

Highways England Supply Chain Capability Review

Office of Rail and Road

30 June 2017



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Introduction

In December 2014, the Department for Transport (DfT) published their Roads Investment Strategy 1 (RIS 1) which provided £15bn of funding for Highways England to invest in the Strategic Road Network (SRN) in the period 2016 – 2021.

RIS 1, representing the largest programme of road investment for a generation covers over 100 major schemes to enhance, renew and transform the network.

Highways England, created as a result of roads reform, replaced Highways Agency as the new Government Company charged with delivery of the strategy and responded to RIS 1 with their Strategic Business Plan published in December 2014 and their Delivery Plan in March 2015. The new organisation committed to three imperatives: Safety, Customer and delivering RIS 1.

Highways England cannot deliver RIS 1 in isolation; the Supply Chain plays a pivotal role in ensuring Highways England meets the commitments made in RIS 1 and in ensuring the organisation meets its performance targets.

In 2016, the ORR commissioned a review to understand the capacity constraints within Highways England's supply chain that would influence deliverability of RIS 1. The review identified three areas that needed to be addressed if future performance was to be enhanced.

This 2017 Review, on behalf of ORR, establishes progress over the last 12 months, reports our Findings and makes Recommendations on the way forward to support continuing delivery of RIS 1 by Highways England and the Supply Chain.

We would like to thank all participants for their time and contributions whilst undertaking this Review.

Executive summary

This Review, commissioned by ORR, has been undertaken to assess Highways England's performance in respect of Supply Chain Capability in delivering Road Investment Strategy 1 (RIS 1) one year on from the 2016 Credo Review (hereafter referred to as the 2016 Review). It provides assurance to ORR and Department of Transport (DfT) that Highways England and the Supply Chain have made progress in this timeframe.

Approach

The Review was undertaken through engagement with participants across industry, Highways England's Supply Chain, Highways England and other infrastructure organisations. The type of engagement for each group varied and evolved during the duration of the assignment and included; workshops, 1:1 meetings, group fora, presentations, questionnaires and telephone conversations.

The main body of engagement was with the Supply Chain working with Highways England. To minimise disruption, our engagement utilised the Collaborative Delivery Framework (CDF) Lots and the communities that have been set up by Highways England and the Supply Chain through the Engagement Council.

Where possible, engagement was through attendance at Lot and Community meetings. This ensured we reached as many participants as possible and allowed for open discussion. We also appreciated that not all suppliers working with Highways England were members of a specific community and as such, we approached these suppliers directly.

Findings

Our Findings and subsequent Recommendations have been based on the evidence arising from our structured engagement approach.

We found that good progress has been made against the recommendations in the 2016 Review with robust evidence to support improved performance, activities and interventions. Actions were most frequently being undertaken by Highways England and the Supply Chain working collaboratively.

The Supply Chain continues to respond to signals from Highways England including greater visibility of pipeline. Named schemes have been delivered and benefits realised through opportunities to optimise delivery by smoothing the programme.

Positive progress has been made in understanding demand requirements for skills, plant and materials and in addressing the challenge of improving the attractiveness of the highways sector. Highways England and the Supply Chain have adopted a multi-faceted approach in these areas which will contribute to reducing delivery risk of RIS 1 and beyond. The political and wider landscape however, causes uncertainty in securing skilled resources.

Engagement across all tiers of the Supply Chain was viewed as positive and Highways England's approach to this through their collaborative fora was considered, by the Supply Chain, to be leading industry.

There were areas, however, including better definition of contract horizon which must be addressed to minimise delivery risk of RIS 1 and enable the supply chain to build the required capability and capacity to deliver. Visibility of the pipeline has improved through the issue of the Procurement Plan, albeit greater visibility was needed by Tiers 2 and beyond.

There remain challenges in delivering the significant peak in workload in the last two years of RIS 1. Importantly, this means ensuring it will be delivered safely, in line with customer expectations and for best value. Highways England's approach to Routes to Market (RtM) was seeking to address many of the challenges they had historically faced to enable delivery of RIS 1.

Recommendations

We have made four key recommendations in this Review with associated Actions.

We propose that Highways England takes further steps in profiling work to optimise resources and impact. We recommend reviewing a totex approach for RIS 2 and that Highways England continues to consider the impact of delivery routes/adjacent sectors when planning and programming work. We believe this will enable greater optimisation of Highways England and Supply Chain resources, drive efficiencies and importantly contribute to improving customer satisfaction.

We have recognised the work done to date to improve visibility and recommend that Highways England provides increased visibility of demand for the whole supply chain. In addition, the organisation should see to provide an appropriate contract horizon to enable the Supply Chain to optimise resources and delivery. RtM has been viewed as a key contributor to success.

The investment that Highways England and the Supply Chain have been making to build capability and capacity and attractiveness of the sector must continue to position both Highways England and the Supply Chain to deliver RIS 1 and beyond. These activities, including understanding and evolving demand intelligence and in raising the profile of the construction and highways sectors as a career of choice, must continue.

Highways England has been found to be leading industry in key areas including their collaborative approach, demand modelling and pro-active approach to increasing diversity and inclusion in the highways sector. We recommend that these continue and that Highways England seeks to position itself as a lead in these areas.

In Summary, Highway England and the Supply Chain have made good progress in the last 12 months with demonstrable evidence of steps taken which will support delivery of RIS 1.

Purpose of Review

This Review on behalf of the Office of Rail and Road (ORR) reports on progress since the 2016 Credo Review (hereafter referred to as the 2016 Review) of Highways England's Supply Chain capability.

The 2016 Review identified three recommendations that needed to be addressed if future performance was to be enhanced:

1. Supply Chain capacity was identified as one of the biggest constraints in successful delivery of the RIS, and Highways England and its Supply Chain should seek opportunities to address this challenge
2. Highways England needed to engage more openly with its Supply Chain
3. Highways England and ORR should identify performance measures which will meaningfully monitor progress on delivery of the RIS and which would also provide forward visibility of delivery risk

This Review establishes progress over the last 12 months against the 3 recommendations to understand:

- current views / concerns with respect to delivery of the RIS
- views on the steps Highways England has taken, or can take, to support the delivery of the RIS through its Supply Chain
- the actions that are being taken in the Supply Chain, and the further steps that might be taken, to support delivery of the RIS
- the extent to which the Supply Chain is responding to current signals from Highways England

We have included our review of progress against the recommendations above in Chapter 2 Findings.

Chapter 1: Context

UK Infrastructure Market

Over the last year, key documents have been published which set out the level of investment being planned for the UK infrastructure market. The National Infrastructure Delivery Plan, the key document which sets out the Government’s plans for economic infrastructure over the next 5 years, was crucially published 3 months before the EU referendum and Britain’s decision to leave the EU. Subsequent documents such as the National Infrastructure and Construction Pipeline and the 2016 Autumn Statement show that the UK Government remains as committed as before to invest in UK infrastructure.

Brexit

As of June 2017, the UK is a few months into the 2-year negotiating period to withdraw from the European Union with no firm commitments having been made to date. Whilst the consequences are unknown, most of the Brexit uncertainty comes from free movement of labour and the potential increased cost of importing goods and materials.

