Highways England Company Limited

Smart Motorways Alliance

VOLUME 2

IMPLEMENTATION PLAN AND SCOPE

Volume 2 Contents:

Highways England Company Limited

Smart Motorways Alliance

Volume 2

Implementation Plan

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GLOSSARY

Acronym	Description
AfP	Application for Payment
AFR	Accident Frequency Rate
BRIG	Business Readiness Implementation Group
BMF	Behavioural Maturity Framework
CCS	Crown Commercial Services
CoI	Conflict of Interest
CPF	Performance Management System
CPI	Cost Performance Index
DDMS	Drainage Data Management System
EDI	Equality, Diversity and Inclusion
EVM	Earned Value Management
GMPP	Government's Major Projects Portfolio
HE	Highways England
HSE	Health and Safety Executive
IAAP	Integrated Assurance and Approval Plan
IPA	Infrastructure and Projects Authority
KPI	Key Performance Indicator
KSI	Killed or Seriously Injured
MPPH	Major Projects Programme Hub
NRTS	National Roads Telecommunications Services
PBA	Project Bank Account
PCF	Project Control Framework
PI	Performance Indicator
PPN	Procurement Policy Note
PMO	Programme Management Office
REM	Rapid Engineering Model
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
RIP	Regional Investment Programme
RIS	Road Investment Strategy
RoCP	Report of Public Consultation
SAR	Scheme Assessment Report
SCMM	Supply Chain Health and Safety Maturity Matrix
SES	Safety Engineering Standards
SME	Small Medium Enterprises
SMP	Smart Motorways Programme
SMR(s)	Subject Matter Resource(s)
SMSTS	Site Management Safety Trainee Scheme
SoW	Start of Works
SPI	Schedule Performance Index
SRN	Strategic Road Network
SRO	Senior Responsible Officer
SSSTS	Site Supervisor Safety Training Scheme
SuDS	Sustainable Urban Drainage System

TAR	Technical Appraisal Report
ToR	Terms of Reference
TUPE	Transfer of Undertakings (Protection of Employment)
VCSE	Voluntary, Community and Social Enterprise
VfM	Value for Money

PURPOSE

1. The Implementation Plan sets out how the Alliance is to operate and will evolve over time. During mobilisation, the Alliance Manager engages with all members of the Alliance to review and agree the Implementation Plan.

2. The Implementation Plan provides detail in the following key areas

    *   how the Alliance is structured, governed and assured,

    *   the responsibilities of the Alliance Manager,

    *   process for allocating and optimising work within the Alliance,

    *   the approach to developing and managing the Alliance supply chain,

    *   how the Alliance will be performance managed by the *Client* and the expectations on the Alliance to manage the performance of the Partners,

    *   the systems to be used by the Alliance, and

    *   how the Alliance will mobilise and evolve in maturity over time.

Making changes to the Implementation Plan

3. The Implementation Plan is a working document. Any member of the Alliance may propose an update to the Implementation Plan (with exception of the *Client* reserved matters stated in the *conditions of contract*) during the life of the Alliance.

4. The Alliance Manager reviews the proposed updates and accepts or rejects following an impact assessment.

5. If the Alliance Manager approves, they take the outcomes of the impact assessment for the proposed update to the Alliance Board for final approval.

6. If the Alliance Board approves, the Implementation Plan is updated by the Alliance Manager

SMART MOTORWAYS ALLIANCE

1. Alliance Overview

1.1 Alliance structure

7. The members of the Alliance operate across three functions

    - the Production Hub,

    - the On-site Assembly and Delivery Function, and

    - the Digitally Enabled Design Function.

8. The role of the Production Hub Function is to

    - enable a programmatic approach to the delivery of the *works* enabling efficiencies to be achieved which would not be possible when applying a scheme by scheme approach, and

    - deliver key efficiency-enabling services such as off-site logistics, integrated planning and digital rehearsal.

9. The Production Hub is resourced by personnel from the members of the Alliance. The *Client* (as a member of the Alliance) provides a presence across various services predominantly within the Production Hub (as listed in Section: 5.2).

10. The role of the On-site Assembly and Delivery Function is

    - to manage the physical construction and installation activities for the works, in accordance with the *Client's* work specifications, working in a combined delivery function,

    - deliver the services set out in Table 5: On-site Assembly and Delivery services, and

    - to provide resources to the Production Hub as detailed in Section 5.4: Production Hub service definitions.

11. The role of the Digitally Enabled Design Function is

    - to carry out design for the works and with particular reference to the region/Schemes allocated to it, as set out in more detail in Table 4: Digitally Enabled Design services, working collaboratively in a combined design function, and

    - to provide resources to the Production Hub as detailed in Section 5.4: Production Hub service definitions.

1.2 Alliance management and governance

12. The Alliance is governed by the Alliance Board which comprises of representation from all members of the Alliance.

13. The Alliance Board provides strategic leadership and oversight of all Alliance operations subject to the limits of authority set out in the Decision Matrix in Annex A.

14. Day to day management of the Alliance is the responsibility of the Alliance Manager, an individual appointed by the *Client*. The Alliance Manager's role is as set out in Section 4 to manage the work on behalf of the Alliance Board.

