissions		
	Network capability  Base requirement at start of CP5 in terms of track milea layout, line speed, gauge, route availability, electrification type.			
	Stations	Station Stewardship Measure (Station Scotland (annual).	SM) by station category, and	
	Depots	Monitoring depot condition usin Depot Stewardship Measure (LM)		
	Asset management	<ul> <li>Asset management excellence model (AMEM) capability for each core group at National level</li> <li>Asset data quality for each asset type at National level</li> <li>Milestones for ORBIS (Offering Rail Better Information Services)</li> <li>Passenger satisfaction;</li> <li>Health and safety: Network rail to deliver a plan to maximist the reduction in risks of accidents at level crossings, using £99m ring-fenced fund;</li> <li>Journey time (average speed) at England &amp; Wales, Scotland, sector, TOC and sub-operator; and</li> <li>Cross-border service availability.</li> </ul>		
	Other			
Whether there was any explicit or implicit prioritisation of the different outcome areas	appropriate their req HLOS included a requ	n level output specification (HLOS) is gi uirements are included as outputs for C irement for PPM in England and Wales ncement projects to be delivered, and to	P5. The Secretary of State's to reach 92% by the end of	
	Topic 2: Measures ar	d targets within the outcomes frame	ework	
	Summary of output	measures and enablers for CP5:		
Description of the key metrics used to measure performance in the outcome areas	Output area	Measure / indicator	Enablers (these support all output areas)	
	Train service reliability	<ul> <li>PPM: sector and sub-operator;</li> <li>Right time performance (by operator);</li> </ul>	Safety management maturity (Railway Management	

<sup>&</sup>lt;sup>16</sup> The ORR state in their price control that this is not an output, but they monitor it as an indicator reflecting the supporting role depots play in delivery of other outputs. .

Enhancemen	Average lateness (by operator / service group);     CaSL: Scotland, sector and suboperator;     Delay measures including: delay minutes, split by category (operator / service group);     FDM by strategic freight corridor;     Freight delay minutes (national); and     Scotland KPI package.  Its     Enhancement fund KPIs (e.g. average scheme benefit cost ratios);     National passenger survey; and Improved governance processes for HLOS funds.  Light Maintenance Depot	Maturity Model – RM3)  System operator capability  Programme management capability (P3M3)  Customer service maturity
	Stewardship Measure by station category: England & Wales, Scotland and National.	
Depots	Average condition score.	
Asset managemen	Asset condition for robustness and sustainability at National and route level     Asset management excellence model (AMEM) capability at route level;     Renewal and maintenance volumes by asset type and spend at National and route level; and     More transparent condition reporting.	
Network availability	<ul> <li>Possession indicator report metrics; and;</li> <li>Monitoring of PDI-P and PDI-F.</li> </ul>	
Network capability	Network planning and network change.	
Environmen	<ul> <li>Scope 1 and 2 traction and non-traction carbon dioxide emissions: England &amp; Wales and Scotland;</li> <li>Carbon embedded in new infrastructure; and</li> <li>Sustainable development KPIs.</li> </ul>	
Other	<ul> <li>Journey time indicator;</li> <li>Station accessibility indicator;</li> <li>Indicators of improvements in passenger information;</li> </ul>	

	Health and safety  Targets for CP5:  Output area  Train service reliability	Possil indica     RM3 a determine safety  Measure /  PPM: (	and associa mine the su and wellbe	cator; and Finnovation ted measur ccess of its eing strateg	es to y. %.		
	Tenability			-	o and and Wa	les PPM an	d CaSL:
			2014-15	2015-16	2016-17	2017-18	2018-19
		PPM	91.9	92.1	92.3	92.4	92.5
		CaSL	2.2	2.2	2.2	2.2	2.2
	Enhancements	Outputs bar freight cust delivery pla	omer bene				
	Stations and depots	Annual Station Stewardship Measure (SSM) outputs for CP5:					CP5:
	1		2014-15	2015-16	2016-17	2017-18	2018-19
		Category A	2.24	2.24	2.24	2.23	2.23
Summary of what		Category B	2.34	2.33	2.33	2.33	2.32
'targets' were set in relation to the		Category C	2.40	2.40	2.39	2.39	2.38
above metrics (where relevant)		Category D	2.40	29	2.39	2.38	2.38
		Category E	2.40	2.40	2.39	2.39	2.39
		Category F	2.48	2.47	2.47	2.46	2.46
		Scotland	2.33	2.33	2.33	2.32	2.32
	Asset management	Asset management capability  Asset management excellence scores are to be achieved by CF submission <sup>17</sup>					by CP6 SBP
		Core grou	ps		CP5		
			agement and		72		
		Whole-life Lifecycle de	cost justifica	tion	72 72		
		Asset know			72		
			on and peopl	e	72		
		Risk and re			72		
		Overall			72		
		Data and a	-	on on asset	data qualit	y outputs:	

<sup>&</sup>lt;sup>17</sup> ORR final determination

Asset group	Output / grade
Track	A2
Signalling	A2
Telecoms	A2
Electrical power	A2
Buildings	A2
Structures	A2
Earthworks	A2

# **Asset condition**

The ORR to monitor a series of measures of condition and performance, these are:

	Robustness (Periodic) Sustainability (Annual)				
Asset discipline	Measure	Reported by	Measure	Reported by	
Track	Rail Breaks and Immediate Action defects per 100km	Route	Track - Used Life - Rail	Route	
	Plain Line Poor Track geometry	Route	Track - Used Life – Switches & Crossings	Route	
	Track failures (service affecting)	Route	Track - Used Life - Sleepers	Route	
			Track - Used Life - Ballast	Route	
Signalling	Signalling failures (service affecting)	Route	Signalling Condition Index (Signalling Infrastructure Condition Assessment Remaining Life)	Route	
Telecoms	Telecoms failures (service affecting)	Route	Telecoms - Remaining Life	Route	
Electrical Power	Alternating Current traction power failures (service affecting)	Route	Electrification & Plant (E&P) - Remaining Life - Conductor Rail	Route	
	Direct Current traction power failures (service affecting)	Route	E&P - Remaining Life – Overhead Line Equipment	Route	
	Non traction operational power supply failures (service affecting)	Route	E&P - Remaining Life - Signalling Power Cable	Route	
Buildings	Reactive faults (attention within 2hr and 24hr)	Route	Percentage Asset Remaining Life - Stations	Route	

Robustness (Periodic)			Sustainability (Annual)		
Asset discipline	sset discipline Measure Reported by		Measure	Reported by	
			Percentage Asset Remaining Life – Light Maintenance Depots	Route	
Structures	Number of open faults with a risk score ≥12	Route	Structures – Primary Loadbearing Element Condition Banding	Route	
			Tunnel Condition Monitoring Index	Route	
Earthworks	Earthwork failures	Route	Earthworks - Condition Banding	Route	
Drainage	None		Track Drainage - Condition Banding	Route	
			Earthwork/Structure Drainage - Condition Banding	Route	
Points	Points failures (service affecting)	Route	None		

	Environment  Other  Network availability  Network capability	<ul> <li>Industry wide actions to an absolute reduction of CO<sub>2</sub> emissions of 12% by the end of CP5;</li> <li>Manage work with minimal impact on the environment.</li> <li>Health and safety –</li> <li>Legal obligation under the Health and Safety at Work Act 1974 to maintain and, where reasonably practicable, improve health and safety.</li> <li>50% reduction in train accident risk by 2019.</li> <li>PDI-P (National CP5 exit of 0.58); and</li> <li>PDI-F (National CP5 exit of 0.7)</li> <li>Maintain minimum level of capability so that Network Rail cannot reduce capability without going through industry</li> </ul>		
Description of how prescriptive / detailed the targets were		processes.  ets the majority of outputs and indicators which they use to monitor rmance. However, in some cases Network Rail sets out its outcomes nd SBR report.		
Description of the rationale underlying the proposed targets	The ORR also commissioned analysis from the independent reporter Nichols, in order to review Network Rail's SBP.  The Scottish Ministers and the Secretary of State publish their High Level Output Specification (HLOS), in which the ORR needs to give effect to in their output framework.  Train service reliability -  National (England and Wales, Scotland) PPM and CaSL outputs set in line with HLOS. Annual PPM and CaSL outputs set for operator, set as a passenger satisfaction outcome. Right time performance, train delays, and freight are set to satisfy passenger satisfaction.  Enhancements -  The DfT and HLOS require named capacity and other enhancements projects to be delivered.  Station and depots -  To satisfy passenger satisfaction, especially with regards to station condition.  Environment -  Majority of the environmental outcomes are somewhat pre-determined by the Secretary of State, Transport Scotland and DfT HLOS; however  The Secretary of State says the industry should also set out plans for embedding the rail industry's sustainable development principles.  Stations and deports -  Stations are a key passenger interface, and a determinant of passenger satisfaction on the railway. Station condition is also a potential safety concern and poorly maintained stations can present a risk to passengers. Targets set represent challenging b achievable, given the funding available.			

