

Routes to Market

Solution Design & Development

RIP and Ops Partnership Model

December 2017

Solution Design & Development document List:

This document should be read in conjunction with the following supporting documents, and any other documents listed in Annexes herein:

1. Statement of Requirements Overview March 2017
2. Statement of Requirements RIP Delivery Model Options March 2017

Overview:

The content of this document is designed to support the development of the solution for the Routes to Market (Routes to Market) procurement which will enable Highways England to meet its delivery commitment.

This document provides a summary of key considerations, recommendations and detailed working assumptions to inform the development of the Regional Delivery Partnership model required to enable future delivery of the Regional Investment Programme (RIP). This content will support Business Case development and progression through the governance cycle.



Purpose

The content of this document is designed to support the development of solution for the Routes to Market (Routes to Market) programme which will enable Highways England to meet its delivery commitment.

This document provides a summary of the requirements and key decisions needed for the development of the Regional Delivery Integration Partnership Model, to enable future delivery of the Regional Investment Programme (RIP).

Between January-April 2017, a Statement of Requirements (SOR) for the Routes to Market programme was produced that defined the programme need, consolidated risks to delivery and determined specific areas of focus which, if managed effectively, would help unlock value across the Highways England portfolio. The SOR provided the foundation for the Routes to Market Strategic Outline Business Case (SOBC) that presented a preferred delivery model option and identified key features for further development.

The solution design and development process are explained herein, where governing principles, key decisions and working assumptions are presented and collectively describe the chosen procurement solution for the RIP.

This content will be used to support the development of the Outline Business Case (OBC) associated with the strategic procurement, developed under the Routes to Market programme. This document will provide a consolidated view of the RIP delivery strategy that will receive validation and approval from Highways England leadership, throughout the programme governance cycle. This output will inform the development of core procurement documentation, including the Invitation for Tender (IfT).

This document reflects Highways England's current state of development with the Routes to Market RIP and procurement solution. Interpretation of available data, governing principles, key decisions and working assumptions represent work conducted during the Solution Design and Development phase of the programme.

Document history

Version	Purpose	Author	Reviewed by	Client Approval	Date
1.0	Initial document	1.0	1.0		1.0
1.1	Updated document	1.1	1.1		1.1
1.2	Updated document	1.2	1.2		1.2
1.3	Updated document	1.3	1.3		1.3
1.4	Updated document	1.4	1.4		1.4
1.5	Updated document	1.5	1.5		1.5
1.6	Updated document	1.6	1.6		1.6

Contents

Executive Summary	6
1 Packaging Strategy - Overview	14
1.1 Packaging: risk	15
1.2 Packaging: ambition	15
1.3 Contract term	16
1.3.1 Technical Advisor Contract term	17
1.4 Contract volumes	17
1.4.1 Spend profile	18
1.4.2 Operations	19
1.4.3 Contract and OJEU notice values.....	20
1.5 Lot structure and Packaging rules	23
1.6 Lot structure and packages of work	24
1.6.1 Technical Advisor	25
1.6.2 Delivery Integration Partner	27
1.7 Supplier planning.....	29
2 Delivery Model - Overview.....	33
2.1 Delivery model.....	33
2.2 Alignment of the RtM RIP-Operations Regional Delivery Partnerships model to Major Projects Change Programme Operating model.....	34
2.3 RtM RIP-Operations delivery model role descriptions.....	34
2.3.1 Highways England as Network Owner	34
2.3.2 Technical Advisor Role	40
2.3.3 Delivery Integration Partner Role.....	40
2.4 Governance of the RtM RIP-Operations Regional Delivery Partnerships Model.....	42
2.4.1 Centres of Excellence and the Sustainable Improvement Hubs	44
2.5 Systems Integration.....	45
2.6 Alignment of RtM RIP-Operations delivery model to Design Principles	47
3 Commercial Strategy - Overview.....	50
3.1.1 Red Line Control Measures	50
3.2 Commercial principles	51
3.2.1 Technical Advisor (PCF stages 1-7)	51
3.2.2 Delivery Integration Partner - PCF stages 3-7	57
	3

3.2.3	Handover strategy and transition Plan for 'live' schemes	70
4	Programme for Performance Management - Overview	74
4.1	The Balanced Scorecard	75
4.1.1	Performance scoring via Balanced Scorecard	77
4.1.2	Mobilisation Phase	79
4.1.3	Framework Delivery Plan	81
4.1.4	Scheme Delivery Plan	81
4.1.5	Framework Execution Plan	82
4.1.6	Mobilisation Scoring	82
4.1.7	Performance failure and improvement process	83
4.1.8	Lot Allocation Process (RIS2)	83
4.1.9	National Contingency Framework Quality Criteria	85
4.1.10	National Contingency Framework operation	86
4.1.11	Termination	87
5	Procurement Strategy - Overview	96
5.1	Selection procedure	96
5.1.1	Selection procedure summary	97
5.1.2	Public Contracts Regulations	100
5.1.3	Selection Questionnaire	101
5.1.4	Packaging structure	103
5.2	Evaluation Strategy	104
5.2.1	Key Decisions	105
5.2.2	Commercial	109
5.2.3	Approach to Evaluation	110
5.2.4	Quality Assurance	111
5.2.5	Evaluation Model and Weightings	111
6.	Acronyms	113
A1	Packaging Strategy	117
A1.1	Routes to Market Benefits Map	118
A1.2	Percentage Breakdown	120
A1.3	Regional Contract Values	120
A1.4	Stress test Outputs	121
A2	Delivery Model	134
A2.1	Routes to Market RIP-Operations Delivery Model	134
A3	Commercial Framework	173



A3.1 Financial Assessment Approach	173
A3.2 Delivery Integration Partner Supplier Incentivisation Scenario Analysis	177
A3.3 Technical Advisor Supplier incentivisation scenario analysis.....	219
A4 – Programme for Performance Management.....	264
A4.1 Performance Indicator	264
A5 Client Research	311
A5.1 Major Infrastructure Client Research and CDF Lessons Identified	311

DRAFT

Executive Summary

1. The Routes to Market programme, initiated to support the design of a procurement vehicle to enable the realisation of Highways England's delivery commitment, has been tasked with providing a solution by Q3 2018.
2. As a result of the investigative work carried out during the Strategic Outline Business Case (SOBC) phase of the Routes to Market programme, separate procurement routes have been identified for the Regional Investment Plan (RIP) and Smart Motorways Programme (SMP). The following strategy relates to the delivery of the RIP only.
3. Highways England's is at the mid-point of a Change Programme, with significant transformation on the horizon that will fundamentally impact the way the organisation operates. As a result of the step change in delivery capability required, Major Projects and Operations are working together, to understand how the approach to programme delivery can be improved.
4. The three Imperatives of Safety, Customer and Delivery of the Roads Investment Strategy (RIS), govern the strategic direction of this procurement and Highways England. Routes to Market provides a vehicle for Highways England to implement the business wide change, necessary to create a foundation capable of accommodating the anticipated step change in delivery, evidenced by this £9bn procurement. This opportunity therefore focuses on developing innovative arrangements to buy goods and services from the supply chain, with an approach that allows both Highways England and the supply chain to succeed.
5. The following report is split into five core sections, Packaging Strategy, Delivery Model, Commercial Strategy, Performance Management, and Procurement Strategy that provide outcomes of the solution development process. Each section begins with an overview of the key drivers that have shaped the solution; in response the document then describes how the Routes to Market RIP strategy is designed to address these factors. A summary of these outcomes is provided below:

Packaging Strategy

6. Highways England is expecting a sharp rise in spend from FY19/20 to FY20/21, with anticipated RIP expenditure across Road Period 1 (RP1) and Road Period 2 (RP2) totalling £12bn. The packaging strategy has therefore had to consider how the Programme can be taken to market in a format that is deliverable, given the market landscape.
7. The scope and geographic distribution of projects, existing capability of the organisation, transfer of risk, management of programme interfaces and the desired economic return from a procurement of this scale are all considered. In response, the packaging strategy demonstrates the following attributes:
 - Enhanced pipeline visibility and programme planning, securing supply through a Delivery Integration Partner contract term of six years.
 - Offering groups of schemes to the supply chain, thereby creating a programme of work to drive programme level efficiencies by reducing overheads and transaction costs.
 - Creating packages of work reflective of the scale that the supply chain is able to deliver; SMEs market entrants are encouraged with the creation of two value bands; Band A, with packages of work less than £100m and Band B, with packages of work greater than £100m.

- Thirty nine schemes are therefore split across the six RIP Regions as follows:
 - Eight Lots – 18 Packages (Delivery Integration Partner);
 - Six Lots – 12 Packages (Technical Advisor);
 - Total value - £4.2bn.

Delivery Model

8. Highways England recognises the need to create a delivery model that achieves its ambition of creating regionally focused communities to deliver the programme. Furthermore, these communities need operate within a structure that supplements the Highways England Client Model, as the organisation matures.
9. The geographic structure of the RIP programme and existing Major Projects governance arrangements, Highways England's capability and culture and key transition points within scheme and programme delivery are all considered. In response, the delivery model demonstrates the following attributes:
 - Highways England in a Network Owner capacity, will programme manage Regional Delivery Partnerships and develop localised supply chain communities;
 - Two Technical Advisors per region to drive value based optioneering and provide ongoing assurance throughout the scheme lifecycle;
 - Two or more Delivery Integration Partners per region, contracted under a Design & Build arrangement from Preferred Route onwards that work collaboratively, with Technical Advisors and each other to deliver the programme;
 - An established interface with Operations throughout the scheme lifecycle that allows Highways England to leverage in-house expertise throughout the design and development process, to create an asset that considers the ongoing maintenance requirement;
 - Regional Centres of Excellence, supported by Sustainable Improvement hubs to drive innovation, knowledge share and improved productivity;
 - Corporate functions operate in a matrix fashion across the six RIP Regions.

Commercial Strategy

10. Highways England has designed a commercial model that aligns supplier return with desired business outcomes. Financial gain, the promise of future work and reputational value are used across commercial and performance management strategies to incentivise the supply chain.
11. Improved cost and schedule control and the equitable transfer of risk govern the commercial construct for the RIP. Red Line Control Measures, identified when determining programme requirements, further govern the commercial strategy that demonstrates the following attributes:
 - Scheme budgets are agreed, based on forecast costs, at or below the Statement of Funds Available (SOFA) to drive the efficiency agenda;
 - Scheme budgets include all costs, rather than construction related costs only, to improve transparency and encourage more effective planning and delivery within the cost envelope;
 - Delivery Integration Partner return is dependent on performance at the scheme and package level to drive a programme approach to delivery; Technical Advisor return is assessed at the package level only;
 - Suppliers are incentivised to meet programme milestones considered critical to Highways England (Start of Works, Open for Traffic – Technical Advisor and Delivery Integration Partner, Journey Time Reliability – Delivery Integration Partner only)
 - Effective handover between options and development phases mitigates the risk of rework.

Performance Management


12. Highways England has the ambition to use demonstrable performance as a currency that can be used to allocate future work. The performance environment now needs to support the transformation agenda that is moving away from project based delivery to enterprise level management.
13. The objectivity and availability of data flows, labour intensive nature of the current performance monitoring process and anticipating how the procurement process should be structured to drive post contract performance are all considered. This approach has resulted in a performance management strategy that demonstrates the following attributes:
 - 100 Day Mobilisation Plan to focus supplier effort early and set the programme up for success;
 - A balanced scorecard that enables programme level supplier comparability and communicates Highways England priorities across the supply chain;
 - Objective supplier scoring to enable fair, data driven work allocation, reducing the need for secondary competition;
 - Underperformance resulting in the possibility of work being removed or contracts terminated;
 - A National Contingency Framework that provides additional capacity and broadens the opportunity for suppliers to access future work.

Procurement Strategy

The procurement strategy recognises the need to create an optimum level of competition to realise value for money. The strategy has therefore had to recognise the former elements across programme packaging, delivery model, commercial and performance, to design a solution that sources the right supply chain to enable sustainable delivery.

Supply chain capability and capacity, the scale of supplier and regional agendas, collaborative practice and general performance over the contract term are all considered. In response to these items, the following attributes are reflected in the procurement strategy:

- The minimum number of suppliers that can be shortlisted for all Band A lots combined is 5 (if the same suppliers express an interest in all 3 lots). The maximum number of suppliers that can be shortlisted for all Band A lots combined is 30;
- The minimum number of suppliers that can be shortlisted for all Band B lots combined is 6 (if the same suppliers express an interest in all 5 lots). The maximum number of suppliers that can be shortlisted for all Band B lots combined is 75;
- The selection process for the Technical Advisor competition will be defined closer to the time of document publication;
- A Restricted Procedure to simplify the tender process and management effort while attracting suppliers with the necessary attributes to deliver the programme;
- A [REDACTED] Supplier Questionnaire, amended to include specific questions reflective of Highways England Imperatives, covering Health & Safety, Customer and roads programme delivery;
- A financial threshold set at a minimum of twice 70% of the highest value package on a lot, divided by three, to improve supply chain resilience and facilitate substitute capacity;
- Regional capability is tested through additional quality questions.

- 
- Tenderers are asked to complete an SME contracting statement to explain their approach when engaging with smaller suppliers and will be further tested on their approach to collaborative working across supply chain tiers through the assessment process.

DRAFT

Solution design process

14. To drive the strategic decision-making process, the Infrastructure Projects Authority (IPA) “Improving Infrastructure Delivery: Project Initiation Routemap” has been applied to the solution development process. By following the IPA “Six Pillars of Procurement” model (Figure 1), multilateral agreement of Programme requirements is used to align Highways England’s transformation journey, with the supply chain’s appetite to transact. The model considers:

- **Pillar 1 Requirements Communication:** What the programme needs to deliver.
- **Pillar 2 Market:** The appetite of the market to transact.
- **Pillar 3 Packaging:** How the programme is packaged to deliver value and mitigate risk.
- **Pillar 4 Contract Model:** The appropriate treatment of risk, and programme interfaces.
- **Pillar 5 Route:** The appropriate option to capitalise on market capability and capacity.
- **Pillar 6 Benefits Communication:** Articulating how intended benefits are realised.

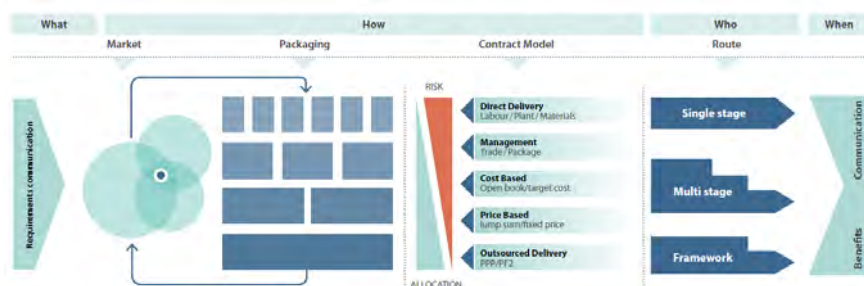


Figure 1: Six Pillars of Procurement

15. This paper consolidates the fundamental requirements, decisions and working assumptions that have been developed during the Outline Business Case (OBC) phase of the Routes to Market programme. A series of solution development sessions across core workstreams have enabled the Routes to Market Programme to refine the preferred Regional Delivery Partnership (RDP), outlined in the SOBC. Core workstreams include:

Packaging strategy

- **Workload volumes:** understanding how the current programme can be packaged and whether supply markets are able to accommodate the anticipated volume of work.
- **Contract scope:** determining the roles and responsibilities of contracted parties to confirm the services Highways England will go to market to procure.
- **Supplier planning:** run in parallel with the workshop series, using supplier feedback to gauge market appetite and supply chain analytics to assess delivery risk.

Delivery model

- **Partnership model:** Determining the services provided under a regionally focused delivery model and understanding how regional efficiencies are shared at the portfolio level.
- **Operations integration:** Investigating opportunities to gain closer alignment between Operations and Major Projects, to create a more integrated approach to delivery.
- **Highways England operating model:** Supporting alignment between the Routes to Market procurement and wider transformation agenda.

Commercial strategy

- **Commercial framework:** Developing a contracting environment that improves control and incentivises the supply chain to deliver in line with predetermined Highways England outcomes.

Performance

- **Performance management:** Reviewing the current performance management environment to determine how current practice can be adapted to improve relationships and promote the realisation of Highways England outcomes.

Procurement strategy

- **Selection procedure:** Determining the appropriate procurement procedure given programme timelines and the nature of work being procured.
- **Evaluation strategy:** Aligning goals of the Routes to Market strategic procurement with the method created for supplier assessment.

DRAFT

16. The “CDF Lessons Identified” and “Major Infrastructure Client Research” (Appendix A5) reports commissioned as part of the Routes to Market programme, have provided key insights to inform development of the RIP solution. Furthermore, the document titled “Routes to Market Statement of Requirements Overview March 2017”, presented the current challenges faced by Highways England, when managing supplier behaviours across the delivery of CDF schemes. These include:

	Sources of Risk
Programme	1 Misalignment between RIP, Ops and SMP programmes and packaging approach.
	2 Inaccuracy of design assumptions – site constraints.
	3 Visibility of forward programme.
Performance	4 Alignment of the supplier performance environment with Highways England strategic priorities.
	5 Ability to differentiate between localised and programme level performance.
	6 Tier 1 collaborative agenda failing to mitigate on-site transactional behaviours.
Procurement	7 Lowest price procurement approach.
Design	8 Limited control.
	9 Misaligned commercial model.
	10 Highways England owned design standards continue to predominate over standardised products.
	11 Misalignment with chosen technology solutions and programme requirements.
Data	12 Poor continuity of corporate memory between RIS periods.
	13 Collection of poor asset data and application of BIM technologies
Capability & Capacity	14 Insufficient internal workforce planning.
	15 Successful management of TUPE arrangements to bolster interim capacity and capability limitations.
	16 Retention and inadequate reward.

Figure 2: Source: “Routes to Market Statement of Requirements Overview March 2017”

17. This risk profile, together with the seven core Routes to Market Design Principles and supporting Red Line Control Measures have been used to further guide the solution design. Where necessary outstanding detail, regarding the mechanics of the overall delivery strategy will continue to be worked through, by procurement, contracts and commercial teams, prior to IFT release.



Routes to Market Solution Design & Development Packaging Strategy December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

1 Packaging Strategy - Overview

1. RIS1 is providing Highways England with the opportunity to set a foundation for the future. During this time, the organisation is developing an understanding of targeted areas that need to improve and where support is required from the supply chain, to honour its delivery commitment (see **Error! Reference source not found.**)
2. The total Highways England spend is projected to rise across all Regions, with a sharp increase in from FY 19/20 to FY 20/21.

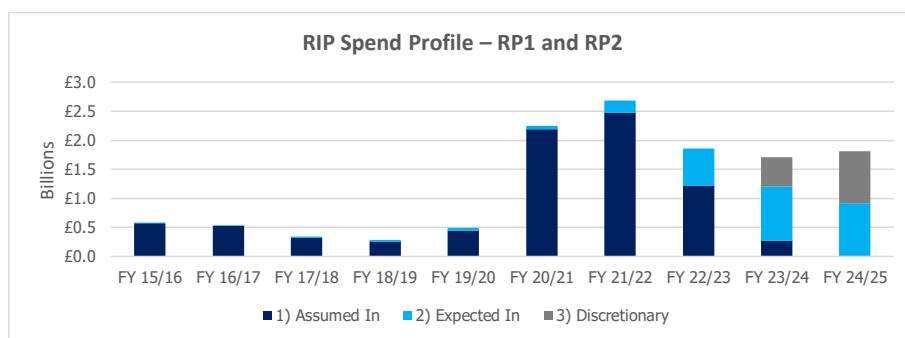


Figure 3: RIP Expenditure in RP1 and RP2¹

3. During the course of Road Period 1 (RP1), from April 2015 to March 2020, and Road Period 2 (RP2), from April 2020 to March 2025, RIP expenditure totals an estimated £12.5bn, with c. £10bn of this during RP2. To meet the delivery challenge Highways England's maturing relationship with the supply chain and the management of programme interfaces created through a packaging approach.

¹ This overall expenditure profile is categorised according to the relative level of certainty of funding as shown in Figure 3. The three categories used to classify spending are as follows:

1. **Assumed In:** Schemes that have been publicly supported by DfT and HMT (those schemes announced in RIS1 and originally planned for start of works in RP1).
2. **Expected In:** Schemes that have been shared publicly but have no firm assurances (those schemes that were announced in RIS1 to be developed in RP1, but with planned start of works in RP2).
3. **Discretionary:** The schemes / areas that the business would like to invest in and will be speaking to DfT about during RIS2 negotiations.

1.1 Packaging: risk

4. This step change in volume poses a fundamental risk to the deliverability of the Highways Programme. However, schemes driving the expenditure profile shown are subject to change. Maintaining a favourable Benefit Cost Ratio (BCR), achieving a successful Development Consent Order (DCO) and changes to political strategy may impact resultant opportunities for the supply chain, where schemes can be added or taken away.
5. Beyond the anticipated programme pipeline, the following factors are also considered when assessing packaging potential of the RIP:
6. **Scope & geographic distribution:** The technical nature and scale of schemes is considered, where scheme complexity and the area covered may limit the ability of some segments of the supply chain to effectively deliver.
7. **Highways England and supply capability and capacity:** Highways England recognises the need for the supply chain to supplement its current capability and capacity to meet the scale of delivery required. Furthermore, the size and scope of programme packages is considered in light of current Highways England suppliers and expected entrants.
8. **Treatment of risk:** The scale of the delivery programme has influenced, the approach to risk transfer and allocation (see Section 3 Contract Model) that correspond to the Design and Build nature of packages.
9. **Interfaces:** Sections of the road network spanning the six programme regions imports complexity. The discrete grouping of individual sections of the SRN, for example the four components that comprise Package B7 of the A12, A120 (see Figure 15), attempts to minimise hard programme interfaces. A collaborative approach to soft programme interfaces is also considered through the regional Centre's of Excellence model (see 2.4.1).
10. **Economic return:** The current method of procuring schemes on an individual basis is not considered to deliver the economic benefits of a procurement the size of Routes to Market. The contract term and corresponding packaging approach is therefore geared towards improving longer term, mutually beneficial returns.

1.2 Packaging: ambition

11. The ambition is to create regionally focused design and construction communities that will be rewarded for their drive in productivity and integration across regional programmes, to meet Highways England Imperatives and DfT outcomes.
12. The proposed strategy has therefore been designed to mitigate delivery risk by effectively coordinating elements of scope, delivered by regional pools of suppliers, to meet the delivery commitment and achieve the following:
 - Programme level efficiencies reducing overheads and transaction costs, resulting in Highways England efficiency target realised.
 - A deliverable programme reflecting supplier capability and capacity to support new core and specialist supplier entrants to the market that are committed to delivering the Highways England Programme.
 - Enhanced pipeline visibility and programme planning, securing supply through long-term contracting.
 - Drive innovation through improved, longer-term supplier engagement to develop supplier confidence and drive inward investment.

- Continuous improvement and a sustained ability to deliver, awarding individual schemes within a package to track performance over time.

1.3 Contract term

13. Three core factors were considered when determining the contract term, these include business transformation, strategic risk management and programme delivery and contingency. Collective consideration of these components has resulted in the recommendation of a six year framework (2018 – 2024), with no break clause for Delivery Integration Partner. This option adds an additional two years to the traditional four year term allowed under Public Contract Regulations 2015 that is justified by the following:
14. **Business Transformation:** Highways England is seeking to transform the way it delivers Major Projects, by moving from a project based, to enterprise model of delivery that drives time, cost and quality through the award and management of programmes. This change requires Highways England to develop the processes, systems, structure and culture to support this model of delivery. To support deeper integration between Highways England and the supply chain, it is imperative that partners are aligned to the term of Highways England's maturity journey. Furthermore, suppliers have the opportunity to calibrate resources and develop longer term growth plans over an extended period.
15. **Strategic Risk Management:** Convergence of major UK infrastructure programmes suggests possible supply side shortages. To mitigate this, Highways England aims to create commercial environment that encourages construction companies to invest in and retain apprentices and those entering the sector. A longer term contract is considered an enabler to unlocking the necessary investment to support this change, where for example, an investment in an initial two year apprentice programme would yield a return on investment for the remaining four years of the term. This outcome would also support improved job security and therefore retention in a sector characterised by a traditionally fragmented workforce.
16. Furthermore, the market perception of a four year framework may discourage the appetite of suppliers to bid for future work at a time when Highways England is trying secure critical capacity.
17. **Programme Delivery & Contingency:** Schemes proposed for initial award of work (£2.9bn - £4.0bn) could technically be accommodated within a four year framework (2018 – 2022). However, considering the complex delivery environment described, an additional two years will provide Highways England with the flexibility required to accommodate newly introduced schemes or those experiencing delay.
18. An extended contract term is also more reflective of a typical period for the delivery of a scheme, with an average of three years for design and construction. This provides the delivery partner with a level of confidence that the entirety of schemes at initial award will be delivered under a single contract.
19. This six year term described will enable the procurement of:
 - Remaining RIS1 (PCF stage 5 to7).
 - Complete RIS2 (PCF stage 3 to7) schemes following their official announcement by the Department for Transport in 2019.
 - Possible RIS 3 (PCF stage 1-2) development.
 - Major renewals (from 2020).
 - Routine renewals (throughout).
 - Possible RIS2 schemes requiring Routes to Market in the absence of a currently defined programme.

1.3.1 Technical Advisor Contract term

20. Given the nature of the assurance role, uncertainty around RIS3 schemes, and smaller values for the Technical Advisor in RIS1 compared to the Delivery Integration Partner, it is not considered essential to have contract term beyond the traditional four year period. Subject to achieving Development Consent Order (DCO) approval, a facility that terminates in Q3 of FY 2022, will allow the procurement of all identified schemes for RIS1 and RIS2.
21. Although an extended term may allow the Technical Advisors to support development of RIS3 schemes while maintaining a consistent regional team, the challenge remains with the uncertainty of the RIS3 pipeline. Moreover, development and delivery of schemes split across procurement vehicles may undermine the future RIS3 procurement strategy. A four year arrangement is therefore recommended for the Technical Advisor.

1.4 Contract volumes

22. Given the above contract terms, the corresponding volume of delivery within this period can be determined. This exercise informs contract values and messaging to the supply chain. Being able to provide a position on planned and anticipated contract volumes, over the contract duration enables Highways England to:
- Demonstrate to key stakeholders [REDACTED] that Highways England is operating as an informed client - aware of the demand it places on the market and how it aims to contract and to mitigate delivery risk.
 - Provide supply markets with a level of confidence that a portion of the pipeline is fixed, thereby improving programme planning and supporting inward investment.
 - Create an attractive commercial offer over the long term, with a realistic proposal of contract values, based on known and projected workload volumes per Region.
23. However, a series of factors influence the ability of Highways England to achieve a level of certainty of regional pipelines, not least to mitigate the risk of later challenge from the market in the event workload volumes are materially altered, these include:
24. **Political environment and funding cycle:** [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
25. **Collaborative Delivery Framework (CDF):** Known schemes with planned investment, identified for RIS1, may need be delivered through Routes to Market as CDF will have reached its financial cap. Furthermore, funding allocation for legacy schemes may potentially delay the initiation of RIS2 design work.
26. **Schemes in development:** Select schemes which are being developing in Road Period 1 (RP1) may have the potential to be delivered in Road Period 2 (RP2), subject to approval.
27. The following sections provide clarity on sources of information and approach used to determine contract values.

1.4.1 Spend profile

28. Demand analysis of the Capital Portfolio Office (CPO) data, for RP1 and RP2, shows that the first contract for the RIP - Operations programme needs to be operational to support delivery from October 2018.
29. To allow for supplier mobilisation, the contract will be awarded by Q3 2018. This precedent is used to determine the maturity of schemes in each of the Regions, at the anticipated time Routes to Market contracts will be tendered.
30. Because the CDF will have reached its financial cap, the 39 RIS1 schemes identified below, with construction SoW before the end of RP1 (31/03/2020) and/or in RP2, will need to be delivered through Routes to Market. This group of schemes accounts for a projected total project outturn cost of £4.20bn, shown below (see Figure 4):

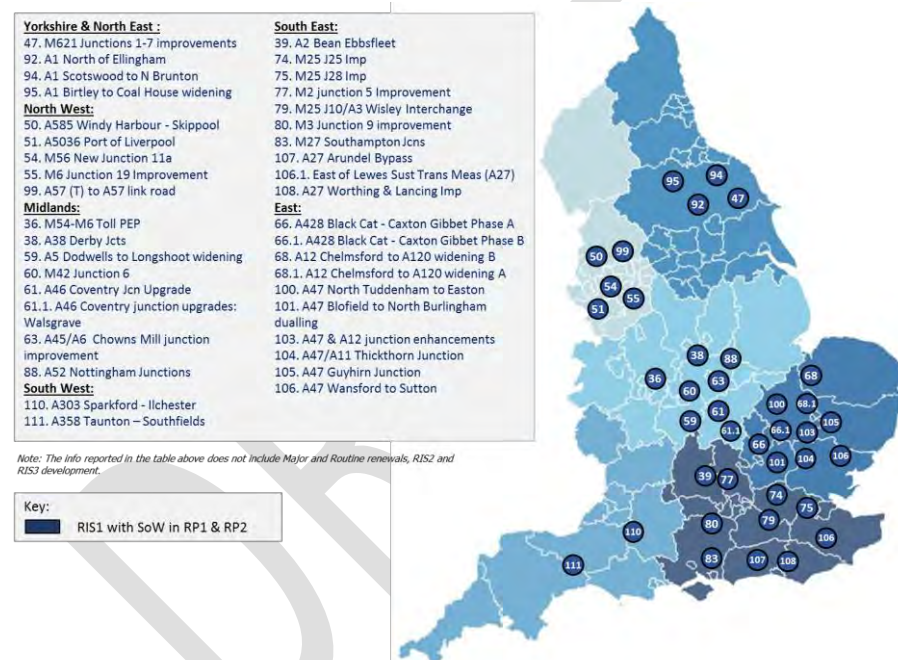


Figure 4: RIS1 with Start of Works in RP1 and RP2 projects which will need to be delivered through Routes to Market

31. Schemes identified for delivery as part of RIS2 will need to be developed in RP1 to enable construction delivery during RP2. If funding is allocated as currently planned, Highways England leadership has advised that RIS2 projected total project outturn cost for the RIP – Operations procurement is an estimated £4.8bn (including RIS3 development and major and routine renewals works) *.²

*There is a high level of uncertainty around the RP2 planning data. Whilst some of the RP2 schemes are defined, the level of certainty of these schemes and strategic studies is still low. The level of certainty of anticipated RIS2 schemes is greater than discretionary RIS2 schemes.

1.4.2 Operations

32. A deeper understanding of the packaging possibilities and sharing of services at the regional level, between Operations and Major Projects is considered key to building regional communities and efficiently delivering the Highways England programme.
33. To support this ambition, several areas were considered as potential sources of programme synergies including:
- High value capital maintenance works and capital renewals
 - Capital renewals currently delivered under the CWF**
 - Routine maintenance and response. **3
 - Design services**
 - Specialist Goods and Services (e.g. Technical surveys and Testing).**
34. Initial discussions between RIP and Operations considered the possibility of delivering high value £10m+ schemes via the Routes to Market RIP facility. Significant attention was placed on those elements of planned capital works that may place additional stress on incumbent Operations suppliers due to the scale and/or complexity of delivery.
35. Operations provided a planned capital maintenance look-ahead, from 2018 to 2020, to investigate the need for an additional capital delivery facility for the Operations programme. The nature of works under consideration includes: the installation of new structures, junction layouts, concrete central reserves, road strengthening, and tunnel refurbishment. Based on the data provided and information collected during the Solution design phase, several factors suggest the need to develop a more flexible delivery arrangement in the near term, these include:
36. **Funding horizon:** A five year funding arrangement is generally provided for capital maintenance works, the annual budgeting process means there is a lack of detailed pipeline visibility which prevents a long-term, five years plus, approach to programme planning.
37. **Incomplete planned capital maintenance data:** variable visibility of projected volumes between regions with the possibility of a significant skew on the average size of project per region with schemes such as the Oldbury Viaduct at c. £170m.
38. **Best value delivery:** The chosen delivery route needing to be a function of the 'best value' option available, rather than an exclusively cost-based judgement.
39. When assessing the known planned capital maintenance works, these were considered to be of a scale and type, deliverable under the existing CWF arrangement. Furthermore, this option is considered to provide smaller suppliers with development opportunities across the Operations portfolio, while maintaining the behavioural trading relationships developed in the Operations community.
40. The current funding arrangement and therefore uncertainty of the Operations capital programme makes it difficult to align the currently unknown RIS2 programme with planned Operations spend. However, in the absence of being able to include specific values for Operations capital works in RIP – Operations contracts, flexibility must be retained that will enable Highways England to instruct Delivery Integration Partner to:
- a. Share road-space and Temporary Traffic Management (TTM) in the pursuit of improved safety and productivity.
 - b. Deliver additional capital works on behalf of the Operations programme if deemed a best-value option.

41. The following process flow indicates the nature of decision making that will be undertaken when considering how to incorporate Operations works:

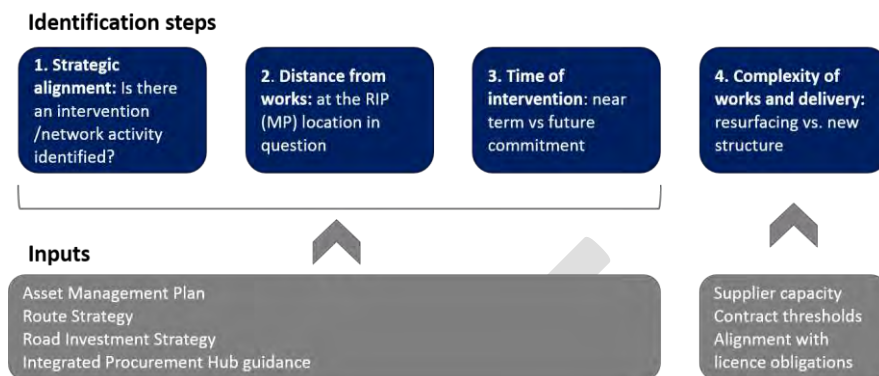


Figure 5 Process flow of incorporating Operations decisions

42. The contractual management of coincidental and larger standalone Operations work, delivered under Routes to Market contracts, is considered in Section 1.4.2. Also see Section 2 for an articulation of how Operations interfaces with the Major Projects delivery model and Section 1.4.3 to understand how Operations work is accounted for in Routes to Market contract values.

1.4.3 Contract and OJEU notice values

43. Procurement Contracts Regulations 2015 (PCR) require the estimated total of the contract to be published in the Official Journal of the European Union (OJEU) Notice. The programme has therefore determined likely values to support this process, these include:
- Anticipated contract values per Region (for Technical Advisor and Delivery Integration Partner).
 - The preferred number of suppliers for each function, relative to anticipated workload volumes.
44. The quantum of all schemes in-progress and those scheduled for delivery, are categorised by Highways England region, with the associated stage each scheme is at within the Project Control Framework (PCF) cycle, to provide an indication of scheme maturity by PCF stage.

****These services are currently delivered separately in Asset Delivery areas only. In remaining areas these services are delivered by the serving Managing Agent Contract (MAC) / Asset Support Contract (ASC) supplier. Asset Delivery areas are: East Midlands - Area 7, Cumbria and North Lancashire - Area 13, the Northeast - Area 14, and the South West - Areas 1&2). Areas with Asset Support Contracts are: Area 10, Area 12, Area 9, Area 6, Area 8, Area 3 and Area 4.**

45. The anticipated contract volumes for the Technical Advisor and Delivery Integration Partner are shown in Figure 6 below.

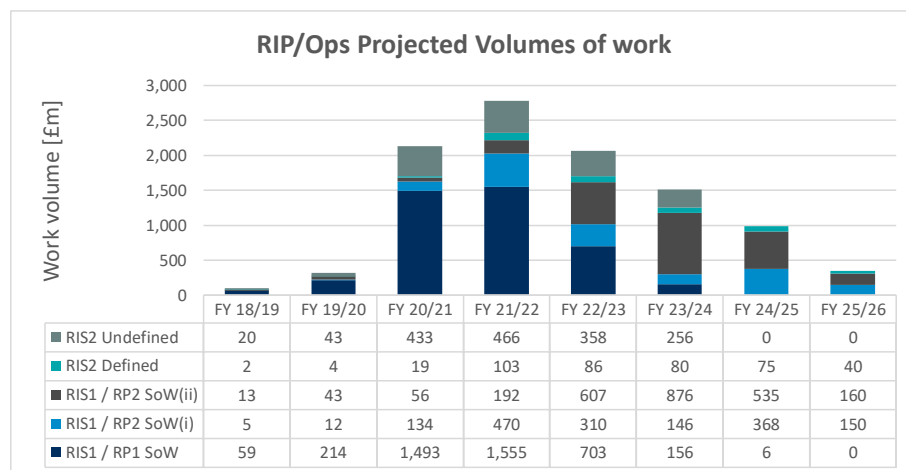


Figure 6: Routes to Market – RIP-Operations Projected Volumes of Work*4

46. The categories of spend shown in Figure 6 above are a further breakdown of those used by CPO as explained in the below table Figure 7.

	Classification	Description	Capital Portfolio Classification
RIS1	RIS1 / RP1 SoW	These schemes were identified within RIS1 and are scheduled to start work before the end of RP1	Assumed In
	RIS1 / RP2 SoW(i)	These schemes were identified within RIS1 with the intention to start work during RP1, but they have since been deferred to RP2 as part of the 'Route Optimisation' process	Assumed In
RIS2	RIS1 / RP2 SoW(ii) – Defined	These schemes were identified within RIS1 to be developed in RP1 and delivered in RP2 (subject to obtaining approval)	Expected In
	RIS2 Defined	These schemes were identified within RIS1 with the intention to start work during RP1 but have since been put on hold due to value for money concerns, they now form part of the potential RIS2 workload	Assumed In
	RIS2 Undefined	Part of the expected, but as yet unallocated, spend within RIS2	Discretionary

Figure 7: Detailed categories of spend

To accurately determine contract values for the Technical Advisor and Delivery Integration Partner, the Highways England's Cost Intelligence team provided detailed percentage breakdowns for contracted roles provided in appendix A1.2 Percentage Breakdown

*The assumed and/or discretionary RIS2 spend in RP1 (April 2015 to March 2020) will be required to undertake a prioritisation exercise to determine and confirm the programme of RIS2 schemes that will be progressed at a later stage. However, there

47. The below cost stack (Figure 8) represents the composition of the OJEU value, incorporating all Technical Advisor and Delivery Integration Partner costs to enable programme delivery.

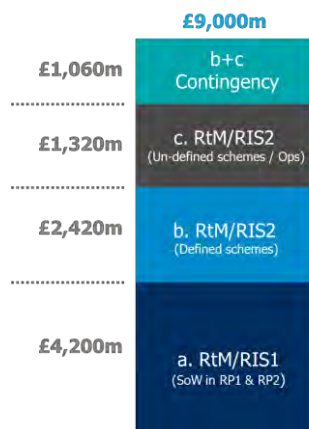


Figure 8: Composition of the OJEU value, incorporating all Technical Advisor and Delivery Integration Partner costs, to enable programme delivery

1.4.3.1 Minimum national value

48. RIS1 defined schemes that require delivery under routes to market, represent financial data which provide guaranteed workload volumes at the lower threshold of the contract range. Furthermore, no additional contingency is added for Operations spend and Local Authorities as Highways England has determined that local public bodies will still have a route to market via existing CWF contracts. Highways England costs will be deducted from workload volumes to inform the minimum contract values.
49. Technical Advisor and Delivery Integration Partner costs for delivering RIS1 schemes, using post-efficiency cost breakdown values, have been used to derive the minimum national value which is expected to be in region of £3.15bn (see Figure 9).

Region	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	Total
NW	7	24	139	163	33	3	1	0	370
Y & NE	3	13	220	65	45	21	0	0	367
SW	3	10	60	110	66	25	1	0	275
SE	8	31	136	236	92	4	0	0	507
Mids.	5	22	128	184	152	46	2	0	539
East	6	18	195	355	170	64	201	82	1091
Grand Total	32	118	878	1113	558	163	205	82	3149

Figure 9: Minimum National Value

is no guarantee that every RIS2 scheme will be adequately defined and RP2 pipeline cannot be confirmed in advance. A profile of spend post RP2 has not been provided, however an estimate has been developed based on historic trends

1.4.3.2 Maximum national value

50. Identified RIS1 schemes and associated Technical Advisor and Delivery Integration Partner actual cost values, using pre-efficiency cost headings, will be used to derive the max contract and OJEU values.
51. The values from the Technical Advisor and Delivery Integration Partner costs for delivering RIS2 schemes, using pre-efficiency cost breakdown, will be added to the RIS1 actuals.
52. A figure of between £85m and £150m per year, across each Region is advised to absorb the planned capital maintenance and likelihood of unplanned capital works materialising across the Operations portfolio.
53. An additional contingency is applied to account for potential Operations spend above the range advised and RIS2 regional variance against the projected RIS2 workload volumes. Highways England costs will be deducted from the volumes of work to inform the total contract values.
54. The maximum national value is expected to be in region of £9.0bn (Figure 10).

Region	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	Total
NW	11	34	224	271	164	52	35	34	824
Y & NE	14	48	377	300	329	293	294	153	1808
SW	6	20	119	231	237	136	36	31	816
SE	11	37	257	397	251	132	71	71	1226
Mids.	10	43	276	356	392	354	162	122	1716
East	12	33	291	514	390	561	613	196	2610
Grand Total	63	215	1545	2069	1763	1529	1210	606	9001

Figure 10: Maximum National Value

1.5 Lot structure and Packaging rules

55. The agreed strategy is based on a series of fundamental rules that influence competition, supplier coverage, package sizes and the ability to award future work. There are 39 schemes (PCF Stage 5-7) planned for RIS1 with Start of Work in RP1 and RP2. These schemes have been grouped in line with the following:
 - Technical Advisor and Delivery Integration Partner work within each Region is be grouped into two or more packages to create regional design and construction communities, improve resilience and promote competition through aligned commercial incentives (Section 3.2.1.2). The number of packages in each Lot will match the number of suppliers appointed as Technical Advisor and Delivery Integration Partner respectively (see Section 1.6), and will depend on the overall volume of work, together with packaging risks previously highlighted. The Routes to Market programme recognises that real opportunity for medium sized contractors to contribute. Therefore, allowing these organisations to compete with similar size suppliers is key to further develop regional resilience and support the growth of UK plc. To assist access to new entrants, the packages of work for the Delivery Integration Partner are split into two bands:
 - **Band A:** Packages under £100m – aimed at regional medium size companies.
 - **Band B:** Packages over £100m – aimed at U.K. national and international suppliers. Suppliers can bid for as many packages as they wish; however, to create fair competition, suppliers who bid for Band B are not permitted to submit bids for Band A.

- After award of initial packages, further schemes grouped into regional packages will be allocated based upon demonstrable performance and subject to announcement of Highways England's Preferred Route to develop schemes through PCF Stage 3-7.

56. The ambition of future awards is to create a number of packages that matches the number of suppliers in a given Region, whose performance justifies their extension of their appointment into RIS2. These packages will then be allocated in a similar way to RIS1. However, there is currently no guarantee that every RIS2 scheme will be simultaneously defined with adequate detail to enable this approach.

1.6 Lot structure and packages of work

57. Varying scheme maturity and a regionally distributed programme has shaped the structure of RIP Lots and value of associated packages.

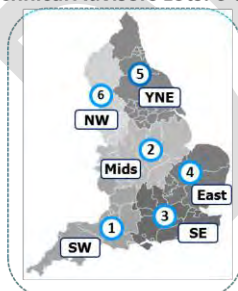
58. Analysis has indicated the (PCF) stage at which individual schemes will transition to Routes to Market. Further guidance from the [REDACTED] has validated the proposed strategy after considering workload volume, engineering scope and geographic distribution.

59. RIS2 schemes (i.e., RIS1 / RP2 SoW (ii) – Defined and RIS2 Defined) have also been taken into account to derive the preferred number of packages considered capable of delivering increased capacity, while providing the opportunity for a broader range of suppliers to service the range of projects offered on a longer term basis. Together with consideration of the "Packaging Rules", these factors have resulted in the following:

- Works within each Region are grouped into discreet packages of two or more, with each region having two Technical Advisors and a minimum of two Delivery Integration Partners.
- Packages are grouped into Lots aligned with the Highways England's six Regions. To broaden the supply base, thereby securing capacity for a RIS2 step change, the East and a combined region of the Northwest and Yorkshire & North East facilitate three Delivery Integration Partners within a single Lot.

60. Lots structure for the Technical Advisor and Delivery Integration Partner is shown in Figure 11.

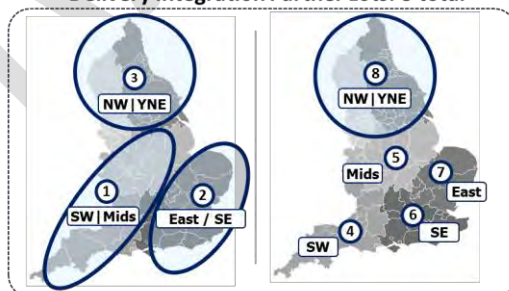
Technical Advisors Lots: 6 total



TA Lots 1-6

- Technical Advisor Lots are aligned with Highways England's six Regions.
- There are 12 packages of work for the Technical Advisors.
- Each region has two packages of work.
- Technical Advisor work is therefore split into six Lots.

Delivery Integration Partner Lots: 8 total



DIP: Band A Lots 1-3

- There are six packages of work in Band A.
- These packages are split between the two Northern Regions, SW and Mids, and the East and SE collectively.
- Delivery Integration Partner Band A is therefore split into three Lots.

DIP: Band B Lots 4-8

- There are 11 packages of work in Band B.
- These packages are split between the two Northern Regions, and the remaining four.
- Delivery Integration Partner Band B is therefore split into five Lots.

Figure 11: Technical Advisors and Delivery Integration Partner Lot structure

1.6.1 Technical Advisor

61. The Technical Advisor RIP-Operations projected spend by region and per annum is reported in Figure 12.

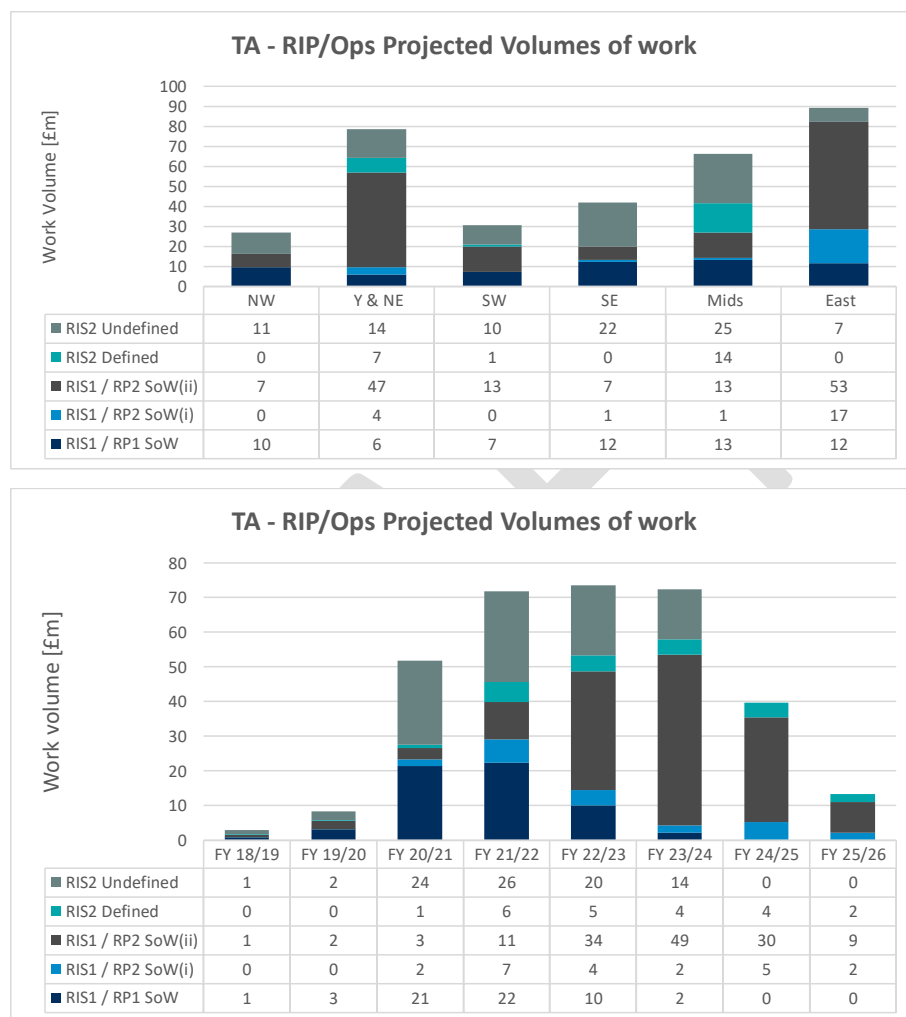


Figure 12: Technical Advisor Work Volumes by Region and annum

OFFICIAL - SENSITIVE

62. The below table (see Figure 13) provides a breakdown of the schemes (PCF Stage 5-7) planned for RIS1 with Start of Work in RP1 and RP2 within each of the 12 packages, Region, and six Lots, for the Technical Advisor.