Major UK Infrastructure Projects

The 2016 Review¹, identified the major infrastructure projects with the greatest overlap to Highways England’s delivery of RIS 1:

| | Identified major projects (spend between FY15-20) | Description | Key overlaps with highways supply chain |
|------------------|---|--|---|
| Airports | No major projects confirmed to fall within 2015 -20 | New runway planned for South East (estimated cost range c. £9bn - £17bn) | Earthworks, road surfacing, marking and lighting |
| Nuclear | Hinkley Point C (£12.2bn between FY12-20) | Planned new 3.3GWe nuclear power station | Earthworks, technology and communications, fencing and barriers |
| Floods and Water | Thames Tideway Tunnel (£3.5bn) | Sewage tunnel under the Thames | Tunnels, drainage |
| Rail | Crossrail (£6bn) | New, high capacity train service in London | Earthworks, bridges and tunnels, fencing and barriers, |
| | High Speed 2 (£11bn) | High-speed rail linking London, Birmingham, Leeds and Manchester | technology and communication |

¹ 2016 Credo Review <http://orr.gov.uk/highways-monitor/publications/highways-englands-supply-chain-capability>

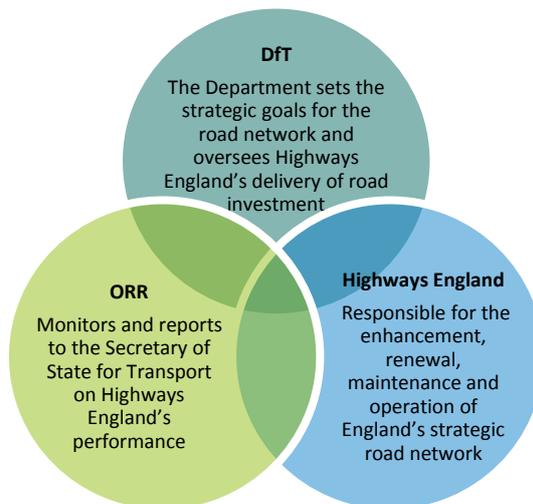
| | | | |
|------------------------|----------------------------------|---|----------------|
| Local Roads | Ongoing maintenance (£6bn) | Maintenance and development of roads outside the SRN by local authorities | All categories |
| Strategic Road Network | Road Investment Strategy (£15bn) | Long term investment programme to improve England's SRN | N/A |

Source: Credo Review 2016

One year on, these projects still provide the greatest overlap in demand to Highways England's delivery of RIS 1. Apart from Crossrail, which is due to complete in 2019, all other projects will be continuing throughout the lifespan of Road Period 1. It will be likely these projects will cause regional hotspots as the demand for skills, materials and road access overlap.

Office of Rail and Road (ORR), Department for Transport (DfT) and Highways England

ORR, DfT and Highways England all have specific roles to play in keeping the Strategic Road Network (SRN) running to sustain our economy.



Road Investment Strategy (RIS) 2015 – 2020

The DfT's RIS 1 published in December 2014 provided £11.4bn of funding for Highways England to invest in the SRN in the period 2015 – 2020. Highways England, created as a result of Roads Reform, replaced Highways Agency as the new Government Company charged with delivering the Strategy. The RIS, representing the largest programme of road investment for a generation will be invested in over 100 major schemes to enhance, renew and transform the network. RIS1 provides certainty of funding in the Strategic Road Network.

Approach to the Review

We identified six distinct groups of stakeholders who were key to informing progress over the last year:

- DfT (Client/Shareholder) – key individuals within the Department
- ORR (Highways Monitor)
- Highways England – key individuals within Highways England
- Supply Chain – the Supply Chain working with Highways England
- Industry bodies engaged within the roads sector
- Other infrastructure clients

In conducting the Review, we engaged with over 90 individuals representing the above key stakeholder groups through workshops, community meetings, telephone interviews and questionnaires.

The results of our engagements are presented as Findings in this Review.

Chapter 2: Findings

In this Chapter, we present the eight Findings from our Review:

- Finding 1: Visibility of pipeline has improved
- Finding 2: The Supply Chain is responding to signals from Highways England
- Finding 3: A lack of committed work for the Supply Chain is a barrier to building capability and capacity
- Finding 4: A multi-faceted approach to improving the attractiveness of the highways sector will contribute to reducing delivery risk of RIS 1 and beyond
- Finding 5: Opportunities to optimise delivery are being sought to drive efficiencies and maximise resources reducing risk to delivery of RIS 1
- Finding 6: Engagement with the Supply Chain is generally considered to be strong and is supporting delivery of RIS 1
- Finding 7: Performance intelligence is demonstrating greater value
- Finding 8: The political and wider landscape is causing uncertainty in securing skilled resources

The following provides greater detail these the Findings together with suggested Actions where appropriate. These Actions are consolidated within Recommendations in Chapter 3.

Overview

Highways England has made good progress against the recommendations in the 2016 Review with robust evidence to support their improved performance, activities and interventions.

Whilst all respondents acknowledged that delivering RIS 1 presented a number of significant challenges for the remainder of the Road Period, there were fundamental building blocks and outcomes around which all parties shared a positive and coherent view, see below.



Key areas of progress and on-going activities, many of which have strong interdependencies with each other in contributing to overall delivery, were largely the result of a collaborative approach with the Supply Chain and therefore, not solely attributable to one party.

FINDING 1: VISIBILITY OF PIPELINE HAS IMPROVED

Forward visibility of demand was highlighted in the 2016 Review as an area needing to be addressed as a priority. The review recommended Highways England should provide more detailed forward visibility of demand at an appropriate level which would “facilitate improved planning by its suppliers”.

The Procurement Plan

Highways England has made positive steps to increase the visibility of their programme through the Procurement Plan. The most recent issue is Version 4 with Version 5 planned to be issued in summer 2017. Each iteration has seen increasing maturity of the information contained therein, for example, increasing tightening of estimated scheme cost and a breakdown of estimated cost between design and construction components.

The Procurement Plan continues to be made available to all suppliers across all tiers through the Supply Chain portal and on the Highways England website approximately every 6 months. It provides important visibility for the Supply Chain of work against specific programmes; Complex Infrastructure Programme (CIP), Regional Investment

Programme (RIP), Smart Motorways Programme (SMP) and Operations Directorate (OD) and Other. Visibility is presented in three categories:

- Committed spend – schemes already awarded
- Future spend – route to market planned
- Future spend – route to market not yet confirmed

The value of the Procurement Plan is acknowledged by the Supply Chain and visibility of the investment programme has been a big step forward.

The greatest uncertainty exists in delivery of RIP schemes where scope is more varied. Currently between £4.6bn and £9.6bn of investment in RIP in RIS1 has no route to market defined, with a further circa £1bn of spend with a route to market defined albeit not yet committed (Source: Procurement Plan Version 4). As such, there remains a lack of visibility for these schemes.

Highways England and the Supply Chain could engage further to develop the forward plan to increase visibility of pipeline. There remains a disconnect between the Procurement Plan insight and definite action from the Supply Chain. There is also a degree of caution from the Supply Chain about the accuracy of the forward programme as they report that, in some cases, they have seen delays post award.

Action: Continue to develop the Procurement Plan to provide visibility of demand across core categories (Action 1, Recommendation 2)

Visibility for Tiers 2 and 3

The 2016 Review found that lower tiers required greater visibility through a more detailed breakdown of the pipeline for them to plan more effectively. Tiers 2 and 3 have little formal visibility of demand given the high level of scheme information provided and this action remains on-going.

Asset Delivery (AD) has provided greater visibility across the Supply Chain through an approach which has broken down traditional Supply Chains and provided visibility and commitment to those suppliers in lower tiers, but this is dependent upon the pace of the rollout.

Procurement process

Certainty of funding does not equate to certainty of work. Constant competitions within frameworks and commissioning delays are costly for the Supply Chain and have a negative impact on availability of resource. Insufficient confidence to invest puts pressure on delivery and achievement of efficiencies.

Procuring projects on an individual basis, where information requested is often repetitive, is currently failing to drive value and is unlikely to be sustainable in delivering RIS 1. New operating models, like AD and RtM are seeking to address this.

There remains an opportunity for Highways England to develop the scalability of the procurements further to allow easier entrance for smaller companies in delivering capital projects, particularly smaller Tier 1 suppliers who may lack a strategic relationship with large Tier 1 organisations. There is, however, evidence of new entrants into the Strategic Highways Market, particularly in AD.