• Using AMEM scores as outputs will help ensure Network Rail meets its licence obligations, and the expectations of stakeholders.

#### Asset management data quality outputs -

• The ORR already has a standard method for assess asset data quality based on confidence grading of data reliability (A-D scale) and a grading of accuracy and completeness (1-6).

#### Asset condition and performance -

An excellent asset management company must have the tools to measure the
condition and performance of its assets at appropriate intervals, to match the
predicted residual life and failure modes and to develop appropriate plans to
maintain and renew these accordingly. The ORR will monitor a suite of asset
condition indicators to improve its ability to understand how well Network Rail is
delivering.

#### Network availability -

Revised CP5 targets given the revised spend profiles for enhancements and renewals
were not sufficiently ambitious to incentivise Network Rail, therefore have set targets
midway between CP4 outturn and the SBP forecast – CP5 exit for PDI-P at 0.58
(equivalent to an 8% reduction) and PDI-F at 0.73 (equivalent to a 17% reduction).

#### Train service reliability -

- The ORR can increase these outputs if this demonstrated value for money, was
  affordable and did not compromise delivery of other HLOS requirements. However,
  due to difficulties determining the trade-offs, the ORR did not increase targets beyond
  those specified by the HLOS.
- The above is also supplemented with annual outputs. Following an assessment of Network Rail's projections, ORR set annual outputs based on a CP4 exit of 91.4% which they believe is achievable based on current performance.
- The performance of franchised TOC is set to achieve a minimum PPM by the end of the control period. This is set at this level because Network Rail could otherwise try to meet the national output by focusing efforts and resources on some TOCs to the detriment of others.

#### Freight delivery -

Description of the methodology and evidence used to determine the targets (where relevant)

• Fright delivery metric (FDM) should be set at 92.5% to reflect the uncertainty of CP5 start position and downsides to performance during CP5 such as traffic growth, weather and engineering work. The target is set equal to the delay minute target set for the final year in CP4.

#### Health and safety -

- Determined by Health and Safety at Work Act 1974.
- Network Rail produced a long-term strategy for health and safety and set its own vision and goals.

#### Stations and deports -

• Station condition is measured by the Station Stewardship Measure (SSM). Stations in England and Wales are classified as 6 categories (by DfT) and outputs are set for each category. Set to maintain station condition at anticipated CP4 exit levels and achieve the SSM figures it has provided to the ORR in its SBP clarification.

#### Network availability -

 Targets set based on forecasted enhancement and renewals work over the period, in order to determine how much disruption is likely to be on the network to passengers and freight users.

#### Asset management capability -

- Network Rail has a general duty under the terms of its network licence to achieve
  best proactice in asset management to the greatest extent reasonably practicable.
  AMCL's AMEM definition of excellence is 70% which is less than best practice
  according to benchmarking. Expectation on Network Rail to develop its own view of
  how far to go beyond excellence, in its business case.
- Set at 72% across all groups, because if Network Rail achieves a score of 72%, the probability it exceeds the 70% excellence threshold for that group will be around 90%.

#### Asset management data quality outputs -

• Network rail cannot be an excellent asset manager without good quality data for all assets, therefore a target of A2 was set for all groups.

#### Asset condition and performance -

• Indicators reflect several ways to measure the condition and performance of assets.

#### **Environment -**

ORR decided on targets for scope 1 and 2 CO2 emissions.

#### Topic 3: how the outcomes were balanced against funding

#### Both the Secretary of State and Scottish Ministers provide funding, and their HLOS include requirements to be included as outputs, such as: How / whether the Level for crossings - requires Network Rail to deliver a plan of projects in CP5 to overall package of achieve the maximum possible reduction in risk of accidents at level crossings using outcomes was the £99m ring-fenced fund made available by the Secretary of State. evaluated relative Funding for a number of enhancement projects to be delivered; and to the available funding Ring-fenced funds to deliver certain strategic objectives - such as station improvements. Where individual outcomes / metrics had explicit financial incentives, N/A how was the extent of 'value' associated with them determined? Whether there are conditions under which under which Enhancement change control mechanism. target outcomes could be re-opened.

# 6.4.7. TfL

Transport for London (TfL) is a local government body responsible for most aspects of the transport system in Greater London in England. Its role is to implement the transport strategy and to manage transport services across London. The Mayor's Transport Strategy (MTS) sets out Boris Johnson's transport vision for London and details how TfL will deliver the plan between now and 2031.

Table 20. Monitoring under the Mayor's Transport Strategy, TfL

Issues / criteria	Description			
То	pic 1: purpose and scope of the outcomes framework			
Overview of the outcomes framework	The Mayor's Transport Strategy (MTS) sets out the transport vision for London and is built around six transport goals. These long-term outcomes sought by MTS are monitored through the collection and publication of a set of 24 Strategic Outcome Indicators (SOIs).  The SOIs provide a manageable and transparent framework to quantify progress with the delivery of the MTS.			
Key objectives / purpose of the outcomes framework	<ol> <li>The MTS is built around six transport goals:         <ol> <li>Supporting economic development and population growth.</li> <li>Enhancing the quality of life for all Londoners.</li> <li>Improving the safety and security of all Londoners.</li> <li>Providing opportunities for all Londoners.</li> <li>Reducing the contribution of transport to climate change and improving its resilience to the impacts of climate change.</li> <li>Supporting the delivery of the London 2012 Olympic and Paralympic Games and their legacy.</li> </ol> </li> <li>Travel in London reports<sup>18</sup> provide a comprehensive and objective evidence base for monitoring achievement of these goals.</li> </ol>			
	Principal transport challenges and outcomes sought by the MTS:  Goals Challenges Outcomes			
Summary of the key outcomes included in the	Support economic development and population growth	Supporting sustainable population and employment growth	Balancing capacity and demand for travel through increasing public transport capacity and/or reducing the need to travel.	
framework		Improving transport connectivity.	Improving people's access to jobs.     Improving access to commercial markets for freight movements and business travel, supporting the needs of business to grow.	

<sup>&</sup>lt;sup>18</sup> See: https://tfl.gov.uk/corporate/publications-and-reports/travel-in-london-reports [accessed on 06/04/16]

	Delivering an efficient and effective transport system for people and good	<ul> <li>Smoothing traffic flow (managing delay, improving journey time reliability and resilience).</li> <li>Improving public transport reliability.</li> <li>Reducing operating costs.</li> <li>Bringing and maintaining all assets to a good state of repair.</li> <li>Enhancing the use of the Thames for people and goods.</li> </ul>
Enhance the quality of life for all Londoners	Improving journey experience	<ul> <li>Improving public transport customer satisfaction.</li> <li>Improving road user satisfaction (all users).</li> <li>Reducing public transport crowding.</li> </ul>
	Enhancing the built and natural environment	<ul> <li>Enhancing streetscapes, improving the perception of the urban realm and developing 'Better Streets' initiatives.</li> <li>Protecting and enhancing the natural environment.</li> </ul>
	Improving air quality	Reducing air pollutant     emissions from ground-     based transport,     contributing to European     Union (EU) air quality     targets.
	Improving noise impacts	Improving perceptions and reducing impacts of noise.
	Improving health impacts	Facilitating an increase in walking and cycling.
Improving the safety and security of all Londoners	Reducing crime, fear of crime, and anti- social behaviour	<ul> <li>Reducing crime rates (and improving perceptions of personal safety and security).</li> <li>Reducing the numbers of road traffic casualties.</li> <li>Reducing casualties on public transport networks.</li> </ul>