SW	Mids	SE	East	YNE	NW
Package B1 •A303 Sparkford - Ilchester Package B2 •A358 Taunton – Southfields	Package A1-B4 •A45/A6 Chowns Mill junction improvement •A38 Derby Jct •M54-M6 Toll PEP •A5 Dodwells to Longshoot widening Package A2-B3 •M42 Junction 6 •A46 Coventry Jcn Upgrade •A46 Coventry junction upgrades: Walsgrave •A52 Nottingham J.	Package A3-B5 •East of Lewes Sust Trans Meas (A27) •M25 J10/A3 Wisley Interchange •A2 Bean Ebbsfleet •M3 Junction 9 improvement Package A4-B6 •A27 Arundel Bypass •A27 Worthing & Lancing Imp •M27 Southampton Jcns •M25 J25 Imp •M25 J28 Imp •M2 Junction 5 Improvement	Package B7-B8 •A428 Black Cat - Caxton Gibbet Phase A •A428 Black Cat - Caxton Gibbet Phase B •A47 North Tuddenham to Easton •A47 Blofield to North Burlingham dualling •A47 & A12 junction enhancements •A47/A11 Thickthorn Junction •A47 Guyhirn Junction •A47 Wansford to Sutton Package B9 •A12 Chelmsford to A120 widening B •A12 Chelmsford to A120 widening A	Package A5 •M621 Junctions 1-7 improvements Package B10 •A1 Scotswood to N Brunton •A1 Birtley to Coal House widening •A52 Nottingham J.	Package A6-B12 •M56 New Junction 11a •M6 Junction 19 Improvement •A57 (T) to A57 link road Package B11 •A5036 Port of Liverpool •A585 Windy Harbour - Skippool
Lot 1	Lot 2	Lot 3	Lot 4	Lot 5	Lot 6

Figure 13: Technical Advisor Packaging Strategy - Breakdown of schemes and packages. The RIS2 Defined schemes are not reported in the table.

63. The work packages and number of schemes for each Technical Advisor by Lot and Region are reported In Figure 14.

Lot	Region	Lot Value [£m]	RIS1				RIS2
			TA A [£m]	# schemes	TA B [£m]	# schemes	Future allocation [£m]
1	SW	31	5	1	2	1	23
2	Mids.	66	7	4	7	4	52
3	SE	42	7	6	6	4	29
4	East	89	18	8	11	2	60
5	YNE	79	9	3	1	1	69
6	NW	27	5	3	5	2	17
Total		334	51	25	32	14	251

Figure 14: Technical Advisor work packages and number of schemes for each supplier

1.6.2 Delivery Integration Partner

64. The Delivery Integration Partner RIP-Operations projected spend by region and per annum is reported in Figure 15.

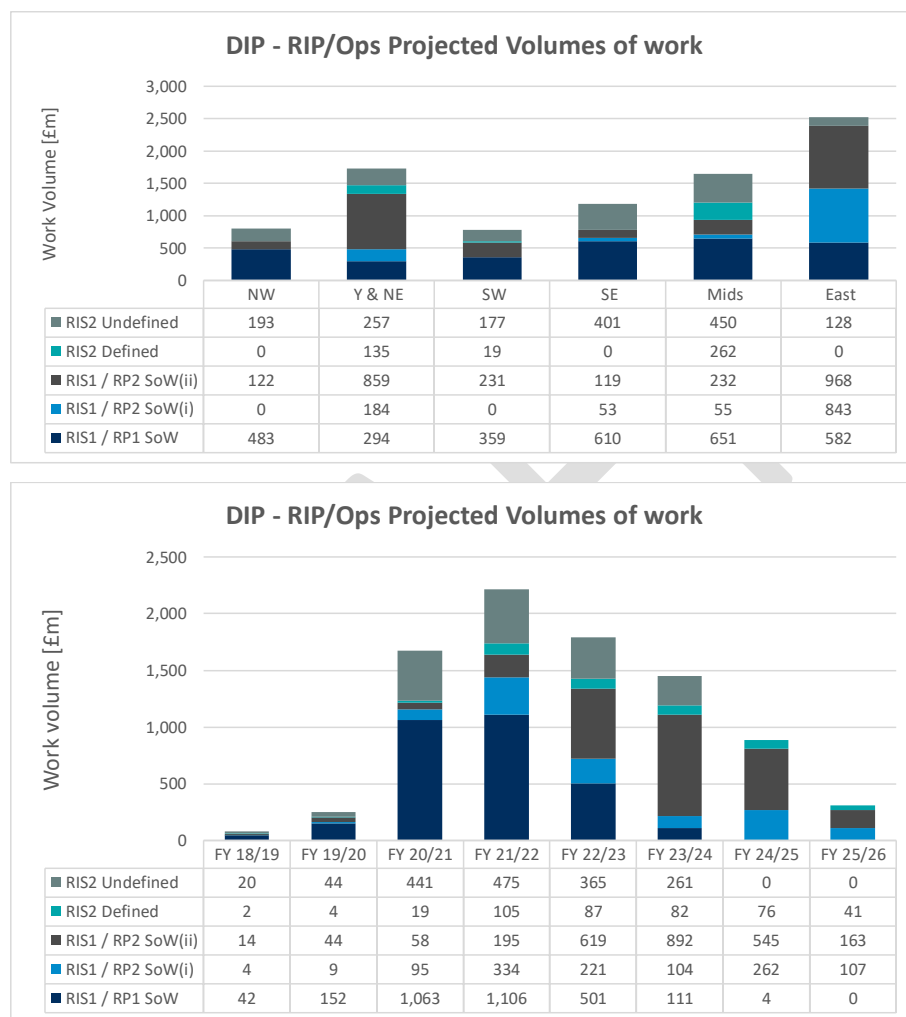


Figure 15: Delivery Integration Partner work volumes by Region and annum

65. The below table (Figure 16) provides a breakdown of the schemes (PCF Stage 5-7) planned for RIS1 with Start of Work in RP1 and RP2 within each of the 18 packages, Region, seven Lots and two Bands, for the Delivery Integration Partner.

Band	SW	Mids	SE	East	YNE	NW
Band A: Lots 1-3 (< £100m)	Lot 1	Package A1 •A45/A6 Chowns Mill junction improvement •A5 Dodwells to Longshoot widening Package A2 •A46 Coventry Jcn Upgrade •A46 Coventry junction upgrades: Walsgrave	Package A3 •East of Lewes Sust Trans Meas (A27) •M3 Junction 9 improvement Package A4 •M25 J25 Imp •M25 J28 Imp •M2 Junction 5 Improvement	Lot 2	Lot 3	Package A5 •M621 Junctions 1-7 Improvements Package A6 •M56 New Junction 11a •M6 Junction 19 Improvement
Band B: Lots 4-8 (> £100m)	Package B1 •A303 Sparkford - Ilchester Package B2 •A358 Taunton – Southfields	Package B3 •M42 Junction 6 •A52 Nottingham J. Package B4 •A38 Derby Jct •M54-M6 Toll PEP	Package B5 •M25 J10/A3 Wisley Interchange •A2 Bean Ebbsfleet Package B6 •A27 Arundel Bypass •A27 Worthing & Lancing Imp •M27 Southampton Jcns	Lot 7 Package B7 •A47 North Tuddenham to Easton •A47 Blofield to North Burlingham dualling •A47 & A12 junction enhancements •A47/A11 Thickthorn Junction •A47 Guyhirn Junction •A47 Wansford to Sutton Package B8 •A428 Black Cat - Caxton Gibbet Phase A •A428 Black Cat - Caxton Gibbet Phase B Package B9 •A12 Chelmsford to A120 widening B •A12 Chelmsford to A120 widening A	Lot 8	Package B10 •A1 Scotswood to N Brunton •A1 Birtley to Coal House widening •A1 North of Ellingham Package B11 •A5036 Port of Liverpool •A585 Windy Harbour – Skippool Package B12 •A57 (T) to A57 link road

Figure 16 Delivery Integration Partner Packaging Strategy - Breakdown of schemes and packages. The RIS2 Defined schemes are not reported in the table.

66. The work packages and number of schemes for each Delivery Integration Partner by Lot and Region are reported in Figure 14.

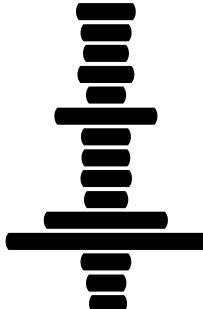

Lot	Region	Lot Value [£m]	RIS1						RIS2
			DIP A [£m]	# schemes	DIP B [£m]	# schemes	DIP C [£m]	# schemes	Future all. [£m]
1	SW / Mids.	183	83	2	25	2	-	-	75
2	SE / East	247	94	3	78	2	-	-	75
3	YNE / NW	178	67	2	36	1	-	-	75
4	SW	710	255	1	104	1	-	-	351
5	Mids.	1,542	341	2	257	2	-	-	944
6	SE	1,013	266	3	226	2	-	-	521
7	East	2,446	581	2	556	2	288	6	1,021
8	YNE / NW	2,349	443	3	243	2	173	1	1,490
Total		8,667	2,130	18	1,525	14	461	7	4,552

Figure 17: Delivery Integration Partner work packages and number of schemes for each supplier

1.7 Supplier planning

67. Understanding the appetite of supply markets to accept delivery risk and providing early visibility of the programme pipeline, is crucial to developing a market that will be 'fit-to-supply'.
68. To ascertain whether the proposed RIP solution is deliverable, Highways England has sourced support from [REDACTED] to stress test the preferred delivery model and associated regional volumes for RIS1 with Start of Works in RP1 and RP2. This analysis tested the proposed packaging strategy, to validate the optimal number of suppliers per discipline, by geographic region, required to support successful delivery.
69. This analysis resulted in the assessment of a supplier pool comprised of smaller size domestic suppliers, considered able to deliver packages of work up to £100m, domestic suppliers considered able to deliver packages of work over £100m and potential European suppliers able to provide significant capacity in a potentially constrained market.
70. Based on the Lot structure and packaging strategy described, the following conclusions are drawn:
- **Band A competition:** Increasing the Band A threshold for Delivery Integration Partner packages of work (£100m) will reduce the number of potential smaller Band A suppliers able to bid inviting mid-size U.K. national and international suppliers to compete for Band A packages, at the possible expense of Band B capacity,
 - **Supplier mix:** Having the same combination of suppliers in any two given Lots may result in one supplier delivering four packages of work in case of other supplier total failure.
 - **Delivery Integration Partner capacity:** The procurement rules which require the suppliers to be able to service the largest package in any given Lot in order to be eligible to bid for that Lot, will restrict the market, but however provide the necessary contingency to support the competition based model.
 - **Technical Advisor capacity:** Whilst most of the suppliers identified can comfortably service regional packages, if the largest Technical Advisor providers are unable to bid due to commercial involvement in a Delivery Integration Partner package, supply will be severely restricted but not to the point of preventing programme delivery.

71. The indicative suppliers potentially available to bid for RIP-Operations packages of work are reported in Figure 18 and Figure 19 for Technical Advisor and Delivery Integration Partner respectively.

No. of potential Technical Advisors	Current Highways England Consultants	Potential Highways England Consultants / Technical Advisor Suppliers
23		

available to bid for RIP-Operations packages of work*


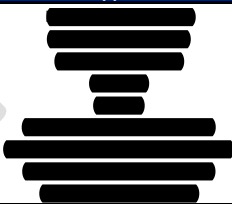
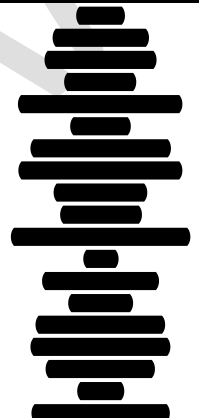
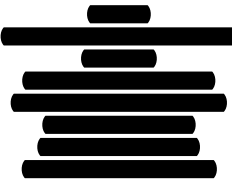
Band	No. of potential Delivery Integration Partners	Total No. of suppliers per Band	Current Highways England Consultants	Potential Highways England Consultants / Technical Advisor Suppliers
Band A (< £100m)	12	39		
Band B (> £100m)	27	27		

Figure 19: Indicative number of Delivery Integration Partners potentially available to bid for RIP-Operations packages of work*⁵

*⁵ The suppliers identified in the table above considers the suppliers' ability to deliver the work packages; however, it does not consider their appetite to do so. Both Delivery Integration Partners (e.g., Ch2m, etc.) and Delivery Integration Partners Self-Delivery (Jackson Civil Engineering, etc.) are reported in the table above.

████████████████████

72. To assess the attractiveness of Highways England as a client amongst different sectors of the market, supplier briefing days and webcast events have been held to determine suppliers' appetite and view with respect to the RIP model proposed.

73. Following the engagement with circa 190 distinct suppliers, Routes to Market supplier engagement day feedback analysis has captured the following key points that the solution has considered:

- **Supply chain structure:** Many small and medium size contractors have business models that require a national coverage in the UK highways sector to maintain a healthy level of turnover. Bridging possible capacity issues within RIP and utilising a combination of large and medium sized contractors, all working collaboratively as core suppliers to Highways England, is therefore considered crucial.

Three or four suppliers are appointed per region, is therefore considered to provide increased capacity and a broader access to a range of suppliers.

- **Enhanced pipeline visibility:** Consistency of work is considered to provide the most favourable opportunities for suppliers to continuously improve and deliver real efficiencies through long term investment. Engagement over an extended period is considered to drive better network planning and hence customer experience local understanding and ownership.

Extended pipeline visibility beyond that of a traditional four year framework, where possible is preferred.

- **Staggered procurement:** Routes to Market procurement process will be a significant undertaking for suppliers. Given that a tenderer for a Delivery Integration Partner role will include at least one consultant in a team, and that separately that consultant may be tendering for the Technical Advisor role, there may be significant confidentiality challenges to overcome.

A staggered procurement exercise for Delivery Integration Partner & Technical Advisor is considered to provide the opportunity for a lean and more efficient procurement process.

- **Secondary competition and allocation of work:** Delivery focus should be on improving value and reducing unit cost.

Allocation of work based on demonstrable performance is considered as a possible mechanism to share best practice and improve predictability in programme planning and supplier delivery.

- **Drive innovation:** Steady or smoothly growing workflow is considered to enable effective resource planning, and supplier development, leading to improved performance thorough learning and standardisation. A more stable workflow is therefore considered preferable.

OFFICIAL - SENSITIVE



Routes to Market Solution Design & Development Delivery Model December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

2 Delivery Model - Overview

74. Highways England Major Projects is undergoing a Change Programme to transform the capacity and capability to deliver Major Projects. The strategic drivers for the Programme are:

- **Growth and complexity:** emergence of mega-projects
- **Performance:** performance improvement across safety, customer and delivery
- **Alignment:** Major Projects to align to the delivery of RIS 1 and beyond

75. The RIP sits within Major Projects and therefore the approach to the Routes to Market (RtM) RIP-Operations delivery model aligns to the target state of the Major Projects Change Programme. The delivery model is also considered in parallel with the following RtM objectives:

- **Highways England and Supply Chain Capacity and Capability:** developing regionally focused relationships over an extended Delivery Integration Partnership duration.
- **Asset Integrity:** improving the continuity of corporate memory across investment periods and reducing the frequency of interventions over an asset lifecycle to reduce network disruption.
- **Enhanced level of Project and Programme Management:** delivering benefits led solutions rather than 'engineering led' designs and driving the continuity of design across both a programme of work and individual scheme lifecycles

76. In response to the above, this section focuses on the roles that Highways England and the supply chain will undertake, to enable effective, sustainable delivery.

2.1 Delivery model

77. The RtM RIP-Operations delivery model, shown in Figure 20, displays the functions that Highways England as Network Owner, and the supply chain (Technical Advisor and Delivery Integration Partner), are responsible for at a regional level.

78. Corporate Functions within Highways England that provide services to support the delivery of the RIP in a matrix fashion are shown alongside the model (see Appendix A2.1 Routes to Market RIP-Operations Delivery Model for the function definitions). The alignment of the regional delivery vehicle to the regional and national Centre's of Excellence within RIP is described in Section 2.4.1.

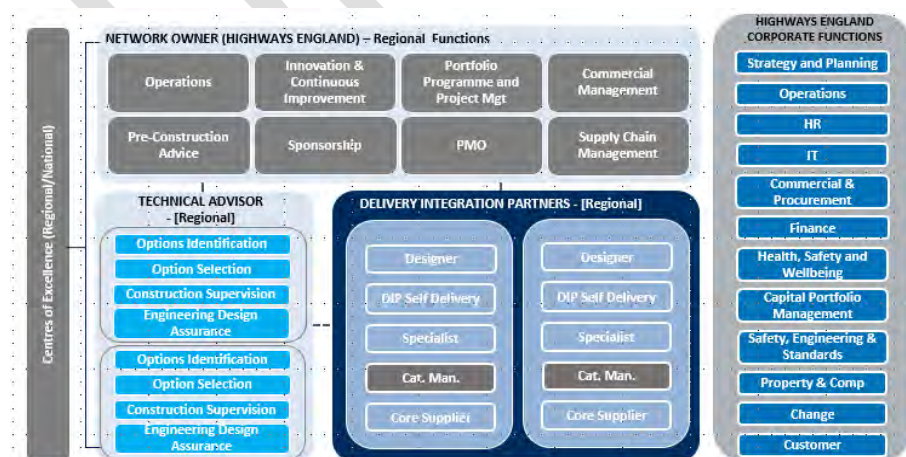


Figure 20: RIP-Operations Regional Delivery Partnerships Model

OFFICIAL - SENSITIVE

79. The three key roles shown in the model are Highways England as Network Owner, the Technical Advisor and the Delivery Integration Partner. How these roles operate and interact is described in Section 2.3. The governance structure supporting the RtM RIP-Operations delivery model to facilitate transparent escalation processes and timely decision making within RIP is described in Section 2.4. The systems being implemented through the Major Projects Change Programme to support improved governance and controls and delivery performance are outlined in Section 2.5.

2.2 Alignment of the RtM RIP-Operations Regional Delivery Partnerships model to Major Projects Change Programme Operating model

80. Highways England Major Projects is implementing large scale transformation across the organisation. Its Change Programme has included:

- A review of the Highways England Major Projects operating model, focusing on a review of programme management capability.
- The planned procurement of a portfolio of systems.
- An assessment of internal capability within Highways England Major Projects.

81. The RIP-Operations delivery model is aligned to this wider transformation agenda. The following was used to align the RtM RIP-Operations delivery model to this wider transformation agenda:

- Mapping of the functions and services identified in the Major Projects operating model, considered key to delivery, to the RtM RIP-operations delivery model
- Validating the services within each function with the Highways England function leads)
- Validating the maturity of the services at the start of the Contract Award and during the Contract term with the Highways England function leads.
- Validating the requirements of the systems to be in place at Contract Award.

82. The stakeholders consulted to validate the delivery model and the methodology used to determine maturity and implementation priority can be found in Appendix A2.

83. The internal capability to deliver the services identified within the RtM RIP-Operations delivery model is assessed through the Major Projects Change Programme.

2.3 RtM RIP-Operations delivery model role descriptions

84. The roles of Highways England as Network Owner, the Technical Advisor and the Delivery Integration Partner responsible for each of the service areas and corresponding functions described in the delivery model are presented within this section.

2.3.1 Highways England as Network Owner

85. As the Network Owner, Highways England will combine Major Projects RIP and Operations at a regional level and work with the supply chain to programme manage the delivery of the RIP.

86. The eight regional functions operated by the Network Owner as part of the RtM RIP-Operations delivery model are Operations, Innovation & Continuous Improvement, Programme and Project Management, Commercial Management, Pre-Construction Advice, Sponsorship, Project Management Office (PMO) and Supply Chain Management. The Delivery Integration Partner and Technical Advisor are managed through the Programme and Project function.

87. A description of the services provided by each of the functions is described below, with a detailed description of each service provided in Appendix A2.1 Routes to Market RIP-Operations Delivery Model.

2.3.1.1 Operations

88. The regional Operations function directly interfaces with the RtM RIP delivery model and is integrated with the deliver teams throughout the PCF lifecycle. This will allow the project teams to utilise early design input to de-risk delivery, improve whole-life asset planning and design schemes with the future maintenance regime in mind.
89. The Operations function provides the following services; Planning and Development, Scheme Delivery and Service Delivery, to provide an active, supporting interface throughout the delivery process. This structure also improves the ability of Highways England, as Network Owner, to monitor the level of asset information received to support the development of data – rich asset information plans.
90. The Operations function liaises with the Sponsorship function to provide Customer and supplier insight at the start of a project. This allows the Sponsor to develop Client requirements that take into account future needs. The functions also engage at the end of a project during handover to ensure the requirements have been met.
91. The function also works closely with the delivery teams in the Project, Programme and Portfolio Management function throughout the design and construction phases. This supports the provision of available asset information and also offers ongoing assurance that the Client requirements are understood.
92. It is expected that the services within the Operations function will be fit for purpose to provide a Programme-focused management approach to the RIP Regional Delivery Partnerships Model within 12-18 months before the start of the Contract Award, with no external recruitment required to fulfil the services.

2.3.1.2 Innovation and Continuous Improvement

93. The Innovation and Continuous Improvement function at a RIP regional level leads in developing a collaborative culture between Highways England, as the Network Owner, and the supply chain to identify opportunities in current and future ways of working that unlock better value and performance.
94. To achieve collaboration within the supply chain community the Innovation and Continuous Improvement function:
- Supports Highways England's strategic objectives to introduce opportunities to improve value for money.
 - Provides leading practice research and lessons learnt in partnership with the supply chain for the delivery teams within the PPPM function to utilise.
 - Captures data and measures the efficiency from a change or any business improvement initiatives introduced; for example, new standardised designs to then use within future schemes.
95. As part of the RtM RIP-Operations delivery model, it is the intention to establish regional Sustainable Improvement Hubs and regional and national Centre's of Excellence to serve as focal points for innovative discussion and implementation of any value improvement opportunities identified, see Section 2.4.1 for further detail.
96. The function also includes Delivery services such as coordinating third party utility company input and Development Consent Order (DCO) coordination, to provide advice and access to management of the suppliers working on a DCO.

97. The services within this Function are rated at a maturity score of two and three, however it is expected that these services will be developed to be fit for purpose within 12-18 months before the start of the Contract Award, with no external recruitment required to fulfil the services.

2.3.1.3 Portfolio Programme and Project Management

98. The regional Portfolio, Programme and Project Management (PPPM) function is responsible for delivering the design and construction of RIP schemes.

99. At the start of a scheme, a Project Manager within the PPPM function receives the Client requirements from the Sponsorship function. They then coordinate with the Sponsorship function (Project Sponsor) to develop a Stage Management Plan to outline how product development will be undertaken throughout the PCF lifecycle and a Project Execution strategy to include the specific products required at each stage.

100. The suppliers (Delivery Integration Partner and Technical Advisor) may be consulted on these documents and receive feedback on the content, to support their understanding of delivery requirements, thereby mitigating the risk of re-work. The PPPM function will then lead the Product Development delivery, managing the Delivery Integration Partner and Technical Advisor in the production of their documentation.

101. The following services are undertaken by the PPPM function throughout the RIP project PCF lifecycle:

- Managing the suppliers (Technical Advisor from PCF 1 and the Delivery Integration Partner from PCF 3) during the design and construction of a scheme, including the supplier's performance, based on contractual commitments and agreed payment and performance mechanism.
- Lead Project delivery team meetings to review progress of the suppliers each month.
- Managing the schedule through project plans and managing scope against a signed-off baseline position. The escalation of deviations outside of agreed project contingencies will follow the governance structure set by the PMO function and be agreed by the Sponsorship function.
- Leading a delivery team through the required gateway process at the end of each PCF phase. The Sponsorship function agrees that the requirements of the PCF stage have been met.
- Managing and forecasting risks, issues, assumptions and dependencies.
- Managing workforce scheduling to ensure the right resources are in place for the right tasks.
- Engaging with and managing project specific stakeholders proactively and regularly, through active, planned engagement and communication in alignment with programme and Sponsorship stakeholder requirements.
- Coordinating technical, legal and regulatory compliance and design standard assurance of the relevant products within each phase of the PCF lifecycle. The function will also coordinate with Delivery Services within the Innovation and Continuous Improvement function to ensure best practice methods for construction and design are being implemented within schemes.
- Supporting the corporate Procurement function with the long-term planning.
- Liaising with the Sponsorship function, the delivery team will hand-over the scheme to the Operations function at the end of the PCF lifecycle.

102. Although it is envisaged that Highways England will be in a position to undertake the services required within the PPPM role at the start of the Contract, whilst it is improving its internal capability, Highways England as Network Owner requires close integration with the supply chain to provide the programmatic approach to delivery it is setting out to achieve. Therefore, Highways England may call upon the appointed Suppliers to assist in the delivery of Network Owner services.

2.3.1.4 Commercial Management and Pre-Construction Advice

103. The regional Commercial Management function within the RtM RIP delivery model works alongside the PPPM function to provide Cost Estimation and Commercial and Contract management services. This involves using project designs, whole life Operation and Maintenance requirements, risk analysis and project planning documents to provide an estimate of the project cost, and also working with the PPPM function's delivery teams to ensure the suppliers meet their contractual commitments.

104. The Pre-construction advice function will validate Supplier prices for proposed solutions against the allocated budget. This is a regional function, supplied by a centrally managed capability and will be utilised during PCF 2.

105. It is envisaged that the services within the Commercial Management function will be fit for purpose to provide a Programme-focused management approach before Contract Award.

2.3.1.5 Sponsorship

106. The regional Sponsorship function owns the business case for the duration of a project's lifecycle, identifying and ensuring the viability for delivering project benefits and outcomes. Any additional benefits agreed through innovations within the Centres of Excellence will be included within a business case if required. Throughout a scheme the Sponsor is accountable for ensuring value for money is delivered and monitors the benefits.

107. At the initiation of a project and then throughout the PCF lifecycle, the Sponsorship function undertakes the following services:

- Accountable for the strategic and full business cases to capture benefits at project and programme level and influence the programme direction. This information will also be shared with the PMO function in order to allow strategic analysis to be performed.
- Lead the high-level review of options for the scheme before the scheme is managed through the PPPM function's delivery team and accountable for Preferred Route Selection.
- Identify any internal and external dependencies between and across programmes, and understand, document and actively manage the interfaces between the programme and wider Major Projects and Highways England stakeholders.
- Provide Client scheme requirements to be adhered to by the PPPM function's delivery team.
- Approval of a Stage Management Plan with the PPPM functions delivery team at the start of each stage of a scheme to outline how product development will be undertaken throughout the scheme.
- Accountable for the Integrated Assurance and Approvals Plan for the project setting out the necessary governance.
- Chair regular Project Committees to provide approvals, advice and escalate issues, and hold the delivery team within the PPPM function to account in delivering the benefits.
- Manage and escalate (if required) all deviations from the signed off baseline scope and anything that is outside of agreed project contingencies in liaison with the delivery team.
- Manage the investment case and project funding at each PCF stage.
- Chair and approve the PCF gateway process for each project to ensure proper project scrutiny of the delivery teams work and governance at all formal stages.

- Undertake regional stakeholder mapping and engagement with Highways England and external stakeholders. Stakeholder engagement shall be carried out proactively and regularly in alignment with PPPM and the PMO function at a project and programme level.
- At the end of a project, the Function will formally close the project, handing-over all final documentation to the PMO Function.

108. It is envisaged that the services within the Sponsorship function will be fit for purpose to provide a Programme-focused management approach before Contract Award.

2.3.1.6 Project Management Office

109. The regional Project Management Office (PMO) function is responsible for the definition and maintenance of standards and processes for Governance, Assurance and Controls.

110. As part of programme controls, at the start and throughout the project, the PMO function provides the Sponsorship function with regional programme objectives based on national Highways England requirements. Throughout the PCF lifecycle, the PMO function implements the programme and project level change control process to be administered through Sponsorship and also provides the governance structure and support for internal and external reporting.

111. The function creates and maintains programme wide plans as part of the reporting process, identifies and analyses risks, issues and opportunities at a portfolio level, and is also responsible for document control and internal programme communications.

112. The PMO function is responsible for active project assurance to inform the Programme Directors that projects are performing to expectations and elective internal assurance, used to assure any aspect of a scheme or programme when required. The function will also provide an assurance role to the Sponsorship function by tracking portfolio level benefits to check that benefits are being realised as planned.

113. It is envisaged that the services within the PMO function will be fit for purpose to provide a Portfolio -focused management approach before Contract Award.

2.3.1.7 Supply Chain Management

114. The Supply Chain Management function provides overview of and insight to the wider supplier marketplace to support Highways England in developing its existing Supply Chain Strategy and capitalise on market opportunities. The function supports the development of initiatives at the local, regional and national level in collaboration with the Innovation and Continuous Improvement function to drive value for Highways England. It also supports consideration of whole life cost solutions as part of improvement initiatives, alongside the Operations, Innovation and Sponsorship functions.

115. The function will contribute to the success of the proposed Centre's of Excellence (Section 2.4.1) and use the forums to develop new ways of working initiatives with the supply chain. Any initiatives put forward to implementation through the Centre's of Excellence or Sustainable Improvement Hubs will be communicated to the Highways England's existing supply chain.

116. Within the regional communities developed through the regional Sustainable Improvement Hubs, the Supply Chain Management function provides an 'Honest Broker' service, to overcome any potential concerns relating to sharing supply chain data. It is recognised that data related to Delivery Integration Partners, Technical Advisors, and their respective supply chains may be commercially sensitive. All data will be anonymised before sharing and agreed by the data provider.

117. Category Management is considered to offer a considerable opportunity for the supply chain function within the Centre's of Excellence and Sustainable Improvement Hubs.

2.3.1.8 Category Management

118. Category Management has evolved significantly at Highways England. Traditionally a solution focused on commercial arrangements and frameworks, the strategy now reflects a change in Highways England's approach towards greater understanding of portfolio – wide spend, available supply and better insight into the supply chain, and the products and services it provides.
119. Mandating Category Management is a major step forward in how Highways England manages its supply chain. By implementing a more collaborative and integrated approach, category management will improve the way Highways England operates by:
- Using market knowledge to understand what suppliers are capable of delivering to achieve sustainable performance.
 - Developing a more effective, informed PPPM function that is able to mitigate supply chain risk in project delivery.
 - Improving channels of communication to improve workforce safety and the customer experience.
120. The category management process will be supported by information gathered through Market Development and Intelligence (MDI) and will complement the existing Value Chain Plan (VCP) approach adopted by Highways England through the Centre's of Excellence.

2.3.1.9 Operating principles

121. Category management operates through the following principles:
- Where an existing category arrangement is already in place, this is mandated for all RIP-Operations procurements.
 - New category arrangements, developed during the lifecycle of the RtM RIP procurement through the regional Sustainable Procurement Hubs and regional and national Centre's of Excellence, should be adopted as soon as it is practical and legal to do so.
 - As new ideas and ways of working develop through the Hubs and Centre's of Excellence, novel opportunities may be put forward such as a new procurement route for future categories.
 - Category managers monitor the overall performance of the category across the investment programmes and regions to confirm compliance, category level performance and opportunities for improvement. Updates are provided through the Centre's of Excellence governance structure.

2.3.1.10 Category Arrangements

122. A standardised Category Tree is being defined for use across Highways England. This will allow a common understanding of each category, corresponding products and services and will inform how and where these are used across Investment Programmes and Operations. At present, the category tree identifies 20 defined categories, each containing between one and seven products or services.
123. There are currently three category or product arrangements in place and active; these are Pavements, Technology (matrix signs, CCTV cameras, radar systems and electrical cabinets) and Traffic Transport Management. Specialist Surface Treatment, providing products within the pavements category is currently under development, with early analysis initiated on a fifth (gantries).

2.3.2 Technical Advisor Role

124. The traditional role of designer during PCF stages 1 and 2 is redefined to reflect the options appraisal nature of the services that requires minimal design. The Technical Advisor is the principal designer for PCF stage 1 and 2 and delivers the PCF product deliverables as specified by the Network Owner delivery team, sitting within the PPPM function. This includes high-level route options for prospective schemes and outline technical solutions, prior to the agreement of the Preferred Route. As part of Options Identification and Options Selection services, the Technical Advisor is also expected to complete land referencing.
125. At the end of PCF Stage 2, the Technical Advisor is expected to optimise transition between the options phase and the detailed design, to facilitate a structured handover and provide clean boundaries that reduce friction between design organisations (Technical Advisor and the Delivery Integration Partner).
126. From PCF Stage 3 to 7, the Technical Advisor fulfils a technical assurance and construction supervision role to the appointed Delivery Integration Partner, for the remainder of each scheme. The Technical Advisor provides NEC supervision and Project Management duties as delegated by the Network Owner PPPM function, which may include site quality assurance and technical support to commercial assurance. The Technical Advisor attends the monthly Project Team delivery meetings to update on progress.
127. Throughout the scheme delivery, the Technical Advisor collaborates with the Delivery Integration Partner and the Network Owner Supply Chain Management and Innovation functions to identify opportunities for innovation and increasing value to Highways England. The Technical Advisor shares programme and scheme data within its regional community to identify any current or future benefit opportunities to improve value to Highways England or deliver efficiencies in programme delivery. Recommendations for improving value to achieve Highways England regional and national benefits targets go through the governance structure for the regional Sustainable Improvement Hubs and regional Centre's of Excellence.

2.3.3 Delivery Integration Partner Role

128. The Delivery Integration Partner undertakes development and construction phases for planned schemes, within a given Region, from PCF stage 3 to 7. The Delivery Integration Partner may also provide pre-construction advice within PCF 2 or early facilitation of geotechnical investigation surveys at the Network Owner's (PPPM functions delivery team) request in collaboration with the Technical Advisor.
129. By involving the Delivery Integration Partner earlier in the PCF lifecycle, Highways England anticipates improved design management, inward investment opportunities, and enhanced workforce familiarity with specific sections of the network as a result.
130. The Delivery Integration Partner acts as Principal Designer and Principal Contractor to construct sustainable schemes through its suppliers (e.g., strategic partners, materials manufacturers). The Delivery Integration Partner may self-deliver core elements of the Delivery Integration Partner programme if this demonstrates improved economic advantage, as agreed by Highways England. As mentioned in the Supply Chain Management function section, the Delivery Integration Partner is required to draw on Highways England established supply chain Categories to support delivery.
131. At the start of the design phase of a scheme, the Delivery Integration Partner liaises with the Network Owner Project Manager within the PPPM function, to produce a planning and production strategy. This document demonstrates how designs will be produced at each PCF stage and provides a construction plan and logistic strategy within the construction phase. Document content is cognisant of the Stage Management Plan and Client requirements produced by the Project Manager in liaison with the Sponsorship function.

- [REDACTED]**
- 132. The Delivery Integration Partner may also be required to produce a procurement strategy, materials logistics plan and a skills and capability strategy to review with the Supply Chain Management function, to understand any early opportunities for value improvement that should be shared with within regional Sustainable Improvement Hubs.
 - 133. Development and construction, the Delivery Integration Partner undertakes a number of services including principal CDM duties and Client duties including Safe by Design, producing outline and detailed designs that maximise technical innovation and Client objectives and the provision of PCF products as specified by the Network Owner Project Manager.
 - 134. To produce the PCF products for each PCF stage, the Delivery Integration Partner will liaise with the Operations function to understand future operations and maintenance requirements and may also provide specialist advice on whole-life costing, particularly at PCF 3 to benefit from early engagement within the scheme.
 - 135. Throughout a scheme, the Delivery Integration Partner adheres to any commercial, health, safety, welfare and quality assurance activities the Network Owner Project Manager may specify in order to complete the scheme. Activities may also include stakeholder management assistance and DCO creation.
 - 136. In liaison with the Technical Advisor and the Network Owner delivery team, the Delivery Integration Partner helps to facilitate a structured handover at the end of a scheme to the Operations function to reduce the risk of loss of asset data.
 - 137. It is a fundamental requirement for Delivery Integration Partner within a region, to collaborate with the Network Owner Supply Chain Management function and Technical Advisor. This will be done primarily through the proposed regional Sustainable Improvement Hubs and Centre's of Excellence, where innovative practice and scheme data is shared to benefit the regional community. It is also an opportunity for suppliers to raise any issues or integration opportunities on projects that span over two regions or more.
 - 138. The schematic below shows how Highways England, as Network Owner and the supply chain will interface throughout the project lifecycle (PCF stage 1-7) through the RtM RIP-Operations Regional Delivery Partnerships Model (Figure 21).

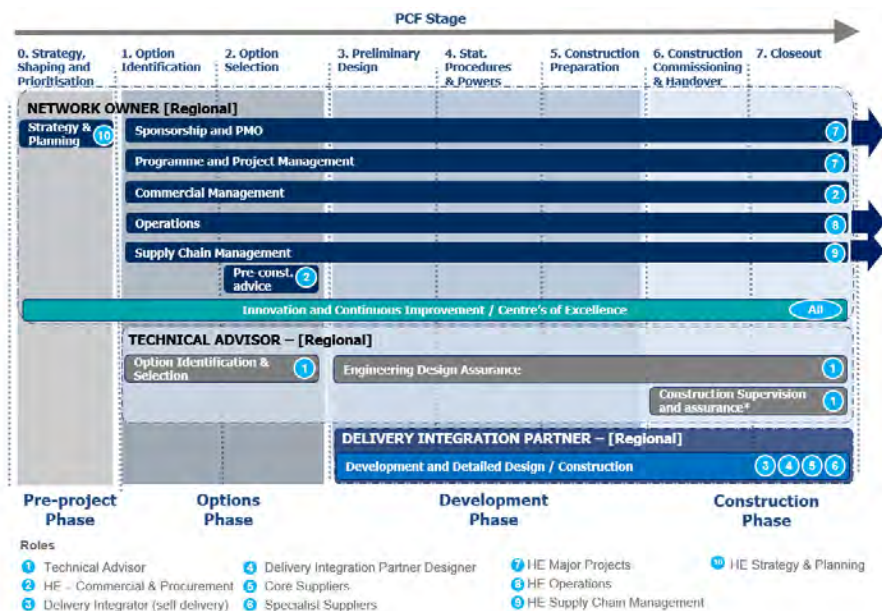


Figure 21: RIP-Operations delivery model interaction through the PCF lifecycle

2.4 Governance of the RtM RIP-Operations Regional Delivery Partnerships Model

139. The RIP governance structure implemented as part of the Major Projects Change Programme is aiming to achieve a portfolio management approach, at a regional and national level, to improve planning and delivery. The RtM RIP-Operations Regional Delivery Partnerships Model will, therefore, use the existing Major Projects RIP governance structure that consists of the following committees:

- Project Committees chaired by the [REDACTED]
- Regional Programme Committees chaired by [REDACTED]
- RIP Programme Committee chaired by [REDACTED]
- Major Projects Executive Committee chaired by [REDACTED]

140. The Major Projects RIP governance structure below shows the general escalation and accountability route for the delivery of projects. It shows that the Project Committee is accountable to the RIP Programme Committee and has the authority to direct the project within the remit set by the RIP Programme Committee. The Project Committee also reports progress through the Regional Programme Committees from which they may seek advice and escalate issues as appropriate. All committees include the option for representatives to attend from other Highways England (Network Owner) functions or the wider business and from external parties such as the DfT and supply chains.

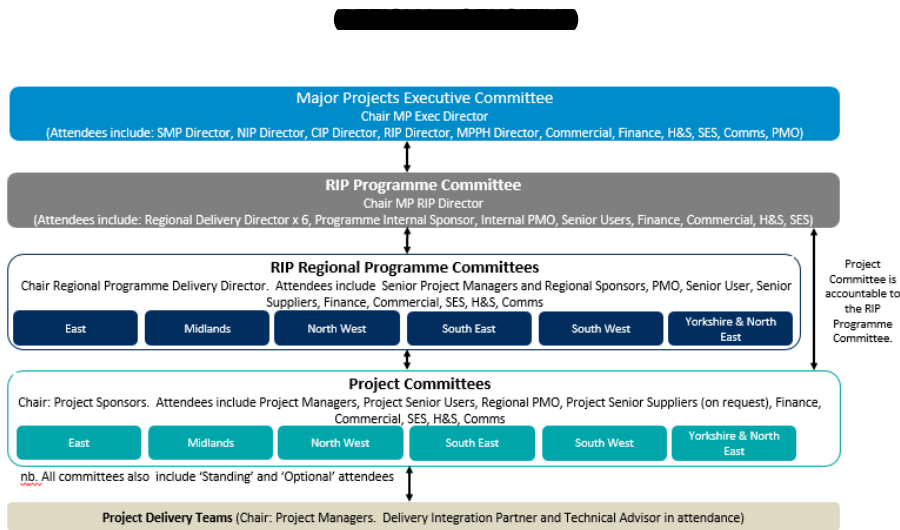


Figure 22 Major Projects RIP Governance Structure. All committees include the option for representatives to attend from other Network Owner functions such as Commercial Management and Supply Chain Management and also from external parties such as the DfT and supply chain (Delivery Integration Partners and Technical Advisors). Project Delivery team meetings for any project a Delivery Integration Partner and Technical Advisor sit within, under a Network Owner Project Manager, will require their mandatory attendance.

141. The [Implementation of New Major Projects Governance Arrangements](#) document (MPI -59-062017 / RIP PMP) outlines the terms of reference, in detail, for each Committee. A summary is shown in Figure 23 below.



Figure 23 High level terms of reference for each Committee. All committees include standing members such as Subject Matter Experts and Commercial Managers.

142. All projects within the RtM RIP-Operations portfolio are managed within one region and are delivered through the Major Projects RIP governance structure. Where one project's boundaries span between regions, only one region will be accountable for managing the project. The regional project interfaces will be managed through the Regional and RIP Programme Committees.

143. It is the intention, as part of the RtM delivery model, to establish regional Sustainable Improvement Hubs and regional and national Centre's of Excellence. These will provide a forum for suppliers to collaborate between regions and unlock any issues and opportunities to promote efficiencies in the delivery of a project.

2.4.1 Centres of Excellence and the Sustainable Improvement Hubs

144. The regional and national Centres of Excellence and the Sustainable Improvement Hubs will provide a focal point for regional and national RIP communities to unlock value. This will be done a number of factors that include:

- **Collaborative exchange:** of information between the Highways England and the supply chain, and also internally at the programme and business level.
- **Programme optimisation:** through improved network planning, sharing of resources and risk management.
- **Standardisation:** of designs and construction elements.
- **Improved supply chain management:** a systems approach to logistics, category management and lean (process optimisation) practices.

145. The governance structure for the regional and national Centres of Excellence and the Sustainable Improvement Hubs is shown below in Figure 24. It aligns to the Major Projects RIP governance structure. It is the intention that these forums will be held separately to the existing Committee meetings, to allow greater focus to improvement opportunities.



Figure 24 Proposed Centres of Excellence and Sustainable Improvement Hubs governance aligned to existing Major Project's structure.

146. The intended objectives of the Centre's of Excellence, are as follows:

- Key members of Technical Advisors, Delivery Integration Partners and the extended supply chain will be in attendance at each relevant level of governance.
- Highways England's Supply Chain Management and Innovation function will be in attendance at each governance level to drive the agenda.
- Sharing of supply chain data across RIP regions, the wider Major Projects Division and wider Highways England business to collaborate and coordinate improvement opportunities.
- Investment opportunities identified within the Hubs proposed to the regional and national Centre's of Excellence as required for implementation.



147. At each level within the Centre’s of Excellence, the benefits of any opportunities implemented will be tracked to identify the opportunity for potential use across future schemes. This will be done through the Innovation and Continuous Improvement function within Highways England through their efficiency measurement service. The Sponsorship function will be engaged if a change is related to a scheme’s business case.

2.5 Systems Integration

148. As part of the Major Projects Change Programme, Highways England is in the process of procuring nine new systems, covering a range of management functions. The change in systems has key implications for the reporting requirements placed on the supply chain and the internal capability required to implement and manage new digital platforms.

149. The following table outlines each system scheduled for implementation, relative to Contract award.

DRAFT

Area	System	Status	Use of system in RIP-Operations delivery model	Supply Chain requirements
Risk Management	Xactium Risk	Ready to use	Although not mandated for use by the supply chain, Highways England will have to record all project risks in Xactium. It would therefore be beneficial to mandate in Routes to Market Contracts.	If Xactium is mandated, supplier will be contacted for details to set up a licence for the system. The Supplier will be invited to attend a mandatory training session. Supplier licence will then be activated to activate supplier user profile and allow system access.
Customer relationship management	Microsoft Dynamics 365	Ready to use	This is mandated for both Highways England and the supply chain. The supply chain should be alerted that they require BPSS clearance via Highways England and should allow sufficient time in their planning (between 10 days and 6 weeks prior).	Supplier is provided with a login and a password to access the new CRM system to access scheme information. Supplier is able to make changes to various sections of this new centralised system including contacts, cases, Organisations and activities.
Planning & scheduling	Primavera Powersteering (Update from P6)	Ready to use	Although not mandated to the supply chain, Highways England will have to use P6 for all project schedules. It would be beneficial to mandate in Routes to Market Contracts. There is a project schedule template for suppliers to use that can be tailored for each project (based on the Project Control Framework).	Training provided if required.
Contract administration	NEC Contract Administration System (CEMAR)	Ready to use	This is mandated for both Highways England and the supply chain. Internally there will also be a new contract management manual.	The profiles and roles of user types are pre-determined within CEMAR. The supplier is assigned a profile/role and permission levels are set for the specific activities that the supplier is involved in. The supplier attends a training session before the information is migrated onto the new system.
Information management	Business Collaborator	April 2018	Mandated for both Highways England and the supply chain to use to share any information.	Training provided if required.
Cost management	To be procured (three systems shortlisted)	July 2018	It is important for the supply chain to be aware that Highways England does have a standardised CBS and WBS and that the supply chain will need them to report against. This is expected in the new year.	
Reporting	Power BI	Ready to use	Currently only to be used internally by Highways England. However, this may change during the Contract term.	

Table 1 List of procurement systems and their prescribed usage within the RIP-Operations delivery mode.

2.6 Alignment of RtM RIP-Operations delivery model to Design Principles

150. The following table (Figure 25) is provided as a check, to support ongoing alignment of the delivery model with the fundamental RtM design principles of the programme:

Design Principle	Expected outcome to satisfy Principle
Improved Performance	<ul style="list-style-type: none"> Improved options design management aligned with Highways England outcomes. Improved detailed design management through early involvement of Delivery Integration Partner capability. Collaborative working relationships: <ul style="list-style-type: none"> Between regional Technical Advisor and Delivery Integration Partner where the Technical Advisor is encouraged to complete the options phase, while the Delivery Integration Partner is invited to engage early to propose and share innovative buildability advice. Between Highways England and the Technical Advisor and Delivery Integration Partner to improve value through the Sustainable Improvement Hubs and Centre's of Excellence. Reduced delay traditionally realised through the requirement for rework. Improved accuracy of design assumptions due to early consultation of the specialist design community. Early facilitation of GI through the incumbent Delivery Integration Partner's appointed supplier. Supplier visibility of the forward looking programme providing the opportunity for inward investment and allowing Highways England to identify the source of additional savings. Alignment of supplier responsibilities with Highways England outcomes e.g., design handover. A more standardised, prescriptive approach to the level of maturity required for PCF products throughout the gateway process to support improved review and approval.
Customer Satisfaction	<ul style="list-style-type: none"> Designing with operations asset managers involved in early PCF stages team with the aim to reduce frequency of interventions over the asset lifecycle resulting in reduced network disruption. More sustainable workforce engaged over a longer period able to dedicate more time to community stakeholder management.
Safer Roads	<ul style="list-style-type: none"> Longer term supplier engagement to build workforce familiarity with specific sections of the network. Potential to utilise more robust site establishment when delivering capital works on behalf of Operations with potential to reduce time on-site to lessen workforce exposure to the roadside environment. Early involvement of Operations teams supports designing for safety during asset maintenance.
Asset Integrity	<ul style="list-style-type: none"> Improved continuity of corporate memory across investment periods due to Regional Delivery Partnership duration. Prescriptive standards for the recording, management and handover of asset data from suppliers to Highways England.
Sustainable Marketplace	<ul style="list-style-type: none"> Providing a packaging approach (based on the information in Section 1) that: <ul style="list-style-type: none"> Is aligned with volumes and associated risk Highways England understands the markets are able to bear. Offers a defined 'base-load' of work to improve market confidence. Provides the opportunity for different sized design houses to bid (for either options phase or detailed design, or both – dependant on capacity). Supports the realisation of mutual client-supplier rewards and significant supplier upside if innovative practices come to fruition. Requiring Strategic suppliers to name key members of their smaller suppliers who will provide specialist services or who will play a key role in scheme delivery.