Action: Develop a clearer view of intent for smaller Tier 1 contractors, beyond AD (Action 2, Recommendation 2)

“Direct engagement with Highways England is enabling greater visibility and innovation to be shared, although lack of early certainty of committed pipeline is hampering further investment and application” Supply Chain

FINDING 2: THE SUPPLY CHAIN IS RESPONDING TO SIGNALS FROM HIGHWAYS ENGLAND

We have heard from many participants that Highways England has the right intent in positioning the organisation to deliver RIS 1 with its Supply Chain. The collective progress made in the last 12 months is recognised by all.

In conducting this Review, it was clear however that the “signals” from Highways England were achieving mixed response from the Supply Chain. This was related not only to the confidence/belief the Supply Chain has in the “signal” but also to the infrastructure market more generally. “Signals” prompting a lesser response, i.e. rated Amber as opposed to Green, were, in part, a result of the timing and associated actions rather than a lack of commitment to respond.

A summary of “signals” and responses as shown below, have been assessed based on our discussions with the Supply Chain in the course of undertaking this Review. As such, it should be viewed as subjective and further investigations undertaken as required. Key to ratings is as follows:

| Rating | Supply Chain Response (action) rating | Supply Chain Confidence (belief) rating |
|---|---------------------------------------|---|
|  | Reactive action only | Limited |
|  | Pro-active/collaborative action noted | Good |

| Highways England Signal | Supply Chain Response (action) rating | Supply Chain Confidence (belief) rating |
|---|--|---|
| Safety, customer and delivering the RIS remain our top priorities |  |  |
| Doing more together to deliver the RIS |  |  |
| Working collaboratively to build better relationships and optimise delivery |  |  |
| Working with industry and suppliers to promote the sector to encourage skills and aid retention |  |  |
| Providing the best available visibility of pipeline |  |  |
| Pro-active interventions are supporting RIS 1 delivery |  |  |
| Seeking to overcome barriers to success as far as possible |  |  |
| Easing “hotspots” wherever possible |  |  |
| Incentivising good performance with a greater allocation of work |  |  |

“It is evident that Highways England is seeking to raise their game with new approaches and skills to support new procurement routes”
Design Community & Tier 1

Whilst the overall intent of Highways England is good, there is a general view that Highways England remains bound by some of the legacy of Highways Agency. All parties endorsed the value that collaborative engagement is realising, albeit greater transparency and more input by the Supply Chain would be of benefit in enabling delivery of RIS 1. As a leadership and governance forum, the Collaboration Board may be viable a route to achieving this.

FINDING 3: A LACK OF COMMITTED WORK FOR THE SUPPLY CHAIN IS A BARRIER TO BUILDING CAPABILITY AND CAPACITY

The 2016 Review identified that Supply Chain capacity was one of the biggest constraints to successful delivery of RIS 1, and that Highways England and its Supply Chain should seek opportunities to address this challenge.

We have found this remains the case, however, it is largely subject to two key contributing factors:

Certainty of work

Our Review found that the innate “elasticity” of the construction sector means that, in most Supply Chain areas, including resources, plant and materials, there would be capacity to deliver, providing sufficient notice was given². However, a lack of demand certainty, enabling timely procurement through the Supply Chain and early work commitment, means that suppliers are unlikely to invest in building capacity other than to maintain a steady state and satisfy general construction sector commitments across all clients. This is exacerbated by the continuous need to compete for work.

Gearing up for the peak in latter years’ delivery of RIS 1 was not evidenced in the Supply Chain. This was largely a result of the lack of secure workload.

Action: Develop the plan to define the appropriate contract horizon across consultancy and all contracting tiers. and begin implementation (Action 3, Recommendation 2)

Continuity of work

The potential for salary competition between organisations was a real threat and the Supply Chain reported that this could drive up price as demand increased. In addition, the Supply Chain advised that often resources would drift away from highways schemes within the last 6 months of a project due to a lack of continued work post the end of the scheme. As such, skills and lessons learnt were lost, often to adjacent sectors and projects.

Highways England is taking steps to address the challenge of committed workload through their new operating models, AD for operations and RtM for Smart Motorway Programme and Regional Investment Programme capital schemes.

AD is underpinned by term contracts with a defined commitment. This is particularly relevant to suppliers who have traditionally been in tiers 2 and beyond who now have direct contracts with Highways England based on the value they bring in delivering services critical to successful outcomes. This approach is currently operating in five

“2019 feels unrealistic but solvable with the right action now”
Tier 2

“We (suppliers) are already competing for the same resources due to lack of continuity within one organisation inevitably resulting in salary wars”
Tier 1, 2, 3

² Subject to the uncertain impact of Brexit on general trades currently coming from the wider European Union

Areas; Area 7 East Midlands, Area 12 North East, Area 13 North West, and Areas 1 and 2 South West.

RtM is Highways England’s new procurement approach currently being developed as the successor to the Collaborative Delivery Framework (CDF) awarded in 2014. Engagement with the Supply Chain and industry peers, including adoption of best practice principles, for example, Infrastructure and Projects Authority (IPA) pillars, has resulted in key design principles emerging:

- A national alliancing approach for Smart Motorways Programme
- Term contracts with a pipeline of work across a region for the Regional Investment Programme
- Direct awards/removal of secondary competition
- Subsequent awards based on previous performance

The Supply Chain acknowledges that the intent of RtM is good, although it may not be transformational. It is intended to satisfy the need for workload security and the Supply Chain recognises that RtM presents the opportunity to improve procurement processes to enable suppliers deliver to the Strategic Outcomes. However, there remains uncertainty over timing and the scope of the requirements, particularly in respect of the Smart Motorways Programme.

Demand Modelling

Despite of the current lack of demand certainty and early work commitment for the Supply Chain, there is certainty of spend in RIS 1. Highways England and the Supply Chain have been taking positive steps to understand the likely demand for skills in delivering RIS 1. This has been evidenced in three key areas:

- **Skills demand modelling:** information is available by total headcount across Road Period 1 and per programme/type of skilled resource (by discipline and trade). This is providing a good degree of intelligence and clear evidence that progress has been made in this area in the last 12 months.
- **Plant demand modelling:** Highways England has provided visibility of anticipated demand to manufacturers and the Supply Chain and continues to facilitate engagement with the “non-framework” plant community. Highways England is seen to be at the forefront of industry in engagement and development in this area through initiatives including “Raising the Bar”, a top down/bottom up approach aimed at developing common specifications/standards in plant for clients across the sector.
- **Skills survey:** Highways England compiled a survey which has been undertaken by the Supply Chain. The resulting intelligence identifies that circa 60% of skills working on highways are non-specific highway trades thereby capable of working across all sectors and potentially a group most at risk of the impact of Brexit.

We have found that the above activities have provided a good baseline of information which is more developed than most other infrastructure organisations we have engaged with in undertaking this Review. Beneficial next steps will be in developing the data collated to recognise the impact of other interventions, for example, opportunities to create efficiencies and challenge standard working practices. Other areas to consider are the positive impacts on capacity of smoothing the pipeline of work and considering the impact of digital technology and other innovative approaches.

“Adoption of machine control systems has meant less skilled resources setting out on the A14 resulting in more effective delivery in a safer environment”
Highways England

FINDING 4: A MULTI-FACETED APPROACH TO IMPROVING THE ATTRACTIVENESS OF THE HIGHWAYS SECTOR WILL CONTRIBUTE TO REDUCING DELIVERY RISK IN RIS 1 AND BEYOND

Whilst building capacity and capability of skilled resource is difficult, a dependant challenge exists: improving the attractiveness of the highways sector.

In conducting this Review, both Highways England and the Supply Chain reinforced their on-going challenge to increase the attractiveness of the highways sector given the perceived appeal (lifestyle, career, higher salaries and profile) of other infrastructure projects.