1		T .	1
	Improve transport opportunities for all Londoners	Improving accessibility	<ul> <li>Improving the physical accessibility of the transport system.</li> <li>Improving access to services.</li> </ul>
		Supporting regeneration and tackling deprivation	Supporting wider regeneration.
	Reduce transport's contribution to climate change and improve its resilience	Reducing CO <sub>2</sub> emissions	Reducing CO <sub>2</sub> emissions from ground-based transport, contributing to a London-wide 60 per cent reduction by 2025.
		Adapting to climate change	Maintaining the reliability of transport networks.
	Support delivery of the London 2012 Olympic and Paralympic Games and its legacy	Developing and implementing a viable and sustainable legacy for the 2012 Games.	<ul> <li>Supporting regeneration and convergence of social and economic outcomes between the five Olympic Growth Boroughs and the rest of London.</li> <li>Physical transport legacy.</li> <li>Behavioural transport legacy.</li> </ul>
Whether there was any explicit or implicit	N/A		

# explicit or implicit prioritisation of the different outcome areas

N/A

Topic 2: Measures and targets within the outcomes framework

Description of the key metrics used to measure performance in the outcome areas The long-term transport outcomes sought by the MTS are monitored through a set of **24 quantitative SOIs**. These indicators are 'outcome-based', reflecting changes in conditions experienced by Londoners. They provide a manageable means of assessing the overall direction and pace of change in relation to MTS goals. They do not cover all aspects of transport that will be of interest and do not, of themselves, provide a detailed understanding of topical transport issues.

The SOIs quantify progress in the delivery of the MTS in order to facilitate a broad understanding of the 'totality of effects' of the strategy's interventions on transport and wider quality of life in London.

Theme	Strategic Outcome Indicator	Brief definition
Contextual indicators	Travel demand	The number of trips or journey stages made to, from or within London per calendar year.

	Mode share	Proportion of trips or journey stages undertaken by each mode to, from or within London per calendar year
Supporting economic development and population growth	People's access to jobs	Employment accessibility maps - number of jobs within 45 minutes travel time (three-yearly).
	Smoothing traffic flow - journey time reliability	For a selection of key routes, percentage of journeys completed within five minutes of a specified typical journey time.
	Public transport reliability	Reliability indicators for each principal public transport mode will be presented separately.
	Public transport capacity	Calculated using planning capacities for the various train/tram/bus types, multiplied by kilometres operated.
	Operating costs per passenger kilometre	Operating cost per passenger kilometre, for the principal public transport modes
	Asset condition	Composite multi-modal indicator measuring the percentage of in scope asset that is deemed to be in good condition.
Enhancing the quality of life of all Londoners	NOx emissions	Emissions from all identifiable ground-based transport sources in London per year, expressed as tonnes of NOx.
	PM10 emissions	Emissions from all identifiable ground-based transport sources in London per year, expressed as tonnes of PM10.
	Public transport customer satisfaction	Overall satisfaction of those travelling on the network with the operation of the principal public transport modes.
	Road user customer satisfaction	Satisfaction of private road users with the maintenance



			and operation of the road network.
		Public transport crowding	Satisfaction of those travelling on the network with the level of crowding inside the vehicle, on the principal public transport modes.
		Perception of journey experience	Perception of London residents of their overall journey experience when travelling in the city.
		Perception of noise	Perception of London residents of transport-related noise levels in their local area.
		Perception of the urban realm	Perception of London residents of the quality of the urban realm in their local area.
	Improving the safety and security of all Londoners	Road traffic casualties	Number of people killed or seriously injured in road traffic collisions in London per year.
		Crime rates on public transport	Crimes per million passenger journeys by principal public transport modes.
		Perception of crime/safety	Perception of London residents of their sense of safety and fear of crime when travelling in the city.
Improving transport opportunities for all Londoners	Access to services	Local area score of average journey time by public transport, walking and cycling to work, education, health services, quality food shopping and open spaces (three-yearly).	
		Physical accessibility to the transport system	Level of step-free access across the public transport and TfL Streets networks.
		Real fares levels	Cost of fares for a selected, representative 'basket' of trips.
	Reducing transport's contribution to climate change and	CO <sub>2</sub> emissions	Emissions from all identifiable ground-based transport



	improving its resilience		sources in London, expressed as tonnes of CO <sub>2</sub> .	
	Supporting delivery of the London 2012 Olympic and Paralympic Games and its legacy	Convergence of social and economic outcomes between the five Olympic boroughs and the rest of London	The measure of convergence is to be determined through the Transport Legacy Action Plan	
Summary of what 'targets' were set in relation to the above metrics (where relevant)	exceptions, do not have a evaluate, over the longer Mayoral transport goals,	These 24 SOIs are not formal performance indicators and, with a small number of exceptions, do not have associated MTS targets. Instead, they are to be used to evaluate, over the longer-term, the overall direction of progress in relation to Mayoral transport goals, primarily so as to provide appropriate feedback to the ongoing policymaking process.		
Description of how prescriptive / detailed the targets were	<ul> <li>SOIs with targets</li> <li>Journey time reliability for road traffic: 87% target.</li> <li>Road traffic casualties: target of 50% reduction by 2020.</li> <li>CO<sub>2</sub> reduction target: reduce CO<sub>2</sub> emissions in London by 60%, against 1990 levels, by 2025.</li> </ul>			
Description of the rationale underlying the proposed targets	N/A			
Description of the methodology and evidence used to determine the targets (where relevant)	N/A			
Тор	ic 3: how the outcomes were balanced against funding			
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A			
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A			
Whether there are conditions under which under which target outcomes could be reopened.	N/A			

# 6.4.9. NZ Transport Agency

The New Zealand Transport Agency (NZTA) is a Crown entity governed by a statutory board. The NZTA Board is responsible for allocating funds from the National Land Transport Fund to land transport activities: local roads, state highways and public transport.

Table 21. NZ Transport Agency Statement of Intent 2013-16, NZ Transport Agency

Issues / criteria	Description			
	Topic 1: purpose and scope of the outcomes framework			
Overview of the outcomes framework	In the NZTA Statement of Intent 2013-16, the NZTA set out four high level outcomes (see below) which produces 20 outputs, each of which contributes to their four desired long-term goals, these long-term objectives include:  (i) integrating one network; (ii) shaping smart transport choices; (iii) delivering highway solutions; and (iv) maximising returns for NZ.  In order to reach the above objectives, the NZTA statement of forecast service performance sets out the outputs the NZTA is funded to provide and the standards against which service delivery and investment performance is assessed. It is divided into the following categories:  Planning the land transport network; Providing access to and use of the land transport system;  Managing the state highway network; and Investing in land transport.  The statement of forecast service performance contains three types of measurements – value for money, service quality and customer satisfaction.			
Key objectives / purpose of the outcomes framework	<ul> <li>effective - moves</li> <li>efficient - deliver costs;</li> <li>safe and respons</li> <li>resilient - meets</li> </ul>	transport solutions for a thriving New Zealand (NZ) on behalf of the en the transport system and sector is:  speople and freight where they need to go in a timely manner; rs the right infrastructure and services to the right level at the best sible – reduces the harms from transport; and future needs and endures shocks.  of the NZTA's service delivery and investment performance.		
	The following table summari	ses the main outcomes included in the framework		
	Objectives Outputs			
Summary of the key outcomes included in the	Planning the land transport network	<ul> <li>Management of the funding allocation system;</li> <li>Transport planning; and</li> <li>Sector research.</li> </ul>		
framework	Providing access to and use of the land transport system	<ul> <li>Licensing and regulatory compliance;</li> <li>Road tolling;</li> <li>Motor vehicle registry;</li> <li>Road user charges collection, investigation and enforcement; and</li> <li>Refund of fuel excise duty.</li> </ul>		

Highway Network	<ul> <li>New infrastructure for state highways;</li> <li>Renewals of state highways;</li> <li>Maintenance and operation of state highways.</li> </ul>
Investing in land transport	<ul> <li>Public transport;</li> <li>Administration of the super gold cardholder's scheme and enhanced public transport concessions for super gold cardholders;</li> <li>Road safety promotion;</li> <li>*Road policing programme (NZ police output);</li> <li>*New and improved infrastructure for local roads;</li> <li>*Renewal of local roads;</li> <li>*Maintenance and operation of local roads;</li> <li>*Walking and cycling. 19</li> </ul>

Outcomes were generally informed by statutory obligations and ministerial expectations such as:

- Government Policy Statement (GPS); and
- Ministry of Transport Statement of Intent (SOI).

There were also working groups containing business representatives.