Design Principle	Expected outcome to satisfy Principle
Value Based Procurement	<ul style="list-style-type: none">• Utilise the right capabilities of the Delivery Integration Partner and supporting specialisms to support a leaner, efficient approach to planning and delivery.
Highways England & Supply Chain Capacity and Capability	<ul style="list-style-type: none">• Developing regionally focused relationships over an extended Regional Delivery Partnership duration to secure supply.• Supplementing current Highways England capability through augmented frameworks.• Proving the Sustainable Improvement Hubs and the Centre's of Excellence as forums to identify any improvement opportunities in developing supply chain capacity and capability.

Figure 25: Design Principles



Routes to Market Solution Design & Development Commercial Strategy December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

3 Commercial Strategy - Overview

1. Highways England realises the need to build a sustainable marketplace that will support industry growth and allow UK Plc to succeed. The approach to supplier incentivisation therefore offers a “triple lock” of financial gain, continuity of work and reputational value, to support sector growth in line with Highways England outcomes. This strategy is driven by the following:

Improved cost and schedule control: setting the scheme budget at or below the SOFA by the end of stage four prevents supplier windfall gain, while design maturity and risk is managed more effectively through the Stage Gate Review Process.

Equitable risk transfer: the timing and effective management of the supplier interface between PCF stage 2-3 mitigates commercial risk, while also recognising the benefit of the Delivery Partner being involved earlier in the PCF lifecycle to improve scheme budget and outturn cost.

Aligned commercial model: alignment of supplier returns with Highways England critical requirements (e.g. SoFA, Start of Works, Open for Traffic).

3.1.1 Red Line Control Measures

2. To deliver Highways England’s performance ambition, the commercial framework takes into account the Routes to Market Programme’s Red Line Control Measures as described in the Strategic Outline Business Case (SOBC):

Routes to Market’s Red Line Control Measures	
1	Set price and programme –based on demonstration of improved value over time leading to price improvement
2	Set the Fee (lump sum)
3	During initial competition suppliers compete based on capability and the ability to outperform in Highways England priority areas
4	Allocation of future work based on supplier capability, secured capacity and demonstrable performance
5	Ability to outperform the Fee dependent on alignment with Highways England outcomes
6	If policy dictates that Highways England outcomes change, suppliers do not make windfall gains
7	Effectively transfer Highways England’s government commitment to drive continuous improvements in Safety, improved Customer Satisfaction and Delivery Performance

Figure 26: Routes to Market Programme’s Red Line Control Measures described in the SOBC

3. The following sections describe elements that comprise the commercial strategy including the contracting and commercial approach for Technical Advisors and Delivery Integration Partners. The treatment of schemes transitioning from the Collaborative Delivery Framework (CDF) to the Routes to Market facility is also considered.

3.2 Commercial principles

4. Contractors are incentivised by the possibility of financial return through the commercial strategy while the demonstration of continuous performance, measured via the Performance Management framework (Section 4.1.3) provides the opportunity to access future work.
5. Financial performance and the management of pain/gain, considered within the commercial strategy, is monitored at scheme and package level. This provides an opportunity for the Delivery Integration Partner to adopt a portfolio approach when managing multiple schemes within a given geography with the ability to offset underperforming schemes with savings made at the package level.
6. Delivery Integration Partners and Technical Advisors are offered the opportunity to realise enhanced returns by achieving shared milestones, critical to delivering the Highways England programme:
 - Highways England critical milestones.
 - Statement of Funding Available (SoFA).
 - Cost savings.
7. This approach is considered to drive consultants and contractors to pursue mutually beneficial goals to the benefit of Highways England.
8. The contracting strategy for both Technical Advisor and Delivery Integration Partner has informed the incentive principles that apply in each phase of the project life cycle.
9. The figure below (Figure 27: Commercial incentivisation at scheme and contract levels) provides an overview of commercial incentivisation at scheme and contract levels for both Technical Advisor and Delivery Integration Partner and is described in detail in the following section:

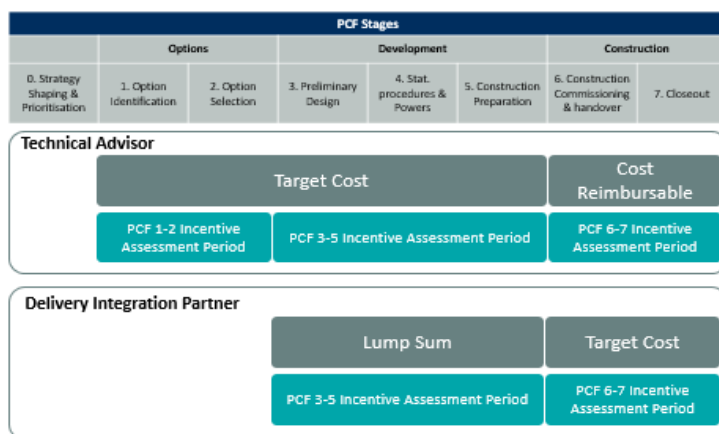


Figure 27: Commercial incentivisation at scheme and contract levels

3.2.1 Technical Advisor (PCF stages 1-7)

3.2.1.1 Contracting strategy

10. The Technical Advisor is contracted under one package order for a given scheme, using a Target Cost contract during PCF stages 1-5 and using Cost Reimbursable contract for PCF stages 6-7. This provides continuity of service and the opportunity to vest the Technical Advisor's interest in the development phase (PCF stages 3-5) and construction phase, through incentivising improved, collaborative performance with the Delivery Integration Partner.

PCF stages 1-5: Target Price

11. Adoption of a Target Cost contract is perceived to mitigate the risk of the Technical Advisor over-designing during options Phase or producing multiple unaffordable options. Equally, the risk of a Target Cost contract driving the Technical Advisor to produce a "golden" route will be mitigated through the incentives to deliver a preferred on time and within the SoFA.
12. A Lump Sum Priced Contract is not considered viable, as the scope of the Technical Advisor during option phase is not defined with enough detail to enable contracting on a lump sum basis. Equally, a Cost-Reimbursable contract is not considered viable given the potential for cost to escalate and reduced level of control associated with a cost reimbursable contract.

PCF stages 6-7: Cost Reimbursable

13. During the construction phase (PCF stages 6-7), Technical Advisor is reimbursed to govern the support the scheme through construction, commissioning and ultimately to handover.
14. Contracting using a Lump Sum or Target Cost contract is not considered viable given that the scope of works during this phase is not defined with enough detail to enable contracting on a lump sum or target cost basis, without the requirement to administer significant change thereafter.

3.2.1.2 Incentivisation strategy

15. The incentivisation strategy is structured to provide the Technical Advisor with the opportunity to retain the whole of the target cost for achieving the project objectives and improving the investment baseline (defined as the Benefits Cost Ratio committed to at the Preferred Route Announcement).
16. The Technical Advisor is incentivised at a scheme level only. Incentivising the Technical Advisor will drive performance assurance across PCF stages while tying the Technical Advisor's scope outcome to outturn scheme performance. They key objectives are to drive:
- **Time & Cost:** delivery of the RIS through delivery of the preferred route, NTP and handover on time and budget.
 - **Viability of preferred option:** affordability of schemes (SoFA) and quality of products to get through Stage Gate Assessment Review (SGAR).
 - **Collaboration between the Technical Advisor and the Delivery Integration Partner through:**
 - Smooth handover from the Technical Advisor (at the end of option phase) to the Delivery Integration Partner, leading to minimal design re-work during preliminary design (PCF stage 3).
 - Vesting the Technical Advisor's interest in the development phase by incentivising improved performance and perceived support to agree the Target Price for the construction phase and achieve NTP.
 - Facilitating successful delivery of handover to Highways England upon scheme completion and meeting OfT requirement.
17. Highways England recognises that the absence of a Development Consent Order (DCO) during the options phase may limit the level of benefit realised when incentivising Technical Advisors. However, to improve the level of performance realised, the options phase is incentivised, to encourage end-to-end efficiency improvements within schemes.

18. Incentivising the Technical Advisor in their technical assurance role for efficiencies and/or innovation realised, via a percentage of the Delivery Integration Partner's incentive pot, was considered. However, as the technical assurance role is to assure efficiencies claimed by the Delivery Integration Partner, and not to identify efficiencies independently, this suggestion was not taken forward. Additionally, there is a risk that incentivising efficiencies may drive collusion between the Technical Advisor and the Delivery Integration Partner.

19. Technical Advisor incentives therefore remain separate and are incentivised for outturn performance of its package order for a given scheme, applying three consistent performance criteria throughout PCF stages, assessed at interim periods as described further below.

3.2.1.3 Incentives levels and payment

20. Incentivising the Technical Advisor throughout PCF stages 1-7 is proposed by means of:

Base incentives for cost savings to the Technical Advisor's Target Price for the options phase and development phase (PCF 1-5); additional incentives to drive performance against key criteria across stages (PCF 1-7) and a further incentive to encourage exemplar performance against the investment baseline:

- The Technical Advisor can earn base incentives, additional incentives and an investment baseline incentive on any underspend against the initial agreed package order value (Target Price) as follows:
 - Base incentives for cost savings and banded as follows:
 - 30% based on a minimum of the initial Technical Advisor profit and under spend.
 - Technical Advisor initial profit % on any underspend above the initial Technical Advisor profit value.
 - Additional incentives (to incentivise performance) for:
 - Start works on time (SoW) – 10%
 - Actual costs within the scheme budget – 5%
 - Completion on time (Open for Traffic) – 5%
 - Benefit Cost Ratio:
 - Technical Advisor will be able to retain the remainder of saving achieved in each band (above and below Technical Advisors initial tendered profit percentage) based on assessment of the initial against the outturn investment baseline for the scheme.

21. The figure below illustrates the incentivisation principles applicable to the Technical Advisor

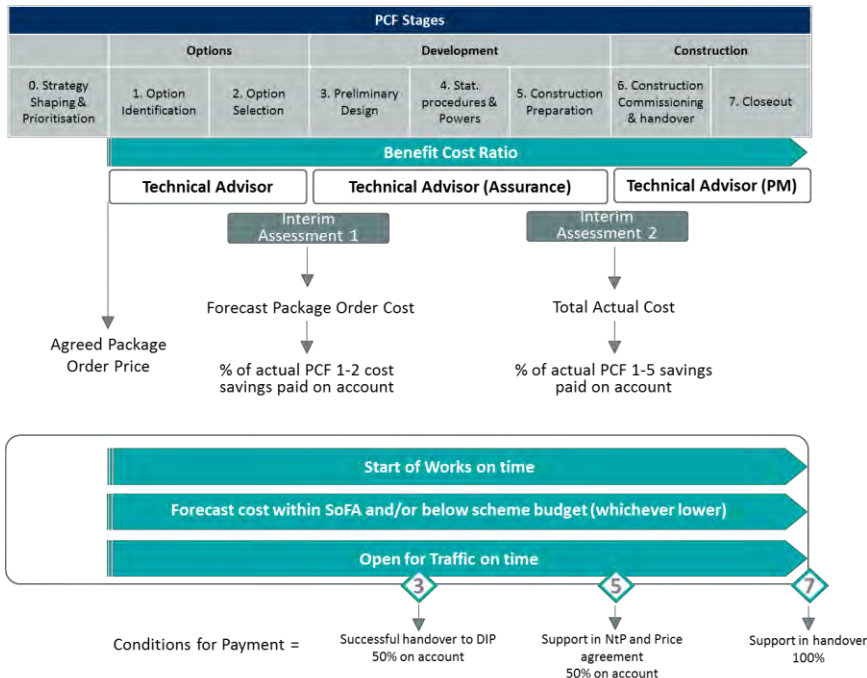


Figure 28: Technical Advisor incentive principles

22. There are two interim assessments for incentives. One at the end of the option phase (PCF 2) and one at the end of the development phase (PCF 5). If the Technical Advisor meets the key conditions for successful payment and are forecasted to meet the additional incentives, they will receive a payment on account (50%) for any gain share calculated through base and additional incentives, at the first and second interim assessments. The second interim assessment takes into account any payment made during the first interim assessment.
23. Actual costs against the initial agreed package order value for the Target Price contract is known at the end of the development phase (PCF 5). It is only at the end of scheme (PCF 7) that it is known whether the Technical Advisor met the additional incentives (i.e., SoW on time, actual cost within the scheme budget and OFT on time). Prior to this date, it is only a forecast. Any payments on account made during the first and the second interim assessments are at risk until the end of the scheme (PCF 7) when the final position is truly known.
24. At the end of the scheme (PCF 7), the final incentives position is calculated, and any gain share earned to date is netted off against the final position (or monies are clawed back). In addition to the base incentives, the table below describes the additional incentives that can be earned by the Technical Advisor and soft conditions to be met for the payment of gain share (Figure 29: Potential for additional incentive). These will be assessed at the same time as the base incentives are assessed during the first and second interim assessment.

	Option Phase (1-2)	Development Phase (3-5)	Construction Phase (6-7)
Additional Incentive	<p>To be assessed at end of PCF stage 3 to be earned by demonstrating:</p> <ul style="list-style-type: none"> • SGAR 2 (preferred route selected) is delivered on time • Preferred route forecast cost is within the SoFA 	<p>Opportunity to maintain the additional relevant incentive earned during PCF stages 1-2 (and assessed at the end of PCF stage 5), by demonstrating:</p> <ul style="list-style-type: none"> • Notice to proceed is delivered on time • Preferred route forecast cost is within the SoFA and/or below the scheme budget (whichever is lower) 	<ul style="list-style-type: none"> • Opportunity to maintain the additional incentive earned during PCF stages 1-5 (and assessed at the end of PCF stage 7), by demonstrating: <ul style="list-style-type: none"> ○ Start of works on time ○ Actual cost of preferred route below the scheme budget • Opportunity to increase the gain share earned on savings to the Technical Advisor's package order value during PCF stages 1-5 based on the following criteria assessed at the end of PCF stage 7: <ul style="list-style-type: none"> ○ Completion on time
Condition	<p>The award of <u>any</u> gain share earned during PCF stages 1-2 is subject to the successful handover to the Delivery Integration Partner during PCF stage 3. The success of handover is assessed by the Project Manager in consultation with the Delivery Integration Partner. Timing of payment aligns with the realization of the above condition.</p>	<p>The award of <u>any</u> gain share is conditional upon the perceived support provided by the Technical Advisor to go through SGAR5 in delivery of documentation to support the agreement of Price and the NTP process (assessed by Project Manager in consultation with the price negotiation team and Delivery Integration Partner). Timing of payment aligns with the realization of the above condition.</p>	<p>The payment of this enhanced gain share is subject to the support and documentation provided to facilitate getting through SGAR6 and successful delivery of handover (assessed by the asset manager).</p> <p>Timing of payment aligns with the realization of the above condition.</p>

Figure 29: Potential for additional incentive

25. A scheme awarded to the Technical Advisor will be assigned an investment baseline target which, if achieved, coupled with achievement of the base and additional incentives would result in the Technical Advisor retaining all savings made against the initial Target Price.

3.2.1.4 Pain share

26. In order to encourage participation, limit the risk exposure and thus reduce tendered costs of the Technical Advisor, it is proposed that the pain level be capped at the total profit under a package order value (i.e., profit % applied to actual cost). This is considered a sufficient pain incentive because the financial risk to Highways England (especially during option phase) is proportionally low compared to the higher impact realised by the Technical Advisor when not recovering their profit.
27. To enable isolating profit from fee and the separate calculation of the pain, Routes to Market will adopt the NEC4 Professional Services Contract, as NEC3 Professional Services Contract does not allow for defined costs plus fee.
28. As soon as the Technical Advisor goes into pain (i.e., any overspend above the initial package order value), the Technical Advisor will not be reimbursed for their overhead and profit. The overhead and profit are considered irrecoverable losses and are borne by the Technical Advisor.
29. The Technical Advisor's pain on recoverable losses is capped at their initial profit value (based on the initial agreed package order). The Technical Advisor can mitigate this pain through meeting the additional incentives – at 33.3% per incentive at the end of a scheme (PCF7).
30. This is to focus the Technical Advisor on continued performance in striving to achieve the additional incentive criteria, even in the event that they are in pain.
31. A further pain disincentive for the Technical Advisor is the sanctioning of future work as a result of poor performance. This is further detailed in the Performance Management Section (4).

3.2.1.5 Contract level incentive

32. There are not likely to be significant innovations or best practice methodologies identified by the Technical Partner that would warrant the sharing of a portfolio level incentive. Furthermore, whilst the intention is to incentivise and actively encourage the Delivery Integration Partner to share best practice, to innovate and to encourage collaboration at a regional level through the Sustainable Improvement Hub, the same is not deemed appropriate for the Technical Advisor given the nature of works they are undertaking in identifying options and providing assurance.

3.2.1.6 General payment principles:

33. To mitigate risk of cost escalation and to provide additional rigour around cost control, the following steps are proposed:
 - Rates will be tendered and assured as part of the procurement exercise and used to influence future price negotiation.
 - The tendered Fee is to be split to identify project office overhead, corporate overhead and profit separately.
 - Tendered hours per annum per staff (annual divisor) is an all-in rate (allowing recovery of project office & corporate overhead), with additional hours being paid on the basis of cost paid to people, plus profit.
 - Modified Schedule of Cost Components is to be used for People (project office overhead, corporate overhead and profit percentages fixed for the duration of the contract).
 - Technical Advisor required to provide initial, and any revised forecast of spend for PCF stages 6-7, for agreement by the Project Manager. Cost in excess of the agreed forecast will be disallowed.
 - Technical Advisor submits Project and Regional Delivery plans (including a resource plan) prior to award. Any deviation from this resource plan needs to be change controlled and justified by the Technical Advisor.

34. In order to provide clarity and transparency and to aid the assessment of change control, it is proposed that the tendered Fee is split, to identify project office overhead, corporate overhead and profit separately. This will necessitate the drafting of a modified schedule of cost components to reflect this split.
35. On this basis, the tendered hours per annum per staff will be all-in rates and allow recovery of project office and corporate overhead, with additional hours being paid on the basis of cost paid to people, plus profit.

3.2.2 Delivery Integration Partner - PCF stages 3-7

3.2.2.1 Contracting strategy

36. The contracting strategy proposed for the Delivery Integration Partner is a key component in driving innovation and increased productivity.
37. The Delivery Integration Partner is contracted under one package order from development phase into construction phase. During the development phase, the Delivery Integration Partner will act as Principal Designer in carrying out all works necessary to enable agreement on the total of the Prices for the construction phase and will act as Principal Contractor during PCF stages 6-7.

PCF stages 3-5: Lump Sum

38. During the development phase the Delivery Integration Partner submits a Project Delivery Plan. The Technical Advisor supports Highways England during price agreement and assessment of the Project Delivery Plan process at the outset.
39. The development phase provides an opportunity for the supply chain to contribute its knowledge and expertise, earlier in the project lifecycle to improve the likelihood of project success. Traditionally, the development phase has been contracted under a cost reimbursable arrangement. However, this has not delivered the outcomes and behaviours Highways England expected. To address this, contracting under a Lump Sum, with the price build up informed by a resource schedule, is considered to drive a change in behaviour from the Delivery Integration Partner at the outset.
40. Highways England envisage realising a number of benefits under the proposed arrangement, including:
- **Cost predictability:** contracting the Development Phase on a fixed price will allow Delivery Integration Partner control over spend to de-risk the Construction Phase as they see fit, thereby providing added certainty during construction.
 - **Leveraging Technical Advisor's services:** between option phase and development phase to support efficient design development, where design is purchased as a product.
 - **Greater sense of ownership:** by the Delivery Integration Partner who has the opportunity to leverage its expertise, and the specialism of its suppliers early, to support proactive risk and opportunity management.
 - **Reduction in volume:** of administrative effort that Highways England must provide, allowing greater focus on value creating activities.
 - **A cultural shift:** for both Highways England and the supply chain, moving a step closer to an alliance based model that is founded on common goals and shared risk and reward.
41. The proposed contracting strategy is designed to provide greater clarity of the financial position of RIP schemes, early in the project lifecycle. Furthermore, the strategy moves from a volume base development environment to one focused on improved value.

PCF stages 6-7: Target Price

42. This option provides the Delivery Integration Partner with an opportunity to demonstrate its ability to maintain efficient delivery and positively manage the cost envelope to result in potential gain.
43. It is necessary to establish and isolate events which may result in a change to the scheme budget and the Target Price respectively. An adjustment to the Lump Sum Fee for a change in the Target Price will not change the scheme budget.
44. Also reflective of the Technical Advisor model is the intention to split the tendered Fee to identify project office overhead, corporate overhead and profit separately. This will necessitate the drafting of a modified schedule of cost components.
45. Highways England envisage realising a number of benefits under the proposed arrangement, including:
 - **Improved transparency and control:** scheme budget will include all cost elements allowing Highways England and suppliers to focus on the same pot of funds (including risk and contingency) to limit administration of change.
 - **Certainty of supplier return:** setting the construction fee earlier as a lump sum to drive value engineering and discourage inflation in scheme budget and defined cost.
 - **Flexibility in scheme budget setting:** encourage the Delivery Integration Partner to set the scheme budget as soon as possible, (but no later than PCF stage 4) whilst considering their approach / propensity for risk and opportunity.
 - **Prevent excessive windfall gains:** by incentivising the Delivery Integration Partner against savings to scheme budget and Target Price during construction phase to drive real efficiencies in performance.
 - **Package level incentive:** manage pain on an underperforming scheme by retaining / offsetting it with gain realised at the package level.

3.2.2.2 Incentivisation strategy

46. The intended outcome from incentivising the Delivery Integration Partner is to ensure collaboration and frictionless transition with the Technical Advisor, drive productivity, knowledge share, effective design management, and aligning supplier with Highways England outcomes and programme milestones.
47. To achieve the above intended outcomes, an incentive structure is applied that drives:
 - A reduction in the total of scheme budgets at a contract level.
 - Savings against the total of the Prices during construction phase.
 - An opportunity for the construction fee to become higher in relevant terms by converting this fee to a lump sum when the scheme budget is set and thus incentivising a reduction in construction costs.

48. Figure 29 below illustrates at a high level the incentivisation principles of the Delivery Integration Partner:

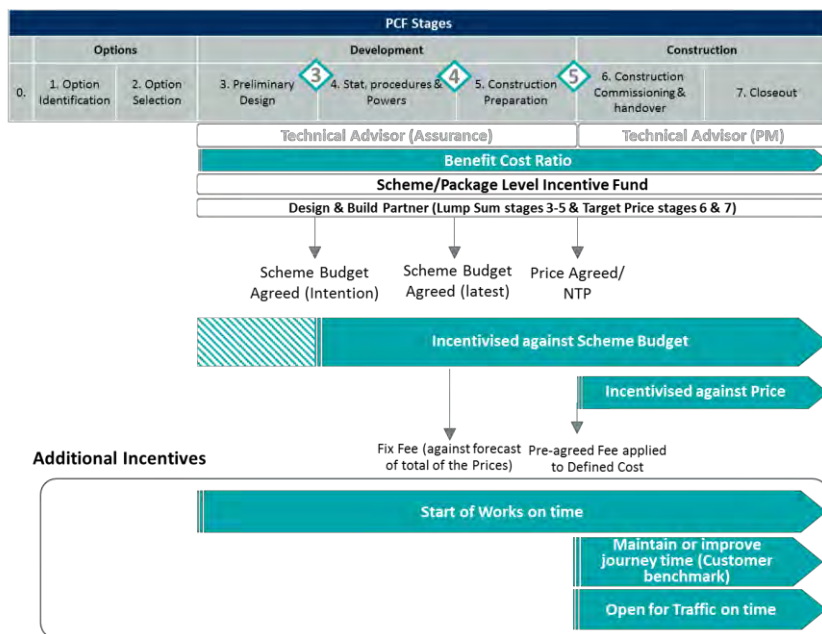


Figure 30: Delivery Integration Partner incentivise principles

49. The timing of incentive payments and how they are earned and assessed have been agreed. However, detailed modelling is ongoing to determine the percentage return that can be gained by delivery model parties.

Commented [A1]: Do we still need this?

3.2.2.3 Package level and Scheme budget cost breakdown

50. To achieve a commercial environment that drives mutual benefit for Highways England and its suppliers, when determining the scheme budget and setting the construction fee, the following principles are considered:

- Provide suppliers with certainty of fee return by setting the construction fee at a lump sum to mitigate benefit supplier will receive from inflation of scheme price.
- Achieve improved control and effective risk management by including all cost elements into the scheme budget.

Figure 31 provides an overview of the Delivery Integration Partner contract and scheme budget cost breakdown:

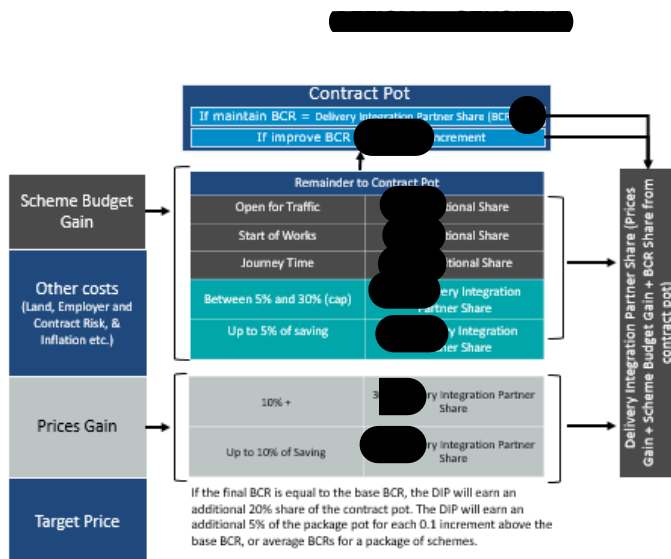


Figure 31: Delivery Integration Partner contract and Scheme budget cost breakdown

The following table provides a summary of principles related setting of the scheme budget, Fee, incentivising against the scheme budget and Target Price and the general approach to incentives.

Commented [A2]: Should there be a table below? If not delete.

3.2.2.4 Commercial principles: Detailed summary

51. Principles of the commercial strategy are summarised in detail in the table below:

Principle	Description
Setting scheme budget	<ul style="list-style-type: none"> The scheme budget (post efficient SoFA) will include all cost elements, but net of portfolio risk and third party income. This will allow Highways England and suppliers to focus on the same pot of funds (including risk and contingency), thereby limiting administration of change. The ambition is to set the scheme budget at PCF stage 3 and before DCO, however the contract will remain flexible for the Delivery Integration Partner to agree the scheme budget anytime up to the end of PCF stage 4. Highways England will be willing to set a scheme budget throughout this period. If a scheme budget is not agreed at the end of PCF stage 3 or stage 4, the Delivery Integration Partner will produce a report explaining why it cannot be agreed at that time. This becomes a new PCF product. The rationale for providing the Delivery Integration Partner the flexibility to agree scheme budget up to end of PCF stage 4 is to facilitate an environment considered fair and equitable to both parties. The scheme budget will decrease as the project progresses. Agreeing the scheme budget later in the project lifecycle decreases the Delivery Integration Partner's ability to gain against the scheme budget as the incentive mechanism only applies once the scheme budget has been set. This would encourage the Delivery Integration Partner to set the scheme budget as soon as possible, whilst considering their approach / propensity for risk and opportunity. If the Delivery Integration Partner understands its preferred route redlines, their Statutory Undertakings and DCO risks, and have confidence that the scheme budget is robust, they will be in a position to agree to the scheme budget earlier (PCF stage 3). However, it would be the intention to set a scheme budget by end of PCF stage 4 in most cases. To support this ambition, the agreement on scheme budget by the end of PCF stage 4 forming an SGAR requirement should be considered. Once the Delivery Integration Partner agrees the scheme budget, the fee will be fixed, and the Delivery Integration Partner can start earning incentive against savings to the scheme budget.
Fee	<ul style="list-style-type: none"> In order to provide Highways England with the ability to bring forward construction activities during the development phase, the Delivery Integration Partner will be required to tender two separate fees, one for the development phase and one for the construction phase. In order to provide additional rigour around change control and to assist in the validation of tenders, the fee at each of these stages will be split to identify project office overhead, corporate overhead and profit separately. During construction phase there will be one lump sum fee. The construction lump sum will not be adjusted for compensation events, except for strategic risk. Given that different suppliers have different business models, Highways England are not in a position to prescribe the fee percentage. Suppliers will quote a percentage construction fee during the tender process that will be evaluated and then be set relative to the agreed scheme value.



Fee	<ul style="list-style-type: none">• When the scheme budget is agreed, the construction fee against the forecast total price is fixed as a lump sum. When the construction Target Price is agreed at NTP, the pre-agreed lump sum fee is applied. Hence, the later the Delivery Integration Partner agrees to set the scheme budget, the lower the fee will be, relative to turnover. This should encourage suppliers to set the scheme budget earlier and manage down cost thereafter. This is based on the assumption that the forecast defined costs, including associated risk and inflation will reduce during the development phase. Alternatively, the Delivery Integration Partner will delay agreeing scheme budgets until the estimate of construction costs is more accurate and risks have been mitigated, albeit the latest they can do that is end of PCF stage 4.• The Delivery Integration Partner can be instructed to carry out advance works if required during PCF stage 3-5. This may necessitate an adjustment to the Fee. For early works which Highways England wish the Delivery Integration Partner to undertake during PCF stage 2, they will be contracted on a time charge basis using NEC PSC.
Incentivising against post-efficient scheme budget	<ul style="list-style-type: none">• Throughout PCF stages 3-7, the Delivery Integration Partner will be encouraged to improve delivery performance, realised through a positive gain share as recognition of efficiencies achieved throughout the development phase and construction phase against savings to scheme budget. Given that the Delivery Integration Partner will be contracted on a Lump Sum basis during the Development Phase, there will be no incentives against the fixed price (i.e., 100% pain/gain).• The intention is to incentivise the Delivery Integration Partner against all cost elements within the scheme estimate (including inflation and employers risk) other than third party contributions and portfolio risk. This approach is taken while appreciating that contractors may consider that they can influence all heads of cost, but not necessarily control them. This would align supplier commercial objectives to Highways England's, i.e., alignment with the Statement of Funding Available (SoFA). To this effect, where available, contract scheme budgets will be also set in accordance with efficiency targets. Where not available, S&P will be consulted.• Setting contract scheme budgets at post-efficiency level drives the commercial model to assure Highways England's license requirements. Commercial estimates will be compared with 'available funds' / efficiency targets with suitable adjustments incorporated when forming scheme budget proposals. Furthermore, incentives will be assessed against savings only (i.e., above efficiency level) to support Highways England in achieving its efficiencies targets set by the DfT.
Incentivisation against savings to both scheme budget and target price during Construction Phase	<ul style="list-style-type: none">• Designers and contractors will be incentivised together under the Delivery Integration Partner contracts to create commercial tension. However, sub-contract arrangements and associated incentives for the Delivery Integration Partner's designers will be at the discretion of the Delivery Integration Partner.• Incentivises for savings against scheme budget (throughout PCF stages 3-7) and Target Price (PCF stages 6-7), both to be paid in increments at various stages throughout the construction phase.



Incentivisation against savings to both scheme budget and target price during Construction Phase	<ul style="list-style-type: none">• Separating incentive payments across these two components (i.e., scheme budget and Target Price) is designed to drive real efficiencies in performance rather than allowing the Delivery Integration Partner to benefit from windfall gains.• However, incentivising against scheme budget and Target Price must therefore consider proportionate risk-reward for each element. Consideration is given to the balance of pain and gain at scheme level to manage the overall contract level pain/gain split (gain on schemes will offset pain on other schemes). The shares need to be relatively lower given that the supplier approach to risk (pain) would be conservative, recognising their perceived influence but not control. As such it is important to reward separately at a both scheme budget and Target Price level in order to drive the right commercial performance.• The share of incentive against the Target Price should be higher than the level of incentive against the scheme budget, given that Delivery Integration Partner is in a position to influence and control construction costs, but only in a position to influence the scheme budget.
Incentives	<p>The proposed incentive model will drive delivery performance by incentivising at two levels:</p> <p>The Delivery Integration Partner will be incentivised at two levels as follows:</p> <ol style="list-style-type: none">1. For savings against the Total of Prices; and2. For savings against the scheme budget, with an opportunity to increase their share of the savings for achievement of additional performance criteria which align supplier's performance to Highways England's milestones and outcome. Additional opportunity will exist for the Delivery Integration Partner to earn savings up to the total of the scheme budget for exemplar performance against the investment baseline. <p>1. Construction Target Price (PCF stages 6-7) – "Total of the Prices"</p> <p>➤ <u>Overall performance assessment</u></p> <p>The overall performance of the Delivery Integration Partner on the construction Target Price is assessed by comparing the agreed construction Target Price (set at NTP at the end of PCF stage 5) with the actual construction price (known at the end of PCF stage 7). This assessment is done on an individual scheme basis for each scheme within the package order.</p> <p>Prior to NTP, the construction phase (PCF stages 6-7) cost is included in the scheme budget as a forecasted construction price and no incentivises are earned against the latter prior to NTP.</p> <p>➤ <u>Key criteria for gain assessment</u></p> <p>If there are savings against the construction Target price the Delivery Integration Partner will receive a gain, providing:</p>



Incentives	<p>(i) The scheme budget is not in pain and (ii) Gain on the construction target price does not drive the scheme budget into pain.</p> <p>➤ <u>Gain assessment</u></p> <p>The gain will be assessed through two bands of savings:</p> <ul style="list-style-type: none">• First band –The first band includes savings up to [REDACTED] of the construction Target Price. If the total savings do not exceed this [REDACTED] all the savings will be in the 1st band. The Delivery Integration Partner will receive a gain of [REDACTED] from savings in this band.• Second band – The second band will include all remaining savings (if any) not included in the 1st band. The Delivery Integration Partner will receive a gain of [REDACTED] from these savings. <p>➤ <u>Pain assessment</u></p> <p>There is no pain on the construction Target Price, as overspend against the construction Target Price reflected in the scheme budget. Pain is therefore assessed at a Scheme Budget level only.</p> <p>2. Scheme budget pain/gain</p> <p>➤ <u>Overall performance assessment</u></p> <p>The Delivery Integration Partner is incentivised for cost savings against the scheme budget (i.e., if the agreed scheme budget is lower than the outturn scheme cost), known at the end of PCF stage 7. There is an interim assessment at end of PCF stages 5, whereby payment can be made on account for savings achieved to date.</p> <p>If at the end of PCF 7, the Delivery Integration Partner has overspent against the Scheme Budget, the Delivery Integration Partner will be in pain.</p> <p>➤ <u>Gain assessment</u></p> <p>If there is a net saving against the Scheme Budget, the total gain received by the Delivery Integration Partner comes from two types of incentives: base incentives for achieving savings to the Scheme Budget and additional incentives for achieving defined performance criteria. Both are assessed on an individual scheme basis.</p> <ul style="list-style-type: none">• Savings not paid to the Delivery Integration Partner as a gain share on a given scheme will add to the Contract/Package Pot. The Delivery Integration Partner will have the opportunity to earn the Contract/Package Pot in its entirety for exemplar performance against the investment baseline for a scheme or Package of schemes. <u>Base incentives</u> <p>The base incentives reward the Delivery Integration Partner for achieving underspend on an individual scheme budget and apply in two bands:</p> <p>Band 1 – [REDACTED] gain share up to [REDACTED] of savings in scheme budget.</p>
-------------------	--



Incentives	<p>Band 2 – [REDACTED] of saving between [REDACTED] and [REDACTED]</p> <p>Any net savings above [REDACTED] of the Scheme Budget are not subject to gain, creating a cap on the base incentive’s mechanism.</p> <ul style="list-style-type: none">• <u>Additional incentives</u> <p>The additional incentives are earned against achievement of Highways England outcomes and critical milestones. For each additional incentive met, the Delivery Integration Partner will receive a gain % from the total net savings of the scheme budget. The additional incentives are the following and are binary (pass/fail):</p> <ul style="list-style-type: none">• Maintaining / improving journey time – [REDACTED] additional gain if met.• Achieving Start of Works (SoW) in accordance with the Highways England target – [REDACTED] additional gain if met.• Achieving completion on time (or Open for Traffic (OfT)) – [REDACTED] additional gain if met. <p>Through the additional incentives, the Delivery Integration Partner can gain up to [REDACTED] of the total net savings from the scheme budget (if meeting all three additional incentives in the same scheme).</p> <p>It is currently proposed that the Delivery Integration Partner will have the ability to gain an additional [REDACTED] the Contract Pot for maintaining scheme benefit-cost-ratio across the package order. In addition, it is proposed that they will be able to increase this share by [REDACTED] for each 0.1 average improvement in the benefit-cost-ratio across a package.</p> <ul style="list-style-type: none">• <u>Investment Baseline</u> <p>The Delivery Integration Partner will have the ability to gain an additional [REDACTED] of this Contract/Package Pot for maintaining scheme investment baseline across the package order. In addition, the Delivery Integration Partner will be able to increase this share by [REDACTED] for improvements against the investment baseline defined by 0.1 incremental improvement in the BCR or average improvement across all schemes in a package.</p> <p>In order for the Delivery Integration Partner to access any gain from within the Contract/Package pot, all schemes within the package should be in gain against each respective scheme budget. The Project Manager may, in exception circumstances, override this principle at their discretion.</p> <p>➤ <u>Pain assessment</u></p> <p>The Delivery Integration Partner will bear a share of the pain for overspend against the scheme budget. This pain is assessed across four bands which are described below.</p> <p>Band 1 of pain assessment – at individual scheme level</p>
------------	--



Incentives	<p>The first band of pain is the lower of (i) the net losses on an individual scheme and (ii) the total fee of the specific scheme being assessed less the value of any pain mitigation (through meeting the additional incentives / performance criteria). Band 1 is calculated individually for each scheme (based on its individual fee) and the net losses included in this band are wholly taken in as pain by the Delivery Integration Partner.</p> <p>The maximum amount of pain that the Delivery Integration Partner can take in a scheme from Band 1 is the fee of that particular scheme. However, the Delivery Integration Partner has the possibility to mitigate up to [REDACTED] of their net loss (maximum their fee in that scheme) included in this band through achieving additional incentives. The mitigation %s are as per below:</p> <ul style="list-style-type: none">• Maintaining / improving journey time – [REDACTED] of pain in Band 1 mitigated.• Achieving SoW in accordance with Highways England target – [REDACTED] of pain in Band 1 mitigated.• Achieving completion on time – [REDACTED] of pain in Band 1 mitigated. <p>Considering that in a given scheme the Delivery Integration Partner meets all the additional incentives, its pain exposure in Band 1 for that scheme will be [REDACTED] of that fee. Furthermore, the fee portion mitigated will be ring fenced and guaranteed to be received by the Delivery Integration Partner, i.e., cannot be used to increase pain exposure for the Delivery Integration Partner in any other Band nor used to offset pain on the overall package order level.</p> <p>After assessing Band 1 of pain for each scheme in the package order, the remaining sum of net losses will be carried forward to Band 2.</p> <p>Band 2 of pain assessment – at package order level</p> <p>Band 2 includes all remaining losses brought forward from Band 1 up to the value of the Contract Pot (sum of Pot of gains from all schemes in a package order) until the Contract Pot is exhausted these losses will be covered by the Contract Pot.</p> <p>If the Contract Pot does not have enough gains to cover all the losses brought forward from Band 1, the remaining will be carried forward to Band 3.</p> <p>Band 3 of pain assessment – package order level</p> <p>Its value will be the lower of (i) the losses brought forward from Band 2 and (ii) the sum of the fees from all schemes within the package order less any pain taken by the Delivery Integration Partner in Band 1 and any pain mitigated by the Delivery Integration Partner in Band 1 through achieving the additional incentives / performance criteria.</p> <p>The maximum value of Band 3 will be the sum of the fees from all schemes in a package order (both gain and pain schemes) less any Delivery Integration Partner pain and mitigation of pain through meeting additional incentives at a scheme level in Band 1. The mitigation of pain through meeting the additional incentives / performance criteria is ring-fenced from any pain exposure. The Delivery Integration Partner will bear those losses included in Band 3.</p> <p>Similar to Band 1, the Delivery Integration Partner has the possibility to mitigate up to [REDACTED] of its pain exposure from Band 3 (thus reducing the amount of losses) through achieving the additional incentives in an individual scheme (same mitigation % per additional incentives as in Band 1) which is in gain;</p>
-------------------	--



	<p>therefore achieving the additional incentives on those schemes in gain has the potential to create a double positive effect by receiving a gain to the Delivery Integration Partner and further mitigation of pain.</p> <p>The remaining net losses not covered in Band 3 will be carried forward to Band 4.</p> <p>Band 4 of pain assessment – package order level</p> <p>Band 4 includes all the net losses brought forward from Band 3. These will be covered by Highways England. Any losses remaining after the 3rd stage will be taken in by Highways England as pain.</p> <ul style="list-style-type: none">• <u>Conclusion from pain assessment</u> <p>The Delivery Integration Partner exposure of pain in a given package order is the sum of net losses included in Band 1 and Band 3. As a maximum, these will be equal to the sum of fees from all the schemes in that package order.</p> <p>Net losses included in Band 2 will be covered by the existing Contract Pot. Highways England exposure to pain (after considering its scheme gains that were included in the Contract Pot) will be equal to the net losses included in Band 4.</p> <p>Detailed modelling work is ongoing in order to determine the split of percentages to drive performance in the key areas. The above percentages are therefore still TBD.</p> <ul style="list-style-type: none">• <u>Failure to agree Scheme Budget/Total of the Prices</u> <p>In order to encourage appropriate agreement of the scheme budget and Price, the following steps are proposed in relation to the incentive model:</p> <ul style="list-style-type: none">• In the event that the Project Manager has to assess the Scheme Budget before Stage 5 – If a scheme is in pain, band 1 will be 2 x Fee as opposed to 1 x Fee. If a scheme is in gain, the Delivery Integration Partner will lose the opportunity to benefit from a base (budget saving) incentive and will only be able to access gain share related to the achievement of additional incentives.• In the event that the Project Manager has to assess the Total of the Prices before Stage 6 – The percentage share of gain for which the Delivery Integration Partner has the opportunity to access will be halved.
Payment of incentives	<p>The Delivery Integration Partner can start earning the incentive when the scheme budget is set, the latest point being at end of PCF stage 4. A portion of scheme budget bonus, assured by Highways England, will be paid post NTP, as this will make benefits of the incentive model feel more tangible to the Delivery Integration Partner as opposed to waiting until the end of the scheme. To mitigate outturn performance issues, the remainder of projected gain, achieved during the development phase, is not earned until during construction phase and contract close-out.</p> <p>For the purpose of calculating the Delivery Integration Partner's share against the scheme budget and the Target Price (PCF stage 6-7), the Price for Work Done to Date exclude the lump sum, Fee.</p>

Commented [A3]: Do we still need this, if not delete.



Contract level incentive fund	<p>The programme will establish a contract level incentive fund. The objective of a contract level incentive fund is to normalise performance and manage pain on an underperforming scheme by retaining / offsetting it with gain achieved on performing schemes.</p> <p>Pain is managed at scheme/package order level and not at regional level (i.e., across suppliers). Any pain at scheme level is to be balanced against gain from other schemes within the Delivery Integration Partner's package order.</p> <p>To mitigate windfall gains while anticipating the appetite of the Delivery Integration Partner, the pain share will be limited at contract level to the Delivery Integration Partner's overall fees at package order level, i.e., if a Delivery Integration Partner is in pain at contract level (after offset of pain with available gain), overall fees at package order level lost as further detailed in the "incentives" section above. This offers the Delivery Integration Partner a portfolio approach to management, driven by the potential for making profit rather than additional turnover.</p>
--------------------------------------	--

Figure 32: Key Principles

3.2.2.5 General Payment principles

52. Key payment principles are as follows:

Fee and pricing:

- The Lump Sum price for development phase is derived using a forecasted resourced programme and will form part of the scheme budget. Suppliers are remunerated through quarterly payments made against the forecast. At SGAR, there is an assessment of actual costs against the Delivery Integration Partner's Work Breakdown Structure (WBS) and an adjusted payment made (i.e., the Delivery Integration Partner will be paid the lower of the forecasted costs and the actual costs), up to an agreed cap at each SGAR stage.
- Mobilisation paid on a Lump Sum basis, based on the Delivery Integration Partners tender submission.
- Keep development fee and construction fee separate during the development phase and create separate Schedule of Cost Component (SoCC) for each phase.
- Modified Schedule of Cost Components is used for People (project office overhead, corporate overhead and profit percentages fixed for the duration of the contract).
- An adjustment to the Lump Sum Fee for a change in the Target Price will not change the scheme budget, except for client Strategic Risk.
- Rates submitted as part of 'basket of goods' will form a ceiling, adjusted annually for inflation.
- Cost estimate submitted at tender for PCF stages 3-5 will influence price negotiation of future schemes.
- The tenderers percentage of construction management cost, relative to direct works will also influence price negotiation of future schemes.
- Delivery Integration Partner can be instructed to carry out advance works if required during PCF stage 3-5 this will necessitate an adjustment to the Fee.
- Scheme budget submission in accordance with specification/template provided in Framework Information.
- Forecast in month, in year and overall contract commercial position in a format provided within Framework Information.

53. Co-location overhead: To drive greater efficiency, Highways England requirements clearly state that Technical Advisor and Delivery Integration Partner are expected to co-locate and associated overhead to be included in the development stage fee. Highways England will not pay Delivery Integration Partner designer overhead separately.

54. Recovery of cost (fee and overhead): To prevent Highways England paying fee-on-fee, in development phase, the Delivery Integration Partner is to recover fee against people spend only. For construction works performed during the development stage (e.g. GI), the construction fee applies. Fees are therefore invoiced separately. If a lump sum construction fee has already been agreed at the time early construction works are undertaken, the Delivery Integration Partner should not be able to apply the development fee also.

55. Project Bank Account: to be mandated as it would help Core and Specialist suppliers' cash flow/payment terms.

3.2.2.6 Schedule of cost components (SoCC):

56. It is proposed that Highways England's bespoke Schedule of Cost Component is used for construction and development phases.

- [REDACTED]**
57. Designers are treated as Principal Designer (not subcontractors) and will be paid in accordance with Schedule of Cost Component. Tender returns with need to specifically reference associated parties in the Schedule of Cost Component to avoid paying fee on fee.
58. The “Routes to Market Statement of Requirements 2017” identifies the ambition to involve Specialist Suppliers in scheme development. It is the intention that such specialists from the Delivery Integration Partner supply chain should be able to recover agreed costs incurred in support of Value Engineering and bespoke solutions. As such, services of these suppliers should be administered during the development phase, or as required, in the same way as the Delivery Integration Partner Designer (SoCC). The approach needs to be recognised in evaluation if ceiling rates are to be established.

3.2.3 Handover strategy and transition Plan for ‘live’ schemes

59. The varying maturity of schemes across the RIP and associated funding arrangements, where necessary, require a method to effectively transition schemes from CDF to Routes to Market. The approach to transition is driven by the following factors:
- The need to retain supplier knowledge in the interests of efficient programme delivery.
 - The level of programme support provided by the incumbent, embedded supplier.
 - The desire to transfer to the preferred model, proposed by the Routes to Market programme.
60. In light of these factors, two preferred stages are identified for legacy schemes requiring transition:
- **End of PCF stage 2:** Incumbent designer already engaged across stages 1-2 will remain in post to the end of the options design phase, supporting early design continuity to the point of preferred route. A clean break and transition to the successful Routes to Market arrangement is felt to import control early on, with the confidence that design would not be progressed to a point that may invite a significant degree of rework under the new arrangement.
 - **End of PCF stage 4:** Incumbent designers across PCF stages 3 and 4 acquire a body of knowledge during the options design phase that needs to be retained. Furthermore, the support provided during this phase to augment the DCO process is crucial to maintaining the pace of delivery set by the RIP. A plan is to be in place for each individual scheme to review existing designers not awarded at Routes to Market within that Region and assess risks of underperformance until completion of PCF stage 4.
61. The following breakdown provides an indication of how an individual scheme may be treated, given its stage in the PCF cycle (see Figure 33).

	Scenario	Transition approach
A	Schemes before PCF stage 0 when Routes to Market – RIP-Operations contract is awarded - No Transition	The Delivery Integration Partner and Technical Advisor is appointed to undertake the options, development and construction phases under the Regional Delivery Partnership. Since the schemes are not defined yet, the appointment of the Technical Advisor/Delivery Integration Partner is to take place at an undefined point in the future of the contract.
B	Schemes in PCF stage 0 when Routes to Market – RIP-Operations Contract is awarded – No Transition	<p>The Technical Advisor will commence work at options Phase and own the design process until end of PCF stage 2. Subsequently, they will provide ongoing engineering design assurance & integration and construction supervision services for a given sub Region from PCF stage 3 onwards.</p> <p>The Delivery Integration Partner is appointed to deliver the Design and Build services from PCF stage 3 onwards. However, Highways England will retain the opportunity to instruct the Delivery Integration Partner to carry out investigative works at an earlier stage to de-risk scheme development and improve ownership of design.</p>
C	RIS1 schemes in PCF stage 1 or Stage 2 when RIP-Operations Contract is awarded	<p>The existing CDF Designer will finalise their design up to announcement of Highways England's preferred route. No further design work is undertaken until the RIP-Operations Contract is awarded.</p> <p>The Delivery Integration Partner and Technical Advisor (Engineering Design Assurance & Integration and Construction Supervision) will be appointed to undertake the Development and Construction phases (PCF stage 3 onwards).</p>
D	RIS1 schemes in PCF stage 3 or Stage 4 when RIP-Operations Contract is awarded	<p>The existing CDF Designer will finalise their design up end of PCF stage 4.</p> <p>i. Should the DCO be confirmed:</p> <p>The Delivery Integration Partner with their designer take over the design developed by the existing CDF Designer from PCF stage 5 onwards.</p> <p>The Technical Advisor is appointed to finalise the Development Phase (Engineering Design Assurance & Integration) from PCF stage 3-5 and Construction Phase (Construction Supervision) from PCF stage 5 onwards.</p> <p>In some instances the highways England may prefer the incumbent designer to provide ongoing services.</p> <p>A plan is to be in place for each individual scheme to review existing designers not awarded at Routes to Market within that Region and assess risks of underperformance until completion of PCF stage 4.</p> <p>ii. Should the DCO not be confirmed:</p> <p>This represents a risk. Further analysis and validation of RIS1 schemes is to be undertaken to confirm whether this scenario is realistic whilst very unlikely to happen.</p>
E	RIS1 schemes from PCF stage 5 onwards when RIP-Operations Contract is awarded – No Transition	The existing CDF procurement method will be used.