1.3 Alliance principles

15. The Alliance structure and design is underpinned by the following principles.

Principles	Rationale
The Alliance Board supports collaborative decision-making across the Alliance with representation from all members of the Alliance.	Alignment and culture – align board level culture with desired Alliance culture.
alliance board representative from the *Client* plays a key role in the *Client* governance requirements (see Annex A Decision Matrix).	Continuity – ensure that Alliance is being run within parameters and boundaries set within the Scope and Implementation Plan.
The Alliance Board is chaired and led by the SRO, who will have voting rights	*Client* representation and the requirement for key decisions to be unanimous protects the best interests of the *Client.*
The *Client* manages the Alliance and the Alliance manages its members as per the performance management framework.	It is the responsibility of the Alliance to manage the performance of individual members whilst the *Client* has the ability to manage Alliance performance by way of intervention in the event of underperformance.
The Alliance Manager will be appointed by the *Client*	Continuity and capability build – clear understanding of *Client* processes and development opportunity for career progression.
The *Client* sets clear objectives and parameters for the Alliance, and monitors that the Alliance is delivering within these requirements.	Accountability – the *Client* is ultimately accountable to the regulator and must therefore retain accountability of the overall Alliance.
The Alliance Manager, leading the Alliance management team, is responsible for delivering the Smart Motorways Programme (SMP) on behalf of the Alliance Board.	Autonomy - The *Client* will provide the Alliance with the autonomy to deliver the SMP in the best way they see fit.

Table 1: Alliance principles

2. Governance and assurance of the Alliance

2.1 Governance of the Alliance

Alliance Board

16. The Alliance Board is the key governance forum for the Alliance. There is representation from the *Client*, the Partners and Subject Matter Resources (SMRs) as required.

17. The Alliance Board has authority for the decisions outlined in the Decision Matrix (Annex A   Decision Matrix) on a majority or unanimous basis.

Reporting lines

18. The Alliance Manager reports into the Alliance Board and the Alliance Board reports into the *Client* (as per the governance structure in Figure 1).

***Client* governance**

19. The SRO, with the support of *Client* SMRs (as necessary), make decisions retained by the *Client*. Typically, these decisions are in the areas of funding, allocation of work and termination (see Decision Matrix).

20. The *Client*, through the SRO, may issue a proposal for an instruction to the Alliance (at any time) initiating the process outlined in Section 2.4.
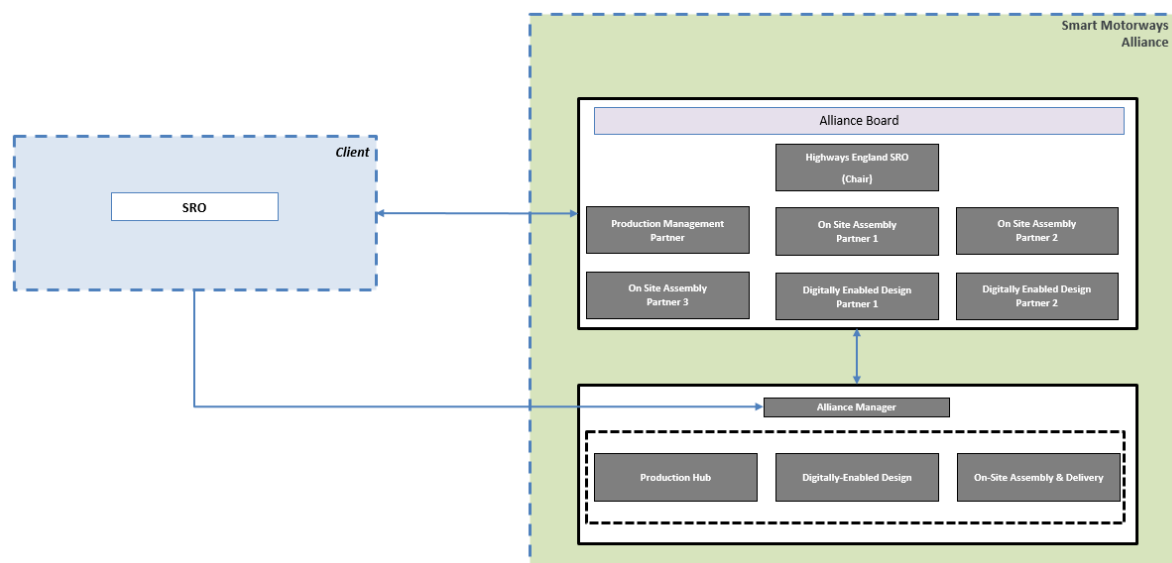
Figure 1: Alliance governance structure

2.2   Assurance of the Alliance

21. There are varying levels of assurance to provide confidence to the *Client* that the Alliance is discharging its obligations as outlined in the Scope and Implementation Plan.

22. The *Client* (via its Major Projects Programme Hub (MPPH)) will carry out a quarterly review of Alliance activities ensuring adherence to PCF milestones. In the event of a failure to meet a PCF milestone the MPPH may initiate an audit of the Alliance.

23. The *Client* (via capital portfolio management) will also carry out a bi-annual review, independent of the MPPH, focussing specifically on the benefits realisation of the Alliance.