Whether there was any explicit or implicit prioritisation of the different outcome areas

Prioritisation is generally informed by Statutory Obligations and Ministerial Expectations.

However, the NZTA have recently incorporated prioritisation, as the result of budget and resource constraints which are in effect, starting to impact progress on some of the objectives.

Therefore, outcomes influenced by the GPS, the Ministry of Transport's SOI and the Ministers letter of expectation tend to be prioritised.

 $\label{thm:continuous} \textbf{Topic 2: Measures and targets within the outcomes framework}$ 

The NZTA statement of forecast service performance is as follows:

Description of the key metrics used to measure performance in the outcome areas

Objectives	Value for money	Service quality	Customer satisfaction
Planning the land transport network	Total cost of managing the funding allocation systems a % of NLTP expenditure.	% of activities delivered to agreed standards and timeframes     % of operational assurance activities completed     Average number of days taken to deliver	% customer satisfaction – approved organisations
Providing access to and use of the land transport system	Unit transactional costs: driver licensing; motor vehicle registration; road user charges; and road tolling.  for transactions completed digitally: driver licensing; motor vehicle registration; road user charges; and road tolling.	% of operational assurance activities completed.     % accuracy of registers     Number of products/services delivered or processed.     % of activities delivered to agreed standards and timeframes.     % revenue compliance.     Average number of days taken to deliver.	% customer satisfaction: driver licensing; and motor vehicle registration
Manging the state Highway Network	% of activities delivered to agreed standards and timeframes: new and improved	Length of road construction and new roads completed (lane km.) Length of bridge replacements (lane km)  % of sealed network resurfaced (based on road length in lane km).	% customer satisfaction: suppliers; network

<sup>19 \*</sup> NZTA does not deliver these goods or services directly. These output classes receive NLTP investment funds – actual outputs are delivered by approved organisations.



	infrastructure for state highways; renewal of state highways; and maintenance and operation of state highways.	% of network rehabilitated (based on road length in lane km).     % of unsealed network metalled (based on road length in centreline km).     Safe stopping: % of travel on network above skid threshold.     Network resilience: % of rutting >20mm over state highway network.     Smooth ride: % of travel on network classed as smooth.     Availability of state highway network: % of unplanned road closures resolved within 12 hours     Fare revenue as a % of total	information; and customers
Investing in land transport	% of activities that are delivered to agreed standards and     timeframes: renewal of local roads; maintenance and operation of local roads	<ul> <li>Fare revenue as a % of total expenditure.</li> <li>Length of road construction and new roads completed (lane km).</li> <li>Length of bridge replacements (lane km).</li> <li>% of sealed network resurfaced (based on road length in lane km).</li> <li>% of network rehabilitated (based on road length in lane km).</li> <li>% of unsealed network metalled (based on road length in centreline km).</li> <li>Kilometres of new footpaths, cycle lanes and cycle paths.</li> <li>Number of passengers using urban public transport services (bus, train and ferry)</li> <li>Public transport boarding's per NLTF invested on public transport services (including track access charges).</li> <li>Pavement integrity of the sealed network.</li> <li>Cost of renewals (excluding emergency reinstatement) per network lane km (total cost).</li> <li>Surface condition of the sealed network.</li> <li>Average number of days taken to deliver.</li> <li>% of activities delivered to agreed standards and timeframes.</li> <li>% of target audience aware of road user safety messages.</li> <li>Road Policing Programme.</li> <li>Cost of emergency reinstatement.</li> <li>Cost of maintaining and operating the network (excluding emergency work) per network lane km (total cost).</li> </ul>	

The following tables summarise the targets set in the 2013-16 SOI.

# Planning the land transport network:

Summary of what 'targets' were set in relation to the above metrics (where relevant)

HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?"	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target
% of activities that are delivered to agreed standards and timeframes?	90%	100%	100%	100%
Total cost of managing the funding allocation system as a % of NLTP expenditure <sup>1</sup>	<1%	≤1%	≤1%	≤1%
% of operational assurance activities completed <sup>2</sup>	100%	100%	100%	100%
$\%$ of activities that are delivered to agreed standards and timeframes $^{3.6}$	97%	100%	100%	100%
Average number of days taken to deliver <sup>4</sup>	19	25	25	25
% customer satisfaction <sup>5</sup>	New measure	>55%	>60%	>65%



					Road tolling					
HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?*	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target		
Unit transaction costs <sup>8, 15</sup>	\$36.46	\$36-\$39	\$36-\$39	\$36-\$39	\$0.65	\$0.65-\$0.70	\$0.65-\$0.70	\$0.65-\$0.7		
% of transactions completed online <sup>9,16</sup>	14%	>16%	>18%	>25%	60%	>65%	>70%	>759		
% accuracy of registers <sup>10</sup>	96%	>93%	>93%	>93%						
% revenue compliance					>96%	>96%	>96%	>989		
% of operational assurance activities completed <sup>4</sup>	100%	100%	100%	100%						
% of activities that are delivered to agreed standards	92%	>90%	>90%	>90%						
Number of products/services delivered or processed <sup>3</sup>	948k	826k-1,090k	834k-1,020k	845k-1,033k	6.1m	6.0m-6.5m	6.0m-6.5m	6.5m-7.0r		
% customer satisfaction <sup>14</sup>	New measure	>73%	>75%	>80%						
DUTPUT CLASS		Motor vehi	cle registry			oad user char				
HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?°	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target	2012/13 estimated actual	estigation ar 2013/14 target	2014/15 target	2015/16 target		
Unit transaction costs	\$5.53	\$5.50-\$6.00	\$5.50-\$5.80	\$5.50-\$5.70	\$6.13	\$5.80-\$6.50	\$5.80-\$6.40	\$5.80-\$6.30		
% of transactions completed online <sup>17,20</sup>	22%	>25%	>35%	>45%	47%	>50%	>50%	>559		
% accuracy of registers <sup>is</sup>	95%	>95%	>95%	>95%						
% revenue compliance	99%	≥98%	≥98%	≥98%						
Number of products/services delivered or processed <sup>21</sup>	9.1m	8.8m-9.8m	9.0m-9.9m	9.1m-10.0m	2.5m	2.5m-2.7m	2.5m-2.7m	2.5m-2.7r		
% customer satisfaction <sup>19</sup>	New measure	>95%	>95%	>95%						
OUTPUT CLASS				Refur	nd of fue	l excise d	luty			
HOW DO WE ASSESS OUR DELIVERY PERFORMANCE	E			013/14 2014/19 arget target		5 2015/16 target				
Average number of days taken to de		11		10		10	10			
Number of products/services deliver	essed <sup>23</sup>	29,394		29k-31k	29k-	31k	29k-31k			



OUTPUT CLASS	New and improved infrastructure for state highways				Renewals of state highways					
HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?°	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target		
% of activities that are delivered to agreed standards and timeframes <sup>24, 26</sup>	>80%	>90%	>90%	>90%	>90%	>90%	>90%	>90%		
National War Memorial Park: Buckle Street undergrounding project	New	100%	100%	100%						
Construction of passing opportunities on State     Highway 2 between Napier and Gisborne	New	100%	100%	100%						
Safe stopping: % of travel on network above skid threshold $^{\prime\prime}$					98%	≥98%	≥98%	≥98%		
Network resilience: % of rutting >20mm over state highway network <sup>28</sup>					196	<2%	<2.5%	<3%		
% customer satisfaction <sup>25</sup>	New measure	>50%	>55%	>60%						

OUTPUT CLASS	Maintenance and operation of state highways							
HOW DO WE ASSESS OUR SERVICE® DELIVERY PERFORMANCE?®	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target				
% of activities that are delivered to agreed standards and timeframes <sup>29</sup>	>90%	>90%	>90%	>90%				
Safe stopping: % of travel on network above skid threshold <sup>30</sup>	98%	≥98%	≥98%	≥98%				
Smooth ride: % of travel on network classed as smooth <sup>31</sup>	97%	≥97%	≥97%	≥97%				
Availability of state highway network: % of unplanned road closures resolved within 12 hours <sup>32</sup>	>80%	90%	90%	90%				
% customer satisfaction <sup>33</sup>	New measure	45%	45%	45%				