Figure 33 Transition Plan

62. Working assumptions relative to the commercial model include:

- For RIS2, scheme budget can only be set at the time of submission of the IFT, for those projects that have a defined single option/preferred route. Given that this is not the case for remaining RIS 1 schemes, it will not be possible to set scheme budgets at award. Additionally, maturity of schemes would necessitate inappropriate risk transfer and significant administration of change.
- CDF designer will take RIS1 schemes through DCO (PCF stage 4).
- Once approved, technical assurance will be provided by the Routes to Market Technical Advisor.
- The CDF designer has no further involvement in the scheme following this stage. Whilst it is acknowledged there will be a break in continuity of design services, it is considered that retaining the incumbent designer will risk compromising the procurement process. A clean break between parties is therefore advised.
- Any scheme which will be at PCF stage 5 is already accounted for under CDF.



Routes to Market Solution Design & Development Programme for Performance Management December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

OFFICIAL - SENSITIVE

4 Programme for Performance Management - Overview

1. Highways England has identified the need for closer alignment between the three Business Imperatives of Safety, Customer and Delivery of the RIS, and the level of performance realised across its programmes.
2. Furthermore, the performance environment now needs to support Highways England's transformation from project based, transactional supply chain relationships to an enterprise based trading approach, capable of embracing alliancing principles. The drive this transition, key requirements from performance management under Routes to Market include:
3. **Management Information based on existing data:** deliver objective, transparent reporting that relies on naturally occurring data in the contract management process.
4. **Performance as a currency:** creating the ability to allocate work based on observed performance and supplier reputation, with poor performance resulting in possible termination and reallocation of work.
5. **Measure what is important, not what is possible:** reducing resource intensive supplier monitoring resulting in improved efficiencies.
6. **Drive business transformation:** creating a data rich, performance environment that encourages improved dialogue between Highways England and the supply chain to support deeper integration.
7. **The Golden Thread:** tying pre-contract evaluation to post contract management by evaluating at tender the supply chain's ability to realise Highways England Imperatives and continuously measuring performance against these criteria during delivery.
8. A review of the current performance landscape across Highways England provided a comprehensive understanding of how performance is measured, monitored and managed. The following key sources of measurement were identified:
 - Office of Rail and Road (ORR) KPI's and targets.
 - Health & Safety.
 - Lean (& Collaborative Planning).
 - Strategic Alignment Review Tool (StART3).
 - Behavioural Maturity Framework (BMF).
 - Collaborative Performance Framework (CPF).
 - Customer Deep Dive.

9. Further information relating to this exercise can be found in Appendix A4.
10. This review has identified key areas that have benefited from further development, to support the performance ambition. During the procurement development process, a suite of products have been identified and developed to support the Routes to Market performance management approach:

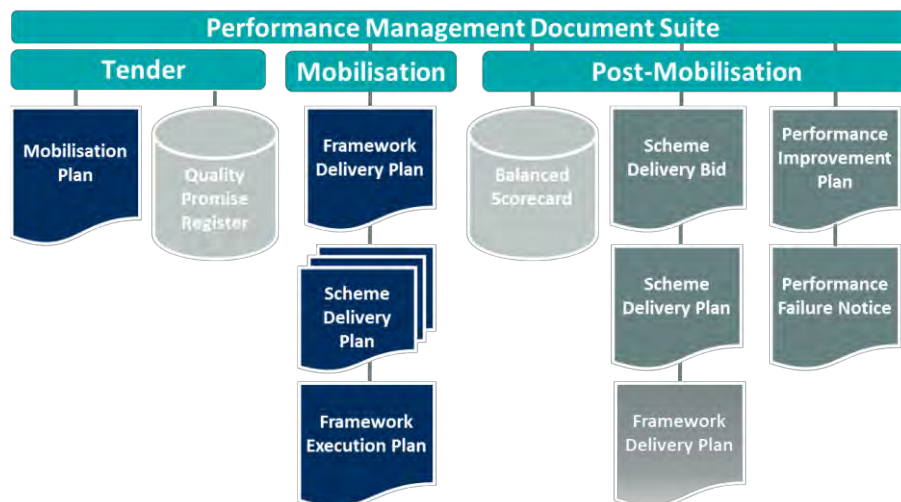


Figure 34 Performance Management Document Suite

These items shown in Figure 34 Performance Management Document Suite) are described in further detail throughout following Section 4.1.

4.1 The Balanced Scorecard

11. Infrastructure and Projects Authority (IPA) guidance "Improving Infrastructure Delivery: Project Initiation Routemap" 2016, advises the use of a scorecard to communicate client-led priority themes and underlying critical success factors that support the delivery of programme requirements.
12. The implementation of the Balanced Scorecard will support alignment between the Highways England vision and the supply chain's commercial imperative.
13. The IPA advises that application of a scorecard during the procurement process, allows the client to weight scoring criteria relative to key themes identified, thereby creating a 'Golden Thread' to drive post contract performance. Within the Selection Questionnaire (SQ) the key themes assessed are:
 - Health and Safety;
 - Customer;
 - Skills, apprentices and Equality, Diversity and Inclusion (EDI); and
 - StART3.

These are used as a foundation to inform the evaluation criteria that address:

- Strategic Alignment.
 - Safety.
 - Customer Service.
 - Improved Performance.
 - Asset Integrity & Value Procurement.
 - Sustainability, Capacity & Capability.
 - Programme Mobilisation & Delivery (encompassing a 100 day plan).
14. The performance review indicated a preference to align Performance Management under Routes to Market with strategic outcomes specified by the DfT. This is approach aligns the goal structure Highways England and the supply chain, who will work together to deliver the programme, while satisfying departmental policy requirements.
15. To drive this alignment, a number of Performance Indicators have been developed. The relationship between indicators, DfT outcomes and Highways England's strategic direction is shown below:

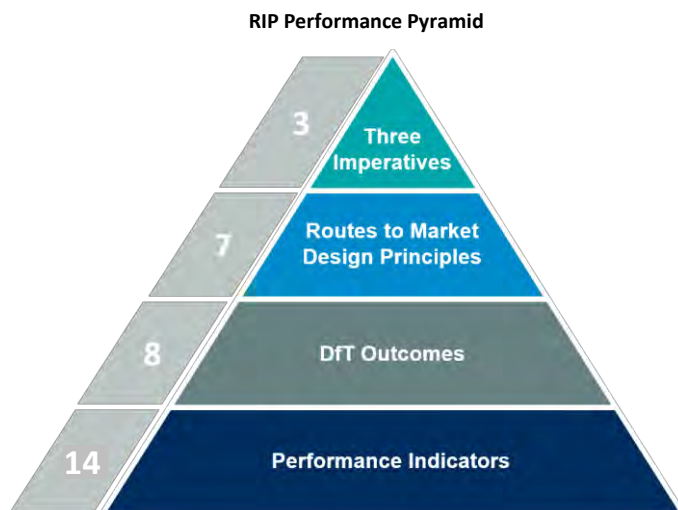


Figure 35 RIP Performance Pyramid

16. The criteria for procurement and performance management strategies are based on a triple bottom line of Environmental, economic and social sustainability and is reflected in the Balanced Scorecard presented below. For further details on the Selection and Evaluation strategy, see Section 5.

4.1.1 Performance scoring via Balanced Scorecard

17. Highways England recognises the need for a consolidated approach to performance measurement, management and improvement that supports procurement evaluation, continuous supplier monitoring and the objective allocation of work.
18. Beyond a method of measurement, the Balanced Scorecard provides an opportunity to cascade Highways England priorities deeper into the supply chain. This exposes multiple supply chain tiers to a method of aggregating and sharing accurate information to improve predictability in programme planning and supplier delivery.
19. Figure 36 RIP Balanced Scorecard shows the detailed composition of Performance Indicators design to respond to DfT Outcomes and Highways England Business Imperatives:



Figure 36 RIP Balanced Scorecard

20. There are 12 performance indicators in total, with additional scoring for mobilisation that is covered in further detail in Section 4.1.2. The frequency of measurement and rules governing the scoring of indicators identified are described below:
 - **Mobilisation:** 100 day mobilisation will be scored at the end of the period. Time. Mobilisation scoring criteria discussed below.
 - **Quarter scoring:** Each quarter there will be a collation of data to inform the scoring of the Balanced Scorecard.
 - **Annually aggregated score:** – Scoring for each project will be aggregated into the annual Balanced Scorecard at the end of a 12 month period.

- **Framework level aggregated score:** – There will be an annual aggregation of scores at a framework level with the additional of the score of the mobilisation phase.
- **Allocation:** Qualitative measures will not be included when scoring for allocation.

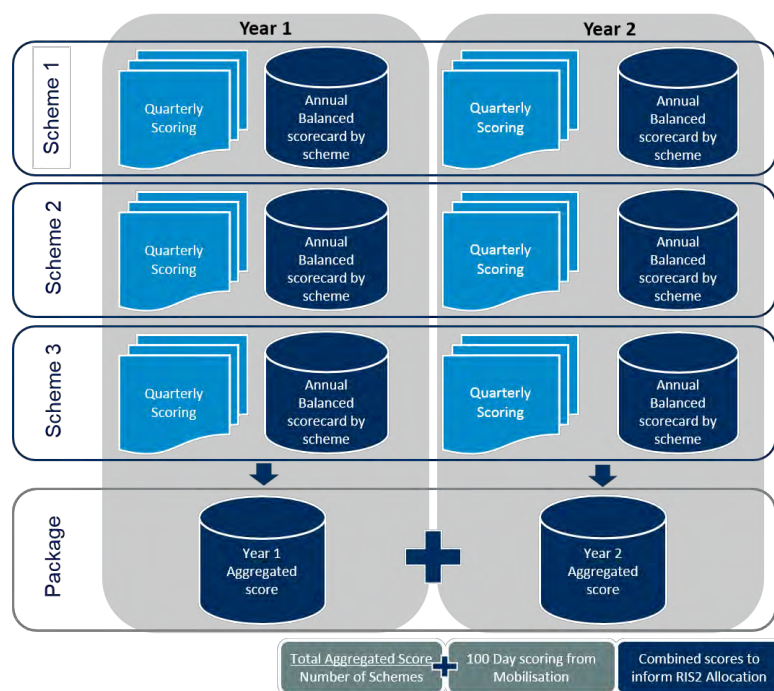


Figure 37 Performance Management Scoring Regime

- A maximum score is achievable each quarter that is aggregated at year end. Scoring is applicable across all PCF stages
 - The proposed PI's will not start to be measured until commencement of the works following successful completion of mobilisation.
 - If a Joint Venture is formed prior to submission, scoring applies to the Joint Venture, not the individual company.
 - Scores will be discrete to each Region.
 - In circumstances where points allocated drop below 60% of those achievable in any given quarter, this will result in the Performance Improvement process being initiated.
 - Scoring is informed by qualitative and quantitative measures.
21. Only selected performance indicators are used to allocate based on performance but all performance indicators will be used to monitor and review suppliers' performance, which will remain a contractual requirement. A detailed description of the balanced scorecard mechanism is contained in appendix xx.
 22. Qualitative scoring is based on analysis of supplier promises made within the Framework Delivery Plan and subsequent Scheme Delivery Plan(s). These documents contain information describing the approach to delivery, addressing process requirements such as StART3, Behavioural Maturity


Framework, People, Equality, Diversity and Inclusion (EDI) and Continuous Improvement. These are assessed collaboratively, within Region, at a quarterly Performance Review meeting that is hosted by Highways England and attended by all the suppliers in the Region. SME's of the qualitative processes will then provide the necessary support to conclude the assessment for each supplier in that quarter.

4.1.2 Mobilisation Phase

Tender Period

23. The mobilisation period is critical to programme success and is therefore included in the Balanced Scorecard. During tender period, the supplier is requested to submit a Mobilisation Performance Plan, to Highways England for approval.
24. The Mobilisation Performance Plan will include delivery of three key documents a Framework Delivery Plan, Scheme Delivery Plan and Framework Execution Plan. The above deliverables are covered in further detail in the following section.
25. The Mobilisation Performance Plan will also include:
 - A plan detailing what the supplier proposes to deliver on time or early;
 - A plan for number of iterations/right first time by product;
 - A plan for the resources, the key roles that are allocated and how these create an effective team;
 - A proposal for efficiency savings off the total mobilisation budget to be realised by the end of the phase
 - A plan detailing how to deliver the Lump Sum for schemes that are due to commence Development Phase within 12 months of Mobilisation;
 - A plan detailing how the supplier will work with the client, and how they will build relationships and collaborate with the other suppliers within the Region (see sec. xx Centres of Excellence).
 - How much risk/contingency/waste was planned v's what was actually experienced
 -
26. Where these products are either not provided, or not of a standard deemed acceptable by Highways England, there is a [REDACTED] penalty to available performance scores.
27. The mobilisation period will not conclude until the above products are submitted to, and approved by Highways England. Where these are not received within the 100 day period, the supplier is not be permitted to start work. It is then be expected that the supplier will conclude these activities, outside of mobilisation, at their own cost.

Contract Award

- 
- 28. Following Contract Award, the supplier enters into a 100 day Mobilisation period. Where the supplier is unable to deliver the requirements of the mobilisation phase, there is a 15% reduction in available points.
 - 29. Mobilisation scoring is included in the total points score at the end of Contract Award, to then inform future work allocation. The scoring criteria for mobilisation phase are to be determined.
 - 30. Suppliers that are awarded work will automatically be allocated to the National Contingency Framework for opportunities to win additional work.

4.1.3 Framework Delivery Plan

31. Before the end of mobilisation, the supplier (Delivery Integration Partner/Technical Advisor) is asked to produce a Framework Delivery Plan to clarify how they will delivery future packages of work. This will include:
- Health and Safety management plan (Generic)
 - Value management plan (incl customer)
 - StART3 accreditation
 - StART3 Development Plan
 - EDI Inclusion Actions plan
 - Workforce Planning
 - Behavioural Maturity Framework
 - Earned Value plan
 - Incentive Management Plan
 - Plan for progressing from Level 3 P3M3 to Level 4 and 5
 - Quality Management Plan
 - Capability and Capacity evaluation with Key named individuals
 - Resource plan broken down by PCF phase for the contract.
 - Forecast spend by PCF stage for the contract
 - Quality promises programme
 - Continuous Improvement Plan
 - Supply Chain strategy (see appendix 3)
32. The elements within the Framework Delivery Plan will be reviewed and assessed in the quarterly Performance Review Meeting.
33. To support assessment of the capacity and capability, required for the Framework Delivery Plans, Highways England's Supply Chain Division (SCD) will play a fundamental role in assuring any evidence that is provided.

4.1.4 Scheme Delivery Plan

34. During mobilisation phase, the supplier is also be required to produce a Scheme Delivery Plan for each scheme within the allocated package. The Scheme Delivery Plan will contain site specific information in relation to each scheme for:
- Health and Safety
 - Value management plan (incl customer)
 - Benefits realisation plan (incl customer)
 - Resource plan
 - Team Effectiveness – Delivery Integration Partner and supply chain working on the project.
 - Resource plan broken down by PCF phase for all projects.
 - Forecast spend by PCF stage for all projects.
 - Inclusion Action plan
 - Behavioural Maturity framework
 - Scheme Traffic Management plan
 - A revised and optimised scheme traffic management plan will then be submitted prior to PCF Stage 6 to evidence improvement.

4.1.5 Framework Execution Plan

35. To supplement Framework and Scheme Delivery plan(s) submission, the supplier will also have to submit a Framework Execution Plan that captures their approach to contract and project management, throughout the course of the contract. The supplier is expected to include information relating to all schemes within the contract in this document.

- Risk management plan
- Resource management
- Financial management plan
- Key supplier subcontracts in place
- Evidence that PBA is in place and operative
- All insurances and warranties in place
- Location/colocation planned and established
- Contract procurement strategy

4.1.6 Mobilisation Scoring

36. The scoring of mobilisation will take place twofold; qualitatively and quantitatively.

37. The Qualitative element is:

- Following award, during the Stand Still period, the supplier and the client will both complete a Behavioural self-assessment, a web-based survey containing approx. 60 questions relating to core behavioural areas of importance. This will be completed prior to the end of the stand still period.
- Before the end of the second week of mobilisation period, there will be a workshop that is set up between client and supply chain, and the key outcome of this workshop will be to collaboratively set some key targets against areas for improvement (including Quality Promises).
- The outcomes from the workshop will be developed into a Behavioural Action Plan that will map out aspirations for mobilisation and beyond.
- The delivery of the action plan, and the success against the evidence of collaborative behaviours will be tracked at scheme level and collated at package level, which will then inform the assessment of the Behavioural Action Plan at the end of the mobilisation period.
- There will be actions following the mobilisation period that are ongoing and can be carried over into delivery and these will become the basis to the information in the qualitative element of the performance management protocol, followed by six monthly reassessments.
- There will be no penalty where there have been justified changes to the action plan following review of the relevant parties.

38. The Quantitative element is the measurement of products against quality expectations in relation to predictability of the below:

- Right first time in delivery of the products required as part of the Framework Delivery Plan, Scheme Delivery Plan(s) and Framework Execution Plan.
- Early, on time, late (against programme), a comparison as to how accurate the programme submitted during tender was.
- Allocated resources to the mobilisation period, how much variance was there in the team that were included in the tender submission.
- How much risk/contingency/waste was planned v's what was actually experienced
- Percentage of efficiency against original programme realised by the end of the phase

4.1.7 Performance failure and improvement process


39. Following Contract Award, quarterly Balanced Scorecard results are collated by the Customer Services and Supplier Performance (CSSP) team, who then identify any occurrence where quarterly scores fall below 60% of the points available, either by individual measure, or in aggregate. Following this, the supplier will technically enter into a state of performance failure. Once this occurs, the following steps are initiated:

Quarter	Poor performance response
Quarter 1	Supplier is requested to submit an Action Plan, detailing how they will rectify underperforming measures and raise them to an accepted standard. Where this is not applied within two weeks of notification by Highways England, the supplier will experience a reduction of 15% of the annual points as part of that year's Balanced Scorecard points total.
Quarter 2	Where the scores continue to fall below the accepted standard, where possible, performance monitoring is increased to monthly intervals until improvement is evidenced.
Quarter 3	Following nine months of poor performance, and no improvement following the Action Plan submission and implementation, Highways England will intervene, via a series of audits receiving support where necessary from SMEs. This is done at the cost of the supplier.
Quarter 4	Following the above three attempts to improve performance, if the performance score remains below the accepted standard, this leads to immediate termination of the scheme. The scheme impacted by this change, will be offered to the other Delivery Integration Partner(s) within Region, and will follow the protocol detailed in sec. 4.1.7 reallocation.

40. Where a scheme is cancelled due to a change in Highways England's strategic direction, poor scheme economics, or where the supplier under-performs, performance data relating to that scheme is retained in the Highways England database, however is not be used to inform future allocation.
41. If the supplier in question then has further work allocated, they are requested to supply a Scheme Delivery Plan within 30 days of allocation of works. There will be no further penalties to poor performance on future work allocation; the current Highways England Quality Management Process is applied to support ongoing administration.

4.1.8 Lot Allocation Process (RIS2)

42. During delivery all suppliers gather performance data and points within the Balanced Scorecard. This information, drawn from the Annual Balanced Scorecard, informs the allocation of future schemes when performance data (on each PI) will be available for all suppliers. For the purposes of reallocation and termination, the balanced scorecard will be used from start of the contract agreement.
43. One hundred days prior to allocation, the performance scores evidenced to-date will indicate the Regions "highest performer". As the RIS2 quota of schemes will known by this point, Highways England will have a series of Allocation Assessment Meetings, to discuss with suppliers what schemes are being offered for the next tranche of work. The Delivery Integration Partners and Highways England will then provisionally allocate schemes to each supplier, based on the performance scores evidenced within the Balanced Scorecard.
44. Following the provisional allocation of the schemes/contract to the supplier, all suppliers will then have to submit a Lot assessment, which contains the following:
- Framework Delivery Plan

- 
- Scheme Delivery Plan(s)
 - Framework Execution Plan (Updated)

45. The elements within the Framework and Scheme Delivery Plan(s) are the same as those included in the initial mobilisation period. However, Highways England and the supplier are provided the opportunity to discuss if specific areas need to be added, or removed. This will then need to be submitted for acceptance to Highways England.
46. The evidence provided for capacity and capability to deliver the provisionally allocated work is reviewed by the Highways England Supply Chain Division, if deemed acceptable, the package/scheme is then be formally allocated to suppliers.
47. Where there is a discrepancy in the capability and capacity assessment used to evidence delivery, scheme(s) are offered to the top three highest performer(s) on the National Contingency Framework that
- a) Have the necessary capacity and capability to deliver and
 - b) Do not exceed the 30% total Routes to Market OJEU threshold.

See Section 4.1.8 for a description of the allocation process.

4.1.9 National Contingency Framework Quality Criteria

48. Where schemes are awarded via the National Contingency Framework, the supplier is requested to submit a Scheme Delivery Bid.

49. The Scheme Delivery Bid will include the following:

Heading	Description	Percentage
Section 1. Programme Resources	<p>Detail organisation chart & supply chain strategy to show the following functions</p> <ul style="list-style-type: none"> • Programme Management • Commercial Management • Design Management • Construction Management • Health & Safety • Quality Management <p>Supplier returns must clearly define all resources to be self-delivered and all strategic sub-contractors to be used in support.</p> <p>Suppliers will detail how resources will be integrated through the Delivery Integration Partner role. Resources specific to each scheme will also need to be defined, with an overall percentage measure indicate the amount spent on each scheme.</p>	
Section 2. Programme Risk Management	Suppliers are asked to detail their understanding of scheme constraints and risks and explain how they will seek to overcome them.	
Section 3. Cost Management & Efficiency	Suppliers are asked to detail how they will apply the standard Framework Commercial Strategy to exceed Scheme Budget and deliver efficiencies.	
Section 4. Innovation	Suppliers are asked to detail any innovative processes, materials or approach that they would seek to deliver for a given scheme.	
Section 5. Customer Services & Communication	Suppliers are asked to detail how they will engage, consult and manage both stakeholder and customer expectations.	

Figure 38 National Contingency Framework Quality Criteria

50. Highways England will evaluate the Scheme Delivery Bid based on the quality criteria above. The will also determine which Quality Statements provide Highways England with the most confidence that the Employers objectives will be delivered and continual improvement achieved.
51. Highways England will also take into account the key people and resources when marking the Quality Statement.
52. Any uncertainty over the meaning of the Quality Statement will be removed via tender clarification queries and tender clarification responses before the Quality Evaluation Panel complete their marking. No further tender clarification queries on the Quality Statement will be made after the marking is completed.
53. Suppliers will be assessed against each section using the point table.

4.1.10 National Contingency Framework operation

The following descriptions demonstrate how the National Contingency Framework will operate. See Figure 38, Figure 38Figure 40 and Figure 41 for an illustration of contingency framework operational process flows.

4.1.10.1 Regional Assessment Process (See Process Flow 2.1 – Figure 38)

- Any schemes that have been accelerated from RIS2 to RIS1, any Operations schemes that transfer into RtM, or any schemes that are reallocated due to poor performance, are offered to the existing supplier(s) within the Lot.
- Lot suppliers are then able to bid for these additional schemes and the bid will be based on the submission of a Scheme Delivery Bid. [Quality criteria within the Scheme Delivery Bid are to be determined]
- Highways England then evaluates the bids, and awards the scheme to the successful supplier
- When work is allocated via the Regional Assessment Process, a 30 day mobilisation period applies.
- If the existing suppliers are unable to take on the work, the package/scheme is then offered suppliers in the National Contingency Framework.
- The performance management process will commence following the 30 day mobilisation period and become part of the Balanced Scorecard.
- During the 30 day mobilisation period, the supplier will have to provide a Scheme Delivery Plan and an update to the Framework Delivery Plan, to incorporate the new scheme.

4.1.10.2 National Assessment Process (see Process flow 2.3 Figure 41)

- In circumstances where work has been offered to the National Contingency Framework, the Balanced Scorecard scoring will be assessed to identify if there is the contractually required 24 months' worth of work of data available.
- Where Balanced Scorecard data is available, the scheme will be offered to the National Contingency Framework top three performers, determined by the highest, national Balanced Scorecard scores.
- National suppliers will then submit a Scheme Delivery Bid that Highways England will then evaluate to inform award.
- If scheme cannot be awarded via the above steps, then it will go through OJEU to the open market.
- Where there is inadequate Balanced Scorecard data available, then the scheme will be offered to all suppliers on the National Contingency Framework, who will then submit a Scheme Delivery Bid.
- Highways England then evaluates the bids, and identifies a preferred supplier.

- Suppliers cannot re-tender for work they have lost
- A supplier that loses all RIS1 work due to performance failure is not able to access RIS2 work. This rule does not apply where only one scheme out of a package has been removed.
- Following allocation, via the National Contingency Framework, there will be a 30 day mobilisation period.
- The supplier that is allocated work via the National Contingency Framework will not automatically be allocated work as part of RIS2.
- Performance management scoring will commence following the 30 day mobilisation period and become part of the Balanced Scorecard.
- During the 30 day mobilisation period, the supplier will have to provide a Scheme Delivery Plan and an update to the Framework Delivery Plan, to incorporate the new scheme.

4.1.11 Termination

54. Highways England reserve the right to terminate a scheme based on decreasing BCR or an unsuccessful DCO.
55. Poor performance on individual PIs will not trigger termination unless the above steps have been followed.
56. Highways England reserve the right to terminate where there has been a significant failure in one of the key supplier's performance obligations (e.g., imprudence, inattention, negligence, and inobservance of securing the health and safety of any person affected by the project, etc.).
57. In the event that a supplier has their entire RIS1 package terminated, then the supplier in question is unable to access RIS2 work or other works via the National Contingency Framework.
58. The financial consequences of cancelling a scheme are detailed in Figure 42.

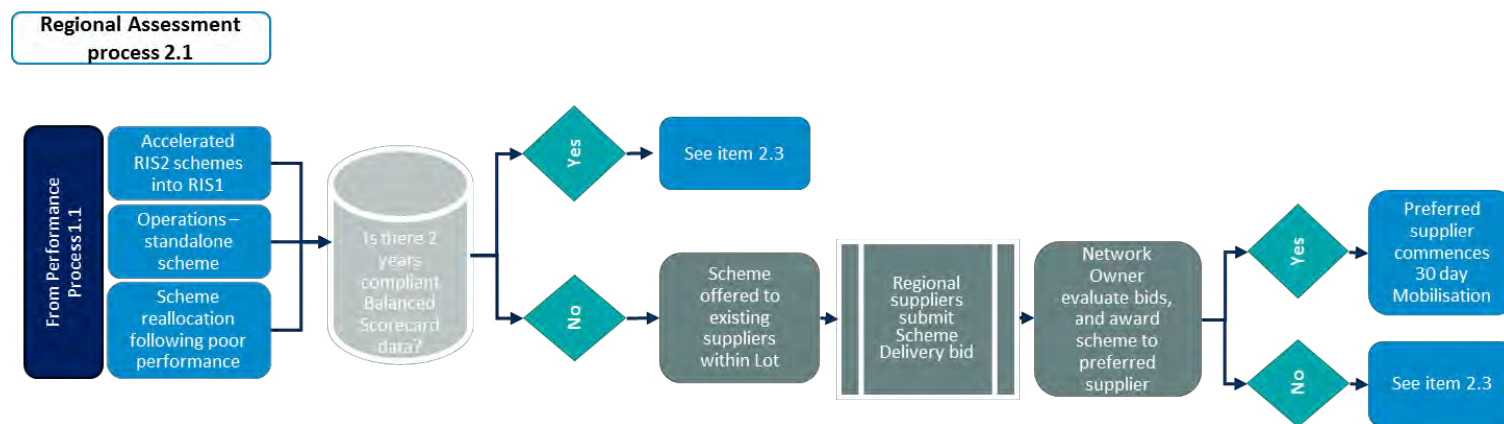


Figure 39: Regional Assessment Process

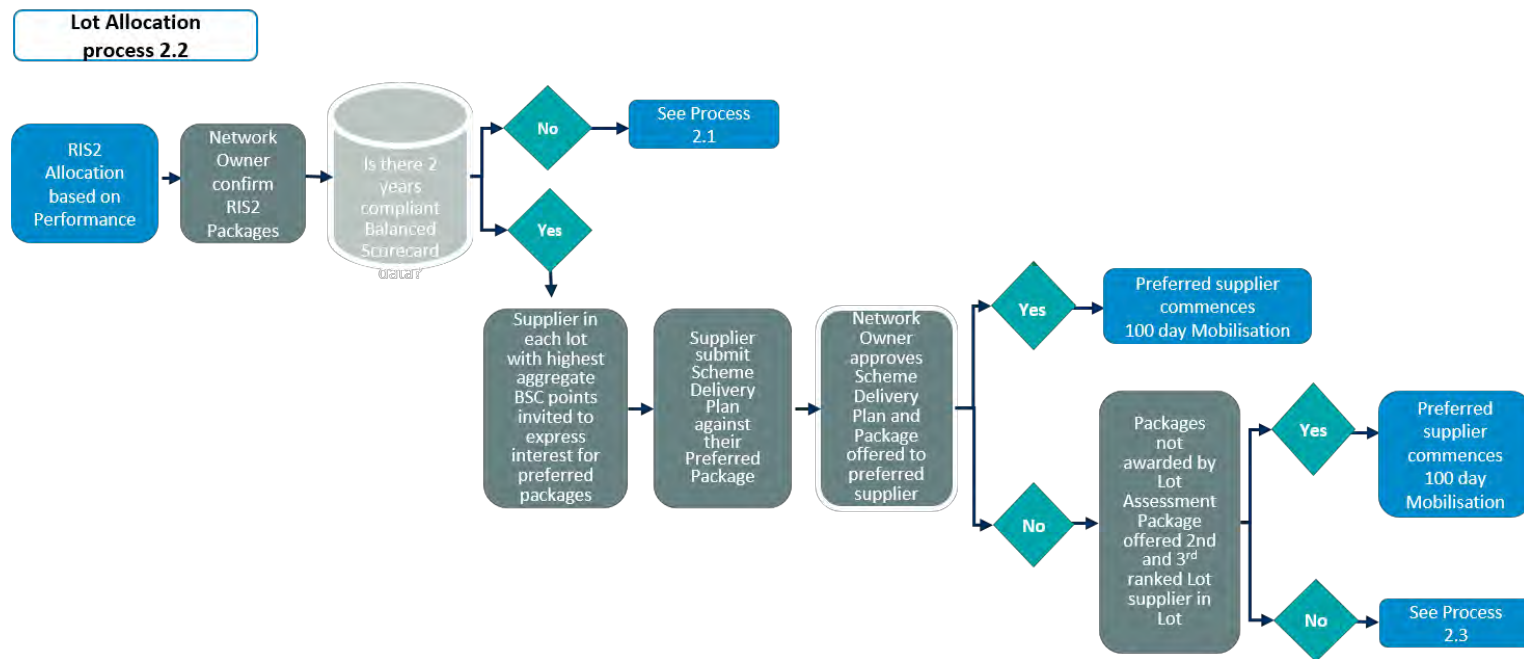


Figure 40: Lot Allocation Process

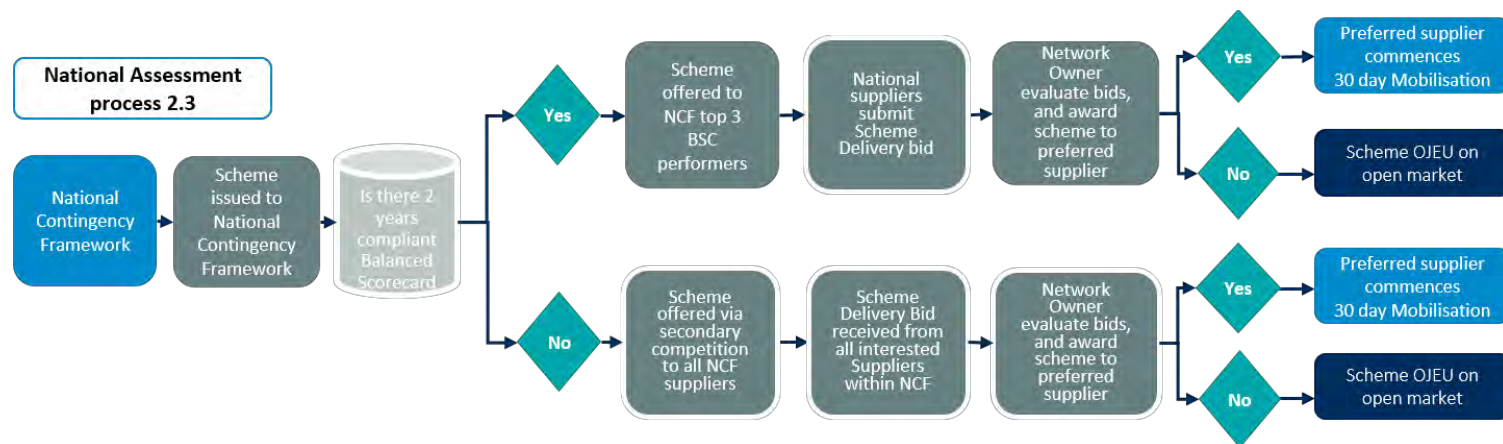


Figure 41: National Assessment process






[REDACTED]

Timing and reason for removal	Financial Consequences of Termination	Impact on incentives	Other comments
Scheme removed during Options Phase (for any reason)	No payment to Delivery Integration Partner. If work is instructed in Options Phase on an ad-hoc basis, reimburse costs incurred/committed in carrying out that work.	N/A.	Delivery Integration Partner not yet appointed.
Scheme removed during Development Phase:			
<ul style="list-style-type: none"> Highways England decision (no fault of Delivery Integration Partner) 	<ul style="list-style-type: none"> Reimburse either Defined Cost incurred/ committed to date (plus fee %age) or in accordance with agreed cash flow ([REDACTED]). Anything to be paid in addition (e.g. %age of unearned part of Development Phase lump sum)? [REDACTED] [REDACTED] 	No gain or pain share payable.	Scheme removed from BCR incentive (based on averages of remaining Schemes). Performance data for removed Scheme to be disregarded.
<ul style="list-style-type: none"> Reduction in BCR 	Irrelevant - BCR measured only at SGAR 2 and after completion of construction.	N/A.	This is our understanding from last week's discussion. [REDACTED] [REDACTED]
<ul style="list-style-type: none"> Failure to agree Scheme Budget 	<ul style="list-style-type: none"> Reimburse either Defined Cost incurred/ committed to date (plus fee %age) or in accordance with agreed cash flow ([REDACTED]). No loss of profit nor "penalty" for Delivery Integration Partner. 	No gain or pain share payable.	Delivery Integration Partner to provide fully detailed drawings/specs for Client to obtain competitive tenders to complete the Scheme. Alternative to removal – right for PM to set the Budget and adjust pain/gain share metrics [REDACTED]

[REDACTED]

<ul style="list-style-type: none"> Failure to secure an acceptable DCO (i.e. deliverable within the Scheme Budget and programme) 	<ul style="list-style-type: none"> Reimburse either Defined Cost incurred/ committed to date (plus fee %age) or in accordance with agreed cash flow ([REDACTED]). Delivery Integration Partner to pay forecast additional cost of engaging another contractor to complete the Scheme – based on either wasted costs of initial DCO application or forecast cost of new application ([REDACTED]). Delivery Integration Partner's liability for additional costs limited to – (i) overall limit of liability, (ii) Fee or (iii) some other sum? ([REDACTED]) 	No gain or pain share payable.	[REDACTED]
<ul style="list-style-type: none"> Under-performance (per Performance Framework) 	<ul style="list-style-type: none"> Reimburse either Defined Cost incurred/ committed to date (plus fee %age) or in accordance with agreed cash flow ([REDACTED]). Delivery Integration Partner to pay forecast additional cost of engaging another contractor to complete the Scheme. Interaction with limit of liability – see above. 	No gain or pain share payable.	Performance data not used directly to re-allocate future Schemes, but Delivery Integration Partner will need to explain (in Scheme Delivery Plan) how it has addressed the earlier performance issue.
<ul style="list-style-type: none"> Default (insolvency, H&S breach, corruption etc) 	As above for under-performance.	No gain or pain share payable.	As above for under-performance.
Development Phase completed, but Notice to Proceed not issued:			
<ul style="list-style-type: none"> Scheme no longer affordable/required (no fault of Delivery Integration Partner) 	Reimburse either Development Phase lump sum in full or Defined Cost incurred/committed to date (plus fee %age) ([REDACTED]), but not loss of profit.	No gain or pain share payable.	



<ul style="list-style-type: none">Failure to agree total of the Prices	<ul style="list-style-type: none">Reimburse either Development Phase lump sum in full or Defined Cost incurred/committed to date (plus fee %age) No loss of profit nor "penalty" for Delivery Integration Partner.	No gain or pain share payable.	Delivery Integration Partner to provide fully detailed drawings/specs for Client to obtain competitive tenders to complete the Scheme. Alternative to removal – right for PM to set the total of the Prices and reduce Delivery Integration Partner's gain share (TBC).
<ul style="list-style-type: none">Under-performance (per Performance Framework)	<ul style="list-style-type: none">Reimburse either Development Phase lump sum in full or Defined Cost incurred/committed to date (plus fee %age) Delivery Integration Partner to pay forecast additional cost of engaging another contractor to complete the Scheme.Interaction with limit of liability – see above.	No gain or pain share payable.	As above for under- performance.
Termination during Construction Phase:			
<ul style="list-style-type: none">Highways England decision (no fault of Contractor)	Reimburse Defined Cost incurred/committed to date, plus construction fee percentage, plus full Fee recovery on uncompleted works (as standard ECC).	Pro rata gain share against total of the Prices (as ECC), but no pain or gain share against Scheme Budget.	Highways England has made a commitment to complete the works within packages and this (generous) position reflects the need to maintain the longer term relationship.
<ul style="list-style-type: none">Under-performance (per Performance Framework)	Irrelevant – no separate ground of termination for under-performance during construction, unless it leads to a default event (see below).	N/A.	  



<ul style="list-style-type: none">• Default (see above)	<ul style="list-style-type: none">• Reimburse Defined Cost incurred/committed to date, plus construction fee percentage, but Delivery Integration Partner to pay forecast additional cost of engaging another contractor to complete the Scheme.• Interaction with limit of liability – see above.	No gain share payable, but forecast pain share against Scheme Budget (if any) payable under “Package Pot” regime.	The harshness of this position (no gain, but pain) balances the generosity of full Fee recovery for termination at will by Highways England.
<ul style="list-style-type: none">• Force majeure (e.g. major incident)	Reimburse Defined Cost incurred/committed to date, plus construction fee percentage, but not loss of profit (as standard ECC).	No gain or pain share payable.	

Figure 42 Allocation decision



Routes to Market Solution Design & Development Procurement Strategy December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

5 Procurement Strategy - Overview

1. The procurement strategy recognises Highways England's need to design a vehicle that supports a sustainable market place, encouraging industry growth to support the delivery of regional programmes.
2. To support this ambition, a number of key principles have shaped the procurement strategy including:
 - **Alignment to Highways England strategic vision:** Through the Evaluation criteria, Highways England will be able to assess the suppliers' understanding of what is most important to Highways England. The criteria is linked to the performance outcomes that will be monitored throughout the Contract term.
 - **Supply capability and capacity:** Highways England recognises the need for the procurement strategy to test the supplier's capability, expertise and capacity to be able to meet the scale of delivery required. The Evaluation criteria requires evidence and Quality promises of what the suppliers will delivery over the Contract term to assess the supplier's maturity and growth.
 - **Greater involvement from smaller Delivery Integration Partner suppliers:** Highways England recognises the need for a procurement and packaging strategy that facilitates the headroom for smaller suppliers to tender individually or as part of a Delivery Integration Partner's procurement pipeline.
 - **Encouraging collaboration:** Through the requirement for a supplier to evidence their alignment with StART 3 methodology and the provision of a 100 day plan, Highways England will be able to evaluate the suppliers from a behavioural perspective.
3. This section focuses on how the Selection procedure and Evaluation strategy provide a structured and focused engagement with the supply chain and create an optimised level of competition to realise value for money.

5.1 Selection procedure


4. An effective and efficient procurement must rely upon structured and focused engagement with the supply chain. It is vital to the successful delivery of Routes to Market that suppliers with an appropriate level of capability, capacity and expertise are appointed in order to maximise the likelihood of achievement of the programme objectives.
5. Choosing the right contract award procedure is a critical to create a sufficiently flexible procurement process, to avoid excessive bureaucracy while optimising the level of competition created and value for money realised.

5.1.1 Selection procedure summary

6. The selection procedure is summarised in Figure 43:

Function	Description
OJEU Public Contract Regulations Procedure	<ul style="list-style-type: none"> Use of the Restricted Procedure for Technical Advisor and Delivery Integration Partner appointment, with careful consideration given to the thresholds within the selection questionnaire with respect to the suppliers' technical, financial capability and capacity so as not to discount potential applicants.
Structure of the IFT	<ul style="list-style-type: none"> One competition for Delivery Integration Partners with a Lot structure that reflects the regional build-up of the RIP programme. Followed by one competition for Technical Advisors with a Lot structure that reflects the regional build-up of the RIP programme.
Style of tender	<ul style="list-style-type: none"> Use of a Highways England tendering template as a starting point so that Routes to Market looks and feels like an Highways England competition.
Standards of SQ Questionnaires	<ul style="list-style-type: none"> The standard Publicly Available Specification (PAS91) which incorporates the Crown Commercial Service (CCS) Selection Questionnaire (SQ) will be used, with three additional Highways England specific questions covering health and safety, customer and roads programme delivery. As PAS91:2013 does not take account of the Construction (Design and Management) Regulations 2015, the Health and Safety section will be rewritten.
Financial Thresholds	<ul style="list-style-type: none"> The financial threshold will be set at suppliers' annual turnover being a minimum of twice [REDACTED] of the highest value package on a Lot, divided by 3. This is expressed as the formula below: $((\text{Highest value of a package on a Lot} * [\text{REDACTED}]) * 2$ [REDACTED] of the package value represents the work expected to be delivered by the main contractor. The figure is divided by three on the assumption that the majority of work on a project will take place over three years, converting the figure to an annual test. However failure to reach prescribed levels of financial cover for a Lot will not automatically preclude a supplier from further participation. They will be given the opportunity to provide another form of security, such a bond or parent company guarantee.
Exclusion Parameters	<ul style="list-style-type: none"> Only in the event that a tenderer could not meet the required turnover levels and could not provide additional surety as to performance in the required format, would they be excluded from the competition. However, a shortlist will be operated for each Lot, meaning that some applicants may not be invited.
Past Experience	<ul style="list-style-type: none"> Supplier's compliance will relate to historic industry record and performance, requiring the provision of information from previous projects.
Commitment to investment in people	<ul style="list-style-type: none"> The requirement for a supplier to evidence their commitment to developing and investing in skills, and in particular their commitment to the creation of apprenticeships, will be maintained in accordance with the standard wording contained within the standard selection questionnaire (PPN 8/16).
StART 3	<ul style="list-style-type: none"> The use of StART3 will be included as a contractual commitment for suppliers to have obtained a StART3 score at an agreed time from contract award. This requirement will be included as a contract clause necessitating the suppliers to have an obligation to comply and also as a performance measure embedded in the contract. The SQ will include a basic question to confirm that suppliers either have a StART score or will obtain one during the mobilisation stage.

	<ul style="list-style-type: none"> Instead of using START3 as the assessment tool, supplier alignment will be tested at tender stage through the structuring of questions based on strategic alignment requirements, in the knowledge that companies would be using the tool at an agreed time following contract award.
Shortlisting Approach to SQ	<ul style="list-style-type: none"> A single SQ is to be released for the Delivery Integration Partner competition to cover all regions. Applicants are to express interest in particular Lots and shortlists will be drawn up for each Lot. A minimum of 5 and maximum of 10 candidates will be shortlisted for each Band A Lot. A minimum of 5 and maximum of 15 candidates will be shortlisted for each Band B Lot. A single SQ is to be released for the Technical Advisor competition at a later date.
Regional Capability	<ul style="list-style-type: none"> Regional capability will be tested through the tender Quality responses
How many Lots can Suppliers apply for	<ul style="list-style-type: none"> Suppliers will be able to bid for unlimited Regions and be awarded a maximum of up to two Regions in the Delivery Integration Partner Lots and up to two in the Technical Advisor Lots. Delivery Integration Partner: Suppliers may express interest in one or more Band A Lots or one or more Band B Lots but not Band A and B Lots together. Suppliers may win a place on one Lot on Band A or places on two Lots on Band B. Technical Advisor: Suppliers may express an interest in any regional Lot where they are not already part of a Delivery Integration Partner: in either Band A or Band B.
Managing the SME Agenda	<ul style="list-style-type: none"> Greater involvement from smaller Delivery Integration Partner suppliers will be fostered by limiting suppliers to tendering for Band A or Band B but not both thereby providing greater headroom for smaller suppliers. The tender assessment will test the processes that the Delivery Integration Partners will utilise to engage the regional supply chain at the lower levels. The Delivery Integration Partners will also establish a procurement pipeline of opportunities for the market and will promote improvement and integrated delivery through the establishment of Sustainable Improvement Hubs and the Centres of Excellence. The process will not preclude expressions of interest from smaller suppliers in consortium in the event that they can meet the requirements. Tenderers will be asked to complete an "SME subcontracting statement" to explain their approach to engaging with smaller suppliers. Per other recent procurements we will advise that this statement will be published on Contracts Finder making it a public commitment by the successful tenderers.
Joint Venture Application	<ul style="list-style-type: none"> Where a supplier wishes to enter into a Joint Venture (JV), the limit on the number of JV any one supplier can enter into is one. To comply with the rules of fair competition, involvement in a JV would preclude a supplier from competing in their own right in the same region as they would effectively be competing against themselves.
Rules Regarding Selection of Designers	<ul style="list-style-type: none"> There cannot be the same Technical Advisor and Delivery Integration Partner designer in a Region. A designer will be excluded from award of a Technical Advisor contract if they are to form part of the Delivery Integration Partner appointed to that region in either Band A or B and B. By staggering the Delivery Integration Partner and Technical Advisor competitions through separate OJEU notices we will ensure that this potential conflict of interest can be managed as suppliers will know the outcome of the Delivery Integration Partner competition before they express interest in the Technical Advisor competition. This approach will also bring greater resilience to the Technical Advisor



	tender list because unsuccessful Delivery Integrated Partner designers will be able to express interest in those regions where they have not been successful as a Delivery Integration Partner designer.
Highways England Financial Exposure	<ul style="list-style-type: none"> Professional Indemnity (PII): The contract should set a limit of design liability transfer relevant to the works in line with the Highways England C&P guidelines issued in 2016. PII requirements should be set to protect Highways England based on the transferred liability.

Figure 43: Selection Procedure summary

7. With the working assumption that the Restricted Procedure will best meet the objectives of this procurement, the SQ must be structured to provide Highways England with sufficient information to assess suppliers' capability and suitability for inclusion for the Invitation to Tender.
8. To achieve the objective of reducing workload throughout the tender process, the SQ should be structured to provide an appropriate shortlist, based on the early assessment of capability and suitability, supplemented by relevant experience, financial standing and technical ability.