24. The Alliance is subject to an annual external assurance process by a body independent of both the *Client* and the Alliance.
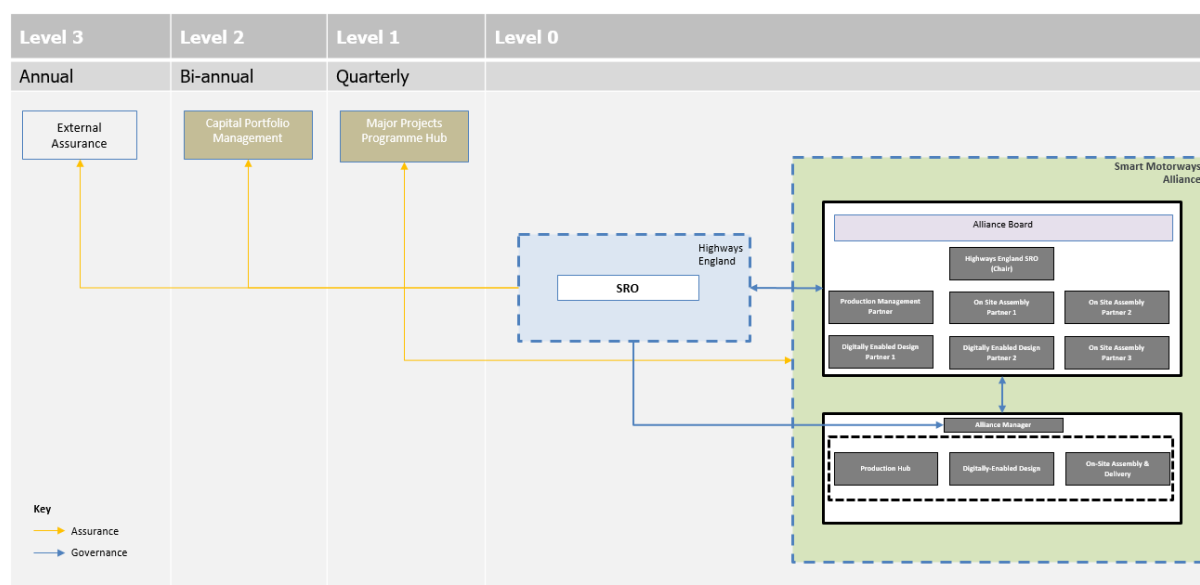
Figure 2 Alliance Assurance Structure

2.3   Role of the *Client's* SRO

25.   The SRO is the *Client*'s Smart Motorways Programme Director and chairs the Alliance Board. The SRO holds the Alliance Board accountable for the delivery of the SMP and reports into the Major Projects Executive Director.

26.   The Alliance is responsible for supporting the SRO in achieving the below objectives

- the SMP adheres to robust, transparent governance and maintains strong relationships amongst key stakeholders,

- the SMP meets its objectives and delivers the projected benefits through the clear and effective monitoring of progress against the agreed objectives,

- the SMP organisation structure and plan has been developed and the appropriate team to deliver the plan, with the necessary skills and resources, are in place,

- progress is monitored and controlled with any changes to the SMP benefits flagged accordingly and ensure effective communication with senior stakeholders,

- conflict resolution and referral processes are appropriate and effective through strong communication links and efficient escalation processes,

- the SMP is subject to review at appropriate stages through the development of an Integrated Assurance and Approval Plan (IAAP), regular evaluation and lessons learned exercises and the efficient addressing of concerns,

- programme closure is managed formally, and

- there is control, alignment & culture, continuity and clarity with single point of accountability for the delivery of the principles outlined above.

2.4   Proposed instruction to the Alliance Manager

27.   Upon issue of a proposed *Client* instruction, the Alliance Manager must conduct an impact assessment and submit a recommendation to the Alliance Board within 28 days.

28.   The Alliance Board has 28 days to review the recommendation and approve it or request a change event to the *Client*.

29.   Following the Alliance Board approval of the recommendation or change event, the *Client* reviews the impact assessment or proposed change event and confirms acceptance or rejection.

30.   If the *Client* accepts the recommendation or change event, the Alliance Manger instructs the Alliance as per the outcome.

31.   Note that if the instruction from the *Client* is a ministerial requirement the process would be accelerated and timescales (for the steps in paragraph 27 and 28) would be shortened to a maximum of 14 days.

3.   Alliance Board

3.1   Alliance Board meetings

32.   See below the Alliance Board terms of reference.

Terms of Reference	
Title	Alliance Board
Authority	The Alliance Board make decisions either by majority or unanimous agreement (see the Decision Matrix)
Purpose	Provide strategic leadership and oversight of operations to ensure the Alliance's success.
Remit	- Hold the members accountable for operating in accordance with Alliance principles. - Ensure the Alliance Manager is fulfilling their duties as per the responsibilities outlined in Section 4.2. - Determine and maintain strategic alignment across the Alliance. - Identify opportunities for collaboration to support the evolution of the Alliance. - Manage and mitigate risks across the Alliance - Manage the escalation process to the *Client* - Review, monitor and challenge performance against programme plan. - Ensure the Alliance meets its objective of delivering and outperforming the programme baseline, providing a sustainable return to each of the Partners. - Ensure long-term sustainability of success over the term of the Alliance Contract. - Review, challenge and approve the Alliance business plan (including formal annual review). - Ensure approach to resourcing is driving maximum value. - Resolve issues and disputes escalated from the Alliance Manager or raised by the Alliance Board. - Request, consider and commission reports from the Alliance Manager to inform forward looking decisions. - Achieve consensus across the members to propose addition setting of additional annual efficiencies or setting/refinement additional

		performance targets.