Worthy of note is Highways England's continued leading role in many areas across wider industry, rather than in purely addressing highways focused/highways specific skills. Many of the skills required for the most significant portion of work on highways are generic skilled trade resources (circa 60%). It will be this workforce that presents the most risk to RIS 1 delivery especially when linked to potential impacts of Brexit. It will be direct interventions that will address the need to attract and retain the majority of generic skilled trade resources to deliver RIS 1.

For example, Highways England is engaged with the Strategic Transport Apprenticeship Taskforce (STAT) with the objective of raising the profile of the scale of the challenge, opening debate and contributing to initiatives as a key client of infrastructure investment. As such, not only has the organisation made progress in understanding and addressing their own skills needs, but are actively contributing across wider industry.

Within the organisation itself, Highways England is undertaking upskilling initiatives to ensure they can meet the increased challenges in delivering RIS 1. The Commercial and Procurement Directorate, for example, is investing in "building capability fit for the future" which encompasses not only internal capability development, but also supplier and cross-sector capability development thereby collaboratively building skills to deliver the ambition set out in the Supply Chain Strategy. Major Projects Directorate is ensuring that their recruitment and growth plans are aligned to building the capacity and capability to meet RIS delivery.

Action: Enhance understanding of Supply Chain businesses and commercial operations, for example, short term placements (Action 6, Recommendation 2)

Highways England and the Supply Chain have taken considerable steps and made good progress in addressing the issue together. A multi-faceted approach has been adopted through investment in many interdependent activities including:

Attracting and recruiting diverse talent: CLEAR project

A study has been undertaken with members of the Supply Chain aimed at developing the sector's capability to attract, recruit and on-board diverse talent from the widest pool to meet emerging capacity, capability and business needs. The project engaged a Highways England and Supply Chain working group to establish current capability and to scope out a range of options for consideration.

“On average 2.5% of the Supply Chain’s workforce will retire each year. Attracting new resources into the sector must be at least at this level to breakeven and ensure businesses remain static at least”
Tier 2

Highways England plans to embed the preferred option(s) in procurement process and evaluation requirements and gain greater understanding of barriers to greater diversity in recruitment practice.

Attracting and recruiting diverse talent: Supplier Diversity Forum

Highways England's Supplier Diversity Forum (SDF) is a collaborative group set up to support the objective of embedding the principles of equality, diversity and inclusion into all areas of the business.

In the last year, terms of reference have been updated and a collective vision created across Highways England's Supply Chain.

Royal Academy of Engineering's (RAE) Diversity and Inclusion Leadership Group

Through the RAE's Diversity and Inclusion Leadership Group, Highways England has participated in a Transport Sector Client forum with Network Rail, HS2, Crossrail and others to share best practice.

Highways England is participating in a procurement sub-group considering Diversity and Inclusion in procurement, particularly regarding hard measures which will impact directly on recruitment and development of resource so helping people embark on construction as a long-term career

Commitment to apprenticeships

Highways England has revised their contractual conditions increasing the requirement on the Supply Chain in building their pool of apprentices. The Supply Chain is now required to have one apprentice for every £3-£5M of spend, or 2.5% of workforce (previously one in £20m). We consider the most significant challenge to be in devising a way to retain these resources after the scheme they have been recruited on completes.

This has accounted for 108 apprentices in the period 1st April 2016 – 31st March 2017 on contracts valued in excess of £10m+ of over 12 months in duration and comprises a mix of 63 contracts/framework appointments.

National skills academies for construction (NSAfC)

Highways England is currently developing a proposal for wider roll-out of NSAfC's on a greater proportion of investment schemes to provide capacity for the future to deliver the following:

- Education and Community Outreach
- Employment
- Training and Upskilling

Currently, Highways England has procured nine accredited NSAfC projects valued at £1.3bn. The ambition is to roll-out NSAfC schemes across all relevant schemes/contract portfolio.

National Advertising Campaign

Highways England continues to be a member of a cross-industry steering group developing a national advertising campaign to attract resources into wider construction to build skills and capacity in the sector to support delivery of RIS 1 and wider

“Average salary in construction is 20% above the national average... this is little known yet presents opportunities for the sector”
Highways England

infrastructure. Work is on-going in this area to promote/raise the profile of the sector and attract resources.

Roads Academy

Highways England and the Supply Chain continue to invest in training key individuals through their jointly funded Roads Academy established 2007. The Academy is a cross sector leadership development programme, which has been created by Highways England and the roads industry to invest in future leaders in the roads sector, whilst also providing a platform to share best practice. There are plans to develop the Roads Academy and extend its reach to middle management and emerging talent.

Cohort 12 are currently engaged in training. In the region of 120 candidates have been supported through the Academy to date.

Memberships

Highways England is an active member of the Strategic Transport Apprentice Taskforce (STAT) - a cross transport body to encourage apprentices across the sector. Benefits from membership to date for Highways England include:

- Joined up approach on apprenticeship commitments across the Transport Sector.
- Visibility of developments and issues of key associated organisations including: Institute for Apprentices (IFA) and Trailblazer developments/issues – with the ability to influence at a transport level.

Additionally, through membership of the National Skills Academy for Rail (NSAR), Highways England is looking at a transport view of skills demand across road and rail.

Investing in/promoting initiatives

Highways England, the Supply Chain and manufacturers continue to invest in “Have a Go” days³ aimed at widening the pool of skilled resources so reducing pressure on the industry and increasing labour rates as a consequence of increased demand. At these days, individuals can ‘try’ plant with a view to securing an apprenticeship. Events have been held at Cambridge College, aligned to the A14, and in Manchester and Leicestershire to date.

Training Schools

Project specific initiatives are being jointly invested in to aid recruitment and retention on key long term projects in a region.

Action: Develop communication plan for improving sector attractiveness. Consider advertising campaign/other media campaigns and maximise the use of social media (Action 1, Recommendation 3)

**“Over 800 individuals attended the Cambridge/A14 ‘Have a Go’ day”
Highways England**

³see www.plantworx.co.uk

FINDING 5: OPPORTUNITIES TO OPTIMISE DELIVERY ARE BEING SOUGHT TO DRIVE EFFICIENCIES AND MAXIMISE RESOURCES REDUCING RISK TO DELIVERY OF RIS 1

Our Review found that the Supply Chain are committed to delivering RIS 1 and in gearing up for RIS 2. They share a common understanding and commitment with Highways England.

In conceptual terms, by developing a five-year programme of work with guaranteed funding, Highways England has the opportunity to work more effectively and efficiently. A long-term strategy and improved certainty of funding is intended to enable the Supply Chain to plan better and help Highways England to secure lower-cost, long-term contracts with suppliers. Indeed, DfT and Highways England expect to achieve £1.2 billion of efficiencies over Road Period 1⁴. There is more to do to realise the theoretical benefits of this approach.

From the outset, Highways England commenced delivery of RIS 1 whilst simultaneously developing its approach to delivery, thereby, potentially undermining the benefits such an approach offers. For example, a portfolio approach supported by a programme management office planning delivery of all projects as an entire RIS 1 programme. Notwithstanding that this was not possible from the outset, there has now been a shift in Highways England's capability and a Portfolio Management Office has been set up to manage the remainder of RIS 1 and RIS 2.

Whilst there is visibility of programme, there remains limited visibility of demand certainty and therefore committed work to deliver these schemes. Consequently, the Supply Chain has little confidence to invest in gearing up.

Budget Commitment

Indications from the first two years of RIS 1 were that Highways England was on track to deliver £11.4bn of capital investment by 2020. Movement is taking place and some timeframes are changing to optimise programmes and delivery. The Supply Chain anticipate that the principles of supply and demand will likely increase project costs significantly as infrastructure client requirements overlap in the latter years of RIS 1. The ability to forward plan to optimise the programme and commit to the Supply Chain would minimise much of the impact.