5.1.2 Public Contracts Regulations

9. The consideration of the appropriate procurement procedure is confined to Open and Restricted options. Alternative procedures, available under Public Procurement Regulations 2015, are discounted, as they can only be used in the following circumstances:
- Needs cannot be met without adapting readily available solutions.
 - Requirements involve design or innovative solutions.
 - The contract cannot be awarded without negotiation due to nature, complexity, legal or financial make up or risks attached.
 - The specifications cannot be established with sufficient precision.
10. Both procedures are therefore considered in light of the prescribed packaging strategy and anticipated level of market participation. The procurement strategy is therefore designed to respond to this intelligence, gathered throughout the procurement development process.
11. Crown Commercial Service (CCS) guidance provides that, whilst the Open Procedure should be the default selection in order to attract the broadest level of competition possible, the Restricted Procedure can be used where 'there is a genuine need for pre-qualification, and/or there is a large marketplace with the potential for a high number of bidders'.
12. When considering the procurement processes for both the Delivery Integration Partner and Technical Advisor, Highways England concludes that the tests in the Procurement Policy Note to justify the use of the Restricted procedure are met. This option supports the aspiration of Highways England to reduce the tendering burden on both Highways England and the supply chain, this is achieved by:
- a. More effective, simplified management of tender lists for the Lot based structure.
 - b. A simplified tender process.
 - c. The opportunity to attract the most suitable suppliers with the required level of capability, capacity, financial standing and technical ability to deliver the programme.
13. Any perceived limitations with the Restricted Process, such as high thresholds related to turnover or capacity, are mitigated through careful consideration of the thresholds within the SQ with respect to the suppliers' technical and financial capability and capacity. Furthermore, packages of an appropriate scale are structured such that the volume of work within each of the Regions is appropriate to the observed capacity of the market.
14. The volume of work per region, informs the level of pre-selection criteria relative to each geography. Consideration of the regional market appetite, relative to the volume of work available, is used to determine a 'bar' that will attract the necessary level of competition.
15. The Routes to Market RIP delivery model provides opportunities for design consultants to operate independently as a Technical Advisor, or as part of a Delivery Integration Partner arrangement. Therefore, to maximise the ability of the market to respond, the Delivery Integrated Partner and Technical Advisor competitions will be tendered separately, under two separate OJEU notices. The Technical Advisor process will commence in summer 2018, once the outcome of the Delivery Integrated Partner process is known.

5.1.3 Selection Questionnaire

16. Four main options describing the format of the SQ are considered:
- a) Standalone use of 'Constructionline' on the basis that if suppliers already have a score on either of these systems they are not required to undertake the mandatory assessment element of the SQ.
 - b) Suppliers to complete the SQ mandated and adapted from the standard CCS framework by Highways England, to the extent permissible to meet with requirements. The SQ is hosted and returned through the Highways England Bravo e-tendering system and intends to maximise the functionality available through the system.
 - c) A blended approach of 1 and 2, whereby if suppliers are registered on 'Constructionline' then it is not necessary for them to answer specific questions from within the SQ and vice-versa.
 - d) Consideration of the requirement to use PAS91, a requirement stipulated by Crown Commercial Services, where Restricted Procedure is used.
17. Of these options, the PAS91 questionnaire and supplementary Highways England questions are considered to streamline the application and assessment procedure.
18. Additional questions appropriate to Highways England's requirements, aligned to the three imperatives covering Health and Safety, Customer and delivery of the roads programme, are added to mandatory Crown Commercial Service (CCS) questions in Parts 1 and 2 that are embedded in PAS 91.

5.1.3.1 Financial Capacity

19. Financial capacity and programme packages inform the number of regions it is permissible for a supplier to win. Furthermore, the replacement of underperforming suppliers failing to meet their delivery obligations and residual capacity needed to satisfy this ambition is considered.
20. A National Contingency Framework will provide further capacity, with the Contract Notice stating how suppliers gain a place and on what basis work would be awarded.
21. Testing financial capacity at selection stage will assess a supplier's ability to meet the financial requirements of a single, preferred Lot. A further assessment is required prior to award, to establish whether a supplier has the capacity to be awarded more than one Region.
22. Regulation 58 of the PCR Regulations limits the maximum turnover requirements that contracting authorities may set, to a minimum of twice the contract value, unless specific risks justify a greater turnover requirement. Highways England has decided to set the financial capacity threshold at the highest value of a package within a Lot, multiplied by [REDACTED]. This calculation has been subject to sensitivity testing to ensure that adequate capacity is available in the market to respond.
23. The initial failure to reach prescribed levels of financial cover will not automatically preclude a supplier from further participation in the tendering process. Instead they are given the opportunity to provide another form of security, such a bond or parent company guarantee. Only in the event that required turnover levels are not met and no additional surety is provided in the format described, would a supplier be excluded from the competition. In the case of a Joint Venture (JV) application, each party to the JV is tested to ensure an annual turnover of at least [REDACTED] of the financial threshold set for an individual supplier.
24. The same financial capacity test is conducted once the ranking is known following the tender assessment, when it is clear how Lots will be assigned to successful tenderers. Lots will not be assigned to tenderers where the financial capacity test is failed.

5.1.3.2 Technical and professional delivery

- 25. Past scheme experience is used to assess the technical and professional ability of a supplier. This data will not then be used to inform award criteria.
- 26. Assessing a supplier's compliance with the selection criteria, relating to their historic performance, requires the provision of information pertaining to previous contracts. Public Contracts Regulations 2015 state that this information may include references and certificates of satisfactory performance.

5.1.3.3 Health and Safety

- 27. Continuous improvement of safety across the road network is critical for the workforce and customer. To reflect this importance, the programme has identified the need to include an additional Health and Safety related question at selection stage, in addition to those mandated within the CCS SQ.
- 28. It is essential to consider compliance with the Construction Design and Management Regulations 2015 in questioning at this stage. In addition, there will need to be a commitment from the suppliers to achieve the required level of maturity, aligned to the requirements of Highways England's Health and Safety maturity matrix.

5.1.3.4 Customer

- 29. Improving user satisfaction is at the forefront of Highways England's imperatives to excel at Customer excellence. Tenderers are required to demonstrate their past experience in providing this customer excellence to road users.

5.1.3.5 Skills, apprentices and Equality, Diversity and Inclusion (EDI)

- 30. The requirement for a supplier to evidence their commitment to developing and investing in skills, and in particular their commitment to the creation of apprenticeships, is maintained in accordance with the standard wording contained within the PAS91 questionnaire.
- 31. The PAS91 questionnaire asks that the suppliers have an ongoing commitment to the development of skills and apprentices at selection stage, seeking evidence of developing and maintaining skills relevant to the contract in question.
- 32. Employment, Diversity and Inclusion questions are also included within the PAS91 questionnaire.

5.1.3.6 StART 3

- 33. The use of StART3 has been mandated and there is a contractual commitment for suppliers to have obtained a StART3 score at an agreed time from contract award. This requirement is included within the scope, suppliers therefore have an obligation to comply where a supporting performance measure is embedded in the contract.

34. However, the following issues are considered when asking suppliers to obtain a StART3 score prior to tender assessment:

- A time and cost implication of signing up to StART3 and obtaining a score. It is likely to take approximately eight weeks. This may be seen as a barrier to participation for some suppliers.
- Possible advantage to those who have already obtained a StART3 score.
- Whether StART3 looks prospectively at supplier's performance and this would be contrary to procurement regulation.

35. Consideration is therefore given to the appropriate stage to use StART3 intelligence. At SQ stage a simple Yes/No question will test whether suppliers have a StART3 assessment or whether they will seek one within the mobilisation stage after award.

36. Despite the agreed advantages of using the StART3 application, questions based on StART3 requirements are considered to offer a more appropriate method for assessing supplier alignment at tender stage, with the provision that companies would be using the tool at an agreed time following contract award.

37. Furthermore, to support ongoing supplier alignment during the assessment phase, the need to have visibility of how a supplier intends to improve over the life of a contract is considered essential. Highways England will therefore request evidence of supplier plans and procedures, previously implemented and ask for an approach that will support a sustained level of performance.

38. Instead of using StART3 as the assessment tool, supplier alignment is tested at tender stage by structuring questions based on strategic alignment requirements, aware that companies would be using the tool within the contractually stipulated timeframe, following contract award

5.1.3.7 Additional questions

39. There will also be additional question to test Equality, Diversity and Inclusivity, BIM, Quality systems and Environmental systems which are embedded in the PAS91 questionnaire.

5.1.4 Packaging structure

40. The packaging structure is essential in securing the correct level of competition for Routes to Market. There are a number of risks the selection procedure considers including:

- Spreading the supply chain too thinly across the Highways England Regions.
- Insufficient competition for Technical Advisor and Delivery Integration Partner packages.
- Skewed competition towards a particular Region, with reduced interest in a less desirable geographies.

41. The following selection approach has therefore been designed to support programme delivery:

- A national (as opposed to regional) approach to SQ release, to avoid limited competition in specific regions.
- A shortlist will be determined for each lot based on supplier preference and their national SQ score.
- On the Delivery Integration Partner competition, suppliers are able to express interest in as many Band A lots or as many Band B lots as they wish but not Band A and Band B lots together. See Section 1.5 Packaging Rules.
- On the Delivery Integration Partner competition, suppliers can be awarded places on a maximum of one Lot in Band A or places on a maximum of two lots in Band B, but not Band A and Band B lots together.

- The number of tenderers to be invited to the Delivery Integration Partner competition will be capped as follows:
 - Each Band A Lot (Lots 1, 2 & 3) will invite a minimum of five tenderers and a maximum of ten tenderers. Refer to Section 1.6.2 for Lot structure.
 - Each Band B Lot with two packages (Lots 4, 5 & 7) will invite a minimum of five tenderers and a maximum of 15 tenderers. Refer to Section 1.6.2 for Lot structure.
 - Each Band B Lot with three packages (Lots 6 & 8) will invite a minimum of six tenderers and a maximum of 15 tenderers. Refer to Section 1.6.2 for Lot structure.
 - All tenderers will be assigned to their preferred lots in the order of their national SQ score.
 - Where a Lot is over or undersubscribed Highways England reserves the right to rebalance the Lots. Highways England will contact tenderers on the oversubscribed Lots, advise them of their position in their current Lot and ask them if they wish to move their preference to an undersubscribed Lot. Once the shortlist is confirmed all suppliers within the Lot maximum will be invited.
 - The minimum number of suppliers that can be shortlisted for all Band A Lots combined is five (if the same suppliers express an interest in all three Lots).
 - The maximum number of suppliers that can be shortlisted for all Band A Lots combined is 30.
 - The minimum number of suppliers that can be shortlisted for all Band B Lots combined is six (if the same suppliers express an interest in all five Lots).
 - The maximum number of suppliers that can be shortlisted for all Band B Lots combined is 75.
- Suppliers may apply for the Delivery Integration Partner competition either in their own right or as part of a maximum of one Joint Venture.
- Suppliers may not express interest both in their own right and as a member of a Joint Venture within the same Lot. This will prevent suppliers from competing against themselves.
- A Delivery Integration Partner and their designer will be prevented from being awarded the role of Technical Advisor in the same region due to conflict of interest.

42. The selection process for the Technical Advisor competition will be defined closer to the time of document publication.

5.2 Evaluation Strategy

43. Establishing relevant and objective evaluation criteria is vital to the appointment of suppliers that are aligned to the objectives of Routes to Market. [REDACTED]


- [REDACTED]
- [REDACTED]
- [REDACTED]

44. It is critical to the success of the project that a 'golden thread' links Highways England's three Imperatives and Routes to Market Design Principles to objectives, evaluation criteria and contract terms. Delivery of tender promises against these criteria are monitored through a performance measurement and management environment informed by these components.

5.2.1 Key Decisions

45. The key decisions regarding the evaluation strategy are reported below in Figure 44 Evaluation Strategy Key Decisions

Function	Description
Design Principles	<ul style="list-style-type: none"> Decision to consolidate the seven Routes to Market Design Principles into the following set of key objectives: Strategic Alignment. Safety. Customer Service. Improved Performance. Asset Integrity & Value Procurement. Sustainability, Capacity & Capability. Programme Mobilisation & Delivery (encompassing a 100 day plan).
Testing Mobilisation	<ul style="list-style-type: none"> As part of the Quality Assessment of programme mobilisation and delivery, suppliers are asked to submit a 100 day plan, outlining what the supplier would deliver in the first 100 days following appointment.
Quality Statement and Testing Maturity	<ul style="list-style-type: none"> The programme proposes the need to adopt a blended approach to the Quality Assessment, using a Quality statement with approach and evidence and Quality promises, asking what the suppliers will deliver in year one, three and six.
Form of Quality Assessment	<p>The Quality Assessment is based on the following:</p> <ul style="list-style-type: none"> Tender promises are captured in a register and flow into the management of the contract through a 'SMART' measurable objective to ensure performance can be measured and assure that the tender promises are delivered. Three maturity based questions aligned to the Highways England imperatives, tested by approach and evidence. Six questions relating to the Routes to Market Design Principles with consideration to the ORR performance outcomes. Two Regional approach questions to reflect regional understanding and approach in organisation readiness, the 100 day mobilisation and regional risks. Suppliers are asked to evidence responses that are subject to validation at the appropriate stage of the assessment process.
StART 3	<ul style="list-style-type: none"> Organisational behaviours are tested through alignment with StART3 methodology and the quality element of a supplier's submission. Part of this assessment will likely include a desktop assessment and site visit, to verify the behaviours described in tender returns.
Behavioural Assessment	<ul style="list-style-type: none"> The '100 day plan' that is submitted as part of the quality submission is tested from a behavioural perspective.
Commercial Assessment	<p>Delivery Integration Partner</p> <ul style="list-style-type: none"> Commercial assessment for will test Fee percentages applied to both development and construction phases. The tendered Fee is split to identify project office overhead, corporate overhead and profit separately. A resourced cost loaded programme for Stages 3 to 5 of an Indicative Scheme. Lump sum price for Mobilisation. A capped proportion of construction management cost of direct works, for schemes of different scale and classification. Basket of goods" approach, using Highways England unit cost data to create cost benchmark for the purpose of driving pricing efficiencies at tender.



	<p>Technical Advisor</p> <ul style="list-style-type: none"> • The commercial assessment tests tendered Fee percentage, corporate overhead and profit separately. • A resourced cost loaded programme for Stages 1 to 2 and Stages 3 to 5 for an Indicative Scheme. <p>Delivery Integrated Partner and Technical Advisor</p> <ul style="list-style-type: none"> • Aligned qualitative questions to create commercial tension.
Earlier coupling of Quality and Financial Panels	<ul style="list-style-type: none"> • Quality and financial panels are combined, prior to validation, to provide assurance that the commercial submission is reflective of the quality submission and as such is a realistic representation of the time and resource required to deliver the work.
Evaluation Panels	<ul style="list-style-type: none"> • There are two panels: • Panel 1: National: Focusing on common elements across tender returns with input from SMEs. • Panel 2: Regional: Focus on submissions within their allotted Region.
Evaluation Model Weightings	<ul style="list-style-type: none"> • An 80% quality weighting, which will encompass a behavioural assessment, and 20% commercial weighting is proposed for Delivery Integration Partner and Technical Advisor.
Financial Capacity Retested	<ul style="list-style-type: none"> • This will be retested prior to award and be a condition that a supplier has the capacity and minimum turnover for all the Region's it will be awarded.

Figure 44 Evaluation Strategy Key Decisions

- [REDACTED]
46. The desire to streamline the evaluation process, has resulted in the identification of Quality Assessment criteria across the following seven principles that consolidate Highways England Imperatives and Routes to Market Design Principles into a robust set of procurement objectives:
- a) Strategic Alignment.
 - b) Safety.
 - c) Customer Service.
 - d) Improved Performance.
 - e) Asset Integrity & Value Procurement.
 - f) Sustainability, Capacity & Capability.
 - g) Programme Mobilisation & Delivery (encompassing a 100 day plan).
47. Innovation and collaborative practice is present throughout the seven Routes to Market Design Principles. These should be evidenced in the response to each questions as a common theme that runs through a supplier's general business practice.
48. The design of the quality evaluation further evolved with the developing performance management themes. These themes are linked to the Highways England ORR outcomes and form the 'Golden Thread' between selection criteria, evaluation criteria and performance management throughout the contract (Section 4.1.10). Questions relating to the design principles with consideration to the ORR performance outcomes are provided. The design of the Quality evaluation is proposed to be in three sections:
- Section one: Maturity assessment, to be submitted only once by tenderers.
 - Section two: Quality assessment, to be submitted only once by tenderers.
 - Section three: Regional delivery. This is specific to the regional Lot being applied for.
49. As part of the assessment of programme mobilisation and delivery, suppliers are asked to submit a 100 day plan, outlining what the supplier would deliver in the first 100 days following appointment. This is considered a suitable methodology for assessing the behaviours of an organisation and will also provide a good monitoring tool for use when assessing behaviours following contract award. In addition, the plan is used to create tension between the quality and commercial assessments.
50. Three options for structuring the Quality Assessment are considered in the design development phase, these include:
- Quality statement – basic open questions with a case study.
 - Quality statement with evidence and approach, currently used in Highways England competitions.
 - Quality promises, asking what the suppliers deliver in year one and year four. This option is currently used on other major infrastructure programmes such as [REDACTED]
51. A blended approach that combines the second and third bullets is used. This includes sufficient provision in the contract terms and supporting performance metrics to enforce and monitor quality promises made at tender stage, through to delivery. The approach therefore incorporates the following:
- Tender promises are captured in a register and flow into the management of the contract through a 'SMART' measurable performance objective so that the tender promises are delivered and captured.
 - Maturity based questions, aligned to each of the three imperatives are included.
 - Specific questions aligned to the ORR principles.
 - Regional delivery questions specific to each Region.

- Suppliers are asked to evidence responses that are subject to validation at the appropriate stage of the assessment process.

52. Alignment between the above steps is required to ensure the core themes identified cascade through procurement into delivery.

53. The proposed quality assessment approach is set out below.

Section Quality	Sub Section	Assessment Approach
Section 1	Strategic Alignment	
1.1	Technical Capability and Delivery	Three step approach: Diagnostic, Leadership and plan, Making the Change
1.2	Making the Network Safer	
1.3	Improving User Satisfaction	
Section 2	Quality Assessment	
2.1	Supporting the smooth flow of traffic	Part A and Part B assessed as one response
2.2	Keeping the network in good condition	
2.3	Encouraging economic growth	
2.4	Achieving real efficiency (Quality)	
2.5	Deliver better environmental outcomes	
2.6	Deliver quality outcomes	
Section 3	Regional Delivery	
3.1	Regional Integration: Organisational and Supply Chain structure, programme mobilisation and 100 day plan	One response
3.2	Regional risk management	

Figure 45 Proposed quality assessment approach

5.2.1.1 Behavioural

- 54. A formal behavioural assessment will not form part of the assessment of the Supplier's Quality submission. As part of the behavioural assessment organisational behaviours are tested through the strategic alignment responses to the quality element of a supplier's submission. Part of this assessment includes a desktop assessment and validation site visit, to verify the behaviours described in tender returns.
- 55. In addition, the '100 day plan' that is submitted as part of the Quality Submission will be tested from a behavioural perspective as part of the wider quality assessment.
- 56. The key element of the behavioural assessment considers past performance relative to improvement plans and how the supplier plans will implement a continuous improvement strategy. Furthermore, Routes to Market lessons identified research has highlighted the need to monitor Highways England behaviours, to position the organisation as an enabling client.

5.2.2 Commercial

- 57. Historically, Highways England have provided scheme budgets at tender stage for verification by suppliers. This will not be the case for Routes to Market due to a reduced level of confidence in the maturity of a number of the scheme budgets identified, and uncertainties surrounding the planning conditions relating to Development Consent Orders that impact the ability to effectively negotiate a scheme budget.
- 58. The commercial assessment will there focus on the following points with respect to the Delivery Integration Partner and Technical Advisor:

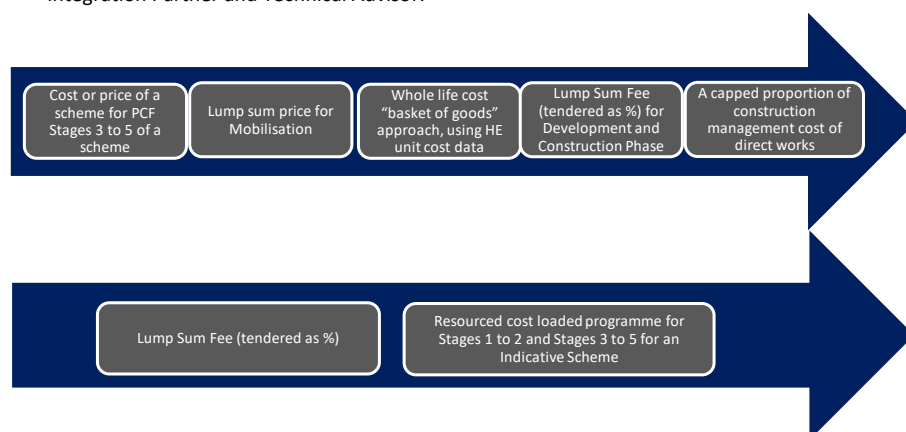


Figure 46. Commercial assessment focus points.

- 59. CDF Lessons Identified research indicates that sample schemes did not deliver the desired level of commercial tension and instead were viewed as an unnecessary burden on the tendering and evaluation process. The proposed commercial criteria has therefore pursued legal advice to understand whether the proposed light-touch proposal is sufficient to:
 - a. Mitigate the risk of challenge from the market post award; and
 - b. To test commercial efficiency in order to identify the Most Economically Advantageous Tender.
- 60. To satisfy the requirement for a robust value for money test to support the commercial assessment, a "basket of goods" approach is used. Highways England unit cost data is aggregated to create a cost benchmark to drive pricing efficiencies at tender.

61. A resourced, cost loaded programme for Stages 3 to 5 of an Indicative Scheme is required from the Delivery Integrated Partner and for Stages 1 to 2 and Stages 3 to 5 for an Indicative Scheme for the Technical Advisor. This demonstrates how the supplier's methodology to meet the quality criteria will be costed and resourced.

5.2.3 Approach to Evaluation

5.2.3.1 Evaluation Model

62. There is a desire to encourage collaboration between the quality and financial assessment panels, earlier in the evaluation process, where previous procurements have separated these functions. This approach limits the ability of the finance panel to assess whether the tender has been priced appropriately in relation to the Quality Submission.
63. The proposed process bring panels together, prior to validation, to provide assurance that the commercial submission is reflective of the Quality Submission and as such is a realistic representation of the time and resource required to deliver the works or services.
64. This approach will enable the amendment of scores, to reflect the comparison and early validation between the financial and quality panels. This is likely to improve the accuracy and validity of scoring outcome.
65. The proposed approach is outlined below in Figure 47:

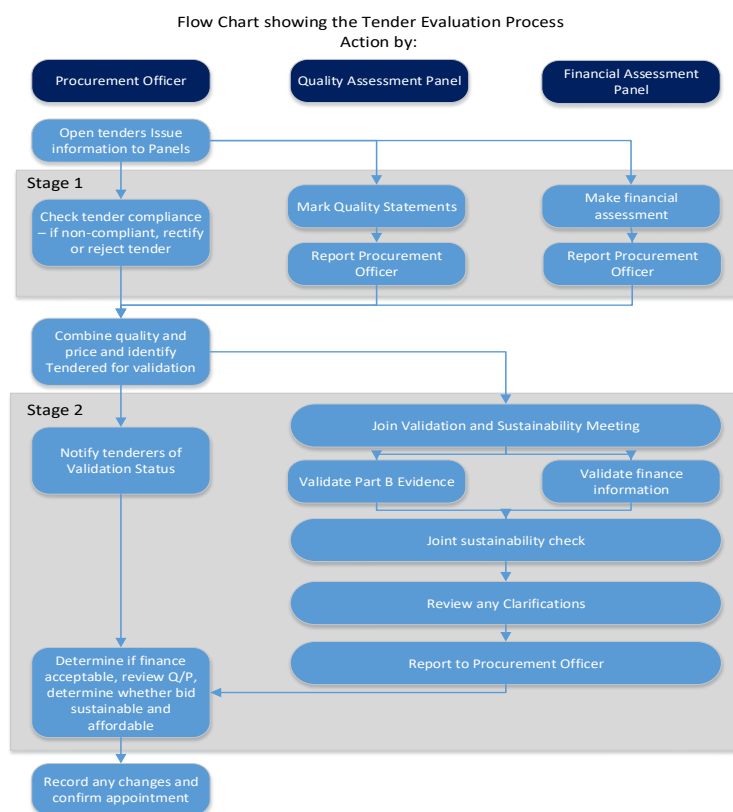


Figure 47 Tender Evaluation process

5.2.3.2 Evaluation Team Structure

66. In order to ensure an optimum level of resource is deployed within the evaluation teams and in consideration of the proposed packaging structure:

- Panel 1: National: Focusing on common elements across tender returns.
- Panel 2: Regional: Focus on submissions within their allotted Region.

67. Subject matter experts will be assigned to support the evaluation effort within their respective fields as shown in Figure 48.

National Element of Submission	Regional Element of Submission
Panel 1	Panel 2
Subject Matter Experts	Financial Panel
	Quality Panel
	Subject Matter Experts

Figure 48 Team Structure

68. The same structure will be adopted for both Technical Advisor and Delivery Integration Partner assessment panels, with two separate teams assessing each.

5.2.4 Quality Assurance

69. External assurance is required to support correct alignment of the evaluation model to Business Imperatives and Routes to Market Design Principles. This will result in appointment of appropriate suppliers that are aligned with the strategic priorities of Highways England.

5.2.5 Evaluation Model and Weightings

70. To reflect the importance of innovative practice and cultural alignment an 80% quality weighting, which will encompass a behavioural assessment, and 20% commercial weighting is proposed.

5.2.5.1 Quality and commercial

71. Given the equal importance procurement design criteria an even weighting across the Routes to Market Design Principles is provided, with the exception of Safer Roads and Customer Satisfaction that receive a greater weighting to reflect their status as stand-alone Imperatives.

72. An indicative split for Delivery Integration Partner is included below:

[REDACTED]

Quality Criteria											80%
Technical Capability & Delivery	Making the Network Safer	Improving User Satisfaction	Supporting the smooth flow of traffic	Keep the network in good condition	Encouraging economic growth	Achieving real efficiency	Deliver better environmental outcomes	Deliver Quality Outcomes	Programme Mobilisation & Delivery (100 day plan)	Regional Risk Management	
[REDACTED]			[REDACTED]					[REDACTED]			Level 2 Weightings
Commercial Criteria											20%
Lump Sum Fee (tendered as %) for Development Phase (DIP)			Lump Sum Fee (tendered as %) for Construction Phase (DIP)		Sample work package prices	Lump sum price for mobilisation (DIP)	Capped construction management cost proportion (DIP)	Basket of goods Unit cost			
[REDACTED]			[REDACTED]		[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED]	[REDACTED]			Level 2 Weightings

Figure 49 Quality and Commercial criteria. Commercial criteria costs are indicative at this stage.



Routes to Market Solution Design & Development Acronyms, Abbreviations, and Definitions December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

Abbreviation	Definition
AD	Asset Delivery
AIP	Agreement In Principle
ASC	Asset Support Contract
BMF	Behavioural Maturity Framework
C&P	Commercial and Procurement
CAUTS	Cold Applied Ultra-Thin Surfacing
CCS	Crown Commercial Service
CCTV	Closed Circuit television
CDA	Contract Development and Assurance
CDF	Collaborative Delivery Framework
CDM	Construction, Design and Management regulations
CPF	Collaborative Performance Framework
CPO	Capital Portfolio Office
CWF	Construction Works Framework
D&B	Design & Build
D&C	Design & Construction
DCO	Development Consent Order
DDW	Design Decision Workshop
DfT	Department for Transport
DIP	Delivery Integration Partner
DIPM	Delivery Integration Partner Model
DPS	Dynamic Purchasing System
ECC	Engineering and construction contract
ECI	Early Contractor Involvement
FBC	Final Business Case
GNIP	UK Government National Infrastructure Pipeline
H&S	Health & Safety
HEIC	Highways England Investment Committee
HELMA	Highways England Lean Maturity Assessment
ICG	Infrastructure Client Group
IDC	Investment Decision committee
IPH	Integrated Procurement Hub
IPR	Intellectual Property Rights
ITT	Invitation to Tender
JV	Joint Venture
KPI	Key Performance Indicator
LA	Local Authority
M&R	Maintenance & Renewal
MAC	Managing Agent Contract

MDI	Market Development and Intelligence
MP	Major Projects
NAO	National Audit Office
NCoE	National Centre of Excellence
NEC	New Engineering Contract
NO	Network Owner
NTP	Notice to proceed
OBC	Outline Business Case
OD	Operations Division
OJEU	Official Journal of the European Union
ORR	Office of Rail and Road
PC	Principle Contractor
PCF	Project Control Framework
PCR	Procurement Contracts Regulations
PD	Principle Designer
PDP	Programme Delivery Partner
PI	Performance Indicator
PM	Project Manager
PMO	Programme Management Office
PPM	Project and Portfolio Management
PQS	Professional Quantity Surveyor
RIP	Regional Investment Programme
RIS1	Road Investment Strategy 1
RIS2	Road Investment Strategy 2
RP1	Road Period 1
RP2	Road Period 2
Routes to Market	Routes to Market
S&P	Strategy & Planning
SBP	Strategic Business Plan
SCD	Supply Chain Division
SDP	Strategic Delivery Partner
SES	Safety Engineering Standards
SMEs	Small and Medium-sized Enterprises
SMP	Smart Motorways Programme
SOBC	Strategic Outline Business Case
SoCC	Schedule of Cost Components
SoFA	Statement of Funding Available
SOR	Statement of Requirements
SPaTS	Specialist Professional and Technical Services
SPV	Special Purpose Vehicle
SQ	Selection Questionnaire

SRN	Strategic Road Network
StART3	Strategic Assessment Review Toolkit 3
TA	Technical Advisors
TST	Technical Surveys and Testing
TTM	Temporary Traffic Management
TUPE	Transfer of Undertakings (Protection of Employment)
VCP	Value Chain Plan
VE	Value Engineering

DRAFT



Routes to Market Solution Design & Development Appendix December 2017

To be read in conjunction with the Routes to Market Solution Design & Development RIP and Ops Partnership Model September 2017

OFFICIAL - SENSITIVE

A1 Packaging Strategy

5.3 A1.1 Routes to Market Benefits Map

Shown below in figure 43 is the Benefits Map for Routes to Market, reflecting the dependencies and interactions between issues, changes, outcomes and benefits throughout the programme

DRAFT

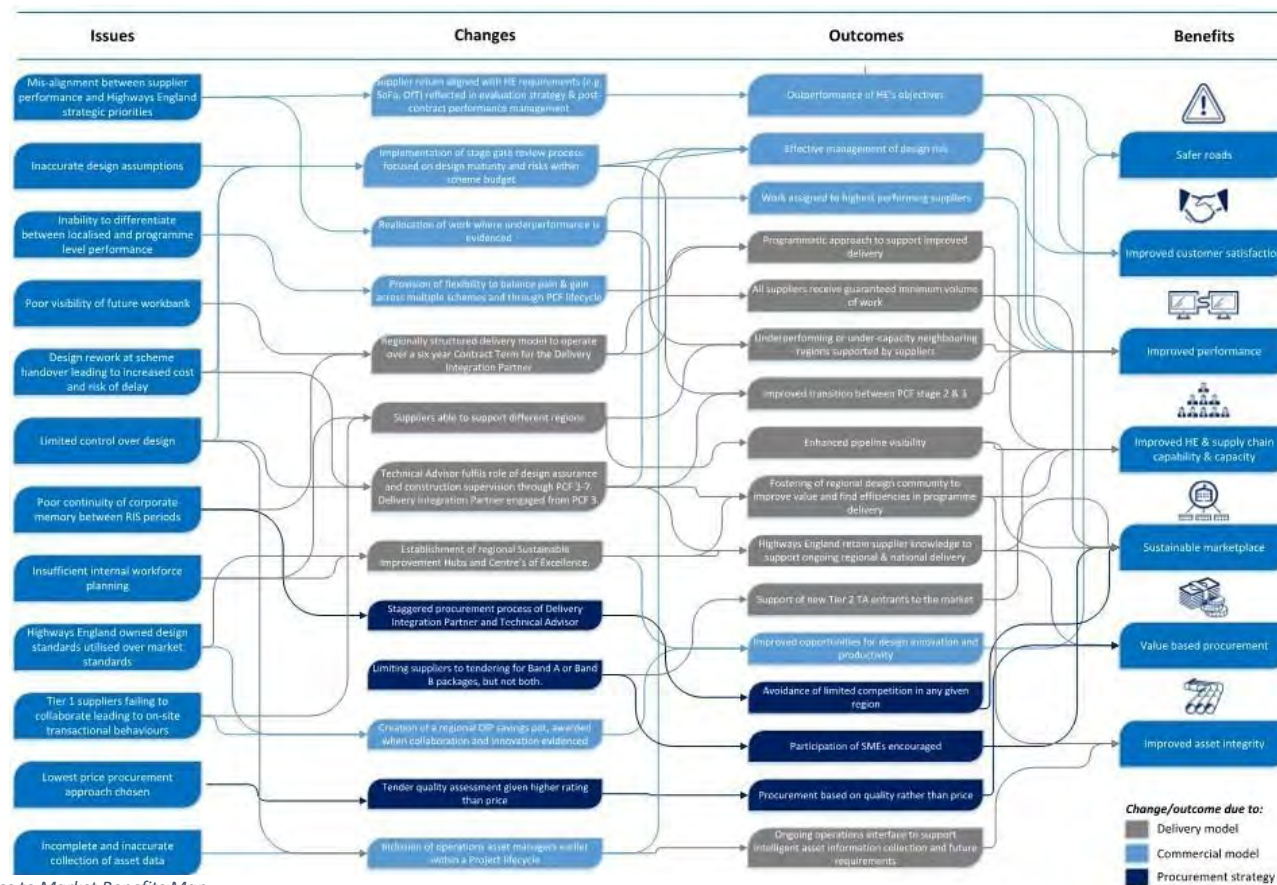


Figure 50 Routes to Market Benefits Map

5.4 A1.2 Percentage Breakdown

To accurately determine contract values for the Technical Advisor and Delivery Integration Partner, the following percentage breakdown provided by the Cost Intelligence team for contracted roles is provided below.

Cost heading (pre-efficiency)	% Breakdown
(Stage 1 and 2) Option Identification & Option Selection Cost	2.70%
(Stage 3, 4 and 5) Designers Costs	2.07%
(Stage 3, 4 and 5) Commercial Assurance Costs	0.28%
(Stage 3, 4 and 5) ECI Contractors Cost	10.13%
(Stage 3, 4 and 5) Other Costs	0.35%
(Stage 6 and 7) Construction & Handover - Contractor's Cost	67.11%
(Stage 6 and 7) Construction & Handover - Design Supervision & Assurance Costs	1.32%
(Stage 6 and 7) Construction & Handover - Commercial Assurance Costs	0.73%
Highways England Other costs	15.32%

Figure 51 Percentage Breakdown

5.5 A1.3 Regional Contract Values

Further percentage breakdowns are then used to determine regional contract values of RIS1 and RIS2 schemes.

RIS1 - Cost heading (pre-efficiency)	% Breakdown
Design Assurance and Construction Supervision (post PCF stage 4) - Technical Advisor	1.44%
Design Cost (post PCF stage 4) - Delivery Integration Partner	4.07%
Construction Cost (post PCF stage 4) - Delivery Integration Partner	67.11%
RIS2 - Cost heading (pre-efficiency)	% Breakdown
(PCF stage 1 to 7) Design Assurance, Construction Supervision, and Options design – Technical Advisor	4.37%
(PCF stage 3 to 7) Detailed design costs - Delivery Integration Partner	12.20%
(PCF stage 3 to 7) Construction costs - Delivery Integration Partner	67.11%
RIS1 - Cost heading (post-efficiency)	% Breakdown
Design Assurance and Construction Supervision (post PCF stage 4) - Technical Advisor	1.08%
Design Cost (post PCF stage 4) - Delivery Integration Partner	3.05%
Construction Cost (post PCF stage 4) - Delivery Integration Partner	50.33%
RIS2 - Cost heading (post-efficiency)	% Breakdown
(PCF stage 1 to 7) Design Assurance, Construction Supervision, and Options design - Technical Advisor	2.45%
(PCF stage 3 to 7) Detailed design costs - Delivery Integration Partner	6.86%
(PCF stage 3 to 7) Construction costs - Delivery Integration Partner	37.15%

Figure 52 Regional Contract Values

5.6 A1.4 Stress test Outputs

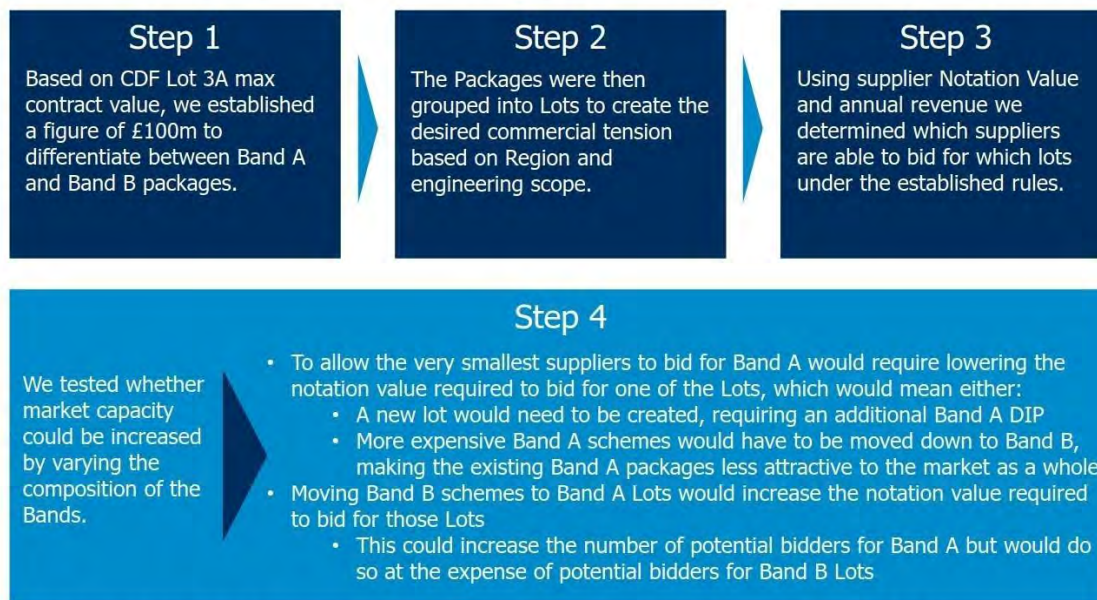
To ascertain whether the proposed RIP solution is deliverable, Highways England has sourced support from Supply Chain Division (SCD), to stress test the preferred delivery model and associated regional volumes for RIS1 with Start of Works in RP1 and RP2. This analysis tested the proposed packaging strategy, to validate the optimal number of suppliers per discipline, by geographic region, required to support successful delivery

Please consider the following when analysing this data:

- Supplier data has been verified by Highways England Commercial & Procurement and Supply Chain Division, however this may not be representative of the whole market.
- The stress test analysis assesses an individual supplier's ability to bid, it does not assess their appetite to do so.
- Supplier preference to form specific consortiums based on known market relationships has not been considered.
- The placing of suppliers in specific value bands is approximate (based on Construction Line Notation Value), suppliers may therefore be acknowledged to demonstrate characteristics resulting in a different band placing to that shown.
- Smaller tier suppliers, traditionally known as tier 3 and 4 have not been considered for their ability to support the Highways England programme.
- The impact of specific converging construction programmes is not factored into the stress testing exercise.

DIP Packaging Strategy – Approach to Defining Lots

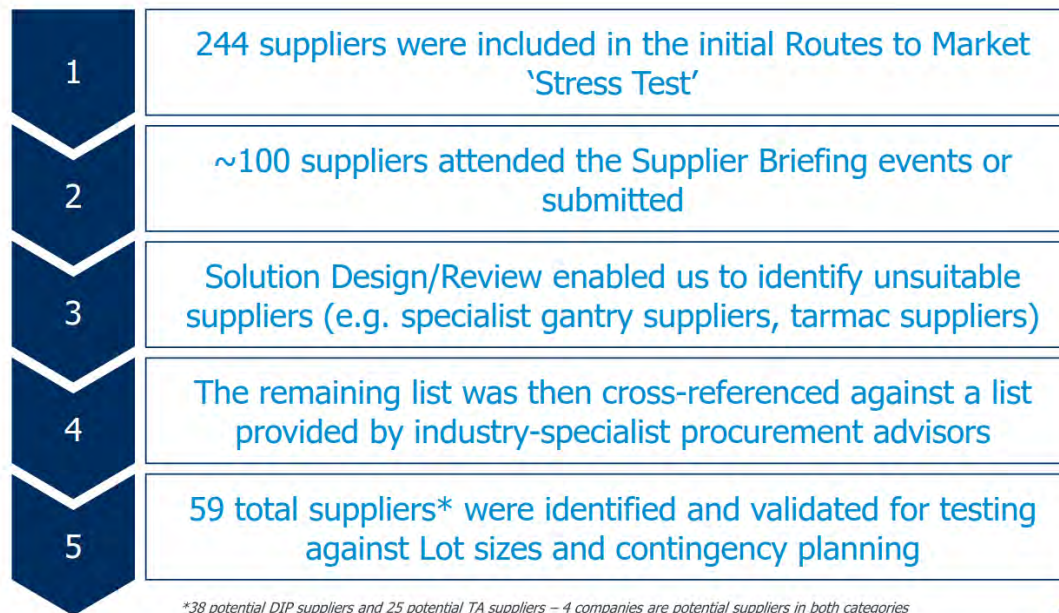
To create the desired level of commercial tension and support access to new entrants (core and specialist supplier) the packages will be grouped into Lots aligned with the HE's six Regions. This also takes into account engineering and geographical efficiencies to ensure delivery of best value for money.



NOTE: To bid for a Lot, a supplier must have annual revenue of at least [redacted] of the value of the largest Package within that lot. This is based on a typical Package length of 3 years and surplus capacity to cover other Packages if required.

Packaging Strategy: Supplier Downselect

We narrowed down the suppliers to be analysed based on our previous Stress Testing work, the attendance and engagement at Supplier events, and independent verification from RR.



Packaging Strategy – Bidding Restrictions

Rules have been put in place to ensure there is contingency cover in the event of a supplier no longer being able to deliver a package of work:

- Suppliers must be able to service the largest package in each Lot in order to bid for that lot and thereby win any of the packages in that Lot
- This viability is determined by a supplier being able to cover the annual costs of the package (defined here as 1/3 of the total cost, based on the average package length of 3 years) twice over
- Therefore suppliers must have an annual revenue greater than 2x 1/3 (66%) of the value of the largest package in a lot in order to bid for that lot and to win any of the packages in it

YNE	NW
YNE Package A3 RIS1 – RP2 SoW •M621 (£50/£36) 87%	YNE Package A4 RIS1 – RP1 SoW •M56 J11A (£65/£46) •M6 J19 (£29/£21)

$$\text{Revenue required} = 2 \times \left(\frac{\text{Value of largest package}}{3} \right)$$



$$£44.6m = 2 \times \left(\frac{£46m + £21m}{3} \right)$$

DIP	Revenue
	9.8
	26.8
	49.0
	72.5
	73.2
	77.0
	109.0
	143.8
	149.1
	154.0
	156.0

TA Market in event TAs partnering with DIPs

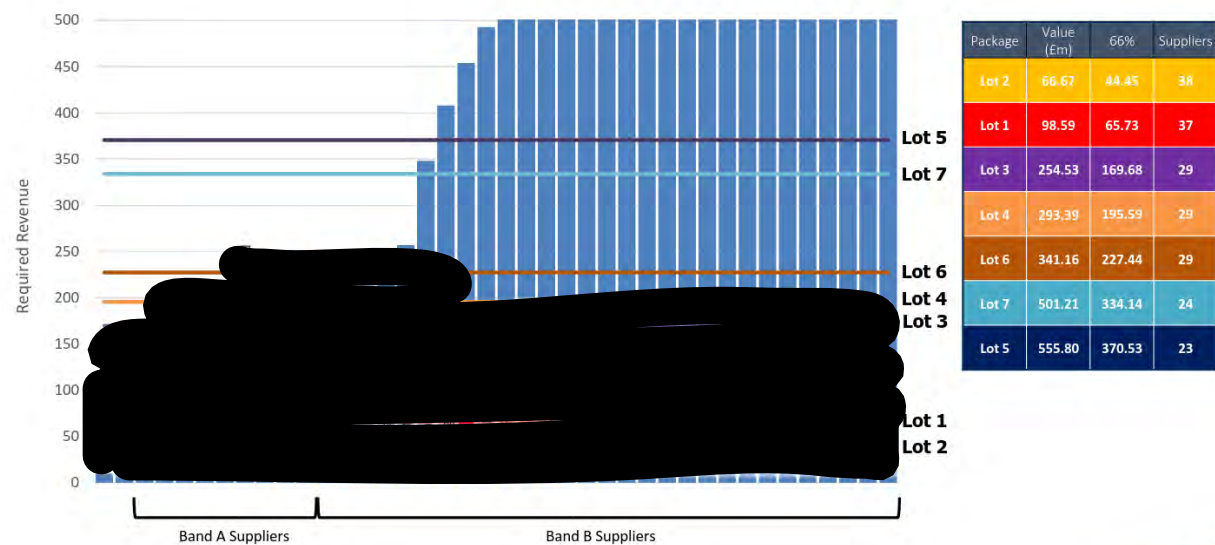
Each DIP bidder is required to have design contractor support as part of their proposal. Designers included in these proposals cannot simultaneously bid for TA packages as they would be entering into a conflict of interests.

The table below assesses the capacity of the TA market in the event of the 'best case' DIP bidding scenario, i.e. 15 separate DIP bidders, one for each available package. It demonstrates that if each of the 15 bidders partnered with the largest 15 TA providers, the TA market would be severely restricted, although in theory there would still be sufficient capacity to service the required packages.

		TA Suppliers																
Region	Package	NV																
		Package NV	Sum NV	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0
SW	B1	1.39																
SW	B2	3.39																
SE	A1	1.31	5.22															
SE	B3	3.91																
SE	B4	3.89																
East	B5	3.84	10.16															
East	B6	6.32																
East	B7	7.40																
Mids	A2	0.33	4.88															
Mids	B9	4.54																
Mids	B8	4.13																
NW	A3	0.48																
NW	B10	3.25																
Y & NE	A4	0.89																
Y & NE	B11	6.68																

Delivery Integration Partner Market Capacity

Comparing the required notation values with the Lot values, the table below right shows the number of suppliers that could bid for each Lot (based on the rules outlined earlier to provide contingency).



Delivery Integration Partner – Scenario Testing

Two scenarios are then tested to establish market capacity in the event of a supplier being removed from the market:

- The 6 largest suppliers servicing the packages in descending order of value
- The smallest supplier that is capable of bidding for each package

Two scenarios are tested because it is not clear which would be the 'worst case' without more detailed commercial modelling, which would in turn require data on other infrastructure schemes and likely supplier combinations which is not currently available.