| | | • Termination of Partners in accordance with *conditions of contract* and Decision Matrix.
• Following *Client's* confirmation, instruct commencement of Schemes through PCF stages three, five and six and completion through PCF stages zero, three and five.
• Agreement of the budget and allocation of Schemes outside of the original delivery plan (through the optimisation process) and the approval of compensation events quotations.
• Determine design requirements, level of design innovation and adoption of new designs/ways of working.
• Ensure the Alliance adheres to the quality standards as set out by the *Client*.
• Approve Alliance tender commitments for final approval by the *Client*. |
| Attendees | | Subject Matter Resources will be sourced from the members of the Alliance as well as independent advisors.
Note that if a Partner is a joint venture they only have one vote and one *alliance board representative* in attendance. |

	Title	Attendance Mandatory (Y/N)	Quantity	Voting Rights (Y/N)
	SRO - **Chair**	Y	1	Y
	Production Management Partner representative	Y	1	Y
	On-site Assembly Partner representative	Y	1 from each Partner	Y
	Digitally Enabled Design Partner representative	Y	1 from each Partner	Y
	Alliance Manager	Y	1	N
	Subject Matter Resources (as appropriate)	N	N/A	N

Table 2: Alliance Board terms of reference

3.2   Responsibilities of the chair

33.   It is the responsibility of the chair to

- provide leadership of the Alliance Board,

- set the agenda,

- confirm attendees outside of mandatory attendees,

- confirm decisions made at the meeting,

- ensure rules of the meeting are adhered to, and

- approve the meeting minutes.

3.3   Alliance Board voting

34.   The Alliance Board is empowered to make decisions relating to the delivery of the SMP within the specified parameters and in line with the Decision Matrix (Annex A).

35. The Alliance Board is the forum for these decisions, with each member represented. Where the designated *alliance board representative* cannot attend for a Partner, the Partner must send a delegate.

36. If the SRO or a delegate is unable to attend on behalf of the *Client*, the meeting cannot go ahead and must be rearranged.

37. There will be three possible decision-making authorities in place that impact the Alliance. These are

- *Client* (SRO) decision,

- unanimous decision of the Alliance Board, and

- majority decision of the Alliance Board.

4. Alliance Manager

4.1 Alliance Manager role context

38. The Alliance Manager works on behalf of the Alliance Board to manage the Alliance on a day-to-day basis and is accountable to the Alliance Board for ensuring that the SMP delivered by the Alliance meets the outcomes and delivers the projected benefits.

4.2 Alliance management team responsibilities

39. The Alliance management team consists of representatives of members of the Alliance from across the three functions: On-site Assembly and Delivery Function, Digitally Enabled Design Function and the Production Hub Function.

40. The Alliance management team are collectively responsible for

- supporting the Alliance Manager in the delivery of his/her responsibilities

- implementing the agreed strategy and Alliance business plan (as agreed by Alliance Board),

- reviewing Partner service level agreement tender commitments, proposing Alliance tender commitments to the Alliance Board and ongoing monitoring of Alliance against these commitments (template include in Section 13),

- implementing a performance management system that enables visibility of health and safety, financial and non-financial progress, progress against KPIs, management of issues and disputes (e.g. through the early warning system) and any other relevant factors that may impact successful delivery of the SMP,

- reviewing, monitoring and challenging performance, identifying the requirement for improvement plans and tracking progress against plans,

- conducting impact assessment of an instruction proposed by the *Client*,

- recommending progression of Schemes through stage gate process,

- identifying changes to business, regulatory or legal environment and adapting approach as necessary,

- maintaining alignment of Alliance operations,

- escalate any risks of conflict with other Schemes following a variance in the approved programme,

- reviewing the resourcing plan prepared within the Production Hub and monitor resource management to ensure resources are driving maximum value, and

- production of business cases when required by the contract.

5. Functions of the Alliance

5.1 Alliance functions and services summary

41. The functions and services required for the Alliance to deliver the SMP have been identified and developed based on

- the requirements to achieve Alliance principles,

- existing SMP capability, and

- alliancing best practice.
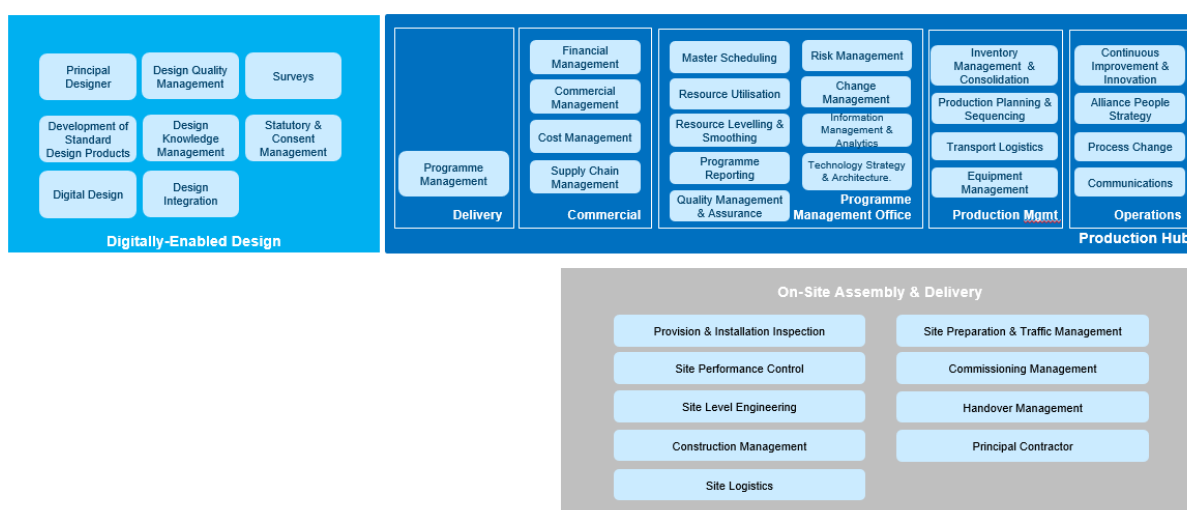
Figure 3: Alliance functions and services

42. In addition to delivering the scope of *work* described in their Lot, the Partners are expected to provide, as and when required, capability to support the efficient and effective working of the Alliance as an entity.