# Investing in land transport:

OUTPUT CLASS		Public to	ransport		schen	SuperGold car ed public tran erGold cardho	ansport	
HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?°	2012/13 estimated actual*	2013/14 target	2014/15 target	2015/16 target	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target
Average number of days to deliver	for service deli-	very performance	allocation system e measures. See t e NZTA monitors	he appendix	17	20	20	20
$\%$ of activities that are delivered to agreed standards and timeframes $^{\rm M}$					10096	100%	100%	100%

OUTPUT CLASS		Road safety promotion				Road Policing Programme					
HOW DO WE ASSESS OUR S DELIVERY PERFORMANCE?		2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target			2015/16 target			
% of activities that are delivered to agrand timeframes <sup>35</sup>	reed standards	100%	100%	100%	100%	See management of the funding allocation system (MOFAS) for service delivery performance measures.					
% of target audience aware of road us safety messages <sup>36</sup>	er	73%	≥70%	≥70%	≥70%						



	OUTPUT CLASS	New and in	nproved infra	structure for	local roads		Renewal of	local roads			
	HOW DO WE ASSESS OUR SERVICE DELIVERY PERFORMANCE?"	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target	2012/13 estimated actual	2013/14 target	2014/15 target	2015/16 target		
	% of activities that are delivered to agreed standards and timeframes > reinstatement of local roads in Canterbury	See management of the funding allocation system (MOFAS) for service delivery performance measures.				100%	100%	100%	100%		
							ent of the funding performance me	allocation system easures.	(MOFAS) for		
Description of how prescriptive / detailed the targets were	Targets were set for all of the	years in t	the SOI po	eriod (he	re 2012-	13 to 201	5-16).				
Description of the rationale underlying the proposed targets	To meet overall long-term goa	Γο meet overall long-term goals set out in the NZTA strategic direction.									
Description of the methodology and evidence used to determine the targets (where relevant)	It was not clear as to how the above targets were arrived upon.										
	Topic 3: how the ou	tcomes	were bal	anced ag	gainst fu	nding					
How / whether the overall package of outcomes was evaluated relative to the available funding	Monitoring framework where how it performs for the fundir			ngainst th	ne above	outputs i	n order t	o demons	trate		
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A										



Whether there are conditions under which under which target outcomes could be re-opened.

The NZTA work on a 20 year goals, ten year objectives, three year results and one year performance expectations framework basis. They revisit the objectives every three years, but there will be yearly tweaks – to ensure the objectives and results remain relevant.



# 6.5. Energy

# 6.5.1. NIUR

The Northern Ireland Utility Regulator (NIUR) is responsible for regulating electricity, gas, water and sewerage industries in Northern Ireland. In electricity, UR sets the prices for Northern Ireland Electricity Networks Ltd (NIE) – the supplier of electricity distribution and transmission.

Table 22. Energy, NIUR

Issues / criteria	Description		
Topic 1: purpose and scope of the outcomes framework			
	The NIUR's outcomes framework sets out a range of appropriate outputs for Northern Ireland Electricity Networks Ltd (NIE Networks) to comply with.		
	The NIUR will monitor NIE's performance against a set of KPIs and publishes an annual monitoring report on their performance (NB: relatively new regime and is currently undergoing refinements) over RP6. The framework relies on reputational incentives in the first instance – but with a view, at a later date, to developing financial incentives.		
Overview of the outcomes	There are four outcom three headings:	es, with six associated outputs, which are categorised under	
framework	<ul> <li>Service level outputs: which provide a tangible measure of the level of service experienced by consumers, such as: interruptions and minutes lost.</li> <li>Nominated outputs: specific objectives which the company must deliver, such as: full ESQCR compliance by required dates or a given increase in capacity at a point in the network to facilitate growth or generation.</li> <li>General activities: such as the quantity of network replaced or refurbished or the number or capacity / connections which will be made during the period.</li> </ul>		
Key objectives / purpose of the outcomes framework	The purpose of the outcomes framework is to monitor the performance of NIE.  This focuses on the delivery of RP6 on outcomes which maximise the company's freedom to determine the best way to deliver the level of service required by its consumers at minimum cost.		
RP5 period. This could chang		ollowing list of outcomes it expects NIE to achieve over the d change over the RP5 period, but currently, there is only the P6, with draft determinations expected to be published in nal ones in May 2017.	
Summary of the key outcomes included in the	Outcomes	Outputs	
framework	Security of supply	<ul> <li>Maintain and develop an economic, safe, stable and reliable network.</li> <li>Ensure a timely and effective response to all new demands on the network (new connections, load growth &amp; renewables).</li> </ul>	

Sustainability	Facilitate delivery of the renewable target in the Department of Enterprise, Trade and Investment's (DETI) Strategic Energy Framework.
Customer Service	Maintain continuous good customer service (as measured by 'customer minutes lost' and Guaranteed Standards of Service' metrics).
Other	<ul> <li>Have effective business processes and information and reporting systems in place to ensure that regulatory reporting is transparent.</li> <li>Design and implement a programme to achieve best practice in asset management. This should include measuring asset condition and serviceability effectively (using, for example, load and asset health indices) in order to ensure that plans for the next price control period (RP6) are fully justified in terms of need, optimum intervention strategies, efficient costs and appropriate risk sharing.</li> </ul>

# Whether there was any explicit or implicit prioritisation of the different outcome areas

Outputs were selected that aligned with the NIUR's strategic themes, such as policy set out by the Department of Enterprise, Trade and Investment.

#### Topic 2: Measures and targets within the outcomes framework

As the approach to outcomes for RP6 are still under development, the NIUR are currently in the process of agreeing final definitions and metrics to be used in the assessment of NIE's performance. To date, the NIUR have not had the information they require for annual performance reporting and are currently building up the information they require in order to do so.

The NIUR want to ensure a wider set of outputs and key metrics are introduced during the RP6 period. They will also ensure these will subsequently be incorporated into the evolution of the Regulatory Instruction Groups (RIGs) to provide the means of enhanced reporting of NIE's performance in the Annual Performance Report. This will necessarily require trialling and eventual introduction of hard KPIs during the RP6 period.

## Description of the key metrics used to measure performance in the outcome areas

To assist with cross-sector comparison of performance to GB DNOs the NIUR will consider the development of any new RP6 measures using the existing Ofgem framework where necessary. Such areas could include the following:

- Safety
- Reliability
- Availability
- Customer satisfaction
- Connections
- Environmental

The NIUR recognises that 'actionable data' is very important, whereby any new metric or KPI must provide the intelligent means by which NIE can establish how it might improve service to consumers and how the NIUR might report their subsequent progress over time.



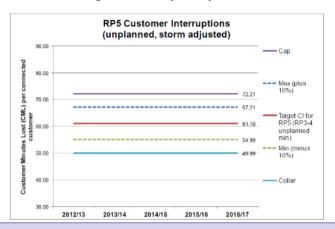
	Moreover, the NIUR is also considering whether a closer alignment to Ofgem's performance measures is required, to allow for easier and / or better benchmarking with GB.	
Summary of what 'targets' were set in relation to the above metrics (where relevant)	<ul> <li>The NIUR set NIE incentives with regards to network performance i.e. reducing the duration and frequency of electricity supply interruptions.</li> <li>Network performance incentives were structured in a symmetrical way:         <ul> <li>The duration of interruptions is captured by: Customer Minutes Lost (CML). Here, NIE faces the following target: CML = 56 with a dead band range of +/-10%.</li> <li>The frequency of interruptions is captured by: Customer Interruptions (CI). Here, the NIUR set the following target: CI = 61.10 with a dead band range of +/-10%; and</li> </ul> </li> </ul>	
	The targets set at RP5 were very detailed, as if they were less detailed they would not be comparable within or across sectors. Below we describe just how detailed the network performance targets were and the financial incentives / penalties associated with them.  CML target	
Description of how prescriptive / detailed the targets were	In the event that CML goes beyond the specified range the NIUR will use the same rate as agreed by Ofgem for SSE Hydro, as it is the most comparable DNO in GB. The incentive penalty/reward is £0.18 million per CML outside of the +/- $10\%$ threshold.	
	The target CML is 56. In practice this means that in the event CML goes above the upper range threshold of 61.60, a penalty of £0.18 million per CML above the limit will be applied. Correspondingly, in the event that CML goes below the lower threshold of 50.40 a reward of £0.18 million per CML below the limit will be applied. In both instances a cap and collar of five times the annual incentive rate (a maximum of £0.9 million) will apply to any reward or penalty.	
	CI target  The approach to determine the CI incentive follows closely from the CML incentive.  A specified target number of CI will have a dead band range of +/- 10%. The target CI for the RP5 period is 61.10. For each CI above or below the upper or lower	
	limits, a penalty or reward of £0.03 million will apply.  In both instances a cap and collar of five times the annual incentive rate (a maximum of £0.15 million) will apply to any reward or penalty.	
Description of the rationale underlying the proposed targets	The NIUR indicates that targets they set are to be prescriptive, but allow for flexibility for events that are outside of NIE's control. The rationale for the network targets set out below illustrates this.  Customer minutes lost (CML)	

There is a range within which the CML may fluctuate without penalty or reward. This range, or 'dead band', provides flexibility for NIE, permitting the company to achieve targets while allowing for any 'natural fluctuations' that may occur.