Highest Value Combinations						Largest		Smallest	
	P1	P2	Combined package value (£m)	NV required to bid		Supplier	NV	Supplier	NV
1	B7	B11	1057	705	>	[REDACTED]	18,078	[REDACTED]	760
2	B6	B9	816	597	>	[REDACTED]	8,444	[REDACTED]	637
3	B3	B8	603	423	>	[REDACTED]	4,395	[REDACTED]	454
4	B4	B5	580	566	>	[REDACTED]	4,112	[REDACTED]	614
5	B2	B10	498	503	>	[REDACTED]	3,624	[REDACTED]	548
6	B1	-	104	70	>	[REDACTED]	2,495	[REDACTED]	72

Suppliers are required to have revenue above [REDACTED] of the value of the largest package in the Lot of the package they are bidding for, as outlined in previous slides

The 6 largest suppliers servicing the packages in descending order of value

The smallest supplier that is capable of bidding for each package

Contingency Scenarios – Summary

INSERT

Key Findings:

Certain contingency scenarios will affect the market in a similar way; 3 outcomes have been tested to cover all eventualities

It is not possible to identify the 'worst case' scenario with the available data; therefore 2 separate versions of the most restrictive package allocation have been tested

If smaller suppliers who can only just meet the notation value required to bid for the Lots are successful, in the event of a supplier insolvency it is likely that there would be a requirement to use the National Contingency Framework

Technical Advisor market capacity is likely to be sufficient to cope with potential supplier insolvency or removal from the market due in all but the most restrictive allocation scenario

Scenario Testing – Impact of Contingencies

The task was to test 14 scenarios identified by the Commercial team as posing a risk to the Packaging Strategy. Fundamentally there are only three outcomes, listed below left, that can result from these scenarios:

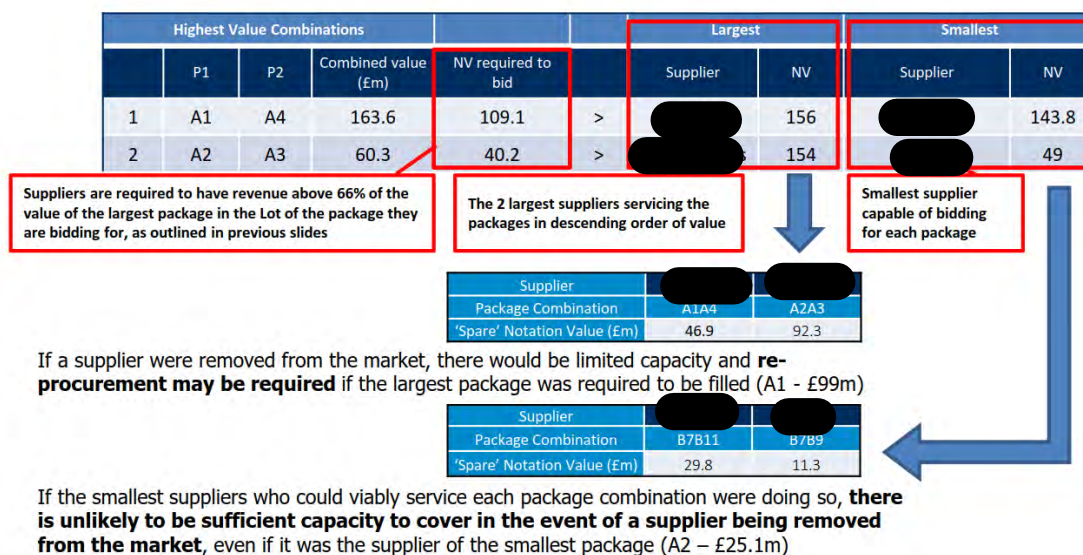
A Increased notation value – no test required	Scenario	Impact
	1. Acquisition of TA by external party	A
	2. Acquisition of DIP by external party	A
B Removal of TA from market (assumed)*	3. Acquisition of TA from a DIP	B
	4. Acquisition of DIP from a TA	B
	5. Merger of 2 TA's in same region	B
C Removal of TA or DIP from market	6. Merger of 2 DIP's in same region	C
	7. Merger of 2 TA's in different regions	B
	8. Merger of 2 DIP's in different regions	C
	9. One TA goes bust	C
	10. One DIP goes bust	C
	11. 2 TA's go bust in same region (unlikely)	C
	12. 2 DIP's go bust in same region (unlikely)	C
	13. 2 TA's go bust in different regions (unlikely)	C
	14.2 DIP's go bust in different regions (unlikely)	C

**NOTE: It has been assumed that because of the relative fees of the TA and DIP packages, any acquisition or merger, even if by a TA supplier of a DIP supplier, would prefer to continue delivering the impacted DIP package and relinquish the impacted TA package*

Delivery Integration Partner – Scenario Testing (Band A)

In the absence of more detailed commercial data on parallel infrastructure schemes and likelihood of specific suppliers bidding for given combinations of packages, we have tested two scenarios to establish market capacity in the event of a supplier being removed from the market:

- The 2 largest Band A suppliers servicing the packages in descending order of value
- The smallest Band A supplier that is capable of bidding for each package



Delivery Integration Partner – Scenario Testing (Band B)

In the absence of more detailed commercial data on parallel infrastructure schemes and likelihood of specific suppliers bidding for given combinations of packages, we have tested two scenarios to establish market capacity in the event of a supplier being removed from the market:

- The 6 largest Band B suppliers servicing the packages in descending order of value
- The smallest Band B supplier that is capable of bidding for each package

Highest Value Combinations						Largest		Smallest	
	P1	P2	Combined value (£m)	NV required to bid		Supplier	NV	Supplier	NV
1	B7	B11	1057	705	>		18,078		760
2	B6	B9	816	597	>		8,444		637
3	B3	B8	603	423	>		4,395		454
4	B4	B5	580	566	>		4,112		614
5	B2	B10	498	503	>		3,624		548
6	B1	-	104	70	>		2,495		72

Suppliers are required to have revenue above 66% of the value of the largest package in the Lot of the package they are bidding for, as outlined in previous slides

The 6 largest suppliers servicing the packages in descending order of value

Smallest supplier capable of bidding for each package

Supplier	[REDACTED]					
Package Combination	B7B11	B7B9	B3B9	B3B7	B2B11	B1
'Spare' Notation Value (£m)	17,373.3	7,900.1	3,992.9	3,725.3	3,292.3	2,425.3

If a supplier were removed from the market, **there would be surplus capacity to cover in any region (largest package size = £555m).**

Supplier	[REDACTED]					
Package Combination	B7B11	B7B9	B3B9	B3B7	B2B11	B1
'Spare' Notation Value (£m)	55.3	93.1	51.9	227.3	215.8	2.9

If the smallest suppliers who could viably service each package combination were doing so, they **could not cover the shortfall** caused by another supplier being removed from the market.

TA Market in event of M&A between DIP & TA

It has been assumed that if a TA and a DIP were to merge or an acquisition was to occur in either direction, the TA would relinquish their package due to the much smaller value. We have therefore tested the capacity of TA suppliers to deliver both packages in a region based on the previous assumption that Highways England's preference is for one supplier to deliver multiple packages in a Lot, rather than to re-procure from the market.

Region	Package	TA Suppliers																											
		66% Package	Sum Package	NV																									
				294.0	212.5	404.0	107.0	117.3	856.7	116.2	122.1	295.1	104.0	0.0	14.0	255.5	0.2	808.0	1363.8	642.6	1441.0	24.0	75.4	225.7	59.9	22.4	261.3		
SW	B1	1.39																											
SW	B2	3.39																											
SE	A1	1.31	5.22																										
SE	B3	3.91																											
SE	B4	3.89																											
East	B5	3.84	10.16																										
East	B6	6.32																											
East	B7	7.40																											
Mids	A2	0.33	4.88																										
Mids	B9	4.54																											
Mids	B8	4.13																											
NW	A3	0.48																											
NW	B10	3.25																											
Y & NE	A4	0.89																											
Y & NE	B11	6.68																											

The table above demonstrates that nearly all TA providers who are capable of servicing one package in a region are also capable of delivering all packages in a region.

	TA Suppliers	Other Suppliers
Number of suppliers	10	10
Number of products	10	10
Number of sales regions	10	10
Number of salespeople	10	10
Number of sales calls	10	10
Number of sales visits	10	10
Number of sales orders	10	10
Number of sales contracts	10	10
Number of sales agreements	10	10
Number of sales terms	10	10
Number of sales conditions	10	10
Number of sales policies	10	10
Number of sales procedures	10	10
Number of sales methods	10	10
Number of sales techniques	10	10
Number of sales strategies	10	10
Number of sales plans	10	10
Number of sales forecasts	10	10
Number of sales budgets	10	10
Number of sales reports	10	10
Number of sales presentations	10	10
Number of sales pitches	10	10
Number of sales proposals	10	10
Number of sales offers	10	10
Number of sales deals	10	10
Number of sales transactions	10	10
Number of sales relationships	10	10
Number of sales networks	10	10
Number of sales channels	10	10
Number of sales partners	10	10
Number of sales affiliates	10	10
Number of sales agents	10	10
Number of sales brokers	10	10
Number of sales intermediaries	10	10
Number of sales representatives	10	10
Number of sales consultants	10	10
Number of sales advisors	10	10
Number of sales trainers	10	10
Number of sales coaches	10	10
Number of sales mentors	10	10
Number of sales sponsors	10	10
Number of sales supporters	10	10
Number of sales advocates	10	10
Number of sales champions	10	10
Number of sales influencers	10	10
Number of sales opinion leaders	10	10
Number of sales thought leaders	10	10
Number of sales visionaries	10	10
Number of sales innovators	10	10
Number of sales disruptors	10	10
Number of sales game changers	10	10
Number of sales trendsetters	10	10
Number of sales pioneers	10	10
Number of sales trailblazers	10	10
Number of sales mavericks	10	10
Number of sales rebels	10	10
Number of sales risk takers	10	10
Number of sales challengers	10	10
Number of sales contenders	10	10
Number of sales competitors	10	10
Number of sales rivals	10	10
Number of sales adversaries	10	10
Number of sales opponents	10	10
Number of sales enemies	10	10
Number of sales foes	10	10
Number of sales nemeses	10	10
Number of sales arch-enemies	10	10
Number of sales bitter enemies	10	10
Number of sales mortal enemies	10	10
Number of sales sworn enemies	10	10
Number of sales implacable enemies	10	10
Number of sales unrelenting enemies	10	10
Number of sales inveterate enemies	10	10
Number of sales lifelong enemies	10	10
Number of sales perennial enemies	10	10
Number of sales old enemies	10	10
Number of sales time-honored enemies	10	10
Number of sales tried-and-true enemies	10	10
Number of sales battle-tested enemies	10	10
Number of sales war-torn enemies	10	10
Number of sales combat-hardened enemies	10	10
Number of sales battle-scarred enemies	10	10
Number of sales war-weary enemies	10	10
Number of sales battle-fatigued enemies	10	10
Number of sales war-exhausted enemies	10	10
Number of sales battle-drained enemies	10	10
Number of sales war-depleted enemies	10	10
Number of sales battle-worn enemies	10	10
Number of sales war-tired enemies	10	10
Number of sales battle-sore enemies	10	10
Number of sales war-stricken enemies	10	10
Number of sales battle-mangled enemies	10	10
Number of sales war-devastated enemies	10	10
Number of sales battle-ravaged enemies	10	10
Number of sales war-shattered enemies	10	10
Number of sales battle-smashed enemies	10	10
Number of sales war-crushed enemies	10	10
Number of sales battle-battered enemies	10	10
Number of sales war-mangled enemies	10	10
Number of sales battle-maimed enemies	10	10
Number of sales war-disabled enemies	10	10
Number of sales battle-injured enemies	10	10
Number of sales war-wounded enemies	10	10
Number of sales battle-damaged enemies	10	10
Number of sales war-afflicted enemies	10	10
Number of sales battle-plagued enemies	10	10
Number of sales war-tormented enemies	10	10
Number of sales battle-oppressed enemies	10	10
Number of sales war-persecuted enemies	10	10
Number of sales battle-victimised enemies	10	10
Number of sales war-suffering enemies	10	10
Number of sales battle-grievous enemies	10	10
Number of sales war-lamentable enemies	10	10
Number of sales battle-pitiable enemies	10	10
Number of sales war-worthless enemies	10	10
Number of sales battle-useless enemies	10	10
Number of sales war-futile enemies	10	10
Number of sales battle-pointless enemies	10	10
Number of sales war-meaningless enemies	10	10
Number of sales battle-absurd enemies	10	10
Number of sales war-nonsensical enemies	10	10
Number of sales battle-illogical enemies	10	10
Number of sales war-unreasonable enemies	10	10
Number of sales battle-imprudent enemies	10	10
Number of sales war-foolish enemies	10	10
Number of sales battle-stupid enemies	10	10
Number of sales war-idiot enemies	10	10
Number of sales battle-moron enemies	10	10
Number of sales war-kluge enemies	10	10
Number of sales battle-imbecile enemies	10	10
Number of sales war-retard enemies	10	10
Number of sales battle-deficient enemies	10	10



A2 – Delivery Model

5.7 A2.1 Routes to Market RIP-Operations Delivery Model

The roles, functions and service definitions for the roles of Highways England as Network Owner, the Technical Advisor and Delivery Integration Partner are shown within the following slides.





- Summary
- Major Projects RIP-Operations Governance Structure
- Method
- Network Owner, Technical Advisor & Delivery Integration Partner definition
- RIP-Operations regional delivery model
- RIP-Operations Function and Service Definitions
 - Highways England as Network Owner (Operations, Innovation & Continuous Improvement, Portfolio Programme and Project Management, Commercial Management & Pre-Construction Advice, Sponsorship, PMO)
 - Technical Advisor
 - Delivery Integration Partner
- Systems Integration



Summary

Governance

Operation schemes delivered through RtM will follow the existing Major Projects governance structure. The proposed Centres of Excellence model will align to the existing Major Projects governance structure in place for the RIP delivery model. It differs in an increased level of support from the Supply Chain Management function and a focus on opportunities to improve value from the supply chain community to meet Highways England's regional and national targets.

Alignment

The RtM RIP-Operations delivery model has been overlaid with the Major Projects Change Programme operating model to review service alignment and allow functional leads to reassess anticipated service capability at the point contracts will be let. The key services that differ within the RIP-Operations delivery model are Supply Chain Management through a closer integration with the supply chain and Operations through earlier collaboration with the project team in the PCF lifecycle to inform asset management and whole life costing.

Capacity

Functional leads feel comfortable that the capacity to provide the services necessary to deliver the contract will be in place at the point of contract award. It should be noted:

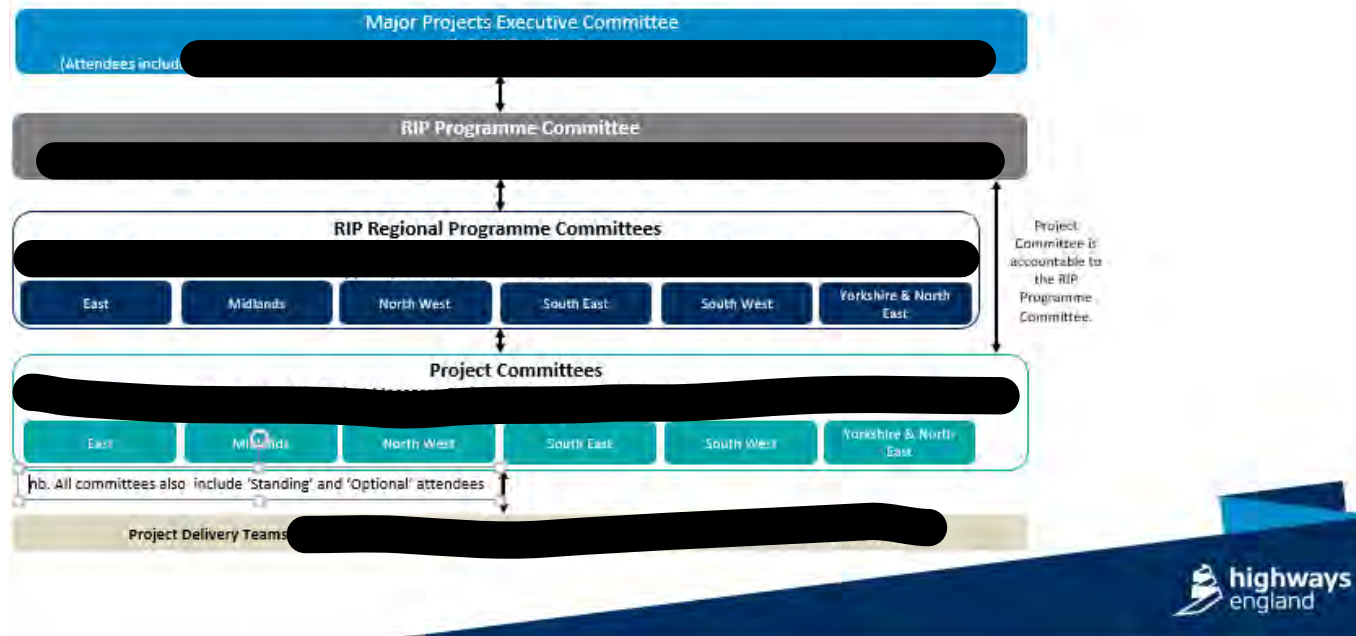
- The strategic workforce plan developed by the Major Projects Change Programme should be monitored to ensure the resource required is internally recruited in the next year.
- Whilst internal capacity should be in place at Contract award, Highways England may want to may call upon the Suppliers to support the Network Owner led services whilst the capability is developing.

Systems

Xactium for risk, Microsoft Dynamics for CRE, P6, CEMAR and Business Collaborator are ready to be used and mandated to the supply chain at Contract award. Standardised CBS and WBS are to be released in the new year.

Major Projects RIP Governance Structure

At a high level, the Major Projects RIP governance structure below shows the general escalation and accountability route for the delivery of projects. All committees include the option for representatives to attend from other Highways England (Network Owner) functions or the wider business and from external parties such as the DfT and supply chains.



Terms of Reference for Major Projects RIP-Operations governance

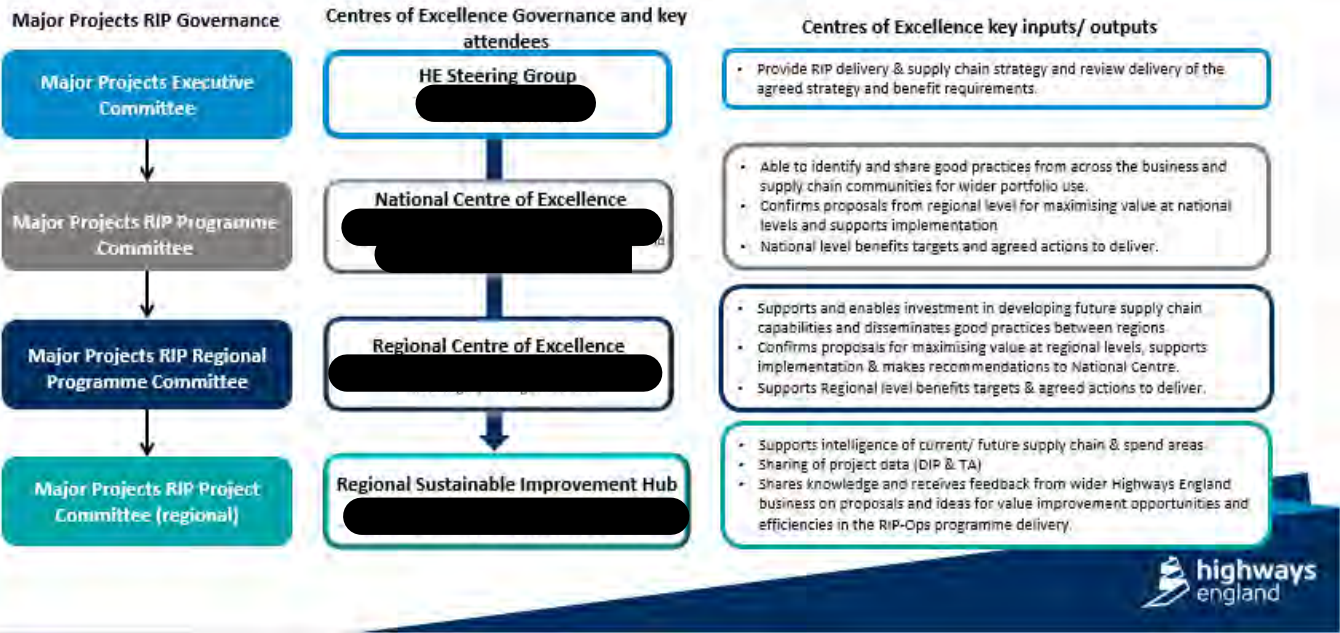
High level terms of reference for each committee are shown below. See MPI -59-062017 / RIP PMP, for full details.

Major Projects (MP) Executive Committee Frequency: Monthly	Purpose: Alignment of MP programmes to Highways England corporate objectives. Responsible for monitoring MP portfolio progress, resolving issues that compromise delivery and benefits realisation. Required Inputs: Escalated items from RIP (and SMP and CIP/NIP) Programme Committees and periodic MP portfolio reporting for current RIS.
RIP Programme Committee (National) Frequency: Monthly	Purpose: Responsible for driving the RIP programme's progress, resolving strategic and directional decisions/ issues that may compromise delivery and realisation of benefits across RIP. Programme Director (SRO) is ultimate decision maker, supported by Internal Sponsor, Senior User and relevant Delivery Director. Required Inputs: RIP Programme Dashboard, Change Register, Risk Register, Escalated items from RIP Regional Committees and any other information as required by RIP Programme Committee.
Regional Programme Committee Frequency: Monthly	Purpose: Responsible for driving the region's programme progress, resolving escalated issues that may compromise delivery and realisation of benefits within the region. Required Inputs: Regional Dashboard, Change Register, Risk Register, Project Guidance Requests, other information as deemed by Committee.
Regional Project Committee Frequency: Monthly	Purpose: Accountable to the RIP Programme Committee for the success of a project, and has the authority to direct the project within the set remit as documented in the project business case. Progress will be reported to the Regional Programme Committee to seek advice and escalate issues. Responsible for communications between Project delivery teams and stakeholders external to that team. Required Inputs: Project Dashboard, Project Management Plan, Stage Management Plan, Risk Register, and other information deemed relevant to the Committee (e.g. Client Scheme Requirement)



Proposed Centres of Excellence approach to feed into Major Projects RIP Governance

The Centres of Excellence aim to provide a focal point for the regional supplier communities to identify innovation and value improvement opportunities at regional and national levels. The proposed approach for how the Centres of Excellence will align to the existing MP RIP governance is shown below, demonstrating increased involvement with the Supply Chain Management function.



Network Owner, Technical Advisor & Delivery Integration Partner Role Definitions

The three key roles within the RIP-Operations regional delivery model are described below.

Highways England, Network Owner

Network Owner role of Highways England will combine Major Projects and Operations to work with the supply chain to programme manage the delivery of the Highways England RIP. There are eight functions within this role in the RIP-Operations delivery model.

Technical Advisor

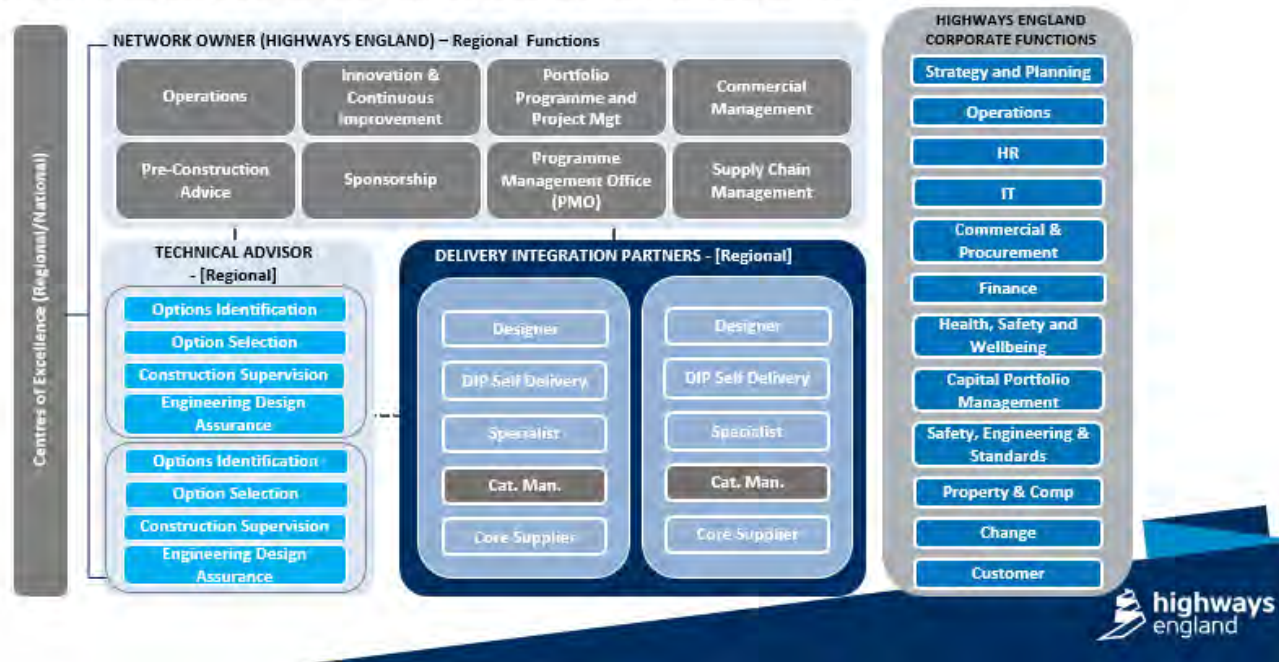
The Technical Advisor role will undertake option appraisal at PCF Stages 1 and 2 of a scheme and fulfil a technical assurance and construction supervision role to the DIP during Stages 3 to 7.

Delivery Integration Partner

The role of the Delivery Integration Partner will be to undertake the development and construction phases from PCF stage 3 to 7 of a scheme. The DIP may also provide pre-construction advice or surveys at the Network Owners request in PCF 2.

RIP-Operations Regional Delivery Model

Below is the RIP-Operations Delivery model, which has been developed in alignment with Major Projects Change Programme. Corporate Functions carried out within Highways England that may interact with the delivery of the RIP schemes are shown alongside the model.



RIP-Operations Network Owner Function Definitions

Below are the definitions of the Network Owner Functions, as shown on the RIP-Operations regional delivery model.

Rip-Ops Function	Description
Operations	Support the RIP-Operations delivery teams to achieve integration throughout the PCF lifecycle to be able to utilise early design input to de-risk, improve whole-life asset planning and design schemes with the future maintenance regime in mind.
Innovation & Continuous Improvement	Responsible for creating the right processes and culture to support innovation. This includes supporting Highways England's strategic objectives through the application of a new process or product that benefits their stakeholders and customers. This function will lead the development of a collaborative supply chain community focussed on improving value delivery through the Sustainable Improvement Hubs and Centre's of Excellence.
Programme & Project Management	Responsible for the RIP schemes throughout the PCF lifecycle, managing schedule and risk management, estimating, programme, performance monitoring, reporting, scope, change control, document control, and demand and resource planning. Co-ordinating all the RIP-Operations delivery model functions and services to achieve an integrated outcome/output.
Commercial Management	Responsible for providing Cost Estimate and Commercial/Contract management services. To the delivery teams.
Pre-Construction Advice	Responsible for providing validation of Supplier prices for their proposed solution against the allocated budget will function during PCF stage 2.
Sponsorship	Initiates and owns the project and programme business case throughout the project lifecycle to ensure it remains viable and accountable for delivering documented and agreed project benefits and outcomes. Accountable for making decisions to safeguard that the work is governed effectively and delivers the objectives that meet identified needs. Acts as internal client on behalf of the asset owner by reflecting the needs of the Operations function, it is also responsible for obtaining project authority, developing and communicating project boundaries and change by managing wider business stakeholders. It assures and confirms project gateways, including initiation and closure.
PMO	Responsible for the definition and maintenance of standards and processes for Governance, Assurance and Controls.
Supply Chain Management	Provide oversight and insight of the wider market place and use this to develop supporting supply chain strategies to maximise value for Highways England.

Highways England Corporate Function Definitions

Below are the definitions of the Highways England Corporate Functions that may work with the RIP-Operations delivery teams in the delivery of the RIP schemes.

Corporate Function	Description
Commercial	Commercial covers all work relating to contracting and management of the supply chain from strategy to transaction in contracts. This includes supply chain and procurement strategies, the identification of suppliers, the tendering process and the day to day management of contracts in support of the programme/ project manager. Acts as sponsor for the commercial element of the Resource Management perspective of P3M3. Commercial also includes project specific aspects of finance relating to project cost estimating and forecasting in relation to approvals /Business cases and cost assurance and verification of project costs. Acts as sponsor for the Financial Management perspective of P3M3
Procurement	Procurement covers work relating to the procurement strategy, the identification of suppliers, tendering process and monitoring of supplier performance and products supplied.
Health, Safety and Wellbeing	Sets out the Health and Safety policy and strategy. Supports and assures the implementation of Health and Safety within programmes in design, construction, operations and on a ad hoc day-to-day basis where required.
People (HR)	Acts as the point of contact for all Services relating to people. Includes: recruitment, induction, learning and development, performance management and promotion. Acts as sponsor of the people /HR element of the Resource Management perspective of P3M3 and the People component of capability (POPIT).
Finance	Corporate Finance includes financial policy and planning, budgeting and forecasting in the context of financial management and accounting of the business in the annual and 'period' context. Executes and supports management of Financial and accounting standards, treasury and financial audit functions, invoice payment to suppliers. Creates and maintains a financial ledger for the Programmes.
IT	Defines the enterprise IT strategy and architecture and procures, operates and maintains all IT systems infrastructure and applications. Acts as sponsor for the IT infrastructure element of the Resource Management perspective of P3M3 and the Technology component of capability (POPIT).



Highways England Corporate Function Definitions

Below are the definitions of the Highways England Corporate Functions that may work with the RIP-Operations delivery teams in the delivery of the RIP schemes.

Corporate Function	Description
Operations	Operations is responsible for scheme whole life requirements including Operational acceptance and project closure. From this function the RIP will receive asset operability and condition data, whole life requirements, network access and co ordination support, operational readiness assessment and defect rectification feedback.
Safety Standard and Engineering	PTS includes the definition and maintenance of customer standards handbook, this function also provides good practice information and initiatives that can be used to inform and update.
Capital Portfolio Management	Manages the stage gate assurance review (SGAR) process
Strategy and Planning	Business case ownership (wider Highways England business, not RIP), Strategic programme development, Phase strategy
Customer	Defines and delivers the customer strategy, standards, insight, initiatives, engagement alongside critical business functions / programmes and conducts monitoring activities to determine levels of customer satisfaction and seek improvements where required.
Change	The activities associated with ensuring the organisation can continually identify and embed improvements to achieve defined benefits as well as adapt to changes occurring when the resources, structures, processes, technology and activities are impacted by change. Sponsors lean, six sigma tools and business improvement techniques (as appropriate) to continuously improve business processes and working practices. Drives innovation and leverage on / disseminate best practice.
Property and Compensation	Delivers services related to land and property including valuation, case management, property related design advice, land and property acquisition and compensation in support of non-technical aspects of schemes. Manages land and property owned by the business. Acts as the sponsor of the physical infrastructure element of the Resource Management perspective of P3M3.

Method

The methodology undertaken to demonstrate how the RIP-Operations regional delivery model will operate at the start and for the duration of the Contract term is as follows:

1. Mapping of the functions and services identified in the Major Projects operating model, considered key to delivery, to the Rtm RIP-Operations delivery model
2. Validating the services within each function with the Highways England function leads
3. Validating the maturity of the services' at the start of the Contract Award and during the Contract term with the Highways England function leads, using the Major Projects Change Programme RAG rating and Implementation Prioritisation methodology:



RAG Rating:



Implementation Prioritisation

Key	Scale	Key	Scale
M	Make the resource - HE to build internal capability usually through recruitment	1	Improve the service in the next six months
B	Buy the resource	2	Improve the service in 6 to 12 months
H	Use HE resource	2/3	Improve service beyond 12 months
A	Augment the resource - Supplement internal HE capability with external bought resource		

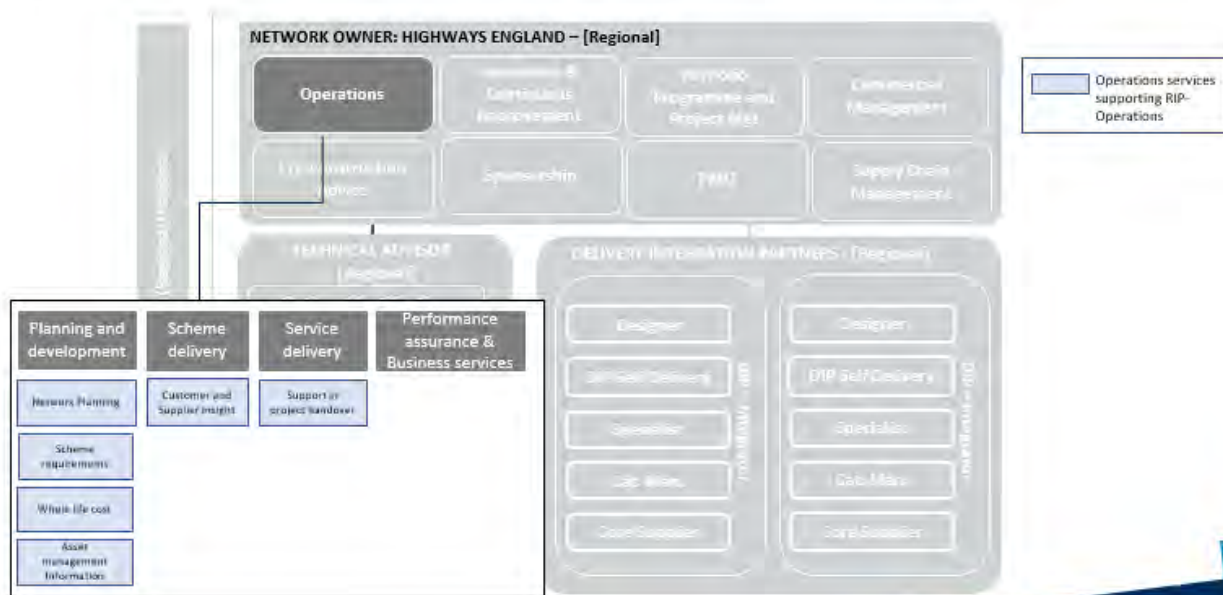
Stakeholder engagement

Below shows the stakeholders consulted to validate the RIP-Operations delivery model functions and maturity of services against the Highways England operational model (Change programme).

Function Area	Stakeholder Name
Programme Management Office	PMO Director (SJ)
Sponsorship	Development & Sponsorship Director (CH)
Operations	AD National Rollout Director (MH)
Innovation & Continuous Improvement	Director of Innovation and Continuous Improvement (PD)
Innovation & Continuous Improvement	Delivery Services Director (MP)
Portfolio, Programme and Project Management	Two Regional Delivery Directors (CW-E, SF-G)
Commercial Management	RIP Commercial & Procurement Director (MP)
Pre-Construction Advice	RIP Commercial & Procurement Director (MP)
All	Procurement Delivery Partner in MP (MK)

RIP-Operations Regional Delivery Model Services

Below are the services to be undertaken within the Operations function to support the RIP-Operations delivery.



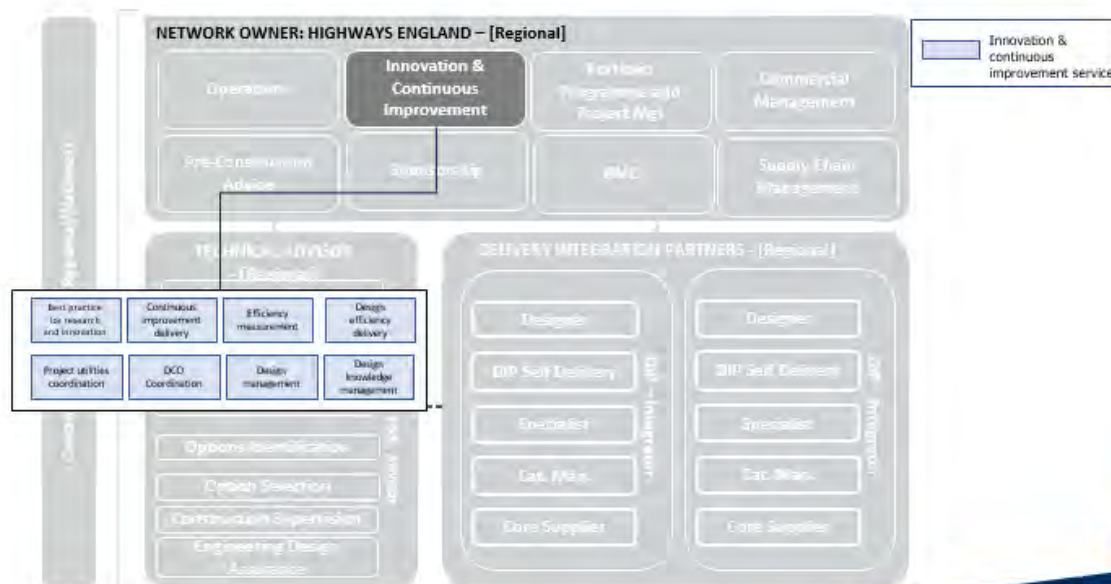
Operations service definitions and service maturity

Below are the definitions of the RIP-Operations Network Owner Operations services, and the maturity of these services. The involvement of the Operations function to provide asset knowledge and future requirements from the start of the PCF lifecycle is a significant change to the current delivery model.

RIP Ops Delivery Model Function	Sub-function	Description within RIP Model	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Operations	Planning and development	Services within this sub-function will assist RIP schemes in developing the forward programme (route strategies and plans), manage planning interdependencies, priorities and integration with Major projects, provide asset information and scheme requirements early in the project lifecycle.	NA	⬆️	NA	2/3H
Operations	Scheme delivery	Provide customer and supplier insight to the delivery team in the design and delivery of RIP projects.	NA	⬆️	NA	2/3H
Operations	Service delivery	Support schemes in the end of project handover to Operations.	NA	⬆️	NA	2/3H
Operations	Performance assurance & Business services	Not applicable to RIP Model.	NA	⬆️	NA	2/3H

RIP-Operations Regional Delivery Model Services

Below are the services to be undertaken within the Innovation & Continuous Improvement Function.



Innovation and Continuous Improvement service definition

Below are the definitions of the RIP-Operations Network Owner Innovation and Continuous Improvement services and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial POP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Innovation & continuous improvement	Best practice for research and innovation	Capture, record and share best practice for research and innovations developed by the programme, and outside of the programme as appropriate. Explore and bring into the programme the latest thinking related to delivery objectives and act as a conduit into the programme (and HE as appropriate) for new ideas. Drive and encourage innovation in the supply chain.	1	1	2/3M	2/3M
Innovation & continuous improvement	Continuous improvement delivery	Conduct programme / project lessons learnt sessions and activities. Identify improvement opportunities from programme performance data or best practice. Capture outputs and share with MPPH for sponsorship and support to execute. Support delivery and embedding of improvement activities within upcoming and ongoing projects. This includes continuous improvement to define targeted programme and ensuring capability for delivery.	1	1	2/3M	1/2M
Innovation & continuous improvement	Efficiency measurement	The measurement and reporting of efficiencies forecasted from the introduction of change initiatives and business improvement initiatives. All schemes have efficiency register which show maturity and contribute to the wider organizational efficiency contribution. This ties in with KPI's on efficiency and effectiveness. This measurement of efficiency cuts across all stages from business case to design, development and delivery.	1	1	2/3M	2/3M

Innovation and Continuous Improvement service definition

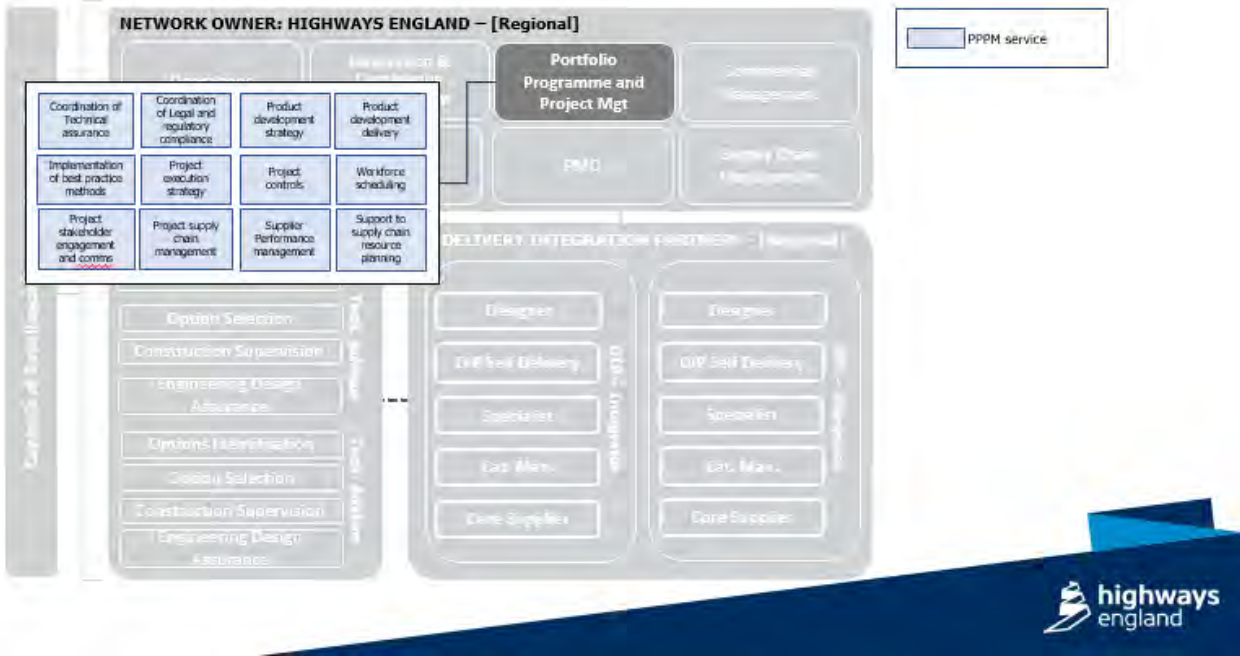
Below are the definitions of the RIP-Operations Network Owner Innovation and Continuous Improvement services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Innovation & continuous improvement	Design efficiency delivery	Capturing and reporting the efficiencies expected and achieved from new, standardised designs.	1	2	2/3M	2M
Innovation & continuous improvement	Project Utilities coordination	In line with detailed scheme requirements and project plan, coordinate third party utility company input into the scheme construction.	1	2	1/2M	2M
Innovation & continuous improvement	DCO coordination	The DCO & Statutory Processes team identifies corporate solutions and efficiencies and supports projects through the Planning Act 2008 (DCO) and Highways Act 1980 statutory planning processes. They provide advice / guidance, templates, position statements, project management tools (scope, time, cost, risk management) and access to / overall management of legal suppliers.	2	2	1/2M	2M
Innovation & continuous improvement	Design management	Lead design management on schemes, working in conjunction with appointed designers and promotion of programmatic approach across projects (e.g. design once, use many). Work with Engineering & Design Assurance to embed best practice methodologies into BAU design practice.	1	2	2/3M	2M
Innovation & continuous improvement	Design knowledge management	Set up agreed knowledge management measures within programme. Produce knowledge management artefact and seek approval for knowledge artefact to be shared from MPPH. Publish knowledge artefact and communicate across the programme.	1	2	2/3M	2M

18 |

RIP-Operations Regional Delivery Model Services

Below are the services to be undertaken within the Network Owner Programme and Project Management Function



Programme and Project Management service definition

Below are the definitions of the RIP-Operations Network Owner Programme and Project Management services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Portfolio programme & project management	Coordination of Technical assurance	Provide a level of assurance, to enable a scheme to progress through the formal governance gateways. The Director of Design and Director of Sponsorship must be assured that the design work is of an acceptable quality and in line with agreed design standards.	1	3	2/3M	2/3M
Portfolio programme and project management	Coordination of Legal and regulatory compliance	Provide assurance that all regulated or legally required design standards are being adhered to in scheme designs.	1	3	2/3M	2/3M
Portfolio programme and project management	Product development strategy	Develop a Stage Management Plan alongside Sponsor and DIP, outlining how product development will be progressed across the programme lifecycle, and communicate this to stakeholders.	1	3	2/3M	2M
Portfolio programme and project management	Product development delivery	Lead, manage and assure Product Development, enacting the agreed strategy and ensuring the correct tactical direction (e.g. are we developing the right things?) Responsibility for the development and deployment of a standardised library of 'product types'. Promote product development horizons and "release" of new products to project timelines. Maintain and improve products and product development processes. The NO leads this service, the DIP manages it and the TA provides assurance.	1	3	2/3M	2M

Programme and Project Management service definition

Below are the definitions of the RIP-Operations Network Owner Programme and Project Management services, and the maturity of these services

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Portfolio programme and project management	Implementation of best practice methods	Management and oversight to ensure that best practice construction methods are being implemented.	1	2	3M	3M
Portfolio programme and project management	Project execution strategy	High level strategy, developed by the project manager, that sets out how the project will be delivered. This should include all the products prescribed by each stage gate.	2	3	1M	1M
Portfolio programme and project management	Project controls	<p>Project planning - Create and maintain project plans (project specific planning resource) and perform tactical planning as required, deploying a close understanding of the detail and the specifics of the project.</p> <p>Schedule management - Manage the Programme/Project schedule and baseline in order to provide an accurate forecast of activity, also forecasting risks, issues, assumptions and dependencies</p> <p>Scope management - Management of the project scope against the signed-off baseline position, and escalation of all potential deviations outside of agreed project contingencies.</p> <p>Cost management - Monitoring costs and expenditure against set cost estimates. This activity is a fundamental part of overarching controls process and as such should sit in Project Controls, rather than with Cost Estimation in Commercial (which is the initial step in the overall process).</p>	1	1	1M	1M

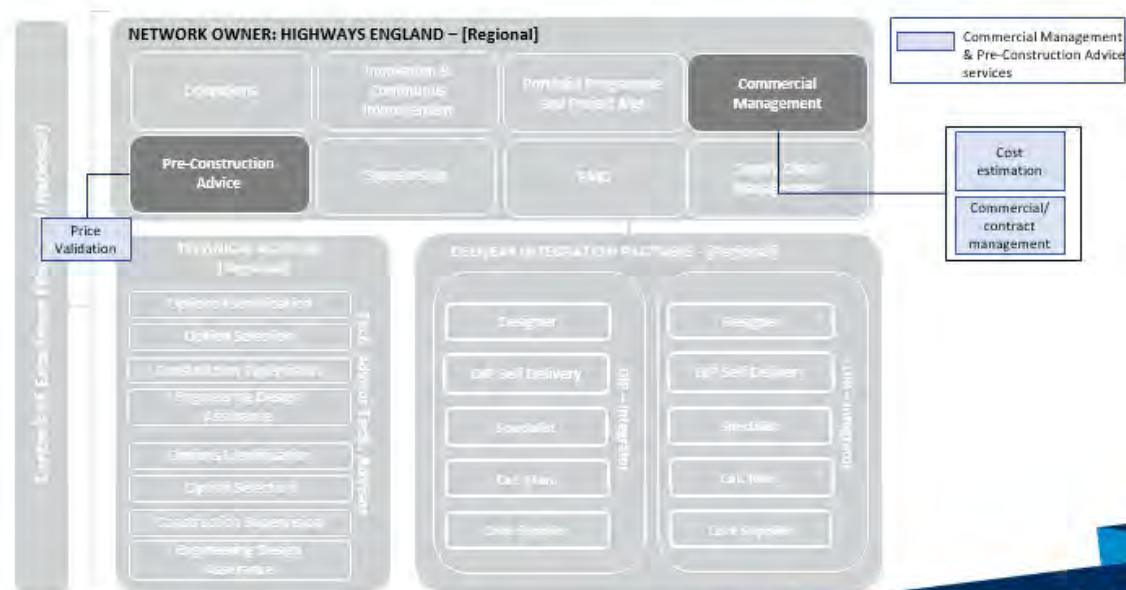
Programme and Project Management service definition

Below are the definitions of the RIP-Operations Network Owner Programme and Project Management services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Portfolio programme and project management	Support supply chain resource planning	Support Procurement with long term planning of possible supply chain requirements, based on program plans and forecasts. Agree resource budgets prior to procurement. Ensure that resources are procured in accordance with the Resource Plan.	2	2	2/3M	2/3M
Portfolio programme and project management	Supplier performance management	Management of current supplier performance, based on contractual commitments and agreed payment and performance mechanism.	3	3	3M	3M
Portfolio programme and project management	Project supply chain management	Management of supply chain during design and construction. Drives effective implementation of supplier performance management, enables effective use of the supply chain and promotes joined up commercial-procurement responsibilities.	2	2	3M	3M
Portfolio programme and project management	Workforce scheduling	Ensure the right resources to the right tasks and ensure that resources know what they should be working on and when. Track resource against plan and Identify and escalate resource issues and risks as appropriate.	3	3	1M	1M
Portfolio programme and project management	Project stakeholder engagement and comms	Engage with and manage project specific stakeholders, proactively and regularly, through active, planned engagement and communication. Ensure activity dovetails with programme stakeholder management activities.	4	2	N/A	N/A

RIP-Operations Regional Delivery Model Services

Below are the services to be undertaken within the Network Owner Commercial Management and Pre-construction advice Function



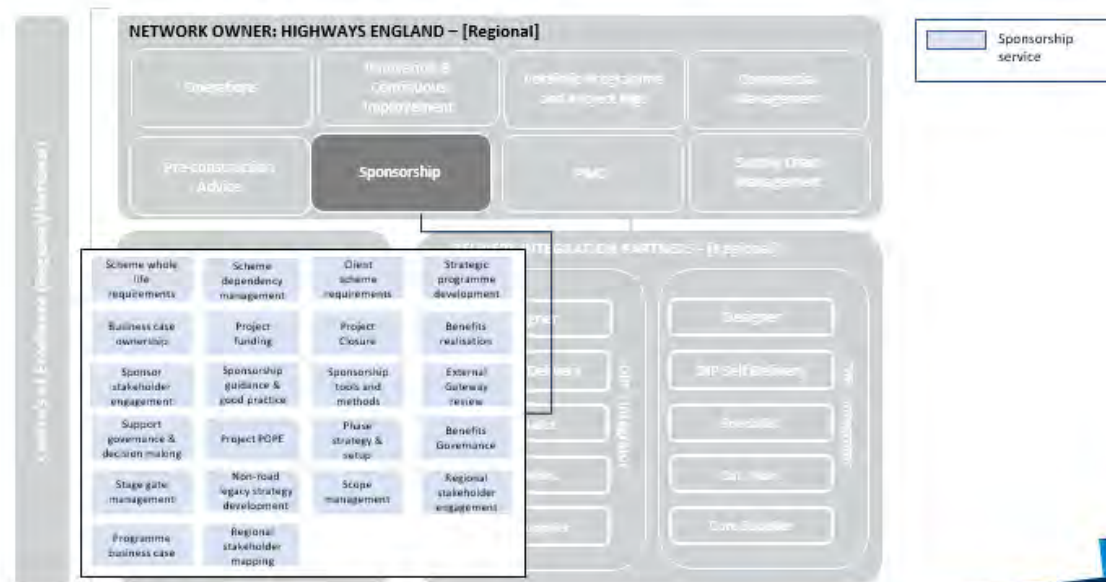
Commercial Management and Pre Construction service definition