43. The majority of this capability will be required in the Production Hub however it is expected that capability from the members of the Alliance may be provided across the Digitally Enabled Design Function and On-site Assembly and Delivery Functions to support the development of an integrated team (illustrated in Figure 4 below).
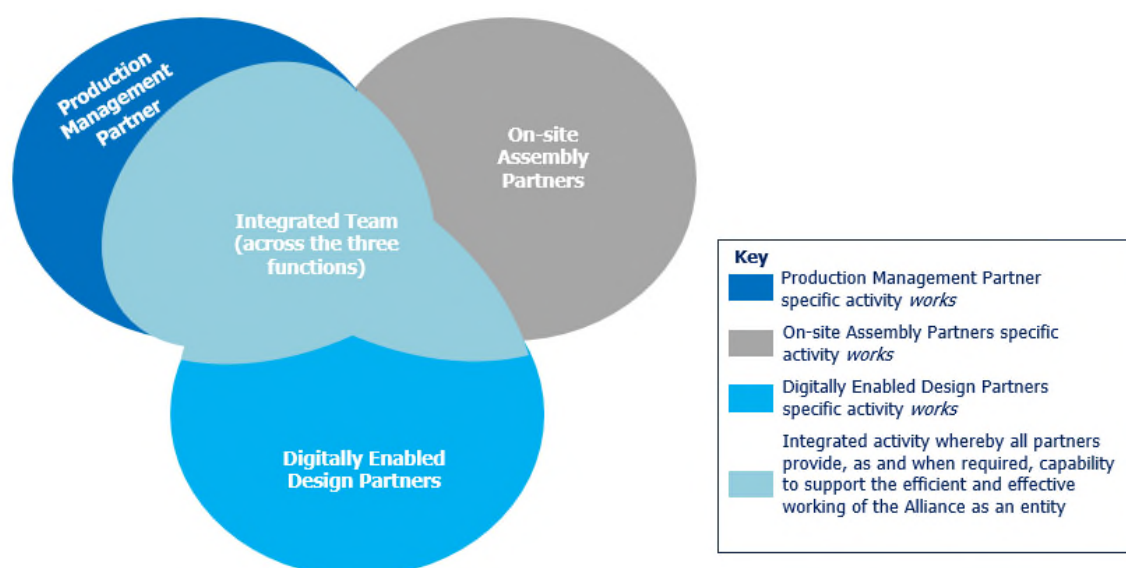
Figure 4 Illustration of blended Alliance team

44. Within the functions and services, individuals fill roles on a best-for-task basis regardless of their employer outside the Alliance to support organic capability development across the members of the Alliance. The exceptions to this rule are

- the presence the *Client* retains across a selected number of services (listed in Section 5.2) to ensure resilience and capability build, and

- the resource provided by the Production Management Partner to deliver the core services agreed as part of the work allocation process.

45. The services that make up the Production Hub Function are described in detail in Table 3: Production Hub services below along with the aligned outcomes that drive the delivery of efficiencies and benefits as detailed in the Outline Business Case.

5.2 *Client* presence within the Alliance

46. As noted, the *Client* (as a member of the Alliance) retains a presence in services across the all three functions Digitally Enabled Design Function, On-site Assembly and Delivery Function and the Production Hub Function. These services are

- Production Hub Function
    - programme management,
    - cost management,
    - financial management,
    - category and strategy management,
    - risk management,
    - information management and analytics,
    - programme reporting,
    - quality management and assurance,
    - technology strategy and architecture, and
    - continuous improvement and innovation,

- Digitally Enabled Design Function

    o design knowledge management,

    o digital design, and

    o design quality management,

- On-site Assembly and Delivery Function

    o construction management.

47. For definitions of the services see the Table 3 (Production Hub in Section 5.4 below), Table 4 (Digitally Enabled Design in Section 5.6 below) and Table 5 (On-site Assembly and Delivery in Section 5.7 below).

5.3   *Alliance key person*s

48. Each of the Partners is required to provide nominations for the following *Alliance key person* roles (see Figure 5)

- four nominations for *Alliance key person* positions within their respective function (see specific roles below), and

- a minimum of two nominations for roles that are open to all the Partners (see roles below).

49. The following *Alliance key person* nominations must be submitted by each Partner for their respective function

- Digitally Enabled Design Function

    o Digitally Enabled Design Director,

    o Head of Digitally Enabled Design for each area (one from each Digitally Enabled Design Partner)*,

    o Lead for Digital Design, and

    o Lead for Product Development and Standardisation.

- On-site Assembly and Delivery Function

    o On-site Assembly and Delivery Director,

    o Head of On-site Assembly and Delivery for each area (one head from each On-site Assembly Partner)*,

    o Lead for Construction Management, and

    o Lead for Installation.

- Production Hub Function

    o Production Hub Director*,

    o Lead for Production Planning*,

    o Head of Production Management*, and

    o Lead for Transport Logistics*.