#### **Customer interruptions (CI)**

The rationale for the CI target follows very closely the one for CML.



# Description of the methodology and evidence used to determine the targets (where relevant)

In order to determine appropriate targets, the NIUR used evidence from:

- (i) stakeholder engagement; and
- (ii) other regulators and companies, to understand what they were doing, in terms of setting targets, and how similar companies were performing.
   For example, in setting the CML target above, the NIUR based its own assessment on Ofgem's target for the most comparable company in GB SSE Hydro.

#### Topic 3: how the outcomes were balanced against funding

$How \ / \ whether \ the \ overall$
package of outcomes was
evaluated relative to the
available funding

The available funding on NIE is set out in their licence, and as such is not specific to an outcomes framework per se. Main purpose of the outcomes frameworks is monitoring, and as such, there is a reliance of reputational incentives.

Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?

N/A.

Whether there are conditions under which under which target outcomes could be reopened.

Outcomes metrics were only recently introduced in RP5 – no conditions for reopening through the period, however, they are going through a period of refinement and standardisation.



# 6.5.2. Ofgem

The Office for Gas and Electricity Markets (Ofgem) is the economic regulator for the electricity and gas markets in the UK. Ofgem regulates the activities of transmission network suppliers through price controls, which set the maximum amount of revenue that they can recover from users. There are three Transmission Operator's (TOs) for electricity - National Grid Electricity Transmissions plc (NGET), Scottish Hydro Electric Transmission plc (SHE Transmission), and SP Transmission plc (SPT) – and one for gas – National Grid Gas Transmissions (NGGT). It should be noted, that in addition to its TO responsibilities, NGET is the designated electricity and system operator (SO) responsible for day-to-day system operation and management. For the purposes of this summary table, when listing specific outcomes, these will relate to NGET's TO duties.

Table 23. T1 - electricity and gas transmission, Ofgem

Issues / criteria	Description	
Topic 1: purpose and scope of the outcomes framework		
Overview of the outcomes framework	Under the <b>Revenue = Incentives + Innovation + Outputs (RIIO)</b> framework, network companies are required to take into account the needs and views of stakeholders in order to submit well-justified business plans to Ofgem.  RIIO is an outputs-led framework, which underlines the importance of transmission operators (TOs) understanding what they are expected to deliver, as well as being held to account for delivery.  The 'outputs part' of RIIO – T1 consists of six output categories that include a mix of legal requirements; reputational and financial incentives. The six RIIO-T1 outcomes are measured by 15 performance indicators.	
Key objectives / purpose of the outcomes framework	<ul> <li>Put stakeholders at the heart of their decision-making process;</li> <li>Invest efficiently to ensure continued safe and reliable services;</li> <li>Innovate to reduce network costs for current and future consumers;</li> <li>Play a full role in delivering a low carbon economy and wider environmental objectives.</li> </ul>	
Summary of the key outcomes included in the framework	RIIO-T1 set out six primary outputs for TOs:  • safety; • reliability; • availability; • customer satisfaction; • connections / wider works (new investment); and • environmental.  In addition to the above, NGET is monitored against a set of network output measures (NOMs) which are measures to inform on both safety and reliability of the network. These outputs are secondary deliverables and include: • criticality; • replacement priorities (or risk); • system unavailability; • average circuit unreliability (ACU); and • faults and failures.  Outputs were developed through written consultation and stakeholder workshops.	

# Whether there was any explicit or implicit prioritisation of the different outcome areas

The RIIO model splits outputs into primary and secondary outputs – which prioritises key outcomes.

Where roles overlapped with TOs and SOs, if the outcome was already captured under RIIO-T1 Ofgem did not look to incentivise the SO for that output again.

Customer service was prioritised within the outcomes.

The companies have to meet set targets for many of the outputs they are funded to deliver. The stringency of these targets indicate the level of importance placed on performance in each area.

#### Topic 2: Measures and targets within the outcomes framework

The following table summarises the key output measures reported in the first RIIO Electricity Transmission Annual Report:

Primary output	Measure
Safety	<ul> <li>Compliance with safety obligations set by the Health and Safety Executive (HSE).</li> <li>Supported by monitoring of secondary deliverables related to asset health, condition, criticality etc. which are assessed through NOMs.</li> </ul>
Reliability	Energy Not Supplied (ENS).
Availability	Implement the Network Access Policy (NAP) to ensure better planning of outages over RIIO-T1 period
Customer satisfaction	<ul> <li>Customer / stakeholder satisfaction survey;</li> <li>Stakeholder engagement discretionary reward</li> </ul>
Connections / wider works	<ul> <li>Generation connections and local demand connections.</li> <li>Baseline and Strategic Wider Works</li> </ul>
Environmental	<ul> <li>Limiting emissions of Sulphur Hexafluoride (SF6)</li> <li>Environmental Discretionary Reward</li> <li>Business Carbon Footprint (BCF)</li> <li>Losses</li> <li>Visual impact: to reduce the visual impact of transmission assets in designated areas.</li> </ul>

Description of the key metrics used to measure performance in the outcome areas

There are five NOMs – or secondary outputs, namely:

- The network assets condition measure
- The network risk measure
- The network performance measure
- The network capability measure
- The Network Replacement Outputs

Summary of what 'targets' were set in relation to the

Summary of targets and incentives for TOs at RIIO-T1:

above metrics (where relevant)	Primary output	Measure	Incentive type
	Safety	<ul> <li>Compliance with safety obligations set by the Health and Safety Executive (HSE).</li> <li>Supported by monitoring of secondary deliverables related to asset health, condition, criticality etc. which are assessed through NOMs.</li> </ul>	Statutory     requirements,     enforced under HSE     legislation. No     financial incentive.     Financial incentive:     compliance with the     NOM targets impacts     on RIIO-T2 funding     through a penalty/     reward of 2.5% of     the value of any     over/ under deliver     of network     replacement outputs
	Reliability	Energy Not Supplied (ENS).	NGET 2014-15     target: 316 MWh     Financial incentive:     Incentive rate of     £16,000/MWh     which is based on an     estimate of the value     of lost load (VoLL)     with a collar on     financial penalties     limiting the     maximum penalty to     3% of allowed     revenues.
	Availabilit y	Implement the Network     Access Policy (NAP) to     ensure better planning of     outages over RIIO-T1 period	TOs required to develop NAP within a month of the RIIO-T1 period. No financial incentive.
	Customer satisfactio n	Customer / stakeholder satisfaction survey;     Stakeholder engagement discretionary reward	Baseline score 2013- 15: 6.9. Up to +/- 1% of base revenue plus TIRG Baseline 2013-15: 5. Up to 0.5% of base revenue plus TIRG via a discretionary reward scheme
	Connectio ns / wider works	<ul> <li>Generation connections and local demand connections.</li> <li>Baseline and Strategic Wider Works</li> </ul>	The timely meeting of existing licence requirements in relation to delivering connections. No direct financial incentive on NGET (general enforcement policy). Baseline and SWW outputs will be subject to timely delivery standards. Additional capacity to be funded