Below are the definitions of the RIP-Operations Network Owner Commercial Management and Pre-construction advice services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Commercial Management	Cost Estimation	Using detailed project designs, whole life O&M requirements, risk analysis and project planning documents, model and estimate a project cost, which is baselined on acceptance, and which is then updated on a regular basis to reflect project changes.	2	2	1M	1M
Commercial Management	Commercial/ Contract Management	Ensure the suppliers meet their contractual commitments and assist projects in managing supplier costs and contractual change control in relation to specific supplier contracts suppliers.	2	2	2M	2M
Pre - Construction Advice	Price Validation	Validation of Supplier prices for proposed solution against the allocated budget using benchmarking and business unit cost data. This is a regional function supplied by the central capability.	N/A	2	N/A	2M

RIP-Operations Regional Delivery Model Services

Below are the services to be undertaken within the Network Owner Sponsorship Function



Sponsorship service definition

Below are the definitions of the RIP-Operations Network Owner Sponsorship services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial PDP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Sponsorship	Scheme whole life requirements	Provide whole life requirements to the scheme, to ensure that these can be included in all design stages	1	3	2M	2M
Sponsorship	Scheme dependency management	Identification and management of internal and external dependencies between and across programmes, and understand, document and actively manage the interfaces between the programme and wider MP / HE departments and stakeholders.	2	3	2M	2M
Sponsorship	Client scheme requirements	Understand and interpret the high level requirements in order to develop coherent scheme requirements so that the design function can develop options.	3	3	1M	1M
Sponsorship	Strategic programme development	Provision of strategic, programme level advice to MP / HE, in order to inform future programme requirements and influence current programme direction. Programme level information will be provided by PMO in order to allow strategic analysis to be performed.	10	10	2M	2M
Sponsorship	Business case ownership	Ownership of scheme business cases at all stages of the project lifecycle, including the updating of business cases at appropriate stages, to ensure the document always reflects the latest project position.	10	10	3M	3M
Sponsorship	Project funding	Provide all required information to obtain information for Investment Strategy and agreement for project funding at the appropriate stage in the project lifecycle.	10	10	3M	3M

Sponsorship service definition

Below are the definitions of the RIP-Operations Network Owner Sponsorship services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial Assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Sponsorship	Project closure	Formally close project, handover all final documentation to PMO, and initiate POPE process.	3	3	3M	3M
Sponsorship	Benefits realisation	Ensure the delivery of the expected benefits from each project, intervening where required and / or escalating issues up the governance process if necessary (responsibility to achieve project benefits still resides with the project manager).	4	4	2M	2M
Sponsorship	Sponsor stakeholder engagement	Manage scheme specific external stakeholders throughout the lifecycle from the perspective of the Sponsor in alignment with PMO and PPPM.	3	3	1M	1M
Sponsorship	Sponsorship guidance & good practice	Knowledge sharing forum for project sponsors, in order to facilitate the sharing of good practice, to improve the consistency of the sponsorship function	1	3	1M	1M
Sponsorship	Sponsorship tools and methods	Development and deployment of standardised tools and methods utilised by project sponsors. This will include inputting requirements into any tools and methods prescribed by MPPH (for example)	1	3	2/3M	2/3M
Sponsorship	External Gateway review	Facilitation of any externally prescribed processes of project scrutiny. Liaise with project managers and MPPH, to generate appropriate material, as required	3	3	1M	1M

Sponsorship service definition

Below are the definitions of the RIP-Operations Network Owner Sponsorship services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial Assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Sponsorship	Support external Governance & decision making	Support to non-programme governance bodies, as required, by collating and supplying programme information or knowledge. Liaise with PMO.	2	2	2M	2M
Sponsorship	Project POPE	Post Operational Project Evaluation review to assess the achievement (or not) of the forecasted outcomes for the scheme. These are typically performed after one and five years of post project completion	1	1	2M/A	2M/A
Sponsorship	Phase Strategy and set up	Using a programme view of requirements and schemes (as developed by 'programme planning' and 'Scheme Dependency Management'), set out a strategy to implement the required schemes alongside PPPM.	2	1	2/3M	2/3M
Sponsorship	Benefits governance	Define the benefits required and establish the mechanisms that allow the regular reporting of those benefits. This encompasses changes to the network and improvements to the running of the business.	1	2	2M	2M
Sponsorship	Stage Gate management	Project Initiation - Formal initiation of projects, and high level review of options for schemes Project Gateways - Management of the project through the required gateway process (in line with the PCF process), to ensure proper project scrutiny and governance at all formal stages	2	2	1M	1M

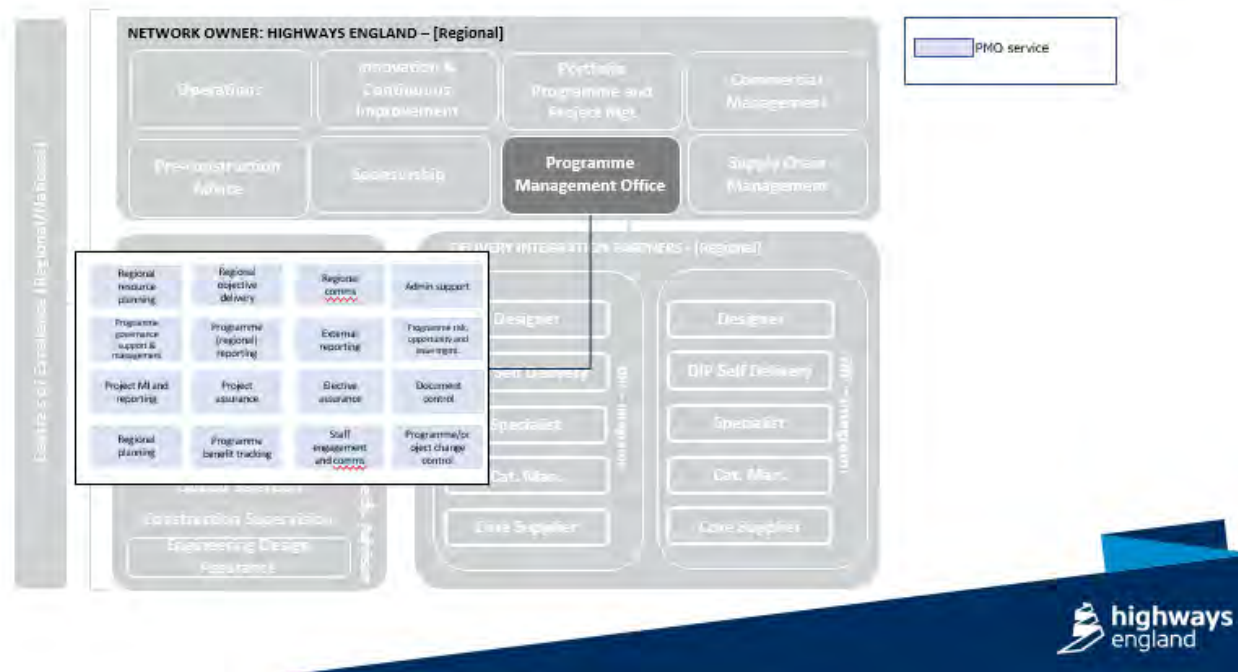
Sponsorship service definition

Below are the definitions of the RIP-Operations Network Owner Sponsorship services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial Assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
Sponsorship	Non-road legacy strategy development	Creation of a strategic view of the development of the non-road elements of programme schemes, unlocked through the scheme	1	1	3M	3M
Sponsorship	Scope Management	Management of the project scope against the signed-off baseline position, and escalation of all potential deviations outside of agreed project contingencies.	2	2	1M	1M
Sponsorship	Regional stakeholder engagement	Engage with and manage HE, MP and external stakeholders, proactively and regularly in alignment with PPFM, through active, planned engagement and communication.	1	1	1M	1M
Sponsorship	Programme business case	Create strategic level business cases incorporating all necessary elements to enable effective decision making and stakeholder communication.	1	1	2/3M	2/3M
Sponsorship	Regional stakeholder mapping	Understand the programme stakeholders and map them, creating a stakeholder map which will underpin Stakeholder Management across the programme, and inform stakeholder management at the project level. Liaise with Operations.	1	1	1M	1M

RIP-Operations Regional Model Services

Below are the services to be undertaken within the Network Owner Programme Management Office Function



Programme Management Office (PMO) service definition

Below are the definitions of the RIP-Ops Network Owner PMO services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial POP assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
PMO	Regional resource planning	Develop resource plan (current and future requirements) across the Programme. Maintain and review the plan on a regular basis	3	3	1M	1M
PMO	Regional objective delivery	Agree top level programme objectives, based on national NO requirements, and the cascade of those objectives to ensure that they are considered within all future and current schemes	1	3	2M	2M
PMO	Regional comms	Communicate internally across the programme using a range of passive and active channels. (These may include, but are not limited to, email, intranet, briefings, team meetings, weekly bulletins etc.) and act as a mouthpiece for the programme leadership team. In addition to internal communications, key stakeholders outside the programme, but within Highways England/ Major Projects, and other interested external bodies should be communicated to through the most appropriate channel.	1	3	2/3M	2/3M
PMO	Admin support	Perform, where required, additional ad-hoc support activities to the programme.	3	4	1M	1M
PMO	Programme governance support & management	Support governance schedule and conduct activities and provide resource to support with activities	2	2	2M	2M
PMO	Programme (regional) reporting	Collate project information and provide MPPH defined programme reporting in line with required schedule.	1	2	2M	2M

PMO service definition

Below are the definitions of the RIP-Ops Network Owner PMO services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial Assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
PMO	External reporting	Provision of agreed programme / project information to any external organisations.	3	3	2M	2M
PMO	Programme risk, opportunity and issue management	Identification and analysis of risks, issues and opportunities at a portfolio level, identifying mitigating actions as required and escalating those requiring further attention to the relevant governance forum.	3	3	1M	1M
PMO	Project MI and reporting	Collection and documentation of required project information and provision to PMO in line with MPPH defined project reporting requirements and schedule. PMO maintains ownership of standards and data is provided by regions and project management. PMO interprets data and highlight areas of concern.	3	3	2M	2M
PMO	Project assurance	Provision of regular activities designed to assure the Programme Director that projects are performing to expectations, and reporting of concerns by exception.	3	3	1M	1M
PMO	Elective assurance	Perform elective internal assurance. Internal assurance can be used to assure any aspect of the programme, and should be initiated via the Programme committee and/or programme leadership team. Elective assurance could include the examination of any aspect of the programme or project.	1	3	1M	1M

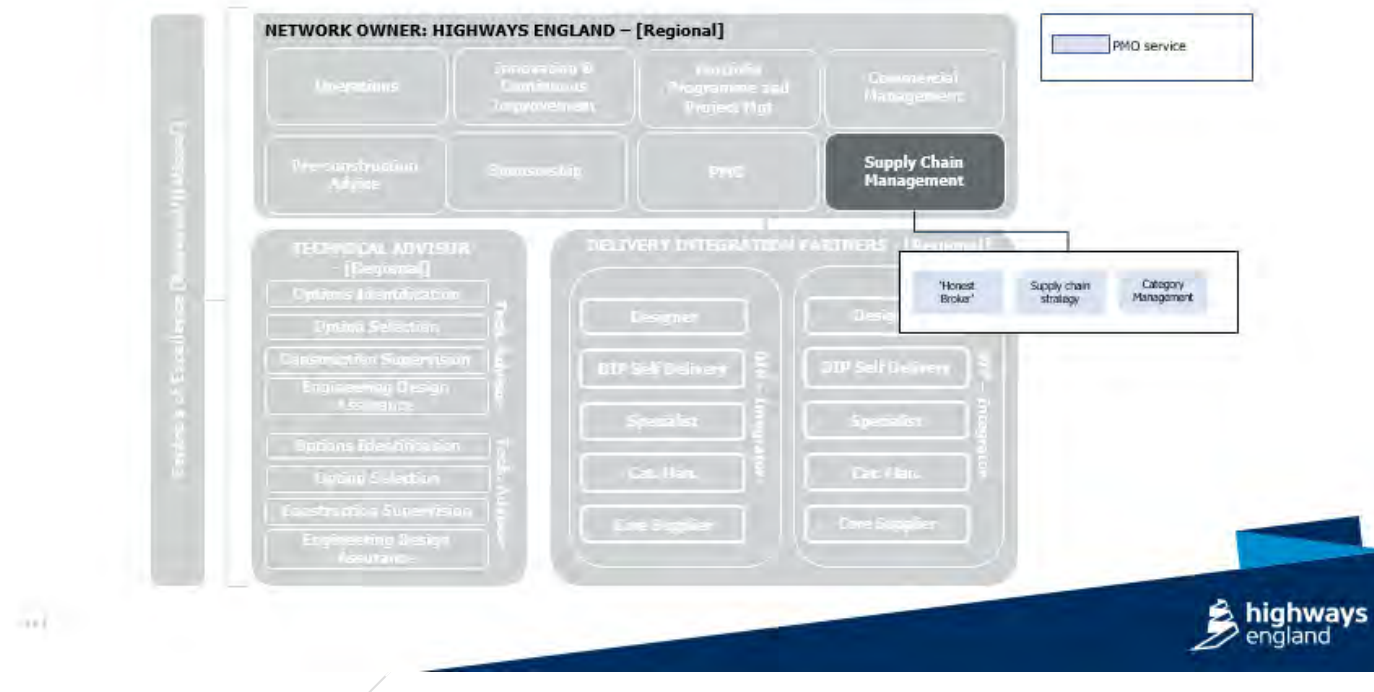
PMO service definition

Below are the definitions of the RIP-Ops Network Owner PMO services, and the maturity of these services.

RIP Ops Delivery Model Function	Service	Service Description	Initial Assessment	Revised Assessment	Implementation Priority	Revised Imp. Priority
PMO	Document control	Manage information and data, digitally and in hard copy, holistically across the programme. This includes consistent treatment and clear retention for designs and specifications, finances, commercial and procurement, HR, and all governance (process and decisions). Communicate MPPH developed Document Management processes and practices so that they are clear to all staff across the programme and a consistent process for naming and version control is followed.	1	1	2M	2M
PMO	Regional planning	Create and maintain programme wide plans, amalgamating and collating project plans into a coherent set of programme plans as required. Plans should be developed and reported in accordance with standards created by MPPH.	2	2	2M	2M
PMO	Programme benefit tracking	The tracking and analysing of portfolio level benefits, and advising where benefits are not being realised as planned.	1	1	2M	2M
PMO	Staff engagement and comms	Communicate internally across the programme, in relation to change activities, using a range of passive and active channels. (These may include, but are not limited to, email, intranet, briefings, team meetings, weekly bulletins etc.)	2	2	1M	1M
PMO	Programme/ project change control	Implement and administer programme and project level change control process to be administered through Sponsorship. Sponsor responsible for steering through the framework, PMO provides framework. This is closely linked to scope management under Sponsorship as changes in scope will be reviewed by Sponsor. Sponsorship is responsible for realising benefits.	2	2	2M	3M

RIP-Operations Regional Model Services

Below are the services to be undertaken within the Network Owner Supply Chain Management Function



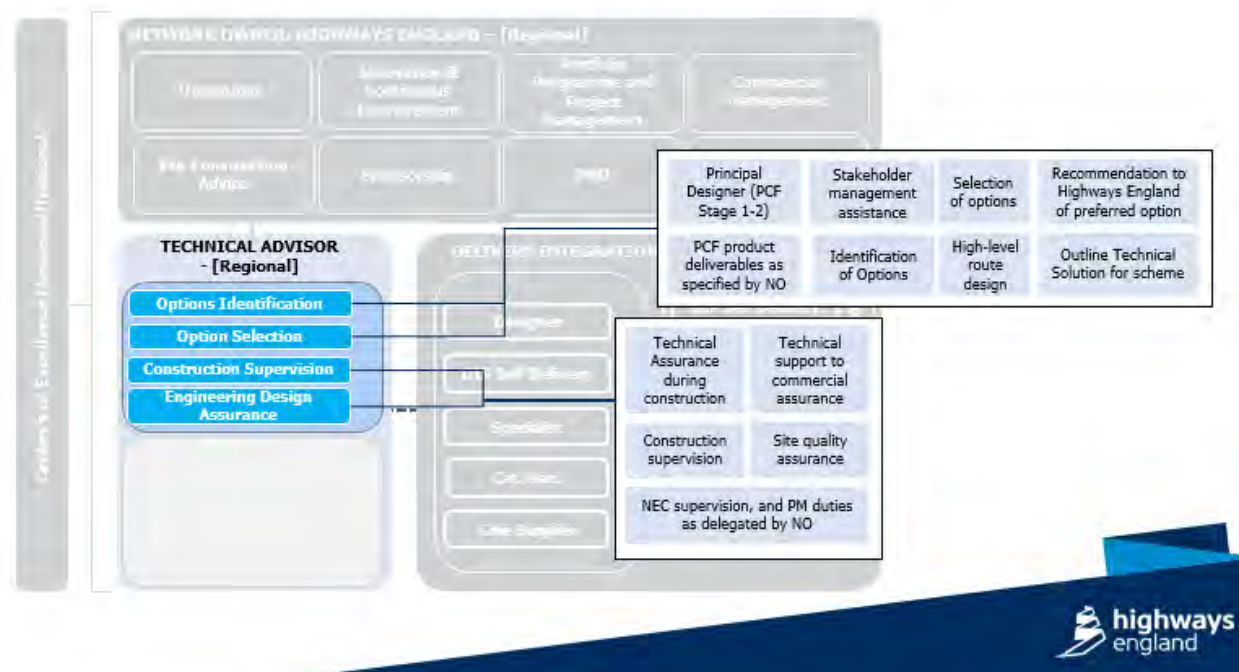
Supply Chain Management service definition

Below are the definitions of the RIP-Operations Network Owner Supply Chain Management services, and the maturity of these services. The integration of this function with the supply chain is a significant development from the current delivery model.

RIP Ops Delivery Model Function	Service	Service Description	Maturity Assessment	Implementation Prioritisation
Supply chain management	'Honest Broker'	Overcome any potential concerns related to the sharing of supply chain data within the RIP Community. Whilst scheme specific data is owned by Highways England, it is recognised that data related to DIP's, TA's and their respective supply chains may be commercially sensitive data.	1	1M
Supply chain management	Supply chain strategy	Provide long term planning of possible supply chain requirements, based on program plans and forecasts. Support the HE RIP/Ops role in development of initiatives at the local, regional and national level that drive value for Highways England. This will be through the National/Regional Centres of Excellence and the Sustainable Improvement Hub.	2	1M
Supply chain management	Category Management	Application of category management within Highways England to provide better insight into the supply chain and the products and services they provide, and develop more effective approaches to mitigating supply chain risk to give greater assurance for programme delivery. Category management will be mandated, with any exceptions presented for approval to Highways England Investment Committee. New category arrangements will be developed during the lifecycle of the delivery model through the National/Regional Centres of Excellence and the Sustainable Improvement Hub.	3	1M

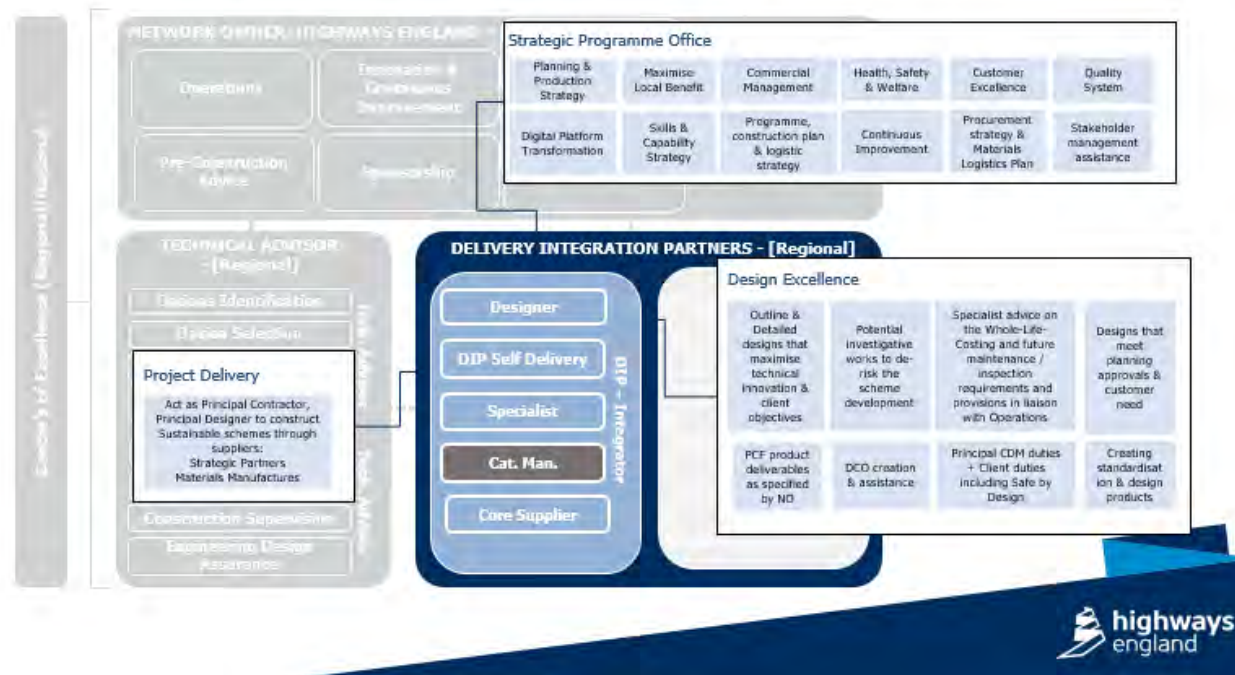
RIP-Operations Regional Delivery Model Services

The services identified within the RIP-Operations delivery model for the Technical Advisor role are shown below.



RIP-Operations Regional Delivery Model Services

The services identified within the RIP-Operations model for the Delivery Integration Partner function are shown below.





Systems Integration within the RIP-Operations delivery model

The following table outlines each system to be implemented and the forecast use of each system during the Contract term.

Area	System	Status	Use of system in RIP-Ops	Supply Chain requirements
Risk Management	Xactium Risk	Ready to use	Although not mandated to be used by the supply chain, Highways England will have to record all project risks in Xactium and therefore it would be beneficial to be mandated in the Contract.	If Xactium is mandated, supplier will be contacted for details to set up a licence for the system. The Supplier will be invited to attend a session. Suppliers licence will then be activated to be able to use the system to manage risks.
Customer relationship management	Microsoft Dynamics 365	Ready to use	Mandated for both Highways England and the supply chain to use. The supply chain should be alerted that they will need a Highways England account which requires they go through BPSS clearance via HE and should allow sufficient time in their planning (between 10 days and 6 weeks before).	Supplier will be provided with a login and a password to access the new CRM system to access scheme information. Supplier will be able to make changes to various sections of this new centralised system including contacts, Organisations, cases and activities. Highways England will be providing training on the use and benefits of the system.
Planning & scheduling	Primavera Powersteering (Update from P6)	Ready to use	Although not mandated to be used by the supply chain, Highways England will have to use P6 for all project schedules and therefore it would be beneficial to be mandated in the Contract. There is also a project schedule template for them to use that can be tailored for each project (it is based on the PCF).	Training can be provided if required.



Systems Integration within the RIP-Operations delivery model

The following table outlines each system to be implemented and the forecast use of each system during the Contract term.

Area	System	Status	Use of system in RIP-Ops	Supply Chain requirements
Contract administration	NEC Contract Administration System (CEMAR)	Ready to use	Mandated for both Highways England and the supply chain to use. Internally there will also be a new contract management manual.	The profiles and roles of user types are pre-determined within CEMAR. The supplier will be assigned a profile/role and permission levels set for the specific activities that the supplier is involved in. The supplier will attend a training session before the information is migrated onto the new system.
Information management	Business Collaborator	April 2018	Mandated for both Highways England and the supply chain to use to share any information.	Training can be provided if required.
Cost management	To be procured (three systems shortlisted)	July 2018	It is important for the supply chain to be aware that Highways England has a standardised CBS and WBS that the supply chain will need them report against. This will come out in the new year.	
Reporting	Power BI	Ready to use	Currently only to be used internally at Highways England. However, this may change during the Contract term.	

A3 – Commercial Framework

5.8 A3.1 Financial Assessment Approach

Routes to Market Regional Investment Programme

Financial Assessment Approach

03/11/17 – v0.1



BACKGROUND

The Routes to Market Programme is now reaching a critical juncture, concerning the agreement of core principles that define the Regional Investment Programme (RIP) delivery strategy and achievement of the defined procurement timeline. Management Steering Group decision is therefore sought in addressing a key decision regarding the financial assessment strategy for RIP.

The Routes to Market Programme needs to devise a financial evaluation mechanism that:

- withstands risk of challenge, by linking financial information submitted at tender stage and control prices for real schemes; and
- supports a direct allocation process; i.e. creates a tangible link between control prices at framework level and allocation of future schemes, to underpin the performance-based allocation regime.

For the Management Steering Group's consideration, the following content provides a description of the options considered to support the decision making process.

PURPOSE

This paper describes the options considered and risks associated with the financial component of the tender assessment for the Delivery Integration Partners for the RIP.

The options considered are summarized below:

- 1) Limited financial assessment looking at tendered fee, mobilisation costs, forecast costs of development work and capped construction management costs ("**Option 1**");
- 2) A combined financial assessment looking at tendered fee, mobilisation costs, forecast costs of development work, capped construction management costs and a representative priced sample scheme ("**Option 2**");
- 3) A combined financial assessment looking at tendered fee, mobilisation costs, forecast costs of development work, capped construction management costs and a representative basket of goods with optional volume and complexity discounts ("**Option 3**"); and
- 4) Tendered discount on Highways England's RIP Book of Unit Rates ("**Option 4**").

It would be the intention to exclude elements of cost covered by existing enabled Category Management Contracts from any assessment approach selected.

OPTIONS ANALYSIS

Option 1 - Limited financial assessment

To address the threat to completing the tender and evaluation process within the programme, from using a sample scheme pricing approach, the Routes to Market team assessed an option reflecting Highways England's ability to set Scheme Budgets and the total of Prices, utilising in-house cost intelligence, on the basis that suppliers do not have any demonstrable competitive advantage when procuring works from the tier 2 and 3 supply market. This approach considered the assessment of only:

- Tendered fee percentages (development and construction)
- Mobilisation lump sum price
- Forecast cost for a sample scheme development phase (PCF stages 3-5); and
- Capped proportions of construction management costs of direct works for schemes of different scale and classification.

On review, legal advice highlighted a threat to the programme caused by the potential opportunity for a procurement process challenge. This threat arises if the award of construction works is effectively based on the provision of rates associated with services and may be considered to be insufficiently representative of the physical delivery of construction works in PCF stages 6 and 7. This is in line with a recent relevant Northern Ireland case-law (*Henry Bros*) which established that an assessment on fee percentage alone is unlikely to provide sufficient indication as to the true price for the works and therefore would be susceptible of challenge.

This threat is all the more real in the context of a work allocation process, where no further price-based competition is undertaken at call-off stage. Highways England therefore needs to be able to derive prices of future works from information available at framework level when awarding RIS2 schemes.

The threat to successful selection, from a legal challenge, could be mitigated to an extent by the OJEU contract notice stipulating the limited nature of the financial assessment. This limits suppliers' opportunity to challenge within thirty days from the point of awareness of the basis for the financial assessment. Given the expected allocation of circa £4b programme of works, this threat was considered to be critical and the approach was therefore not considered further.

Option 2 - Priced sample scheme

As a route used before to assess financial suitability for appointment to projects, this model is well understood by Highways England. This option considered the assessment of:

- Tendered fee percentages (development and construction)
- Mobilisation lump sum Price
- Forecast cost for a sample scheme development phase (PCF stages 3-5);
- Capped proportions of construction management costs of direct works for schemes of different scale and classification; and

- Sample scheme pricing for the construction phase (PCF stage 6-7)

The Routes to Market Programme has considered lessons identified from an analysis of the Collaborative Delivery Framework (CDF) procurement, when designing the evaluation strategy. This has included previous experience with the financial evaluation of suppliers.

Whilst Option 2 would enable Highways England to obtain the level of pricing information required to address risks of challenge highlighted in the aforementioned case-law (Henry Bros), this Option was not taken forward for the following reasons:

The CDF procurement used reference schemes as part of the financial assessment of suppliers at the point of tender. However, through observation, this approach was considered costly to Highways England and the supply chain and proved labour intensive in both preparation, development of detailed tender returns and subsequent evaluation. This approach moves away from the ambition for the Routes to Market contracts to be easier to tender for.

Furthermore, the pricing of reference schemes was not considered to provide a true reflection of market pricing enabling controls into scheme delivery. It therefore represents a threat to successful selection of the right financial offer through the tender process. For more detailed reasons please refer to appendix A3.1 Financial Assessment Approach.

Option 3 - Basket of Goods

The use of a basket of goods, with volume and complexity adjustments, creates an efficient means of robust financial assessment, while providing sufficient (construction) pricing to act as a control for future price negotiation. This option, in addition to the elements assessed within Option 1 above, considers the following:

Leveraging Highways England's in-house Unit Cost Intelligence (UCI) to design a 'basket of goods', representative of the variable elements of direct works considered under the RIP during PCF stages 6-7;

- Using this 'basket of goods' as a cost baseline, submission can be compared at parity;
- Composite rates and elemental costs, used to represent a core unit of measure, can be used as a control during programme delivery;
- Category management supply items will be excluded, i.e. pavements and T&M and the exclusion of preliminary costs.

Whilst Option 3 does not satisfy procurement legislation, it provides a robust basis for evaluation, challenging suppliers to submit unit costs that evidence an ability to deliver economic value across a series of schemes without detailed quantification. It also allows Highways England to assemble robust pricing data, which will mitigate the risk of challenge by demonstrating a clear pathway from the framework tender and assessment process to the pricing of individual schemes.

Below is a summary of the financial assessment for a Delivery Integration Partner, using Option 3:

- Fee assessment: of two tendered fee percentages:
 - Development fee: for PCF stages 3 -5 of an indicative scheme
 - Construction fee

- A capped percentage proportion for construction management as part of the cost of direct works for schemes of different scale and classification.
- Mobilisation: lump sum Price
- Forecast cost: for a sample scheme development phase (PCF stages 3-5);
- Basket of Goods:
 - cost items making up 60-70% of expected variable non-category spend
 - Adjustment for varying scheme types
 - Adjustment for different volumes;
 - A rate requiring a competitive adjustment (+ or -). The adjusted rate then becomes a contract control rate.
 - Tenderers will not be provided with indicative quantities; however the financial assessment will model rates against a consistent generic sample scheme.
 - The scope for regions will give package lists of schemes, with scheme budgets and estimated target Costs from which bidders can use their experience to determine the scale of provision and judge the tendered adjustment.
 - The tender will specify inflation indices.

It is noted that a basket of goods approach seeks to create a level playing field to bidders with the knowledge that the lack of specific project context may lead bidders to be conservative when pricing risk. However, on a particular scheme, commercial tension created by the use of the Statement of Funds Available (SOFA) as an incentivised target and a commercial validation process is sufficient to maintain value even when using such control rates.

Option 4 - Discount on Highways England's RIP Book of Unit Rates

This approach is aligned with a model utilised by, amongst others, Scottish Water. Suppliers provide adjustment percentages against a book of representative unit rates supplied within the scope. Adjusted rates are then used within a specific quantified scheme model to assemble a Scheme Budget and Target costs. Bidders would be required to submit fixed fees and project overheads as these are not represented in the book of unit rates.

Suppliers are provided with the approach to data collection / management and the mechanics by which data is specifically utilised when setting Scheme Budgets and Target costs.

Highways England cost intelligence group considers the use of Highways England "cost data room" presents a significant opportunity for suppliers to challenge the robustness of this immature cost library. Project and regional specifics are not fully recognised by the data available. Using this data base presents significant opportunity for post award construction work target cost variance to be allocated to scheme specific risk provision in the form of estimating uncertainty. This would ultimately erode credibility, transparency, future intelligence and sustainability.

Recommendation

Based on the above considerations, and in particular taking account of legal advice, the Routes to Market team recommends adoption of Option 3 – Basket of Goods approach, noting that this approach has already been discussed and approved, in principle, by GCO.

RtM RIP/Ops Performance Management Framework

What we want to achieve

Highways England has developed Performance management framework based on the following principles:

1. **Strategic alignment:** Aligned to the three HE imperatives and the eight DfT outcomes.
2. **Objectivity:** Ensuring optimal and fair performance management process and mitigating risk of legal challenge.
3. **Existing data:** Calling upon existing data to mitigate burden for Highways England and suppliers.
4. **Supplier and PCF stage coverage:** Considering the TA and DIP through the optioneering, development and construction phases.
5. **Business comparability:** Providing comparison of performance for DfT/ORR across our supply chain.

The strategy therefore aims to achieve the following outcomes:

1. **Performance Management Framework:** Development of a consolidated approach to performance measurement, management and improvement that will aim to support procurement evaluation, continuous supplier monitoring and the objective allocation of work.
2. **Improving value:** Delivery focus should be on improving value and reducing unit cost.
3. **Minimised secondary competition:** Allocation of work based on demonstrable performance is considered as a possible mechanism to share best practice and improve predictability in programme planning and supplier delivery.

RtM RIP/Ops Performance Management Framework Risks & Issues

Risk description	Risk Consequence	RAG			Mitigating action
		I	L	T	
Time lag: Timeframe for developing method of measurement to support agreed performance indicators is extremely tight	Means to implement optimal suite of indicators/metrics - i.e. engaging with key HE, supplier, industry stakeholders or improve business process/data - is limited.	3	4	12	- Engage with key stakeholders wherever possible and focus on existing datasets.
Capacity: Additional RtM performance team resource required to develop and monitor performance scoring. In some cases, in order to deliver a suitable indicator there is a requirement to invest further.	Limited capacity to complete work optimally within timeframe.	3	4	12	- Highlight to/discuss with RtM leadership
Quality and representation: Existing data currently used by Highways England (and in some cases reported to ORR), is lacking in quality or sufficiency.	Subjective or incomplete measurement of PIs, or HE becoming open to legal challenge by suppliers.	4	3	12	- Meet with key stakeholders to understand data and dataflow. - Further investment in business processes/data e.g. assurance activities.
Direct control: Suppliers (either DIPs/TAs) take objection to the idea of being measured for performance that is outside of their direct influence (e.g. KSLs)	Elevated bid prices or in extreme case could even refuse to tender.	4	2	8	- Supplier engagement
RIS2 alignment: RIS2 operational metrics have not yet been defined/agreed.	RtM performance framework may no longer address all key.	2	4	8	- Engage with RIS2 team. - Allow for adjustment within the RtM contract. - On 05/12/17 [REDACTED] will present the proposed Performance Management approach to the Metrics Assurance group.
Supply chain behaviours: Metrics could inadvertently drive conflicting or perverse behaviour	Indicators show positive performance while the reality is less positive.	3	2	6	- Engage with metric SMRs to identify and mitigate risks related to each metric.

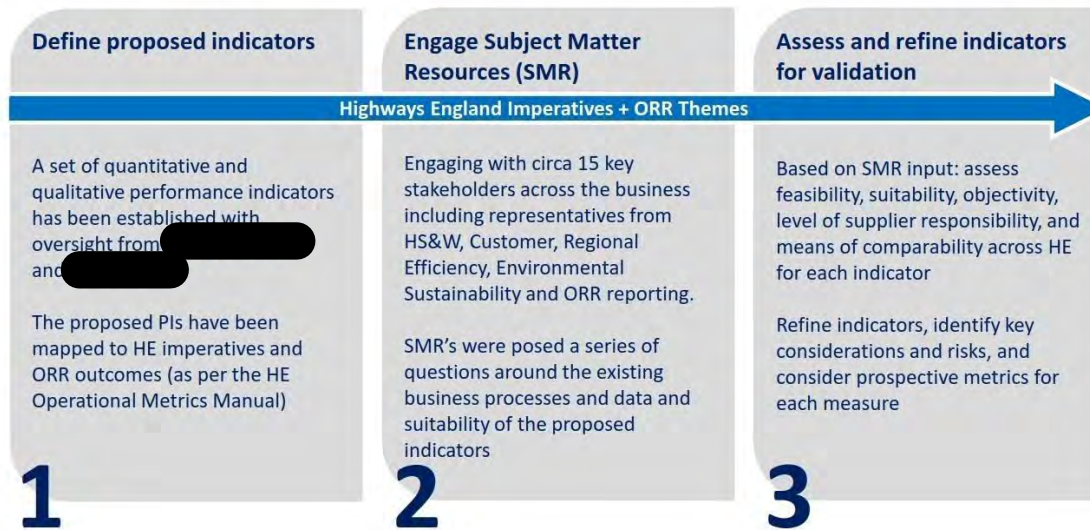
Key:

I x L = T [I – Impact (0-5) / L – Likelihood (0-5) / T – Total risk (0-25)]

RtM RIP/Ops Performance Indicators

Objective and Approach

Establishing a level of confidence in the set of indicators that will be used within the tender documentation, that are strategically aligned, objective and data-driven with means for a level of comparability across the business.



RtM RIP/Ops Performance Indicators Alignment

The 14 performance indicators have been aligned to the 8 DfT outcomes and 3 Highways England imperatives.

HE Imperatives		Safety	Customer			Delivery of the RIS			
DfT/ORR Outcomes		Making the network Safer	Improving user satisfaction	Supporting the smooth flow of traffic	Encouraging economic growth	Delivering better environmental outcomes	Helping cyclists, walkers and other vulnerable users of the network	Achieving real efficiency	Keeping the network in good condition
Performance Indicators	Workforce safety	✔ □						✔ □	
	Design for zero harm*	✔ □	✔ □	✔ □	✔ □		✔ □	KEY: <div>✔ □ Primary Outcome</div> <div>✔ Other Outcomes</div> <div>□ Qualitative Indicator</div>	
	Customer safety	✔ □	✔ □	✔ □	✔		✔ □		
	Customer journey time		✔ □	✔	✔				
	Customer satisfaction		✔ □				✔ □		
	Network availability		✔ □	✔ □	✔ □				✔ □
	Incident clearance through roadworks	✔ □	✔ □	✔ □	✔ □				✔ □
	Small/medium enterprise (SME)*				✔ □	✔ □		✔ □	
	Continuous improvement (BMF)*		✔ □		✔ □			✔ □	
	Equality, diversity & inclusion (EDI)*				✔ □		✔ □	✔ □	
	Employment and development*	✔ □	✔ □	✔ □	✔ □	✔ □	✔ □	✔ □	✔ □
	Environment*		✔			✔ □			
	Efficiency				✔			✔ □	✔
	Earned value management			✔ □	✔ □			✔ □	

KEY:

✓ □	Primary Outcome
✓ □	Other Outcomes
□	Qualitative Indicator

Notes:

- *Suggested that the following measures should not be used to inform future work allocation but termination and reallocation of work only.

RtM RIP/Ops Balanced Scorecard

High Level Balance Scorecard scoring mechanism and method

The below describe the structure of the Balance Scorecard scoring mechanism and method, and articulate how scoring will be used to measure supplier performance over time to respond to the Highways England ambition.

Overview:

- There is a Balanced Scorecard for the Technical Advisor and one for the Delivery Integration Partner.
- Performance management (Balanced scorecard) will be used to allocate future work when performance data (on each PI) will be available for all suppliers. For the purposes of reallocation and termination, the balanced scorecard will be used from start of the contract agreement.
- Only selected performance indicators are used to allocate based on performance but all performance indicators will be used to monitor and review suppliers' performance; so two separate scores are given to each supplier.
- The balanced scorecard is formed of 14 Performance Indicators (quantitative and qualitative). The score achieved by suppliers will be used to:
 - a. Allocate work based on demonstrable performance.
 - b. Highlight underperformance and determine when intervention is required.
 - c. In the worst case, provide justification for termination.
- The performance indicators are formed of a number of metrics. This figure is dependent on the number of metrics deemed to be an effective measure of suppliers against the performance indicator.
- PIs are measured both at a Contract and Scheme level (at relative PCF Stage).

Scoring Mechanism:

- Each of the performance indicators and metrics are scored out of 10.
- All Performance Indicators contributing to the balance scorecard will be equally weighted.
- All Metrics contributing to a Performance indicators will be equally weighted.

RtM RIP/Ops Performance Management Framework

Performance Indicator scores – the average of metrics

The final score for performance indicators, at scheme or contract level, is calculated by averaging the constituent metrics which form the indicator:

- Performance indicators will consist of any number of metrics
- To determine final scores for each performance indicator *by scheme* the average of the constituent metrics is taken (assuming that metrics are equally weighted)
- E.g. On scheme 3, metrics 4.1 and 4.2 gave a final score of 8 for customer journey time
- A minimum threshold will be set – when a supplier receives a score below 6 (e.g. Metric 5.1, Scheme 3) a formal escalation process commences
- *na* - where data is collected and measured at scheme level but isn't available due to the stage of the scheme

Contract Level Performance Indicators		
Performance Indicator	Metric	Score
Customer safety	3.1	7
	8.1	6
Small/Medium Enterprise (SME)	8.2	8
	9.1	8
Continuous Improvement	9.2	10
	10.1	7
Equality, diversity & inclusion (EDI)	11.1	8
Employment & development	13.1	6
	13.2	6

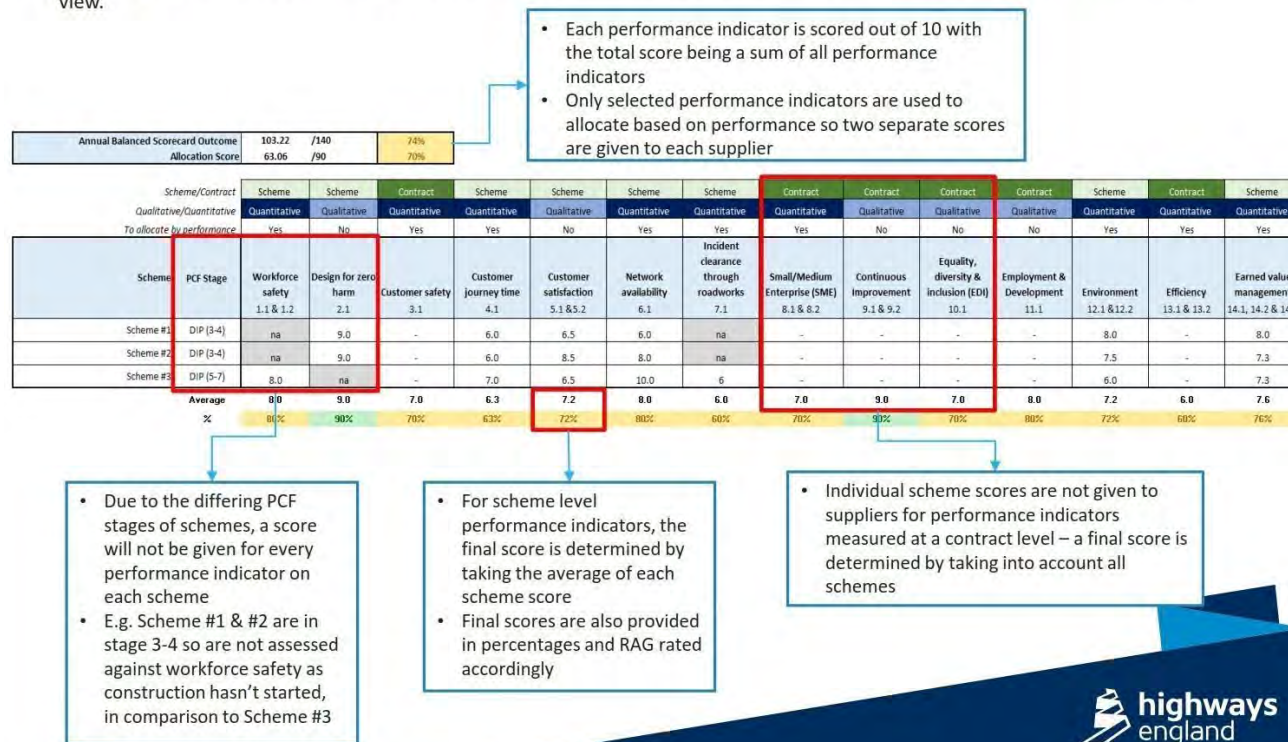
Scheme Level Performance Indicators				
PCF stage		3-4	3-4	5-7
Performance Indicator	Metric	Scheme #1	Scheme #2	Scheme #3
Workforce safety	1.1	na	na	7
	1.2	na	na	9
Design for zero harm	2.1	9	9	na
Customer journey time	4.1	6	6	7
	5.1	6	8	5
Customer satisfaction	5.2	7	9	8
	6.1	6	8	10
Network availability	7.1	na	na	6
Incident clearance through roadworks	12.1	6	6	6
	12.2	8	9	6
Environment	14.1	7	6	9
	14.2	8	9	7
Earned value management	14.3	6	7	6

- Performance indicators measured at a contract level are not given individual scheme scores – instead they are given an overall score out of 10
- Contract level performance indicators may still have more than one metric – when this is the case a final score is determined by taking the average of the metric scores

RtM RIP/Ops Performance Management Framework

Annual Balanced Scorecard

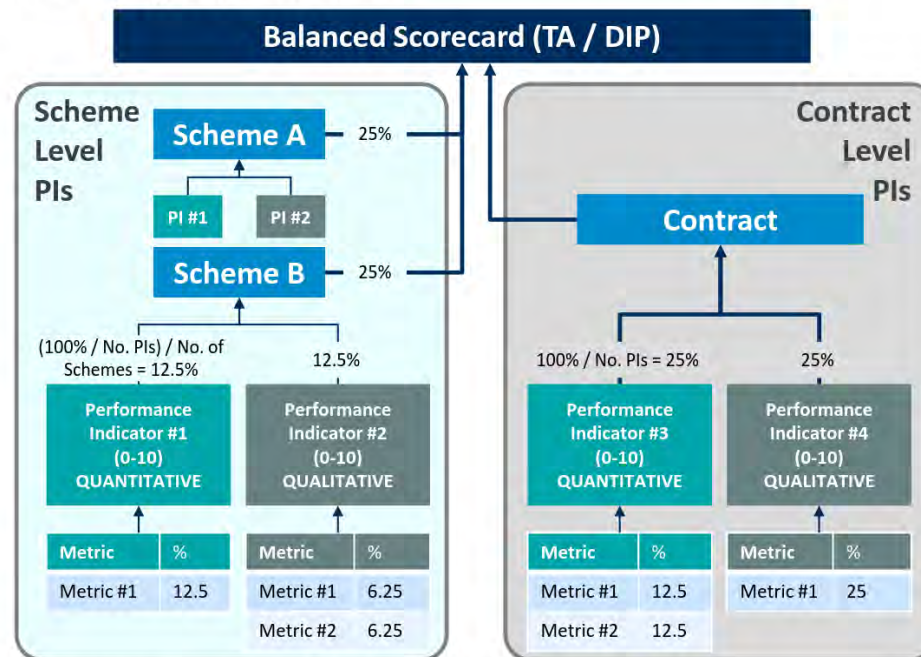
Once scheme level performance indicator scores have been determined for each scheme, they are averaged to determine a final score for the performance indicator. These are combined with contract level performance indicators to provide a comprehensive view.



RtM RIP/Ops Balanced Scorecard

Example: Balance Scorecard scoring mechanism and method

The below example describes the scoring mechanism and method for a Package of work composed of 2 RIP/Ops schemes using the Balanced Scorecard.



Example info:

- No. of schemes** within the package of work: 2
- No. of PIs** to inform Balanced scorecard: 4 (2 qualitative and 2 quantitative)
- PI scoring contribution:** $100\% / 4 = 25\%$ (equally weighting)
- Metric scoring contribution:** % of PI scoring contribution / No. of metrics

Note: Diagram is illustrative and does not reflect actual numbers of metrics, PIs or schemes.

RtM RIP/Ops Performance Indicators

Following the identification of the parameters for measuring and monitoring performance and engagement with stakeholders, the following 14 PIs are currently proposed for consideration and approval.