Hotspots

Distribution of schemes is not uniform across England and will place pressure on the Supply Chain in specific locations. Certainty of timing in regional requirements and smoothing between capex and opex investment would remove some of the challenges of programme delivery and maximise use of road space, for example, through optimising road closures.

Current strategies to 'smooth' the flow of work by bringing some projects forward and wrapping a number of schemes together as a programme, for example, corridors work (see below), is helping to smooth demand and manage customer impact

Action: Consider investment as Totex for RIS 2 (Action 1, Recommendation 1)

⁴ Source: NAO Report: Progress with the Road Investment Strategy March 2017

Of the 112 projects comprising capital investment in the RIS 1, 54 are scheduled to start in 2019 – 2020 Tier 1

Highways England is taking steps to optimise the profile of their work to drive efficiency and improved customer outcomes as below:

- Bringing the start date of schemes forward, for example, the £800k M49 Avonmouth scheme and the A19 Coast Road both of which are ahead of the 2016/17 start date.
- Actively smoothing RIS 1 schemes to minimise the impact of a start in year 5 on road users and efficient use of resources, for example, corridor approach in Liverpool to Manchester
- Identifying opportunities to wrap schemes together so that a programmatic approach can be taken thereby optimising capacity and value for money, for example, merging M1 Junction 23a-24 with M1 Junction 24-25 as a single project thereby creating overhead efficiencies.
- Engaging with Local Enterprise Partnerships (LEPs) and Local Authorities to deliver some jointly funded projects through their Supply Chains, for example, M4 Junction 17 project managed by Wiltshire Council and M27 Junction 9 £19.5m managed by Hampshire County Council on behalf of Highways England and the LEP.
- Re-programming schemes to deliver better customer experience in the light of investment by other infrastructure clients. For example, M5 Oldbury Viaduct is contributing to smoothing the pipeline by optimising resources and delivering RIS 1.

We have seen evidence of the Supply Chain being loyal to Highways England and in committing as far as they can in delivering RIS 1 through their collaborative engagements. However, they were responding reactively rather than proactively, as a result of lack of committed workload and would welcome the opportunity to engage more with Highways England in problem solving and programme planning. We do, of course, acknowledge there are some limitations given Highways England's responsibilities in being accountable for the public purse.

An inclusive regional and programmatic approach, for example, the "corridors" work, will provide greater commitment/continuity of work, enable optimisation of skilled resources and plant, provide better service to customers and enable value to be realised. Early signs of success, including reduced overheads, are positive.

Action Consider how to further engage with the Supply Chain to optimise the programme (Action 3, Recommendation 1)

FINDING 6: ENGAGEMENT WITH THE SUPPLY CHAIN IS GENERALLY CONSIDERED TO BE STRONG AND IS SUPPORTING DELIVERY OF RIS 1

The 2016 Review identified that all parties would benefit from increased engagement and we note excellent progress has been made. Since becoming Highways England, the organisation has taken a new approach to engaging with their Supply Chain whereby they have sought to break down traditional supply chain hierarchies to:

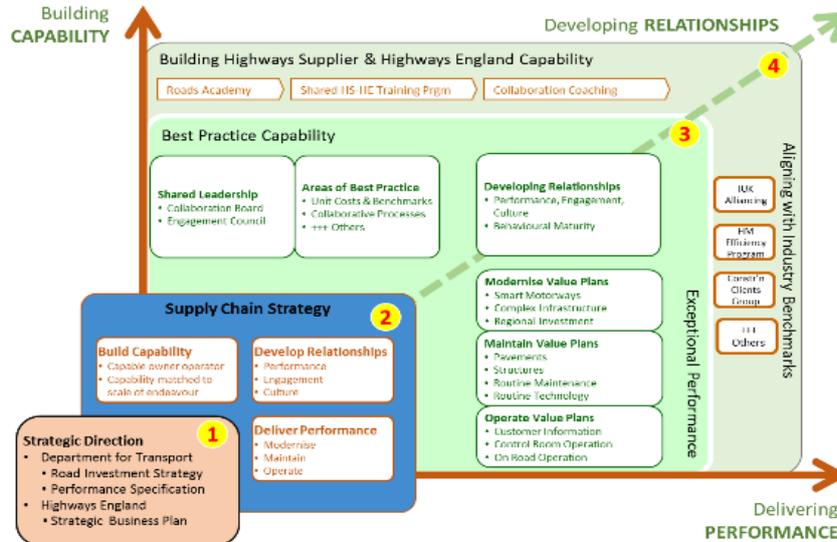
“The Supply Chain could help more than they currently do but Highways England needs to be more open to enable this”
Supply Chain

“Highways England is at the forefront of engagement across their supply chain compared to other infrastructure organisations”
Supply Chain

- Enable direct relationships with the suppliers who are most critical to their business success and who may have traditionally been buried deep in supply chain hierarchies, for example road marking contractors
- Have greater visibility of investment and innovations which would benefit delivery effectiveness and efficiency and which may have been stifled in the past
- Deliver efficiency savings

The commitment to Building Capability, Developing Relationships and Delivering Performance with their Supply Chain is endorsed by Highways England senior management.

“Collaborative relationships are one of the ways you get the absolute maximum out of your resources. Moving to a collaborative partnership, providing you can manage it effectively and efficiently, provides the best value for our customers – DfT and road users”
Highways England



Source: Highways England Supply Chain Strategy 2015: Implementing the Strategy

Committing to Highways England’s three imperatives

All Supply Chain participants are committed to Highways England’s three imperatives: safety, customer and delivering RIS 1 and the various strategies, including the Supply Chain and Innovation Strategies that will enable successful delivery of RIS 1. These have been embraced within Supply Chain organisations and there is clear evidence of collaborative working with Highways England to ensure all imperatives remain at the heart of delivery.

Collaborative fora

In May 2015, the Engagement Council and Collaboration Board were launched. Since commencement they have become more established and successful. Highways England and all tiers of the Supply Chain are seen to be leading the market in this collaborative space. Traditional supply chains have been broken down by focusing on value and creating relationships key to business success.

A clear operating structure with associated governance supports the Engagement Council and Collaboration Board.

The Supply Chain has responded positively to participation in these collaborative fora; embracing the open and honest culture. They have committed to joint initiatives.

Collaborating in communities and across project teams

The Supply Chain is embracing the collaborative approach through working in communities derived through CDF and the Engagement Council. The Collaborative Performance Framework (CPF) has been extended across categories. This level of engagement amongst competitors, to work together in developing solutions to deliver RIS 1, has been a significant transformation.

There is evidence of successful operating models like the Integrated Delivery Team (IDT) approach for the A14 which has brought suppliers and Highways England into a joint delivery team with shared responsibility to deliver the project. It is recognised that these collaborative teams do not form overnight and that work to define roles, create shared vision and objectives is equally as important as aligning behaviours and individual organisation's strategic objectives.

Priority Investment Work Streams

These work streams were initiated through the Engagement Council and continue to demonstrate positive outcomes focusing on key initiatives which deliver positive outcomes for all parties in delivering RIS 1. For example, the Behavioural Maturity Framework (BMF) is delivering tangible project benefits including "role modelling innovation" where leaders have positively challenged and viewed potential failure as a learning opportunity.

Highways England and the Supply Chain continue to identify opportunities to optimise effective delivery of projects through a "Different and Better" approach, driving innovation and alternative methods to increase value, capacity and deliver efficiencies.

Building on the development of Value Chain Plans and Priority Investment Work streams, initiatives are being developed which drive best practice and enhanced productivity, for example, "Really Useful Guides" and "Design Fixes".

Lean

Through Highways England's Lean Maturity Assessment (HELMA), Highways England encourages its Supply Chain to adopt Lean principles and foster a culture of continuous improvement to mutual advantage. Lean practices will contribute to delivery of RIS 1 through effective working practices which optimise delivery and achieve efficiencies contributing to the £1.2bn efficiencies over the first Road Period.

