

The 35 key CDF lessons were identified from multiple data sources (refer to section 6) and grouped into 12 critical Routes to Market (RtM) improvement opportunities (tabled below, showing how the RtM improvement opportunities were mapped from the CDF lessons identified). The evidence for each lesson identified is shown in Appendix B.

	Lesson Identified	Improvement Opportunity
1	Governance of the initiation and development process was not adequate resulting in sub-optimal decision-making and delays. It was not clear who was driving the CDF procurement from initiation through development and into operation. Moreover, the CDF management group wasn't fully embedded from the outset.	Establish and empower RtM as a strategic HE procurement programme to leverage maximum value through the procurement process
2	Originally intended to be a MP procurement vehicle, key business areas (e.g. OD) weren't engaged with the procurement process despite ultimately using the framework	
3	Full mobilisation of planning for delivery did not start early enough, with award date several months after official expiry of the Managed Motorways Framework (the previous MP delivery framework) in February 2014	
4	A fully-resourced team - with clearly defined and agreed roles and responsibilities - was not established for development, delivery and operation of the framework, compromising the quality and timeliness of the output. For example, there was no dedicated project manager from initiation and the framework manager role was vacant for 9 months after framework award	
5	There were challenges in securing enough consistent tender assessors for the framework evaluation given the programme slippage that occurred, impacting the tender evaluation process	
6	There is no structured, organisational approach to collecting performance data, leading to key management information not being readily available (such as spend for RIS1 projects by PCF stage). While there are high-level generic requirements within the CDF works information, there is no detailed framework-level specification for cost and schedule reporting; this is instead managed on a scheme-by- scheme basis, affecting consistency and usability of data obtained.	
7	The tender process was time-constrained and overly complex, placing a burden (and additional cost) on the under-resourced HE procurement team, as well as the suppliers. Challenges with the process include: - Lengthy and complicated Instructions for Tenderers, requiring high level of investment from tenderers - Framework guidance documentation was not adequate to support the suppliers in tendering, or HE in administering the complex framework - Tender pricing was interpreted differently by tenderers, resulting in re-submissions and re-evaluation - The use of sample schemes encouraged tactical pricing - Behavioural assessments were developed and conducted as part of the tender evaluation, but scoring was not ultimately considered due to low success rate - There were a very high number of tender clarification questions (nearly 700 in total)	
8	The Business Case (dated December 2013) was developed nine months prior to the intended award date, reducing the effectiveness of governance and planning and contributing to delays; there were no separate Strategic Outline Business Case (SOBC), Outline Business Case (OBC), and Final Business Case (FBC) documents produced	RtM to produce a Statement of Requirements for SMP and RIP/OD including a defined delivery solution to outperform HE RIS 1 and 2 outcomes
9	Requirements for CDF framework weren't fully defined at the early stages of the procurement in alignment with the business case, compromising the ability of the procurement to deliver the right outcomes	
10	The framework threshold published in the OJEU (£5bn) was not based on a robust detailed spend forecast, and the framework is due to expire significantly earlier than intended as a result, in some cases affecting the preferred delivery option for schemes. Throughput has exceeded expectations on two lots (Lot 1 at 114% and Lot 3b at 80% capacity) after only two years of operation of the four-year framework.	