Of the five NOMs, only the final one (the Network Replacement Outputs) has directly associated allowances and financial reward or penalty related to delivery. However, assessment of both the asset condition measure and the



	network risk measure are integral components of the Network Replacement Outputs.	
Description of how prescriptive / detailed the targets were	Generally the targets were prescriptive and specified / set by Ofgem or other regulations such as health and safety. However with regards to NOMs, target output isn't initially clear what the level / targeted performance should be.  In RIIO-T1, non-delivery of outputs is not just a matter for the applicable financial incentives. NGET is also accountable for delivery through their licence. Ofgem may take enforcement action where applicable where there is delivery failure. This means that even where there is a limit to the financial incentive associated with poor delivery, for example in the case of reliability, the licence enforcement process remains as a backstop. This provides additional protection for consumers in the case of significant underperformance on output delivery. Where both enforcement and financial incentives apply, the enforcement decision would take account of any financial incentives applied.	
	<b>Customer satisfaction baseline:</b> baseline score was set based on an average of the previous survey scores. Data has been stable and is considered to be a sound basis for measuring future performance. <sup>20</sup>	
Description of the rationale underlying the proposed targets	<ul> <li>Environmental:</li> <li>EDR scheme - There is an assessment of two elements: (i) executive-level annual statement; and (ii) evidence submitted by each company to demonstrate performance against EDR score cared.<sup>21</sup></li> <li>Sulphur Hexafluoride - leakage rate is consistent with best practice set by the International Electrotechnology commission standard 62271203 for high voltage switch gear.</li> <li>NOMs - set agreed targets as binding secondary deliverables in the licence - see Special Licence Condition 2L.</li> </ul>	
Description of the methodology and evidence used to determine the targets (where relevant)	In general, targets were set based on past performance where a baseline target was set accordingly. In particular, where a 'score' was used to determine performance and the associated targets, the majority of targets were set using past performance in order to set a baseline level.  Where possible, the target was informed by economic value of a unit of output to consumers.  In addition, some of the outputs are linked with licence conditions and statutory obligations, where the targets are already set within these (in some instances set by other organisations).	
Topic 3: how the outcomes were balanced against funding		
How / whether the overall package of outcomes was evaluated relative to the available funding	A number of the incentives are linked to the percentage of allowed revenue. To maintain strong output incentives and appropriate revenue allowances for specific activities it is important that the caps and collars on these do not just reflect the opening base revenue allowance but also adjust in response to ongoing, but uncertain, changes in revenue in order to better reflect the true change in network total expenditure (totex) and other in-period adjustments over the price control period.	

 $<sup>^{20}\</sup> https://www.ofgem.gov.uk/sites/default/files/docs/2015/06/stakeholder\_incentive\_consultation\_22\_jun\_15\_publication.pdf$ 



 $<sup>^{21}\</sup> https://www.ofgem.gov.uk/sites/default/files/docs/2013/01/ngedr\_0.pdf$ 

TOs' revenues or allowances can be adjusted downwards if they do not deliver the level of outputs for which they have been funded. Ofgem makes an allowance adjustment for the amount of under delivery after an assessment of actual outputs against the expected level of output delivery set out in the Final Proposals or TOs' licence.

Ofgem have considered potential implications of the approach on NGET in carrying out work for delivery of outputs in future price control periods. For example, Ofgem recognise that without clarity on the efficient costs of delivering outputs there is a risk that NGET may seek to defer load-related projects into RIIO-T2 to fund more expensive projects through the baseline. As a result, Ofgem consider it is in existing and future consumers' interests, and in line with the RIIO principles generally, to ensure that the company has strong incentives to deliver these customer-driven outputs efficiently and in a timely manner.

As such, Ofgem is including an additional funding mechanism for NGET to trigger a funding adjustment to cover this expenditure should it be needed. This will work through the respective volume drivers in each load-related area, using the unit cost allowances agreed for RIIO-T1 and the generic spend profile that is also included as part of the volume drivers. The benefit of this approach is that there will be a much clearer link between the costs NGET has incurred in the RIIO-T1 period and outputs that the company can be held to account to deliver during RIIO-T2.

In general, the size of the financial incentives is linked to the cost associated with over and under delivery.

TOs can receive payments (two years in arrears) under various incentive schemes relating to safety, wider works, reliability, connections, customer service, and social and environmental obligations where they have delivered outputs above the assumed level.

**NOMs**: For under delivery the gap between the outturn and target NOMs of current RIIO-T1, will not be funding in RIIO-T2, and for over delivery this gap is funded through the NLRE allowance for RIIO-T2.

**Connections / wider works**: Additional capacity to be funded through a flexible baseline (with volume driver to adjust allowances if delivery turns out to be different) and SWW.

**Customer satisfaction**: incentive directly linked to the results of the survey. Limits of +/-1% of the particular year's allowed revenue.

#### RIIO-T1:

40-50% sharing factor for network total costs and SO internal costs (where the precise level to be determined through the Information Quality Incentive (IQI)).

#### More specially:

Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?

- **Environmental EDR scheme** has a standard annual financial reward of up to £4m across all. It allows up to 50% of the unallocated funds from the previous year to be added to this. Therefore, the financial reward available in 2014-15 is £6m.
- NOMs: TOs have allowances totalling approximately £6.5bn over RIIO-T1 to deliver their Network Replacement Outputs (NOMs targets). The NOMs targets are set for the end of the price control. If by that time a TO has delivered above or below its NOMs targets then it will receive a revenue reward or penalty in the next price control period. Any reward or penalty is dependent on whether the over or under delivery is justified or unjustified.

	<ul> <li>Reliability: Incentive rate of £16,000/MWh27 which is based on an estimate of the value of lost load (VoLL). This incentive has a collar of 3% of allowed revenues and a natural cap as NGET cannot reduce ENS below zero. Collar is consistent with Ofgem's overall assessment of the risk of NGET's overall package.</li> </ul>
Whether there are conditions under which under which target outcomes could be reopened.	The RIIO-T1 price controls allow for a mid-period review (MPR) of output requirements half way through price controls. The MPR is a mechanism included in the price control to help manage uncertainty. The purpose of the MPR is not to reopen price controls, but to cover material changes to outputs that can be justified by clear changes in government policy and the introduction of new outputs that are required to meet the needs of consumers and other network users. This could also be due to changes in legislation, for example.  Ofgem committed to not alter incentive mechanisms, other than as required to accommodate changes to outputs.  For RIIO-T1 the MPR will take place in 2016, with any changes being implemented in April 2017.

### 6.6. Post

### 6.6.1. Ofcom

Ofcom is the communications regulator in the UK and regulates the TV, radio and video on demand sectors, fixed line telecoms, mobiles, postal services, plus the airwaves over which wireless devices operate.

Royal Mail is the sole provider of the Universal Service in the UK and delivers a six-days-a-week, one-price-goes-anywhere postal service to more than 29 million addresses across the UK.

Table 24. Annual monitoring update on the postal market: 2015, Ofcom

Issues / criteria	Description	
Topic 1: purpose and scope of the outcomes framework		
	Royal Mail is monitored by Ofcom, as it is the only postal business in the UK which operates a network capable of delivering letters and parcels to over 29 million business and household addresses nationwide – i.e. it is the designated provider of the universal postal service.	
Overview of the outcomes framework	Ofcom has imposed requirements on Royal Mail as the universal service provider to provide certain services. The services Ofcom requires Royal Mail to provide include:	
	<ul> <li>undertaking collection and delivery services for letters six days per week and parcels five days per week;</li> <li>providing priority (next day) and standard (within three days) delivery services; and</li> <li>minimum quality of service targets.</li> </ul>	
Key objectives / purpose of the outcomes framework	Ofcom monitors the postal market as a key safeguard of the regulatory framework that it put in place in March 2012, alongside greater pricing freedom for Royal Mail.  Royal Mail is monitored in four areas:  1. Financial performance 2. Operating performance 3. Impact on customers and consumers 4. Impact on competition	
Summary of the key outcomes included in the framework	Ofcom monitors Royal Mail's Quality of Service very closely, specifically through various product-related and service-oriented targets. It also uses consumer and business surveys to gauge satisfaction with the postal sector.	
Whether there was any explicit or implicit prioritisation of the different outcome areas	N/A.	
Topic 2: Measures and targets within the outcomes framework		
Description of the key metrics used to measure performance in the outcome areas	<ul> <li>Quality of service</li> <li>Product</li> <li>First Class retail items delivered on time</li> <li>Second Class retail items delivered on time</li> <li>Number of PCAs in which First Class delivery target were met</li> <li>European International Delivery achieved</li> </ul>	

- Special Delivery achieved
- Service
- Collection points served each day
- Delivery routes completed each day
- Items delivered correctly each day

#### Complaints

- Total complaints per 100,000 items
- Average cost per complaint in response to which compensation was paid
- Top ten categories of complaint (i.e. lost items)