Strategic Alignment

Highways England and a number of the Supply Chain invest in Strategic Alignment Review Tool (StART) assessments which provide an important indicator of alignment in strategic direction of companies to Highways England. 25 suppliers were assessed in 2010 (Round 1) and a further 21 in 2014 (Round 2). To date 18 full assessments have been completed in Round 3 (with 7 to follow) in addition to 8 Equality, Diversity and Inclusion only assessments.

Recognising Performance

Highways England and the Supply Chain continue to celebrate successes through investment in annual Supplier Recognition Awards. The Awards recognise the contribution the Supply Chain make and maximise the value of engagements which have delivered successful schemes. 166 entries were received in 2016.

92% of the respondents rated the Collaboration Board and Engagement Council as Effective or Highly Effective 1 year since launch Highways England

**“RtM is not
shaping out to
be
revolutionary
but the intent
is good”
Supply Chain**

Learning lessons from the past

Since the Area 7 East Midlands pathfinder for AD, similar procurements have taken place in Area 12 North East, Area 13 North West, and Areas 1 and 2 South West. Highways England engaged with the Supply Chain after award of Area 7 East Midlands to develop lessons learnt, a number of which were applied to subsequent Areas despite the rapid roll-out. A further “lessons learnt” workshop has taken place post procurement of all five areas to date.

Engagement in operating model development

The 2016 Review recommended that Highways England should engage with the Supply Chain more in developing new operating models. This would ensure their ability to bid and deliver. Clear progress has been made, particularly in respect of RtM (and AD above).

RtM has a defined Engagement Plan which continues to be implemented.

Value-based procurement

RtM will embrace a value-based procurement approach which is an outcome of the Defining Value Priority Investment work stream of the Engagement Council. This approach is core to RtM and is currently being piloted on three projects currently out to tender:

- Operations Directorate East Package of Works
- A30 Chiverton to Carland Cross
- A5036 Port of Liverpool.

The Supply Chain support this value based approach. They hope it will overcome the challenge with current contractual and commercial arrangements which make it too risky for main contractors to appoint their supply chain as soon as they are appointed given the need to hone the target cost. Lower tier contractors and plant manufacturers would welcome greater opportunity in contributing to driving innovation and delivering a value based tender. Earlier engagement across all tiers including designers will be beneficial.

Action: Embed lessons learnt from “Defining Value” pathfinder procurements within RtM (Action 4, Recommendation 2)

Action: Develop the value based procurement approach to drive value across first tier and beyond (Action 5, Recommendation 2)

FINDING 7: PERFORMANCE INTELLIGENCE IS DEMONSTRATING GREATER VALUE

The 2016 Review recommended that Highways England and ORR should identify performance measures which would meaningfully monitor progress on delivery of the RIS and which would also provide forward visibility of delivery risk. We noted the following progress:

Performance Monitoring

Highways England has transitioned from the Motivating Success Toolkit approach and has adopted the Collaborative Performance Framework (CPF) for monitoring

performance on projects and programmes designed to better align with desired outcomes as a method for assessing individual project performance.

This approach is giving greater ability to flex measures to be more relevant to desired specific scheme outcomes and is therefore more meaningful. The change has been well received by the Supply Chain.

Monitoring indicators of future trends

Significant unit cost data is held by Highways England to enable benchmarking of rates against market trends, specifically from tender returns. Currently this information is not shared with adjacent industries. This would provide a tangible opportunity to gain greater value from data held.

In addition, data on a supplier's current capacity and capability is gathered in each tender exercise. This is currently not used to inform and update demand data.

Action: Establish a protocol to periodically update the demand model from recent tenders, re-programming (from impacts of smoothing/corridor work) / innovation to ensure the demand model is based on latest intelligence (Action 2, Recommendation 3)

Sharing best practice

Highways England has been using the relationships it has across industry to greater effect. For example, they recently undertook a peer review on another organisation's significant procurement. This approach generates intelligence across the market and shared collateral. This is to be continued through wider industry engagements.

Action: Develop a plan to consider opportunities to lead industry in areas of strength and share learning (Action 1, Recommendation 4)

FINDING 8: THE POLITICAL AND WIDER LANDSCAPE IS CAUSING UNCERTAINTY IN SECURING SKILLED RESOURCES

The political landscape is going through a period of great uncertainty and is, to a large extent, uncontrollable.

Brexit

The unknown impact of Brexit presents a potential risk to delivery of RIS 1. We understand that a proportion of general trade contractors come from the European Union (EU), outside the UK. This could have an adverse impact on availability of resources to deliver RIS 1. In addition, there is potential increased risk in escalating labour rates and the ease of import of materials through the Supply Chain.

Whilst there is uncertainty in the impact of Brexit, both Highways England and the Supply Chain are undertaking a number of continuing actions. For example, Highways England is seeking to mitigate any potential risk by:

- Mapping regional hotspots
- Gaining greater intelligence of key suppliers through "deep dive" reviews
- Tracking variations in share price as an early indicator of company stability
- Investigating changes in Supply Chain company ownership

In addition, the intelligence gathered through Highways England's skill survey, of the Supply Chain, mentioned previously, is highlighting risks in skilled resource capacity aligned to the potential impacts of Brexit.

The Supply Chain is:

- Tracking the nationality of their key resources and assessing potential impacts
- Considering the impact of a withdrawal of resources/increases in labour rates and therefore the impact on the cost of schemes
- Developing early contingency plans by building their British/outside EU

Adjacent Industries

Lack of certainty means infrastructure clients with a firm order, least risky/largest margin projects will get first call on resources. Certainty of work is a significant factor in delivering value and enabling attraction and retention of skilled resources. The perception that other infrastructure clients are more attractive, both in profile and work duration, presents a threat to RIS 1 delivery.

Highways England has been taking pro-active steps to deliver RIS 1 where proximity of adjacent industry investment would be likely to have a detrimental impact on delivery. This is notable particularly in their efforts to reduce the impact that road space congestion will have on the customer, availability of skills and movement of haulage.

For example, major maintenance to the M5 Oldbury Viaduct valued at £100m is one of the projects brought forward in RIS 1. Not only will this mitigate the impact of works due to be undertaken in the vicinity by adjacent industries at the original programmed start time for the scheme, but it will also ease pressure on resources and existing infrastructure in the area and serve to reduce the impact on customer service and secure better project value for Highways England.

Action: Be aware of the impact of delivery routes/adjacent sectors and programme options at the point of planning on a prioritised basis (Action 2, Recommendation 1)

Summary

Highway England and the Supply Chain have made good progress in the last 12 months with demonstrable evidence of steps taken which will support delivery of RIS 1.

That said, there are key areas where action is needed which have been suggested against the various Findings. These are discussed more fully in the following chapter.

Chapter 3: Recommendations

The broad themes of the recommendations made in 2016 still hold true given their enduring nature in better positioning Highways England and their Supply Chain to deliver RIS 1. Based on this Review, we have updated these and added specific areas of additional focus arising from our Findings.

Our key Recommendations, supported by defined Actions and timeframes are as follows:

- Recommendation 1: Highways England should take further steps when profiling work to optimise resources and impact
- Recommendation 2: Highways England must continue to improve visibility of demand for the whole Supply Chain and provide certainty of work as far as practicably possible.
- Recommendation 3: Highways England must sustain momentum in their endeavours to build skills and capacity.
- Recommendation 4: Highways England could seek to lead industry in key areas of strength to build “brand” reputation and promote the sector.

Importantly, the actions against the Recommendations will provide greater confidence to both ORR and DfT of the progress Highways England is making with the Supply Chain to build capability to deliver RIS 1 and that there is a clear direction to make positive progress.