Theme	Performance Indicator	ID	Metric
Safety	Workforce Safety	1.1	Accident Frequency Rate (AFR) for construction and maintenance workers, and Customer Operations
		1.2	Level of near misses for personnel delivering the scheme
	Design for zero harm	2.1	Qualitative
	Customer safety	3.1	The number of KSIs on the SRN
Customer	Customer journey time	4.1	Average delay (time lost per vehicle per mile)
	Customer satisfaction	5.1	Customer Deep Dive (CDD) assessment
		5.2	Customer audits
	Network availability	6.1	The percentage of the SRN available to traffic
	Incident clearance through roadworks	7.1	The percentage of motorway incidents cleared within one hour
	SMEs	8.1	% of value spend through SME sub-contractors (Contractors)
		8.2	% of value spend through SME sub-contractors (Consultants)
	Continuous improvement (BMF)	9.1	Qualitative – BMF
Delivery of the RIS		9.2	Qualitative – START 3
	Equality, diversity & inclusion (EDI)	10.1	Qualitative
	Employment and development	11.1	Qualitative
	Environment	12.1	Carbon dioxide equivalents (or CO2e) in tonnes associated with Highways England and its supply chain
		12.2	Biodiversity*
	Efficiency	13.1	Savings on capital expenditure
		13.2	WLC*
	Earned value management	14.1	Schedule Performance Index (SPI)
		14.2	Cost Performance Index (CPI)
		14.3	Data management points*

Notes:

- Metrics outlined by an amber shaded box indicate that further capacity is expected to be required to develop and monitor the metric.
- Qualitative PIs are outlined by a blue shaded box.
- *Metric to be confirmed following engagement with SMRs

RtM RIP/Ops Performance Indicator – Customer safety

Indicator Overview			
Imperative	Safety		
DfT/ORR Outcome	Making the network safer		
RtM RIP/Ops PI	Customer safety		
Purpose	This indicator supports the key safety imperative, demonstrating the need for ongoing reductions in the number of KSI (Killed and Seriously Injured) casualties on the network; it's critical that all injuries and deaths are avoided.		
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's safety imperative, this indicator builds on the existing KPI metric and aims to achieve an overall of reduction in KSIs.		
Level	Scheme		
Frequency	Annual		

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	The number of Killed or Seriously Injured (KSIs) on the Strategic Road Network (SRN)	100%	The number of Killed or Seriously Injured (KSIs) on the Strategic Road Network (SRN).

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Customer safety

M-01 The number of KSIs on the SRN

Metric Overview	
Metric	M-01: The number of Killed or Seriously Injured (KSIs) on the Strategic Road Network (SRN)
DfT/ORR KPI/PI	KPI: The number of Killed or Seriously Injured (KSIs) on the Strategic Road Network (SRN)
Purpose	To demonstrate ongoing reductions in the number of KSI casualties on the SRN.
Methodology	<ul style="list-style-type: none"> Road accidents on the public highway in Great Britain, reported to the police and which involve human injury or death, are recorded by police officers onto a STATS19 report form. The form collects a wide variety of information about the accident (such as time, date, location, road conditions) together with the vehicles and casualties involved and contributory factors to the accident (as interpreted by the police). The form is completed at either the scene of the accident, or when the accident is reported to the police. The number of KSIs are calculated on an annual basis from the SRN data extracted from the DfT validated data. The number of KSIs is the sum of the number of fatal and seriously injured casualties. This information is compared to that of the previous years to monitor progress against the target. Once the national data is released (annually), Highways England extracts the data for the SRN and plots it against the referenced network, enabling any discrepancies to be identified. In addition, the metric for each individual scheme is calculated on the basis of KSI within the geographical coverage defined by the Traffic Management layout. The number of KSIs is calculated on an annual basis from the SRN data extracted from the DfT validated data. This information is sense checked and compared to that of the previous years. Changes in levels of traffic and road speeds on the network, and developments within the automotive industry, could influence KSI numbers and therefore influence the ability to meet the target. The number of KSIs is reported retrospectively on an annual basis via the validated STATS19 data which is released by the Department for Transport (DfT) at the end of June each year.
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 5-7
Data Details	
Data Source	The data recorded by the police on STATS19 is collated by the relevant local authority who undertakes an initial validation for their area. The data is then forwarded to DfT who undertake a further validation process for all UK data.
Measurement frequency	Data is collected continuously and reported on a rolling 12 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Customer safety

M-01 The number of KSIs on the SRN

Data Assurance	
Data manipulation	Risk level = B <ul style="list-style-type: none"> The number of Killed and Seriously Injured are correct and all are reported. There are no errors in this value. The data represents the entire SRN and there are no holes. However, as noted in the risks to reporting, police coverage and capability are a potential issue. The process is not automated.
Data assurance	<ul style="list-style-type: none"> Data input is reliant on the police to provide accurate data when they collect it at the accident scene. This is currently deteriorating as a result of reducing police coverage. On roads police capability is down 70%. STATS19 and police reporting are covered by the Standing Committee for Road Accident Statistics (SCRAS). Highways England is represented on this group. Number of KSIs: supplied by STATS19 Road Accident dataset.
Scoring	
Quantification	KSIs (1 January to 31 December) data will be scored numerically.
Performance expectations	<ul style="list-style-type: none"> M-01 = Overall reduction of at least XX% - Leading M-01 = Overall reduction of at least XX% - Acceptable M-01 = Overall reduction of at least XX% - Poor
Historical Data	Baseline and actual Supply Chain M-01 can be used
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Workforce Safety

Indicator Overview			
Imperative	Safety		
DfT/ORR Outcome	Making the network safer		
RtM RIP/Ops PI	Workforce safety		
Purpose	This indicator supports the key safety imperative, demonstrating that the safety of all operatives undertaking construction and maintenance on the Strategic Road Network (SRN) is paramount: it's critical that all injuries and deaths are avoided.		
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's safety imperative, this indicator builds on the existing CPF by augmenting the AFR metric (an HE PI) with near misses, where incidents occurred that had a high potential to cause an AFR		
Level	Scheme		
Frequency	Quarterly		

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Accident Frequency Rate (AFR) for construction and maintenance workers	=	The level of "Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013" (RIDDOR) reportable personal injury accidents and fatalities
M-02	Level of high potential near misses for construction and maintenance workers	=	The level of events that, while not actually causing injury or ill health, had high potential to cause such harm

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Workforce Safety

M-01 Accident Frequency Rate

Metric Overview	
Metric	M-01: Accident Frequency Rate (AFR) for construction and maintenance workers
DfT/ORR KPI/PI	PI: Accident Frequency Rate (AFR) for construction and maintenance workers, and for Customer Operations
Purpose	To ensure that workforce safety is optimised through effective management of root causes of accidents
Methodology	<ul style="list-style-type: none"> Reducing the AFT is dependent on the supply chain continuing to comply with procedures and legislation, and subsequent guidance issued by Highways England, and compliance with procedures This metric uses the number of accidents (M-01) and hours worked for construction and maintenance workers who are directly exposed to risks from network users. This data is recorded onto AIRSweb and IRIS for the construction and maintenance workers. The metric is calculated on the basis of incidents reportable under the RIDDOR, and presented as a 3 month rolling average, per 100,000 hours worked. It is a legal requirement to record and report all RIDDOR incidents. Calculated as follows: $M-01 = \text{No. of reportable incidents per year} / (\text{No. of hours worked in the year} * 100,000)$
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	Incident data for construction and maintenance workers is sourced from Highways England's Accident and Incident Reporting System (AIRSweb) and includes incidents occurring while working on the whole of a contract/scheme, including those of any office based staff. Incidents data for Customer Operations is sourced from Incident Reporting Information System (IRIS). IRIS is the database which records incidents from Highways England employees. These incidents may be RIDDORs, but also less significant incidents such as near misses and undesirable circumstances.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 3 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Workforce Safety

M-01 Accident Frequency Rate

Data Assurance	
Data manipulation	Risk level = B <ul style="list-style-type: none"> Appropriate checks against previous performance are carried out to help assure that the final PI is calculated properly from the raw data. HSE estimate that only 33-50% of accidents at work that fall under RIDDOR definitions are actually reported. However, it is a legal requirement that the supply chain record all RIDDORs, and the correct recording of RIDDORs and hours worked is part of their contract with Highways England - compliance with the contract improves the chance of successful tendering in future.
Data assurance	<ul style="list-style-type: none"> Data input is reliant on individuals entering accident information. Highways England employees do check all RIDDOR and high potential near misses on AIRSweb records by reading the descriptive text in each record and ensuring the correct category has been chosen, e.g. RIDDOR or near miss. Also, the National Health and Safety Division and consultants undertake inspections and review site accident books for errors.
Scoring	
Quantification	Supply chain data will be scored numerically
Performance expectations	<ul style="list-style-type: none"> Supply Chain M-01 = 0.05 - Leading Supply Chain M-01 = 0.10 - Acceptable Supply Chain M-01 = 0.20 - Poor
Historical Data	Baseline and actual Supply Chain M-01 can be used
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Workforce Safety

M-02 Level of Near Misses

Metric Overview	
Metric	M-02 Level of high potential near misses for construction and maintenance workers
DfT/ORR KPI/PI	PI: Accident Frequency Rate (AFR) for construction and maintenance workers, and for Customer Operations
Purpose	To ensure that workforce safety is optimised through effective management of root causes of near misses
Methodology	<ul style="list-style-type: none"> Reducing the AFT is dependent on the supply chain and HE Customer Operations both continuing to comply with procedures and legislation, and subsequent guidance issued by Highways England, and compliance with procedures This metric uses the number of high potential near misses and hours worked for construction and maintenance workers. This data is recorded onto AIRSweb and IRIS for the construction and maintenance workers. The metric is calculated on the basis of incidents reportable under the RIDDOR, and presented as a 3 month rolling average, per 100,000 hours worked. It is a legal requirement to record and report all high potential near misses. Calculated as follows: $M-02 = \text{No. of reportable high potential near misses per year} / (\text{No. of hours worked in the year} * 100,000)$
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	Incident data for construction and maintenance workers is sourced from Highways England's Accident and Incident Reporting System (AIRSweb) and includes incidents occurring while working on the whole of a contract/scheme, including those of any office based staff. Incidents data for Customer Operations is sourced from Incident Reporting Information System (IRIS). IRIS is the database which records incidents from Highways England employees. These incidents may be RIDDORs, but also less significant incidents such as near misses and undesirable circumstances.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 3 month basis.
Data granularity	Scheme level

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Workforce Safety M-02 Level of Near Misses

Data Assurance	
Data manipulation	Risk level = B <ul style="list-style-type: none">Appropriate checks against previous performance are carried out to help assure that the final PI is calculated properly from the raw data.
Data assurance	<ul style="list-style-type: none">Data input is reliant on individuals entering accident information.Highways England employees do check all RIDDOR and high potential near misses on AIRSweb records by reading the descriptive text in each record and ensuring the correct category has been chosen, e.g. RIDDOR or near miss.
Scoring	
Quantification	Supply chain data will be scored numerically
Performance expectations	<ul style="list-style-type: none">Supply Chain M-02 = TBC - LeadingSupply Chain M-02 = TBC - AcceptableSupply Chain M-02 = TBC - Poor
Historical Data	Baseline and actual Supply Chain M-02 can be used
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Efficiency

Indicator Overview	
Imperative	Delivery of the RIS
DfT/ORR Outcome	Achieving real efficiency
RtM RIP/Ops PI	Efficiency
Purpose	This indicator supports the delivery of RIS, demonstrating that savings on capital expenditure are realised.
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's imperative, this indicator builds on the existing CPF metric and ORR KPI to foster the delivery of efficiency savings through innovation and improvements to programme efficiency through sharing innovation intelligence.
Level	Scheme
Frequency	Quarterly

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Performance against scheme-specific efficiency targets and effect on whole life performance	100%	The level of performance demonstrate against the efficiency targets supported by the "Scheme Efficiency Register" and effect on whole life cost

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Efficiency

M-01 Performance against scheme-specific efficiency targets and effect on whole life performance

Metric Overview	
Metric	M-01: Performance against scheme-specific efficiency targets and effect on whole life performance
DfT/ORR KPI/PI	KPI: Savings on capital expenditure
Purpose	To provide input into scheme design and construction which satisfies Highways England requirements
Methodology	<ul style="list-style-type: none"> The Efficiency and Inflation Monitoring Manual (EIMM) lays out Highways England's approach to measuring, recording and monitoring efficiencies. Scheme/Area-specific efficiency targets are set by the SRO at the start of the Phase/contract. Efficiency targets are to be profiled in line with forecast spend across the duration of the project/contract (or other specified period) when the target is set. This gives a cumulative, rolling target for assessing performance at the end of each CPF reporting period. The first time this metric is measured the supplier must provide a profile of their overall efficiency target, with target points to align with each CPF period, for approval by the Performance team. This will be challenged and may be rejected if it does not align with the overall scheme forecasts as submitted to Highways England Finance. All efficiency savings must be supported by scheme efficiency registers. 'Reportable' savings are those which are categorised as 'Amber' or 'Green' and have Programme Office and Business Partner approval. Any efficiency that is rejected within the register must be excluded from the calculations. Scoring claims for 6, 8 or 10 must be supported by a plan that shows how the overall efficiency target will be met which is compatible with EIMM principles; this can be shown via the efficiency register, or otherwise as agreed with the HE Efficiency team. Otherwise a lower score will be awarded. Where more than one supplier is being scored on a scheme, they will both use the overall scheme level position and be awarded the equivalent score. This metric is scored n/a for the first reporting period in each phase.
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	<p>Scheme Efficiency Register subject to verification by the appropriate Highways England team.</p> <p>Value Management processes/workshops and scheme Efficiency Register, Whole life cost study and options evaluations, Efficiency Review Group, Managing Down whole life Costs without affecting quality of delivery. All innovations/savings will need to be verified by the appropriate Highways England team.</p>
Measurement frequency	Data is collected continuously and reported monthly on a rolling 12 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Efficiency

M-01 Performance against scheme-specific efficiency targets and effect on whole life performance

Data Assurance	
Data manipulation	Risk level = B <ul style="list-style-type: none"> The Performance team will undertake appropriate checks against a simple profile of the target which is to be provided by the supplier and shows a set of milestones for assessing performance at each CPF reporting period. Only recognised savings count towards achievement of the target. These are efficiencies with Level 2 assurance status (categorised as 'Amber' or 'Green' by the Project Manager and assured by Programme Management Office, Finance Business Partner and Commercial) which are recognised to date in line with EIMM principles.
Data assurance	<ul style="list-style-type: none"> Scheme Efficiency Register subject to verification by the appropriate Highways England team.
Scoring	
Quantification	Supply chain data will be scored numerically
Performance expectations	<ul style="list-style-type: none"> 0: No data 2: Reportable efficiency savings (to date) are less than 90% (TBC) of target (to date). 4: Reportable efficiency savings (to date) are 90-99.9% (TBC) of target (to date), or savings to date are meeting or exceeding target but there is no plan/forecast to meet the overall target that is compatible with EIMM. 6: Reportable efficiency savings (to date) are between 100% (TBC) and 104.9% of target (to date), and there is a plan/forecast to meet or exceed the overall target that is compatible with EIMM. 8: Reportable efficiency savings (to date) between 105% (TBC) and 109.9% (TBC) of target (to date), and there is a plan/forecast to meet or exceed the overall target that is compatible with EIMM. 10: Reportable efficiency savings (to date) are 110% (TBC) of target (to date) or greater, and there is a plan/forecast to meet or exceed the overall target that is compatible with EIMM. M-01 = 8 - Leading M-01 = 6 - Acceptable M-01 = 2 - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Environment

Indicator Overview			
Imperative	Delivery of the RIS		
DfT/ORR Outcome	Delivering better environmental outcomes		
RtM RIP/Ops PI	Environment		
Purpose	This indicator supports the delivery of RIS, aiming to maximise efficient use of resources, to increase overall productivity, and to reduce the Carbon dioxide equivalents (or CO ₂ e) in tonnes associated with Highways England and its supply chain as it operates, maintains and improves the network.		
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's imperative, this indicator builds on the existing CPF metric and ORR PI to foster the reduction of Highways England's carbon footprint.		
Level	Scheme		
Frequency	Quarterly		

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Carbon dioxide equivalents (or CO ₂ e) in tonnes associated with Highways England and its supply chain	50%	Quantity of carbon used per £million of contract spend.
M-02	Biodiversity	50%	Delivery of improved biodiversity, as set out in Highways England's Biodiversity Action Plan

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Environment

M-01 Carbon dioxide equivalents (or CO₂e) in tonnes associated with Highways England and its supply chain

Metric Overview	
Metric	M-01: Carbon dioxide equivalents (or CO ₂ e) in tonnes associated with Highways England and its supply chain
DfT/ORR KPI/PI	PI: Supply Chain Carbon dioxide (CO ₂)
Purpose	To measure reductions in the use of resources across the contract and the amount of waste that is generated.
Methodology	<ul style="list-style-type: none"> The components of the Highways England asset carbon footprint are the supply chain construction and maintenance activities expressed as embodied CO₂e in energy use, materials, transportation and waste removal. This figure, in tonnes, is divided by £m Use the Highways England carbon tool to assess the cumulative amount of carbon that has been used in the delivery of the Services. The figure to be used for this metric is the 'Total carbon dioxide equivalent emissions CO₂e produced per £ spent' generated on the Carbon Tool Summary Report on the latest Carbon Return. This can be cross-referenced back to the Carbon Return which is held by HE. For pre-Construction Phases, this metric is to be scored if enabling/advance works are underway on site. Score as n/a otherwise, or if the only site work is surveying. Any exceptions to these requirements based on size and scope of the task are to be agreed with Commercial Performance. Failure to submit a Carbon return in line with the guidance will result in a score of zero.
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	There are more multiple data sources which feeds into the PI, however all the data would be reported to Highways England via a common reporting tool and combined.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 3 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Environment

M-01 Carbon dioxide equivalents (or CO₂e) in tonnes associated with Highways England and its supply chain

Data Assurance	
Data manipulation	<p>Risk level = C</p> <ul style="list-style-type: none"> The PI is seeking high representativeness (all construction, maintenance and operation with the exception of PFI activity in the intensity measure) the level achieved is likely to be good: The level of reliability is linked with the process applied in turning the raw data into the PI. The process is not automated and requires some manual intervention, yet checking can be done to ensure PI is reasonable.
Data assurance	<ul style="list-style-type: none"> Historically there have been concerns over data accuracy. NAO and internal audit reviews have highlighted this with management actions. The new revised reporting tool is seeking to address these actions. Pending the tool being embedded accuracy can only be considered average.
Scoring	
Quantification	Carbon dioxide equivalents (or CO ₂ e) intensity in tonnes. Carbon dioxide equivalency is a quantity that describes the amount of carbon dioxide that would have the same global warming potential as a given mixture and amount of greenhouse gases, when measured over a specified timescale (generally, 100 years). It is the international quantity for carbon footprinting.
Performance expectations	<ul style="list-style-type: none"> 0: No Data 2: >750 t/£m 4: Between 451 and 750 t/£m 6: Between 201 and 450 t/£m 8: Between 101 and 200 t/£m 10: ≤100 t/£m <ul style="list-style-type: none"> M-01 = 180t/£m - Leading M-01 = 350t/£m - Acceptable M-01 = 600t/£m - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

Subject Matter Resource.

RtM RIP/Ops Performance Indicator – Environment

M-02 Biodiversity

Metric Overview	
Metric	M-02: Biodiversity
DfT/ORR KPI/PI	KPI: Delivery of improved biodiversity, as set out in Highways England's Biodiversity Action Plan
Purpose	To reduce the net loss of biodiversity on an ongoing annual basis.
Methodology	<ul style="list-style-type: none">TBC
Supplier Type	Delivery Integration Partner (DIP) at PCF Stage 3-7

Data Details	
Data Source	TBC
Measurement frequency	TBC
Data granularity	Scheme level

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Environment M-02 Biodiversity

Data Assurance	
Data manipulation	Risk level = TBC <ul style="list-style-type: none">TBC
Data assurance	<ul style="list-style-type: none">TBC
Scoring	
Quantification	TBC
Performance expectations	<ul style="list-style-type: none">TBCM-02 = TBC - LeadingM-02 = TBC - AcceptableM-02 = TBC - Poor
Historical Data	TBC
Continuous improvement	TBC

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Earned value management

Indicator Overview			
Imperative	Delivery of the RIS		
DfT/ORR Outcome	Achieving real efficiency		
RtM RIP/Ops PI	Earned value management		
Purpose	This indicator supports the delivery of RIS, aiming to demonstrate that the portfolio is being developed and delivered in a timely and efficient manner. This should include the progress of major schemes and programmes in construction through reporting Cost Performance Indicator (CPI) and Schedule Performance Index (SPI).		
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's imperative, this indicator builds on the existing CPF metric and ORR PI to foster the efficiency in delivery timescales and costs and the improvement of overall productivity.		
Level	Scheme		
Frequency	Monthly		

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Schedule Performance Index (SPI)	50%	Achieve the Schedule Performance Index (SPI) target for the phase
M-02	Cost Performance Index (CPI)	50%	Achieve the Cost Performance Index (CPI) target for the phase

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Earned value management

M-01 Schedule Performance Index (SPI)

Metric Overview	
Metric	M-01: Schedule Performance Index (SPI)
DfT/ORR KPI/PI	PI: CPI and SPI for schemes at Project Control Framework Stage 5 and beyond
Purpose	To drive efficiency in delivery timescales.
Methodology	<ul style="list-style-type: none"> The principal data is collected via a monthly commercial reporting and monitoring system (CRaMS) produced by the supplier and project manager. The earned value scope covers all costs (excluding programme risk, lands and salaries) for the major improvement programme in construction. It covers performance throughout the construction phase. A change control procedure applies to the baselines and budgets. Both CPI and SPI are frozen at the point at which a scheme opens for traffic. The baseline for this measure is the fully detailed and costed work programme with granularity and deliverables agreed with the project manager. Changes to the baseline programme are only made: (a) to incorporate change control events and (b) where there is a significant change in output or scope that is entirely outside the Supplier's control and not covered by a risk provision, the Divisional Director may authorise a change control adjustment to the baseline programme. The metric is scored on the final agreed SPI results at the end of the final month in the reporting period, unless the reporting period straddles two financial years when the SPI at the end of March is used, rounded to two decimal places. The metric is the cumulative phase SPI rather than the in-year period. Allowances are made for changes which have not yet been implemented, and can be reported as unimplemented changes in the CRaMS form, as set out in the form's guidance notes. The CPI and SPI are derived from information contained in the CRaMS forms and supplemented by internal data: at a programme level SPI = Budgeted Cost of Work Performed/Budgeted Cost of Work Scheduled
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 5-7
Data Details	
Data Source	A commercial return (CRaMS - commercial reporting and monitoring system) from the supply chain is produced monthly.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 1 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Earned value management

M-01 Schedule Performance Index (SPI)

Data Assurance	
Data manipulation	<p>Risk level = B</p> <ul style="list-style-type: none"> The process is owned by Commercial services (to create effective governance) and the principal data collection is via the monthly commercial reporting and monitoring system (CRaMS). The SPI is derived from information contained in this form and supplemented by internal data. There is an audit trail showing performance of suppliers and schemes (incorporating employer risk). A commercial assurance process is in place and internal audit routinely review controls. Through the Commercial Framework in place at the time, a tendering process will appoint commercial assurance consultants who review and validate the information supplied on CRaMS. Once they are satisfied with the data, it is passed on to Highways England who undertakes additional selective validation. This information is reviewed by Project Managers, Senior Responsible Owners and Directors in order to demonstrate control of time/cost and ensure that
Data assurance	<ul style="list-style-type: none"> The representativeness of the data is adequate. However, it is acknowledged that some small budget errors may occur. Appropriate checks are carried out to ensure the PI is valid, and management is satisfied with the process of calculation and assurance for the final PI score from the individual scheme data.
Scoring	
Quantification	SPI at a programme level for the major improvement programme.
Performance expectations	<ul style="list-style-type: none"> 0: No Data 2: SPI is less than 0.95 4: SPI is 0.95 - 0.99 6: SPI is 1.00 - 1.02 8: SPI is 1.03 - 1.05 10: SPI is more than 1.05 <ul style="list-style-type: none"> M-01 = SPI = 1.03 - Leading M-01 = SPI = 1.01 - Acceptable M-01 = SPI = 0.96 - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Earned value management

M-02 Cost Performance Index (CPI)

Metric Overview	
Metric	M-01: Cost Performance Index (CPI)
DfT/ORR KPI/PI	PI: CPI and SPI for schemes at Project Control Framework Stage 5 and beyond
Purpose	To drive efficiency in delivery costs.
Methodology	<ul style="list-style-type: none"> The principal data is collected via a monthly commercial reporting and monitoring system (CRaMS) produced by the supplier and project manager. The earned value scope covers all costs (excluding programme risk, lands and salaries) for the major improvement programme in construction. It covers performance throughout the construction phase. A change control procedure applies to the baselines and budgets. Both CPI and SPI are frozen at the point at which a scheme opens for traffic. The metric is scored on the final agreed CPI results at the end of the final month in the reporting period, unless the reporting period straddles two financial years when the CPI at the end of March is used, rounded to two decimal places. If the CPI is above 1.04 but no satisfactory explanation of savings is provided, the score is capped at 6. Allowances for unimplemented change can be made; this is explained in the Commercial Reporting (CRaMS) form guidance. With the exception of purely reactive or call-off type work, it is expected that all suppliers assess Earned Value independently from their costs to calculate a CPI. In the case of an NEC Option E contract, the CPI represents an anticipated cost saving or overspend against the package order budget. The expectation is that CRaMS are required and CPF EVM metrics will apply unless confirmed otherwise by the performance team. Any exceptions to this must be agreed with the Commercial Performance Team, at the start of the CPF reporting period. Where CRaMS is agreed not to be used, CPI is calculated using the target price (or current contract price) divided by the forecast outturn, and any allowances for unimplemented change can be made subject to details provided by exception. The CPI and SPI are derived from information contained in the CRaMS forms and supplemented by internal data: at a programme level CPI = Budgeted Cost of Work Performed/Actual Cost of Work Performed.
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 5-7
Data Details	
Data Source	A commercial return (CRaMS - commercial reporting and monitoring system) from the supply chain is produced monthly.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 1 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Earned value management

M-02 Cost Performance Index (CPI)

Data Assurance	
Data manipulation	<p>Risk level = B</p> <ul style="list-style-type: none"> The process is owned by Commercial services (to create effective governance) and the principal data collection is via the monthly commercial reporting and monitoring system (CRaMS). The CPI is derived from information contained in this form and supplemented by internal data. There is an audit trail showing performance of suppliers and schemes (incorporating employer risk). A commercial assurance process is in place and internal audit routinely review controls. Through the Commercial Framework in place at the time, a tendering process will appoint commercial assurance consultants who review and validate the information supplied on CRaMS. Once they are satisfied with the data, it is passed on to Highways England who undertakes additional selective validation. This information is reviewed by Project Managers, Senior Responsible Owners and Directors in order to demonstrate control of time/cost and ensure that
Data assurance	<ul style="list-style-type: none"> The representativeness of the data is adequate. However, it is acknowledged that some small budget errors may occur. Appropriate checks are carried out to ensure the PI is valid, and management is satisfied with the process of calculation and assurance for the final PI score from the individual scheme data.
Scoring	
Quantification	CPI at a programme level for the major improvement programme.
Performance expectations	<ul style="list-style-type: none"> 0: No Data 2: CPI is less than 0.95 4: CPI is 0.95 - 0.99 6: CPI is 1.00 - 1.04 8: CPI is 1.05 - 1.10 10: CPI is more than 1.10 <ul style="list-style-type: none"> M-02 = CPI = 1.08 - Leading M-02 = CPI = 1.01 - Acceptable M-02 = CPI = 0.96 - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Small and Medium sized Enterprise (SME) direct and indirect spend

Indicator Overview			
Imperative	Customer		
DfT/ORR Outcome	Encouraging economic growth		
RtM RIP/Ops PI	Small and Medium sized Enterprise (SME) direct and indirect spend		
Purpose	This indicator supports the customer imperative, aiming to demonstrate that Highways England is supporting meeting the (expected) government target of TBC% of direct and indirect spend to small and medium sized enterprises.		
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's imperative, this indicator builds on the existing CPF metric and ORR PI to foster the improvement of sustainability of the supply chain, promoting economic growth through SMEs		
Level	Scheme		
Frequency	Monthly		

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	% of value spend through SME sub-contractors (Contractors)	=	% of value spend through SME sub-contractors (Contractors)
M-02	% of value spend through SME sub-contractors (Consultants)	=	% of value spend through SME sub-contractors (Consultants)

**All the metrics will be equally weighted*

RtM RIP/Ops Performance Indicator – Small and Medium sized Enterprise (SME) direct and indirect spend

M-01 % of value spend through SME sub-contractors (Contractors)

Metric Overview	
Metric	M-01: % of value spend through SME sub-contractors (Contractors)
DfT/ORR KPI/PI	PI: Meet the Government target of 25% Small and Medium sized Enterprise (SME) direct and indirect spend
Purpose	To indicate the proportion of Highways England spend with SMEs (Contractors).
Methodology	<ul style="list-style-type: none"> SMEs are defined by the European Commission as having <250 FTE staff and either an annual turnover of ≤€50m or an annual balance sheet total of ≤€43m. The Monthly Management Accounts (MMAs) are populated based upon data contained within the Oracle finance system. Bravo is populated by DfT. Project Bank Accounts (PBAs) are bank accounts owned by the contractor. Highways England requests each Tier 1 contractor to complete a template which is used to calculate SME spend. Total direct SME spend is taken from DfT Bravo reports which obtains data direct from Highways England's Oracle System. Indirect SME spend is based on assumptions on PBA SME spend. Actual spend to SMEs through PBAs is provided to Finance & Business Services by the Cost Intelligence Team in Commercial Division (from PBA data) The total PBA SME spend is applied against total PBA spend to calculate an average SME % . This % is then applied to other indirect non PBA spend using spend figures contained in the Monthly Management Accounts (MMAs). The direct and indirect spend totals are then added together. The total SME % is taken from the total estimated SME spend against the total MMA spend (less payroll, accommodation and ICT).
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	A commercial return (CRaMS - commercial reporting and monitoring system) from the supply chain is produced monthly.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 3 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Small and Medium sized Enterprise (SME) direct and indirect spend

M-01 % of value spend through SME sub-contractors (Contractors)

Data Assurance	
Data manipulation	<p>Risk level = B</p> <ul style="list-style-type: none"> MMAs: These are compiled by the Financial Accounting team and the data is completely representative. Bravo: The representativeness of the Bravo database is considered to be good. There are occasional differences with Oracle records, mainly due to VAT and period paid (timing differences), but generally considered accurate. PBA: Not all SMEs sign up to PBAs so not all data are collected and the internal system for recording SME spend is still improving. However, in terms of contract value, we believe that around 85% – 90% of the Tier 2 and 3s will sign up to PBAs.
Data assurance	<ul style="list-style-type: none"> MMAs: these reflect the expenditure of Highways England, which in turn is reported in the annual report and accounts which are audited by the NAO annually. Additional checks are performed from time-to-time by internal audit. It is audited by the National Audit Office (NAO) annually (as part of the annual report and accounts), and additional checks are performed from time-to-time. PBAs: spot checks are carried out on approximately 10% of PBAs, further checks are made if errors are found. Spot checks are carried out on approximately 10% of bank accounts, further checks are made if errors are found. The final metric is sense checked by comparing to previous quarter's performance.
Scoring	
Quantification	<p>Percentage. There are three types of data used in calculating this indicator:</p> <ol style="list-style-type: none"> Monthly Management Accounts (MMAs) provide total spend figures, which is compared with Direct SME spend (DfT Bravo reports) which is added to Indirect SME spend (calculated from data available from PBA reports)
Performance expectations	<ul style="list-style-type: none"> 0: No data, or No spend through SMEs 2: <10% 4: <25% 6: 25-70% 8: 71-89% 10: ≥90% <ul style="list-style-type: none"> M-01 = 80% - Leading M-01 = 60% - Acceptable M-01 = 30% - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Small and Medium sized Enterprise (SME) direct and indirect spend

M-02 % of value spend through SME sub-contractors (Consultants)

Metric Overview	
Metric	M-02: % of value spend through SME sub-contractors (Consultants)
DfT/ORR KPI/PI	PI: Meet the Government target of 25% Small and Medium sized Enterprise (SME) direct and indirect spend
Purpose	To indicate the proportion of Highways England spend with SMEs (Contractors).
Methodology	<ul style="list-style-type: none">SMEs are defined by the European Commission as having <250 FTE staff and either an annual turnover of ≤€50m or an annual balance sheet total of ≤€43m.The Monthly Management Accounts (MMAs) are populated based upon data contained within the Oracle finance system. Bravo is populated by DfT. Project Bank Accounts (PBAs) are bank accounts owned by the contractor. Highways England requests each Tier 1 contractor to complete a template which is used to calculate SME spend.Total direct SME spend is taken from DfT Bravo reports which obtains data direct from Highways England's Oracle System.Indirect SME spend is based on assumptions on PBA SME spend. Actual spend to SMEs through PBAs is provided to Finance & Business Services by the Cost Intelligence Team in Commercial Division (from PBA data) The total PBA SME spend is applied against total PBA spend to calculate an average SME % . This % is then applied to other indirect non PBA spend using spend figures contained in the Monthly Management Accounts (MMAs). The direct and indirect spend totals are then added together. The total SME % is taken from the total estimated SME spend against the total MMA spend (less payroll, accommodation and ICT).
Supplier Type	Delivery Integration Partner (DIP) and Technical Advisor (TA) at PCF Stage 3-7
Data Details	
Data Source	A commercial return (CRaMS - commercial reporting and monitoring system) from the supply chain is produced monthly.
Measurement frequency	Data is collected continuously and reported monthly on a rolling 3 month basis.
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Small and Medium sized Enterprise (SME) direct and indirect spend

M-02 % of value spend through SME sub-contractors (Consultants)

Data Assurance	
Data manipulation	<p>Risk level = B</p> <ul style="list-style-type: none"> MMAs: These are compiled by the Financial Accounting team and the data is completely representative. Bravo: The representativeness of the Bravo database is considered to be good. There are occasional differences with Oracle records, mainly due to VAT and period paid (timing differences), but generally considered accurate. PBA: Not all SMEs sign up to PBAs so not all data are collected and the internal system for recording SME spend is still improving. However, in terms of contract value, we believe that around 85% – 90% of the Tier 2 and 3s will sign up to PBAs.
Data assurance	<ul style="list-style-type: none"> MMAs: these reflect the expenditure of Highways England, which in turn is reported in the annual report and accounts which are audited by the NAO annually. Additional checks are performed from time-to-time by internal audit. It is audited by the National Audit Office (NAO) annually (as part of the annual report and accounts), and additional checks are performed from time-to-time. PBA: spot checks are carried out on approximately 10% of PBAs, further checks are made if errors are found. Spot checks are carried out on approximately 10% of bank accounts, further checks are made if errors are found. The final metric is sense checked by comparing to previous quarter's performance.
Scoring	
Quantification	<p>Percentage. There are three types of data used in calculating this indicator:</p> <ol style="list-style-type: none"> Monthly Management Accounts (MMAs) provide total spend figures, which is compared with Direct SME spend (DfT Bravo reports) which is added to Indirect SME spend (calculated from data available from PBA reports)
Performance expectations	<ul style="list-style-type: none"> 0: No data, or No spend through SMEs 2: <10% 4: <25% 6: 25-65% 8: 66-84% 10: ≥85% <ul style="list-style-type: none"> M-02 = 80% - Leading M-02 = 60% - Acceptable M-02 = 30% - Poor
Historical Data	None
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Incident Clearance

Indicator Overview			
Imperative	Customer		
DfT/ORR Outcome	Supporting the smooth flow of traffic		
RtM RIP/Ops PI	Incident clearance through roadworks		
Purpose	This indicator supports the customer imperative, assessing suppliers against their ability to deal with incidents reducing the negative effects this will have on customer experience.		
Proposed Benefits	Directly aligns to the ORR outcome of supporting the smooth flow of traffic. The PI will ensure that suppliers are putting the measures in place to safely deal with motorway incidents resulting in a physical lane closure.		
Level	Scheme		
Frequency	Monthly		
Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Percentage of motorway incidents cleared within one hour	100	The percentage of motorway incidents (between 06:00 and 22:00) that are cleared within one hour from the point that the incident is reported.

**Where metric doesn't apply to the supplier type, the weighting will be re-distributed proportionally*

RtM RIP/Ops Performance Indicator – Incident Clearance

M-01 Percentage of motorway incidents cleared within one hour

Metric Overview	
Metric	M-01: Percentage of motorway incidents cleared within one hour
DfT/ORR KPI/PI	KPI: The percentage of motorway incidents cleared within one hour
Scope of metric	To ensure suppliers have the right processes in place to deal with incidents when they occur within the works envelope thus reducing the possibility of poor customer experiences
Methodology	<p>All motorway incidents that are reported are entered onto the command and control by Traffic Officer control room staff. The amount of time it takes to then reopen the motorway is calculated and logged to determine the duration of incident clearance. Only incidents which occur between 06:00 and 22:00 are included in the calculation. If emergency services are required the time that emergency services are at the location of the incident is deducted from the overall incident time.</p> <p>The metric is calculated by dividing incidents cleared in less than an hour by the total number of incidents within a particular schemes work envelope.</p>
Supplier Type	Delivery Integration Partner (DIP) at PCF Stage 5-7
Data Details	
Data Source	Command and Control Data - Command and Control data is retrieved from RIF using SQL. It is placed into excel then manually analysed and the percentage of incidents within the specified filters/time is calculated. We will include those incidents occurring in sections of roadworks where free recovery is provided by the scheme.
Measurement frequency	Data is collected continuously and can be reported on a weekly basis
Data granularity	Scheme level

RtM RIP/Ops Performance Indicator – Incident Clearance

M-01 Percentage of motorway incidents cleared within one hour

Data Assurance	
Data manipulation	Risk level = B <ul style="list-style-type: none"> Command and control system is an incident management system and is not designed for data and statistical purposes. Command and control data is retrieved from RIF using SQL. It is placed into excel then manually analysed and the percentage of incidents within the specified filters/time is calculated. Due to the nature of this data being manually entered there is also a margin for human error however this is a system that has been used over 10 years by experienced operators.
Data assurance	<ul style="list-style-type: none"> There is currently no data assurance process. There is opportunity to falsify the actual time at which the incident is cleared however the time at which it was reported is logged by the command and control system.
Scoring	
Quantification	Supply chain data will be scored numerically based on the percentage outcome
Performance expectations	<ul style="list-style-type: none"> Supply Chain M-01 = 100% - Leading Supply Chain M-01 = 85%- Acceptable Supply Chain M-01 = 60% – Poor
Historical Data	Baseline data can be used – current baseline period is between April 2013 and March 2014
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this

RtM RIP/Ops Performance Indicator – Equality, Diversity & Inclusion (EDI)

Indicator Overview	
Imperative	Customer
DfT/ORR Outcome	Encouraging economic growth
RtM RIP/Ops PI	Equality, Diversity & Inclusivity (EDI)
Purpose	Highways England overall ambition is to embed the principles of Equality, Diversity and Inclusion (EDI) into all areas, driving real change in how work with customers and communities, supply chain and employees is done. This indicator supports the Customer imperative, demonstrating that Highways England is intent on driving a step change in inclusion and diversity, moving beyond corporate-level approaches and demographic monitoring towards project-specific intelligence led initiatives, leading to improved capacity and performance of the workforce and improved service to diverse customers and communities.
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's safety imperative, this indicator qualitatively assesses the performance of suppliers in three priority performance areas: (a) create an inclusive working culture that leverages the performance advantage that diversity can bring, (b) attract a greater diversity of talent into the sector at all levels, and (c) understand the diverse needs of our customers/communities and ensuring appropriate action is taken to be 'a good neighbour' throughout the life of Highways England contracts. This will be achieved through the effective delivery of the evidence based Inclusion Action Plan (IAP), which is to be produced by the supplier.
Level	Scheme
Frequency	Quarterly

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Inclusion Action Plan	100	Qualitative score** of how the IAP is delivered throughout the life of the contract based on the steps the supplier will take to (a) attract, recruit and develop a greater diversity of talent to meet the workforce needs of the project, (b) create a working environment and culture that enables everyone to perform to their potential, (c) genuinely consider the differing needs of customers and neighbouring communities when making decisions throughout the life of the project, and (d) hold themselves and those in their supply chain to account in delivering the and monitoring the difference made in relation to point (a-c).

*All the metrics will be equally weighted

**A Performance Review Meeting, hosted by Highways England and attended by all the suppliers in the Region, will be undertaken to allow the Subject Matter Experts (SMEs) of the qualitative processes to collaboratively conclude the score for each supplier in the relevant area. The qualitative score will be derived from analysis of the assurances made within the Contract Delivery Plan and subsequent Scheme Delivery Plan(s), containing information relating to the approach to delivery M-01.

ys

RtM RIP/Ops Performance Indicator – Equality, Diversity & Inclusion (EDI)

M-01 Inclusion Action Plan (IAP)

Metric Overview			
Metric	M-01 Inclusion Action Plan (IAP)		
Scope of metric	To drive a step change in inclusion and diversity, moving beyond corporate-level approaches and demographic monitoring towards project-specific intelligence led initiatives, leading to improved capacity and performance of the workforce and improved service to diverse customers and communities.		
Methodology	<p>The IAP is developed based on analysis of the intelligence and data gathered on (1) Employment intelligence on all tiers and organisations working on the contract, and/or (2) Customer and Communities intelligence. These will be required to (1) identify opportunities to improve the inclusiveness of the working culture and the diversity of the workforce across pay quartiles and occupational groups and/or (2) deliver a more socially sensitive SRN and be a better neighbour to communities impacted by the contract - particularly those who are vulnerable as a result of a protected characteristic.</p> <p>The IAP will set out the contract specific actions that will be taken to make a difference in the practice and performance across the contract (including sub contracted tiers).</p> <p>The IAP output will be produced, collected and reported on a quarterly basis.</p>		
Supplier Type	Delivery Integration Partner (DIP) at PCF Stage 3-6		
Scoring			
Quantification	Supply chain will be scored numerically.		
Performance expectations	Score Guidance	Additional notes	
	0	No evidence based plan in place	No plan provided or action plan not based on evidence
	2	Plan being drafted or not being implemented	Plan being prepared with date of implementation provided
	4	Plan in place but only being partially implemented	Actions are outstanding beyond their target dates. No evidence of review of within the last quarter. Limited actions being carried out
	6	Evidence based plan in place, being fully implemented and up to date	Plan is linked to priorities for action as identified by evidence and is being fully implemented. There is demonstrable activity that shows progress against expected timescales
	8	Evidence based plan in place and being fully implemented and can show difference made	Confirmation of this from subject matter specialist/ metric owner
	10	Evidence based plan in place and being fully implemented and can evidence difference made. Evidence good practice is being shared.	Evidence provided that the difference made has led to legacy or the development of a case study and / or good practice being shared widely with peers/ down supply chain .
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.		

ys

RtM RIP/Ops Performance Indicator – Equality, Diversity & Inclusion (EDI)

M-01 Inclusion Action Plan (IAP)

Additional considerations	
Internal Resourcing	Highways England has the adequate capacity and capability to successfully manage metric and no additional resources are expected to be required.
Supplier requirements	<p>The suppliers will need to:</p> <ul style="list-style-type: none"> gathered baseline intelligence. analyse this intelligence to identify likely opportunities presented by the contract. determined where to focus intelligence gathering for the remainder of the contract. <p>Consideration should be given to the following:</p> <ul style="list-style-type: none"> Robust quantitative and qualitative data are unlikely to be available from the outset and can be expensive to gather so targeted, proportionate action is key. Intelligence gathering should not be a one off exercise but repeated at intervals, providing useful insight into opportunities arising and/or the impact of work done through the action plan. <p>Employment Intelligence (i.e. data and analysis) must be gathered on the whole of the workforce involved in delivering the contract. This includes people working in all organisations involved in joint ventures, people working for sub contracted tiers, and people from Highways England. Data must be shared with Highways England upon request.</p> <p>Evidence is required to show that the Contract Manager has considered opportunities to contribute to delivery of the Transport Infrastructure Skills Strategy, for example, in relation to apprenticeships. For example, Highways England's ambition for apprenticeships is that, where they are currently under represented, the number of women and people from Black, Asian and Minority Ethnic groups attracted into apprenticeships in our supply chain will grow year on year.</p> <p>It is expected that relevant Customer and Communities Intelligence will be gathered from earlier stages of work and informed via other appropriate sources, for example Equality Impact Assessments (EQIA), economic appraisals of social value, OGC gateway reviews, customer insight work, public liaison through Development Consent Orders, industry standard ethical codes, and Crown Commercial Service Procurement Policy Note (PPN) requirements.</p>
Evidence	[What evidence is used to assess the performance of suppliers?]

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Customer Satisfaction

Indicator Overview	
Imperative	Customer
DfT/ORR Outcome	Improving user satisfaction
RtM RIP/Ops PI	Customer Satisfaction
Purpose	This indicator supports the Customer imperative, demonstrating that Highways England is intent on maximising the satisfaction of the various different users of the highway through minimising disruption during roadworks.
Proposed Benefits	In direct alignment with the DfT/ORR outcome and HE's safety imperative, this indicator qualitatively assesses the performance of suppliers in maximising user satisfaction. This will be achieved through customer deep dive assessments and customer audits to ensure that suppliers are mitigating the concerns raised by customers through various engagement. This is a development on the current ORR measure that uses the NRUSS by looking at user satisfaction from another lens.
Level	Scheme
Frequency	Quarterly

Indicator Composition			
Ref.	Metric Title	Weighting *	Metric Description
M-01	Customer Deep Dive (CDD) assessment	50	Qualitative score** of (a) what the project team has done, (b) what the scheme could do to take customer experience further, (c) any barriers the team foresee or have experienced, and (d) consideration of the cost implications.
M-02	Customer audits	50	Qualitative score** of customer perception of safety, experience and information provision.

*All the metrics will be equally weighted

**A Performance Review Meeting, hosted by Highways England and attended by all the suppliers in the Region, will be undertaken to allow the Subject Matter Experts (SMEs) of the qualitative processes to collaboratively conclude the score for each supplier in the relevant area. The qualitative score will be derived from analysis of the assurances made within the Contract Delivery Plan and subsequent Scheme Delivery Plan(s), containing information relating to the approach to delivery M-01, and M-02.

RtM RIP/Ops Performance Indicator – Customer Satisfaction

M-01 Customer Deep Dive Assessment

Metric Overview	
Metric	M-01 Customer Deep Dive (CDD)
Scope of metric	To assure that customers' needs are being considered and an adequate level of engagement is taking place, so that appropriate steps are taken to improve the experience for customers at a scheme level.
Methodology	<p>The programme of CDD will be undertaken by the Customer Service Division in Major Projects and Operations and will be based on a questionnaire of circa 16 questions to provide major schemes with regular feedback.</p> <p>Following the initial review, a report is produced to highlight key outcomes such as areas of best practice, lesson learnt, potential improvements and recommendations, and a clear process for how this information will then be shared across other projects and programmes.</p> <p>The report will inform the evaluation of the four key aspects: (a) what the project team has done, (b) what the scheme could do to take customer experience further, (c) any barriers the team foresee or have experienced, and (d) consideration of the cost implications.</p> <p>The CDD output will be produced and collected on a continuous basis and reported on a quarterly basis.</p>
Supplier Type	Delivery Integration Partner (DIP) at PCF Stage 3-6 and Technical Advisor (TA) at PCF Stage 3-5
Scoring	
Quantification	Supply chain will be scored numerically.
Performance expectations	Refer to Appendix A.
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

Subject Matter Resource:

RtM RIP/Ops Performance Indicator – Customer Satisfaction

M-01 Customer Deep Dive Assessment

Additional considerations	
Internal Resourcing	Highways England has the adequate capacity and capability to successfully manage metric and no additional resources are expected to be required.
Supplier requirements	No additional activities/resources are expected to be required of suppliers (DIP/TA) as a result of the metric.
Evidence	[What evidence is used to assess the performance of suppliers?]

RtM RIP/Ops Performance Indicator – Customer Satisfaction

M-02 Customer Audit

Metric Overview	
Metric	M-02 Customer Audit
Scope of metric	To identify areas of satisfaction and dissatisfaction with the way in which the works are managed, so that appropriate steps are taken to improve the experience for customers at a scheme level.
Methodology	<p>The Customer Audits will be undertaken by customers who regularly use the scheme and will be based on a questionnaire of circa 35 questions mirroring the 'Customer Focused Roadworks Checklist' used by Traffic Officers to provide major schemes with regular feedback.</p> <p>The performance measure is computed from satisfaction ratings for three key aspects; these key aspects are (a) Planning and designing of traffic management, (b) Information provision, and (c) Engaging and communicating with customers.</p> <p>The customer experience will be collected by external and independent suppliers on a continuous basis and reported on a monthly basis.</p> <p>Since the performance measure might not be within the control of the individual project teams delivering the schemes, this will be supported by a programme of CDD run by the Customer Service Division in Major Projects and Operations.</p>
Supplier Type	Delivery Integration Partner (DIP) at PCF Stage 6
Scoring	
Quantification	Supply chain will be scored numerically.
Performance expectations	<ul style="list-style-type: none"> • M-02 = TBC - Leading • M-02 = TBC - Acceptable • M-02 = TBC – Poor
Continuous improvement	There is no mechanism to reward suppliers for continuous improvement, but there may be potential to incorporate this.

RtM RIP/Ops Performance Indicator – Customer Satisfaction

M-02 Customer Audit

Additional considerations	
Internal Resourcing	Customer audits scores are currently collected and collated by external suppliers. Customer audits are undertaken on each live scheme (7 No. at the moment) and the programme is expected to finish in March 2018. Adequate capability and capacity from external suppliers will be required to successfully manage the metric.
Supplier requirements	No additional activities/resources are expected to be required of suppliers (DIP/TA) as a result of the metric.
Evidence	[What evidence is used to assess the performance of suppliers?]