#### Residential and business customer surveys

- Residential consumers' overall satisfaction with post (very satisfied, fairly satisfied, neither, fairly dissatisfied, very dissatisfied)
- Residential consumers' view on delivery times (very satisfied, fairly satisfied, neither, fairly dissatisfied, very dissatisfied, don't know)
- Residential consumers' view on cost of postage (very satisfied, fairly satisfied, neither, fairly dissatisfied, very dissatisfied, don't know)
- Perceived Value for Money of First Class and Second Class Stamps( very good, fairly good, neither, fairly poor, very poor, don't know)
- Main postal issues experienced by residential consumers who have reported problems
- Satisfaction levels amongst businesses for Royal Mail and other postal operators (very satisfied, fairly satisfied, neither, fairly dissatisfied, very dissatisfied)

### **Quality of service**

#### Product-related targets

- First Class national target: deliver 93% of all First Class retail items on the day after collection
- Second Class national target: deliver 98.5% of all Second Class retail items within three days of collection
- Post Code Area (PCA) target: deliver 91.5% of all First Class single piece mail the day after collection in 118 PCAs
- European International Delivery target: deliver 85% of European International items in three days
- Special Delivery (Next Day by 1pm) target: *deliver 99% of Special Delivery items on the next delivery day.*

#### Service-oriented targets

- Collection target: collect from 99.9% of its collection points, six days per week
- Delivery route completion target: *complete 99.9% of its delivery routes, six days per week*
- Correct delivery target: deliver 99.5% of items correctly, six days per week

# Summary of what 'targets' were set in relation to the above metrics (where relevant)

Description of how prescriptive / detailed the targets were	If Royal Mail fails to meet its Quality of Service targets Ofcom will consider opening a formal investigation.  Ofcom believes that the risk of investigation and enforcement action incentivises Royal Mail to meets its Quality of Service targets for universal services. Moreover, it takes into account exceptional circumstances e.g. force majeure events, such as severe weather, when monitoring performance.
	First Class and Second Class national targets
	First Class and Second Class national targets were set below 100% to allow for commonly experienced circumstances that may arise in the transportation, processing and delivery of mail, for example, disruption to aircraft flights due to bad weather or missed network connections due to road traffic delays and breakdowns. If the targets were set at a higher level it would be likely to increase Royal Mail's costs and, potentially, universal service prices. In the case of the 93% first class target this was originally agreed as achievable by Royal Mail and Postcomm in 2001.
Description of the rationale underlying the proposed targets	PCA target
	There are 121 PCAs in total. This target has been put in place to ensure that Royal Mail provides a good level of service across the UK –not just in more densely populated areas, but also in less densely populated areas and those where addresses may be harder to reach. Three of the PCAs – Hebrides, Kirkwall and Orkney, and Shetlands – are excluded from this target, mostly because it is not practical logistically to achieve a next day service for 91.5% of First Class mail sent from across the UK to these remote destinations. In addition, these offshore areas are more frequently subject to weather-related disruption of ferry and air services.
Description of the methodology and evidence used to determine the targets (where relevant)	Many of the current targets were developed from Royal Mail's own internal targets and have been in place since 2001. Historical performance suggests that all of the targets are achievable.
Topic 3: hov	w the outcomes were balanced against funding
How / whether the overall package of outcomes was evaluated relative to the available funding	N/A
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A
Whether there are conditions under which under which target outcomes could be re-opened.	N/A



### 6.8. Education

# 6.8.1. Department for Education

The Department for Education (DfE) is responsible for education and children's services in England. They work to achieve a highly educated society in which opportunity is equal for children and young people, no matter what their background or family circumstances.

Table 25. Secondary School Accountability system 2013, Department for Education

Issues / criteria	Description	
Topic 1: purpose and scope of the outcomes framework		
Overview of the outcomes framework	The Department for Education (DfE) reformed the school and college accountability systems to set higher expectations, and to make the system fairer, more ambitious and more transparent. In order to do this, they have implemented an accountability system that encourages high quality provision for all students, supports students in making informed choices, and identifies poor performance quickly.  The DfE set out a performance / outcomes based framework for 16 – 19 Accountability Headline Measures.  Schools are required to make five headline indicators (outputs) available	
	in a standard format so they are easily comparable and interpretable.	
Key objectives / purpose of the outcomes framework	The objective of the framework is to make schools accountable for their performance through the reputational implications of having key performance metrics published and available to stakeholders.  It is also aimed at highlighting the progress that students make while at school or college.  Clearer and more comprehensive performance tables will allow parents and the public to hold schools and colleges to account. These performance measures can also be used as an avenue to intervention where underperformance occurs. Whether they have been identified through providers not meeting minimum standards or judged by Ofsted – the Office for Standards in Education, Children's Services and Skills, who inspects and regulates services that care for children and young people, and services providing education and skills for learners of all ages.  Ofsted has introduced new inspection frameworks for schools with a greater focus on students making expected levels of progress. This accountability framework provides Ofsted with better information to help inform their risk assessments and judgements.	
Summary of the key outcomes included in the framework	Headline outcomes published to give a snapshot of the performance of schools include:  • progress; • attainment; • English and Maths GCSEs; • retention; and • destinations.	
Whether there was any explicit or implicit prioritisation of the different outcome areas	Performance measures are focused on achieving the best outcomes for all students.	

Topic 2: Measures and targets within the outcomes framework			
	A set of five headline measures will be published in 16-19 performance tables. The headline measures to quantify the performance of schools include:		
Description of the key metrics used to measure performance in the outcome areas	Headline Outcome	Measure	
	Progress	Proportion of a grade above or below the national average.	
	Attainment	Average grade for each qualification	
	English and maths GCSE	Record of students aged 16-19 who achieve at least a grade C in English and maths.	
	Retention	% of all students retained to the end of their studies	
	Destinations	% of all students going on to sustained education, employment, or training at the end of their course.	
	The outcomes framework was subject to one public consultation and there was detailed engagement with a relatively small number of influential educationalists (circa 15-20). Moreover, there were also stakeholder discussions in small groups.		
	Two headline measures have associated 'minimum standards', which are in effect targets to be achieved. These include:		
Summary of what 'targets' were set in relation to the above metrics (where relevant)	<ul> <li>Progress = number of grades (or proportion of grade) below the national average level of progress of zero.</li> <li>Combined completion and attainment measure = number of grades (or proportion of grade) below the national average.</li> <li>Targets were also set so that they were in line with Ofsted's inspection framework i.e. meeting minimum standards where applicable.</li> </ul>		
	Targets were specified directly by the DfE.		
Description of how prescriptive / detailed the targets were	<ul> <li>Progress</li> <li>A provider will be seen as underperforming if (i) its academic or Applied General value added score is below the threshold set by the department and (ii) its value added score is statistically significantly below the national average (both confidence intervals are below zero).</li> <li>The threshold (value added score in grades) for academic qualifications is likely to be set at around -0.6. The exact threshold is still to be finalised.</li> </ul>		
	• The threshold for Applied General qualifications will be announced in the next update when there have been more entries in these qualifications so there is sufficient data for sound analysis.		
	Completion and attainme	nt	



	The target will take the form of a number of grades (or a proportion of one grade) below the national average.	
Description of the rationale underlying the proposed targets	Appropriate minimum standards will help to raise standards and ensure focus on achieving the best outcomes for all. In addition they will also help to identify where there needs to be improvement.	
Description of the methodology and evidence used to determine the targets (where relevant)	In general the targets are set with regards to the <b>national average</b> and are standardised across all schools for consistency.	
Topic 3: how the outcomes were balanced against funding		
How / whether the overall package of outcomes was evaluated relative to the available funding	Enforcement action can be taken should a school's performance fall below the specified minimum standard. If intervention is necessary, or if an institution is judged inadequate by Ofsted, they will be required to improve.  They will become under additional scrutiny, until the DfE considers that they have sufficiently improved. However should a provider come under scrutiny and not improve, further intervention may be required which could result in the withdrawal of funding, closure, changes in leadership etc.	
Where individual outcomes / metrics had explicit financial incentives, how was the extent of 'value' associated with them determined?	N/A reputational only – however with regards to the above 'further interventions' details of what exactly this involves were not provided.	
Whether there are conditions under which under which target outcomes could be re-opened.	There are no plans to revisit the framework, rather just observe the outcomes at this stage.  2016 is the first year of implementation of the outcomes framework.	

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