Recommendation 1: Highways England should take further steps when profiling work to optimise resources and impact

Aims:

- Optimising the use of skilled resources, plant and materials.
- Improving planning and programming.
- Reducing delivery risk.
- Enhancing customer satisfaction.

Benefits:

- ✓ Optimising the profile of work by flattening peaks and troughs with a mix of major project capital investment (capex) and maintenance (opex) spend
- ✓ Consistency and variety of workload aiding attractiveness, retention and driving best value.
- ✓ Optimising resource utilisation easing pressure on skills and capacity (labour, plant and materials).
- ✓ Reducing costs, enhancing productivity and increasing value.
- ✓ Easing potential pressure on road space through an associated programmatic approach across regions and projects to benefit the customer.

Actions:

| Action | Owner | Timeframe |
|---|---------------------------------|---|
| 1. Consider investment as totex for RIS 2 <ul style="list-style-type: none"> • Highways England to make the case for totex funding • DfT & ORR to review viability of the totex approach in driving future efficiencies | Highways England DfT/ORR | End March 2018 End October 2018 |
| 2. Be aware of the impact of delivery routes/adjacent sectors and programme options at the point of planning on a prioritised basis | Highways England | Highways England to demonstrate plans to achieve this by March 2018 |
| 3. Consider how to further engage with the Supply Chain to optimise the programme | Highways England | Demonstrable progress by March 2018. On-going thereafter |

Links to Findings 1, 3 & 6

Recommendation 2: Highways England must continue to improve visibility of demand for the whole supply chain and provide certainty of work as far as practicably possible

Aims:

- Enhancing demand visibility
- Increasing the contract horizon.
- Timely award across all tiers.
- Increasing the knowledge of supply chain operations.
- Maximising opportunities for investment in innovation and best practice.
- Realising best value for money and efficiencies.

Benefits:

- ✓ Earlier demand certainty across supply chains deriving best value.
- ✓ Increased confidence of suppliers to invest in building capability and capacity and pro-actively contributing to successful delivery.
- ✓ Procurement based on value and performance rather than cost throughout the supply chain.
- ✓ Greater intelligence and awareness enhancing the capability of Highways England personnel in procurements.
- ✓ Innovation and delivery optimisation across the entire supply chain through early contractor involvement.

Actions:

| Action | Owner | Timeframe |
|---|---------------------------------------|-------------------|
| 1. Continue to develop the Procurement Plan to provide visibility of demand across core categories | Highways England | End March 2018 |
| 2. Develop a clearer view of intent for smaller Tier 1 contractors, beyond AD | Highways England | End October 2017 |
| 3. Develop the plan to define the appropriate contract horizon across consultancy and all contracting tiers. and begin implementation | Highways England and the Supply Chain | End March 2018 |
| 4. Embed lessons learnt from “Defining Value” pathfinder procurements within RtM | Highways England | End October 2017 |
| 5. Develop the value based procurement approach to drive value across first tier and beyond | Highways England and the Supply Chain | End March 2018 |
| 6. Enhance understanding of supply chain businesses and commercial operations. e.g. short term placements | Highways England and the Supply Chain | End December 2017 |

Recommendation 3: Highways England must sustain momentum in their endeavours to build skills and capacity

Aims:

- Maturing demand modelling intelligence with all sources of available data.
- Building capacity and capability through recruitment and retention maximising opportunities in diversity and inclusion.
- Promoting the highways sector as a career of choice.

Benefits:

- ✓ Securing skills and capacity to deliver RIS 1 and prepare for RIS 2.
- ✓ Retaining resource to achieve greater effectiveness, reliability and efficiency in delivery.
- ✓ Up to date intelligence to aid programming decisions and optimisation of resources.
- ✓ Positive actions to mitigate the unknown impacts of Brexit.

Actions:

| Action | Owner | Timeframe |
|---|------------------|----------------|
| 1. Develop Communications Plan for improving sector attractiveness e.g. consider advertising campaign/other media campaigns and maximise the use of social media | Highways England | End March 2018 |
| 2. Establish a protocol to periodically update the demand model from recent tenders, re-programming (from impacts of smoothing/corridor work) / innovation to ensure the demand model is based on latest intelligence | Highways England | End March 2018 |

Links to Finding 7

Recommendation 4: Highways England could seek to lead industry in key areas of strength to build “brand” reputation and promote the sector

Aims:

- Optimising resources across the infrastructure sector.
- Ensuring impact on the customer is minimised.
- Leading industry in key areas of strength.

Benefits:

- ✓ Raising the profile of Highways England across industry
- ✓ Leading initiatives and best practice across the DfT family and wider industry in areas of strength
- ✓ Supporting the infrastructure market moving as one where common skills and resources are key
- ✓ Embedding best practice

Actions:

| Action | Owner | Timeframe |
|--|------------------|-------------------|
| 1. Develop a plan to consider opportunities to lead industry in areas of strength and share learning | Highways England | End December 2017 |

Chapter 4: Summary

This Review, one year on from the 2016 Review, has found that Highways England has made good progress in many interdependent areas contributing to positioning the organisation and their Supply Chain in a much stronger place to deliver RIS 1. These activities, including understanding and evolving demand intelligence and raising the profile of the construction and highways sectors as a career of choice, must continue.

Relationships with the Supply Chain are open and honest and built on collaboration through the Engagement Council and Collaboration Board. These are maturing and still have opportunities to evolve, but, intent and commitment from all parties is hugely positive.

It is clear there are some very positive messages arising from the way Highways England and the Supply Chain are working together on joint initiatives to deliver schemes. Named schemes have been delivered, large teams mobilised and there is better sharing of working practices to drive effectiveness.

There remain challenges, particularly in Highways England providing demand certainty thereby early commitments of work for the Supply Chain and in delivering the significant peak in workload in the last two years of RIS 1. Importantly, this means ensuring it is delivered safely, in line with customer expectations and for best value.

Highways England must continue to increase pace and do what they say they will and consult more with the Supply Chain. In return, the Supply Chain must be more proactive and creative with solutions.

There are factors which Highways England and the Supply Chain cannot control, the uncertain scale of the impact of Brexit, for example. However, the commitments made through RIS 1 will not change and working together, both parties can build on the progress made to deliver more successful outcomes for all.

Appendices

Appendix A. Abbreviations

| | |
|----------|--|
| AD | Asset Delivery |
| C&P | Commercial & Procurement |
| CDF | Collaborative Delivery Framework |
| DfT | Department for Transport |
| EU | European Union |
| HS2 | High Speed 2 |
| IPA | Infrastructure & Projects Authority |
| LEP | Local Enterprise Partnership |
| MST | Motivating Success Toolkit |
| NAO | National Audit Office |
| NSAR | National Skills Academy for Rail |
| ORR | Office of Rail and Road |
| RAE | Royal Academy of Engineering |
| RIP | Regional Investment Programme |
| RIS/RIS1 | Road Investment Strategy 1 2015 – 2010 |
| RIS 2 | Road Investment Strategy 2 2020 - 2025 |
| RtM | Routes to Market |
| SMP | Smart Motorways Programme |
| SRN | Strategic Road Network |
| STAT | Strategic Transport Apprenticeship Taskforce |
| UK | United Kingdom |