50. Note that the *Alliance key person* roles highlighted by an asterisk (*) are Partner-specific roles however still require Alliance Manager approval to be appointed.

51.   In addition to the above *Alliance key person* roles, the Partners must put forward candidates for a minimum of two of the below positions

- Commercial, Finance and Procurement Director

    o   Head of Cost Management,

    o   Head of Commercial,

    o   Head of Supply Chain, and

    o   Head of Finance.

- Head of Health, Safety and Wellbeing

52.   None of the *Alliance key person* roles available to all Partners listed above (paragraph 51) are mandatory (with the exception each Partner must submit at least two nominations). It is expected that Partners only nominate individuals for the positions where they have a core competence.

53.   For high level job descriptions of each of the *Alliance key person* roles see Annex I.

54.   In the event that not all the *Alliance key person* positions available to all Partners are filled, the Alliance Board will review and fill roles as part of mobilisation.
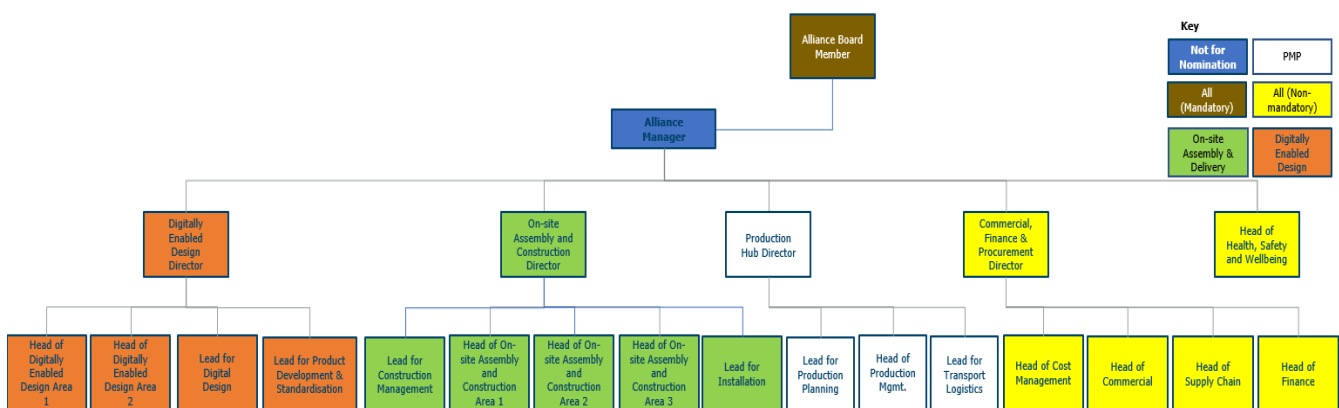
Figure 5 *Alliance key persons* nomination structure

Alliance key person selection and replacement process

55.   All *Alliance key person* nominations must be available to work full time within the Alliance.

56.   The Alliance Manager conducts interviews of *Alliance key person nominations* as necessary.

57.   The selection process differs slightly depending on the role

- Partner-specific roles that the nominated key persons are appointed to subject to Alliance Manager approval,

- Lot-specific roles are roles that all Partners within the Lot and the client may submit a nomination for are appointed on a best for task basis, and

- pan-Alliance roles (those highlighted yellow in Figure 5) are roles that any alliance member may submit a nomination for and are appointed on a best for task basis

58. If the Alliance Manager does not identify a suitable individual for an *Alliance key person* role they may request alternative candidates from the Partners until an individual is identified.

59. Once identified, the Alliance Manager proposes the *Alliance key person* nominations to the Alliance Board for approval.

60. If an *Alliance key person* leaves their role within the Alliance (e.g. moving onto another project)

- the *Alliance key person* selection process is rerun to determine who the next *Alliance key person* is on a best-for-task basis, and

- a one month handover must take place with the incoming *Alliance key person*.

5.4   Production Hub service definitions

61. The Production Hub enables an Alliance-wide programmatic approach to be delivered across five sub-functions. The Production Hub will deliver specific identified functions of the Alliance that will benefit from being implemented on a programmatic Alliance-wide basis, which would have traditionally been delivered by individual Partners.

62. The Production Hub delivers across five sub-functions (detailed further in Table 3: Production Hub services).

- operations,

- Programme Management Office (PMO),

- production management,

- commercial, and

- delivery.

Service	Description	Outcome
Production Hub – Delivery		
Programme Management	Provide programme management of Schemes to agreed time, cost and quality. Provide leadership and direction to site teams and supports teams on site to deliver project objectives	Schemes deliver to agreed time, cost and quality targets.
Production Hub – Commercial		
Service	**Description**	**Outcome**
Financial Management	Establish and manage common Alliance financial management procedures, systems and protocols. These will include setting up integrated cost data collection systems, Alliance budget management, management of Project Bank Accounts, managing the Alliance profit & loss and forecasting, and overseeing financial auditing	Enables a more effective and value for money delivery of financial services to Partners, suppliers and customers, and gives greater transparency for the *Client* and the Partners around financial reporting and forecasting.