11	There is no clearly defined strategic pipeline for the CDF framework - with CDF largely operated on a first-come-first-served basis - affecting ability to make optimal delivery decisions and reducing opportunity for HE and its suppliers to plan effectively. Moreover, allocation of new work through the CDF in some instances has been challenging.		
12	Despite always being intended for delivery through the framework, it is viewed that some schemes could have been delivered for better value outside of the framework (e.g. [REDACTED])		
13	While pre-award market engagement activities have taken place, these primarily focused on informing the supply chain of the CDF, as opposed to early and ongoing collaboration to identify the optimal delivery model		
14	Market engagement targeted Tier 1 suppliers who HE will directly contract with, but who subsequently sub-contract a large proportion of work to sub-tiers of the supply chain; these sub-tiers may have been engaged incidentally at supplier events but were not the focus, and as such their input has been limited	3	Structured and focused engagement with the supply chain to align them to the SoR and solution to outperform HE RIS 1 and 2 outcomes
15	Furthermore Lot 2 - for low value (£0-25m) and OD schemes - has seen significantly less throughput than anticipated (46% committed of the [REDACTED] cap) with insufficient work awarded to most suppliers to justify their investment at tender stage, impacting credibility with the supply chain		
16	There is not appropriate use of supplier intelligence to be able to readily identify resource constraints or points of failure across the entire supply chain (sub-tiers and specialist suppliers)	4	Analyse the supply chain spend to develop a clear supplier segmentation model which identifies opportunities, vulnerabilities and risk within the HE supply chain
17	While part way through the procurement some details were laid out in board papers (September/October 2013) and the business case, there is no full baseline contracting strategy and route to market approach defined, documented and agreed among key stakeholders, reducing the ability to deliver the optimum outcome		
18	There was no fully-defined, integrated strategy for work packaging, with decisions often being made on a scheme-by-scheme basis driven by funding or time constraints	5	Design a robust and flexible work packaging strategy which enables the supply chain to leverage greater value to meet HE outcomes
19	the way work has been packaged for the CDF has not fully met the original intent to deliver programmes of work, with schemes delivered as standalone projects		
20	The NEC3 form of contract used as the basis for CDF has seen a high degree of tailoring, to allow for flexibility for all eventualities (not all of which was ultimately required), resulting in increased risk		
21	Collaboration between HE – supplier and supplier-supplier is not viewed as having been fully effective, appearing to have been diminished by the use of secondary competitions		
22	HE was not seen to have fully adopt collaborative measures expected of supply chain, e.g. supply chain developed training for relevant staff to ensure collaborative behaviours were understood, but there was no parallel activity take within HE	6	Create incentive mechanism to drive programme outperformance which necessitates supply chain collaboration
23	CDF behavioural assessments were incorporated within the framework procurement, but very few suppliers were able to demonstrate the required level of behaviour. Furthermore, supplier representatives were not necessarily those who would deliver the work, diminishing the relevance of the scores		
24	the incentivisation model is extremely complex to accommodate adverse range of procurements, and is unsuitable for design work		
25	SMP schemes are currently repeating design work for similar parts (e.g. gantries, barriers) resulting in increased cost of design work		
26	While the CDF framework allows flexibility in contracting decisions, HE has often retained excessive risk – which has not been adequately managed - through separating design and construction for delivery	7	HE intelligent client model must have Technical Authority to drive design efficiency and control spend on design

27	There are a high level of compensation events on certain schemes, such as within SMP, increasing costs for the work as well as the administrative burden on project teams		
28	Surveys have not always been carried out to determine the asset condition prior to design, resulting in significant redesign (due to drainage issues), and cost increase while this was resolved	8	Undertake appropriate surveys and inspections, including geotechnical investigations, to understand asset condition early in planning/design phase (PCF stage2/3) to optimise scheme delivery and maximise benefits
29	HE has collated an excellent unit cost database to robustly challenge target price and compensation events; there is an opportunity to use this cost database to build a Compatible Unit Model - and to standardise designs - to benchmark projects at the early stages of the PCF	9	Build on excellent unit cost information to develop Compatible Unit Model to benchmark scheme target price (between PCF stage 3 and 5)
30	Secondary competition, used to create competitive tension and demonstrate value for money, is mandatory for all works through the framework, irrespective of scale and risk, impacting collaborative relationships with the supply chain and increasing tendering costs for HE and its suppliers (which are ultimately all absorbed by HE). While there are two mini competition options available (one which reduces the workload by removing evaluation of quality) there is no means of direct award (or work allocation)	10	Procure programmes of work to provide the supply chain with the confidence to invest and to innovate within the programme envelope
31	Since the framework award date (over two years ago) performance management has been based on suppliers' tender scores rather than actual performance data against CDF contracts, and as such this key incentivisation mechanism is under-utilised		
32	There is not a clear line of sight between tender evaluation, performance measurement and delivery of outcomes		
33	There is a significant reliance on the supply chain for project delivery resource (PMs) embedded across the Programmes via the SPATs contract. Furthermore, the contractor providing this resource is embedded within the PDP, without clear segregation of duties	11	Produce an intelligent client delivery model to develop capability and capacity for HE aligned to programme delivery requirements
34	While many lessons have been identified, there was no integrated, structured approach to lesson identification across the business and the supply chain (for example, to fully capture project management and strategic lessons) with development and implementation of clear action plans, reducing the likelihood of all lessons being learned	12	Drive innovation and continuous improvement through HE procurement activities, with aligned benefits measurement and tracking and effective lesson learning
35	There is no clearly defined set of objectives or benefits that were planned to be achieved by the CDF, and no understanding of how the framework has been performing against this plan		