Appendix B. Glossary

| | |
|-------------------------------------|---|
| Adjacent Industry | Other infrastructure investment, including, High Speed 2, Heathrow expansion, Crossrail, Thames Tideway and Hinkley Point C |
| Asset Delivery | Highways England’s new operating model for maintenance delivery primarily based on: <ul style="list-style-type: none"> • Increasing the visibility of investment decisions and customer performance • Insourcing traditional white collar tier 1 contractor resource • Flattening supply chains by direct contracts with the suppliers critical/adding most value to delivery • Collaboration through communities |
| Brexit | The United Kingdom’s withdrawal from the European Union – triggered the UKs notification of its decision to leave in March 2017. |
| Collaboration Board | The prioritisation, leadership and governance forum, meeting every two months and comprising Highways England Executive and Community elected leads from the supply chain. |
| Collaborative Delivery Framework | Highway’s England’s primary route to market for early investment in RIS1 comprising 4 Lots: <ul style="list-style-type: none"> • Lot 1 – Professional design and engineering services • Lot 2 – medium value schemes valued up to £25m • Lot 3a – High value schemes valued between £25m - £100m • Lot 3b – High value schemes valued between £100m - £450m <p>Awarded autumn 2014</p> |
| Collaborative Performance Framework | The new performance framework replacing Motivating Success Toolkit which flexes and evolves to measure the performance requirements key to a scheme |
| Community | Groups of supply chain representatives supplying the same services, works, materials. |
| Contract Horizon | The period of time from contract award until commencement of services and works in relation to a scheme |
| Credo Review | The Review undertaken by Credo Business Consulting LLP to report on Highways England’s Supply Chain Capability. Review was published in February 2016. |
| Delivery Plan 2015 – 2020 | Highway’s England’s plan for delivering the RIS aligned to their Strategic Business Plan 2014. It sets out in detail how the organisation will deliver its strategic outcomes and measure success. |
| Delivery Plan 2016 – 2017 | The 2016-17 Delivery Plan is the first update and focuses on Highways England’s activities in 2016-17 and ongoing work to develop plans for the remainder of the Road Period (2015-20) and complements the original Delivery Plan |

| | |
|-------------------------------------|--|
| Engagement Council | A hotbed for improvement and innovation meeting three times a year with 80+ representatives from Highways England and the supply chain. |
| Health & Safety Plan | Highways England's 5-Year approach to health and safety. |
| Hot spot | An area with a significant value of investment or a significant ramp up/increase in investment. |
| Innovation Strategy | Strategy document setting out how Highways England will deliver £150 million of investment on improving the Strategic Road Network through innovation by 2021. This forms part of the government's £15 billion RIS https://www.gov.uk/government/collections/road-investment-strategy . |
| Lean | Creating more value through different methods and practices to derive greater effectiveness and efficiencies |
| Local Enterprise Partnership | Voluntary partnerships between local authorities and businesses set up in 2011 by the Department for Business, Innovation and Skills to help determine local economic priorities and lead economic growth and job creation within the local area |
| Pavements Efficiency Steering Group | A leadership group arising from the Pavements Value Chain Plan. |
| Priority Investment Workstream | Key initiatives with joint investment (time and funds) from Highways England and the supply chain. Business cases are approved at the Collaboration Board. |
| Procurement Plan | Highways England's approach to procurement and the pipeline of work for Road Period 1. |
| Regional Improvement Programme | Investment works on a regional basis ranging from junction improvements, to by-passes, to widening schemes. Details provided in the regional Route Strategies. |
| Road Investment Strategy 1 | The first 'Road Investment Strategy' (RIS 1) outlines a long-term programme for the motorways and major roads with the stable funding needed to plan ahead. |
| Road Investment Strategy 2 | Road Investment Strategy 2 for the period 2020 - 2025 |
| Road Period 1 | The period of investment in the Strategic Road Network from April 2015 to March 2020. |
| Routes to Market | Highways England's emerging procurement vehicle to replace the Collaborative Delivery Framework on expiry. Intended award dates March 2018 for RIP and December 2018 for SMP. |
| Smart Motorways Programme | Different designs to actively control motorways. These motorways use technology to convert the hard shoulder into an additional, controlled running lane, increasing the capacity of our busiest motorways by a third at a fraction of the cost of traditional lane widening |
| Supply Chain Strategy | Sets out how Highways England will work with suppliers to meet the challenge through the Road Investment Strategy in terms of |

investment, performance improvement and transforming road user experience through operation of the strategic road network

| | |
|-------------------------|--|
| Three imperatives | <p>The priorities of Highways England and the supply chain:</p> <ul style="list-style-type: none">• Safety – ensuring no-one is harmed whilst travelling on or working on the network• Customer – delivering customer satisfaction• Delivering the RIS |
| Tier 1 | <p>The organisation who traditionally has a direct contractual relationship with Highways England, for example, main contractors</p> |
| Tiers 2 and 3 | <p>Organisations who traditionally have a direct contractual relationship with Tier 1 and no direct contractual relationship with Highways England, for example, pavements, gantries, temporary traffic management and traffic technology.</p> |
| Value based procurement | <p>An approach to procurement award based on the value of outcomes proposed rather than a traditional time quality split.</p> |
| Value Chain Plan | <p>A proposal to consider the value of a product or activity to Highways England, the market and different delivery approaches</p> |

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Appendix D. Participants

Supply Chain

| | |
|-----------------------------|--------------------|
| Aggregate Industries | Darren Checksfield |
| AECOM | Darren Kimberly |
| Amey | Scott Millar |
| Amey Mouchel | Mike Dobson |
| Arcadis | John Greiller |
| Arcadis | Lizi Stewart |
| Arup | Steve Hall |
| Atkins | Bev Waugh |
| Balfour Beatty | James Wadley |
| Balfour Beatty | Graham Martin |
| Balfour Beatty | Andrew Nash |
| BAM Nuttal / Morgan Sindall | Bill Suford |
| Britton Fabrications | Dean Morcom |
| Carillion | Andy James |
| Carnell | Aiden Clarke |
| CH2M | John Sneddon |
| Chevron | Tim Cockayne |
| Colas | David Stores |
| Costain | Tony Scutt |
| Forest Support Services | Ross Williams |
| Grahams | Dave Brown |
| Hanson | Denis Curran |
| HW Martin | Grahame Beswick |
| Interserve | Wayne Howell |
| Interserve | Simon Chadwick |
| Jackson Civils | Keven Stobbs |
| Kier | Andrew Bradshaw |
| Kier | Bryan Scarfe |
| Lagan Construction | Dave Hill |
| Motts / Sweco | Brian Gash |
| Nusteel | Jason Messenger |
| Shell | Dave Foster |
| Skanska | John McGinty |
| Tarmac | Nick Shires |
| Tarmac | Andrew Rowley |
| Tarmac | David Winterburn |
| Taylor Woodrow | Peter Whitman |
| Telent | Mark Shingler |
| Telent | Chris Metcalfe |
| Telent | Steve Clark |
| VolkerFitzpatrick | Duncan Atkins |
| WSP | Chris James |

Highways England

David Poole
Russell Wallis
Paresh Tailor
Victoria Houghton
Mark Bottomley
Sharon Cuff
David O'Neal
Tim Dyer
Phil Ellis
Russell Thomson
Karl Anderson
Nicky Ensert

Paul Whitehead
Jon Cole
Dan Lem
Adam Sowman
Nick Magog
Caroline Hinchcliffe
Momataz Begum
Ben Hudson
Maxine Palmer
Mark Borland
Mark Pinhero
Neena Abdulla
Ted Miller

DfT

Catherine De Marco
Kirsty Austin
Philip Andrews
Michael Dnes
Jon Griffiths
Tara Usher
Elinor Godfrey

IPA

Simon Lawrence
Junejo Shehroze
Michael Sherry

Industry Bodies

| | |
|---|------------------|
| Chartered Institution of Highways and Transportation (CIHT) | Andrew Hugill |
| Civil Engineering Contractors Association (CECA) | Adam Tuke |
| Local Government Association | Andrew Jones |
| Mineral Products Association (MPA) | Malcolm Simms |
| Mineral Products Association (MPA) | Jerry McLaughlin |
| Road Haulage Association (RHA) | Duncan Buchanan |
| Road Safety Markings Association (RSMA) | George Lee |

Infrastructure Clients

Hampshire County Council
Heathrow Airport Limited
HS2
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Wiltshire Council

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