Service	Description	Outcome
Commercial Management	Establish and operate common Alliance commercial management procedures, systems and protocols, including those relating to Subcontractors. These will include defining Subcontractor incentives, negotiating and managing administration of subcontracting, agreement of disallowed costs, managing insurance claims on behalf of the Alliance, and analysis of Earned Value Ensure the achievement of efficiency targets through effective monitoring and management of commercial performance and audit of efficiency savings.	Enables centralised commercial management to create a common understanding of contractual obligations and mechanisms used across the Alliance's supply chain, avoiding inconsistencies when dealing with Subcontractors, and facilitating negotiation of commercial arrangements using the economies of scale generated by the Alliance
Cost Management	Establish common Alliance cost management procedures, systems and protocols, including those relating to Subcontractors. These will include managing outbound Alliance payments, assessing Subcontractor applications, supporting cost management reviews and value engineering analysis, cost estimating, cost verification reviews and supporting cash flow forecasting	Enables centralised cost management to create a single source of truth for reporting and forecasting and a single point of contact for all cost-related issues and enquiries from within and outside the Alliance to improve transparency, build trust and increase attractiveness of Alliance as a *Client* for collaboration.
Supply Chain Management	Establish a Supply Chain management plan aligned to the principles outlined in Section 7.2. Develop, manage and maintain a programmatic approach to managing the supply chain, whereby a joined-up approach with master scheduling, category management, plant management etc. provides the knowledge to give visibility of the programme requirements to the supply chain, and to rationalise the demand on the Supply Chain. Develop a Supply Chain Strategy (defined at Section 7.2) aligned to the supply chain principles outlined in Section 7.2.	Enables a more effective, sustainable and value for money supply chain as a result of their ability to invest in long-term development opportunities aligned to the outcomes desired by the Alliance and to accurately forecast and plan for future demand due to programme-wide, long-term visibility of Alliance needs.

Service	Description	Outcome
Production Hub – Programme Management Office		
Service	**Description**	**Outcomes**
Master Scheduling	Develop, manage and maintain an integrated plan across the entire programme of *works* to schedule deadlines, manage dependencies and coordinate the optimal use of resources. Maintain and review integrated plan through delivery of programme. The master schedule is reviewed by the Alliance Manager on a regular basis. A 'levelled' plan that connects site-level activity to programme milestones and can be costed and managed using shared systems and metrics.	Enables optimisation of the use of resources across the programme to maximise Alliance performance potential Enable a programmatic approach to optimise resourcing and scheduling.
Resource Utilisation	Track and monitor resource utilisation across Schemes, report on effective utilisation across the Alliance and provide reports to the *Client* (e.g. MPPH) and Alliance Board as required.	
Resource Levelling and Smoothing	Manage resource requests, escalations, secure additional resource where needed and reallocate underutilised resource.	
Programme Reporting	Issue data and reports to the Alliance Manager, *Client* (e.g. MPPH) and Alliance Board as required. Activities include • Track and report benefits, performance and timeline targets Develop and issue reporting template, • Analyse data at the programme-level, and • Prepare and submit programme-level reports to the Alliance Board and *Client*. • Alliance supports in setting the programme, e.g supporting with establishing optimum portfolio design and sequencing.	Enables a single source of the truth and transparent environment that optimises decision-making ability within the Alliance

Service	Description	Outcome
	Consolidate data from across programme to develop monthly programme-level reports on progress, benefits and performance against KPIs.	
Quality Management & Assurance	Develop the quality management framework to form part of an integrated management system. Conduct internal audits to assure quality processes are being followed and non-conformities dealt with.	Enables right first time culture that maximises value for money by minimising requirement for rework while upholding industry-leading quality standards
Risk Management	Develop the risk management framework to be embedded into risk management practices throughout the Digitally Enabled Design Function and On-site Assembly and Delivery Function. Gather data and populate risk management templates. Actively manage and monitor risks identified.	Enables enhanced visibility of risks, impacts of risks and mitigation strategies to optimize the management of risks within the programme.
Change Management	Manage change control process. Raise monitor and control change requests.	Enables consistent application of change requests and changes to scope across Schemes to provide greater awareness and control of the impact of change.
Information Management and Analytics	Develop the information management strategy across the Alliance (ensuring alignment to the *Client* and enduring the use of common systems) to maximise business value derived from data through the use of analytics tools.	Enables efficient sharing of information to minimise data loss potential and optimal use of programme-wide data availability to improve decision making.
Technology Strategy & Architecture	Develop the required programme-wide IT strategy to drive the desired business outcomes for the Alliance based on (and within the parameters of) the enterprise IT strategy developed by the *Client* (available on .gov.uk website).	Enables consistent use of IT systems across the programme to minimise requirement for repeated bespoke training and facilitate sharing of resources across the programme as well as maximise opportunities to leverage economies of scale.
Production Hub – Production Management		

Service	Description	Outcome
Service	Description	Outcomes
Inventory Management & Consolidation	Develop and execute a strategy and commercial rationale for the centralised management of product inventory in the Alliance.	Enables common awareness of product inventory information and lead times to facilitate just in time delivery of products that optimises use of resources (e.g. prevents delays on site), Enables the minimisation of waste and manual handling requirements to improve safety.
Production Planning & Sequencing	Plan and sequence creation of products to be 'manufactured' and/or assembled offsite, incorporating Alliance approach to category management and standard products. Work in an integrated manner with master planning, digital rehearsal and logistics team to ensure a programmatic approach	Enables reduced fragmentation in the Alliance approach to manufacture and delivery of component products (e.g. joined-up manufacture, just-in-time delivery) to reduce the time, costs and impact on safety associated with on-site assembly as contrasted with manufacturing approaches.
Transport Logistics	Integrate with master planning to plan, monitor and manage the off-site elements of transport logistics programmatically (e.g. to/from consolidation centre, and to/from site).	Enables optimised use of vehicles to minimise carbon emissions and requirements for loading/unloading as a result of vehicle movements.
Product (Plant & Material) Management	Integrate with master planning to plan, monitor and manage the requirement for, ordering of and use of plant at a programmatic level	Enables optimised use of plant resources to minimise costs (e.g. enabling better prices / rebate and less disruption / delay associated with sub-optimal plant availability and utilisation)
Production Hub – Operations		
Service	Description	Outcomes
Continuous Improvement and Innovation	Conduct 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.	A continuous improvement approach is prioritised and valued, resulting in improved benchmarking. Clearer communication and systematic use of systems results reductions in lead times and improved use of resources. Better planning and

Service	Description	Outcome
	Sponsor lean, six sigma tools and business improvement techniques (as appropriate) to continuously improve business processes and working practices.	scheduling (learning from others shared)
Alliance People Strategy	Prepare and support individuals, teams and organisations to adapt to new ways of working. Including: • planning for change, • managing change, • engaging staff across SMP to adopt change, • training and developing SMP staff capability and measuring effectiveness of change.	Enables a high-performing, integrated Alliance team that attracts and retains the required talent across Alliance member organisations.
Process Change	Prepare and support individuals, teams and organisations to adapt to new operational processes. Including: • developing new processes, • putting in place processes, • tracking and monitoring adoption and effectiveness of new processes.	
Communications	Manage internal and external communications strategy and plan. Handle correspondence across Schemes and programme, handling customer correspondence and complaints in line with *Client* standards and procedures.	Enables timely and effective engagement with customers and stakeholders to support a trusted environment within and outside of the Alliance

Table 3: Production Hub services

5.5 Deployment of individuals within the Production Hub

63. Resource requirements for each of the services within the Production Hub (see Figure 3: Alliance functions and services) will be defined during mobilisation (post- Alliance Start Date).

64. In order to build trust, mutual cooperation and maintain resilience within the Alliance, the *Client* will maintain a presence across specific areas within the Production Hub (as listed in Section 5.2).

65. Following the Alliance Start Date and then on a periodic basis aligned to the issue of subsequent packages of work, the Production Management Partner provides the Alliance Manager with

- a proposal of the services within the Production Hub they will provide core capability for, and

- CVs of suitable candidates to fill roles in the core services identified.

66. The Alliance Manager will review the proposal, interviewing candidates where necessary, and either approve or reject and comment. Once approved by the Alliance Manager the proposal is issued to the Alliance Board for review and approval. The process for selecting the core Production Management Partner resources must be completed within three months of the Alliance Start Date.

67. Following the allocation of *Client* and Production Management Partner core resources, the Partners, including the Production Management Partner, have two to four weeks to submit CVs of suitable candidates for the remaining roles.

68. The Alliance Manager then shortlists and interviews candidates (as necessary) and recommends a balanced resource portfolio to fill residual posts.

69. The Alliance Board will review the recommendation by the Alliance Manager and will either approve the resource allocation or reject the recommendations and provide comment to the Alliance Manager.

70. Once approval is confirmed, management and supervision resources are deployed. Where possible, support staff to the management and supervision staff will be sourced from the same Partner.

71. When a role becomes vacant, due to the individual leaving the Alliance or moving position, the above process is repeated to identify a suitable replacement.

5.6 Digitally Enabled Design overview

72. The Digitally Enabled Design Function conducts Scheme designs from initial concept through to delivery and closeout within the Alliance.

73. It is expected that the Partners involved in this function will

- share best practice through the use of common systems and processes,

- use the Rapid Engineering Model (REM) to prepare standard designs across all Schemes,

- involve the wider supply chain to support 'right first time' design, and

- seek early involvement from the On-site Assembly Partners.

74. Table 4: Digitally Enabled Design services outlines the definitions for each of the services within the Digitally Enabled Design Function.

Service	Description	Outcomes
Principal Designer	Plan, manage, monitor and coordinate health and safety in the pre-construction phase, taking account of relevant information that might affect design work (e.g. HSE) and working with other designers to eliminate foreseeable HSE risks. Coordinate collation of pre-construction information and liaise with principal contractor to inform of any risks that need to be controlled during the construction phase. Assure the construction through	Strong relationships with the *Client* and principal contractor as well as the other designers working across the programme to enable the provision and flow of information to ensure that health and safety is considered when making decisions.

Service	Description	Outcomes
	fulfilling construction design management responsibilities.	
Development of Standard Design Products	Leverage standard products in the design catalogue, generated by Rapid Engineering Model (REM), to develop standard design products that can be shared across Schemes.	Enables more efficient design and construction, with commonly understood processes and solutions able to be shared across the programme.
Digital Design	Own the 3D model-based process that gives the insight and tools to more efficiently plan, design, construct, and manage Schemes from design to construction.	Enables a common information modelling solution for the whole programme to drive efficiencies associated with reductions in familiarisation / training, optimal use of resources (resources can be shared as knowledge requirements are consistent), improved ability to assess investment in systems, and efficient sharing of information
Design Quality Management	Ensure • design is prepared in accordance with SES, • design is meeting desired timelines, and • construction is executed against design. • manage departures from design	Enables consistent quality standards that support a standardised approach to design and facilitate optimisation of resource sharing to minimise resource requirement in design
Design Knowledge Management	Set up agreed knowledge management measures within programme and own the strategy for sharing design knowledge across the programme (e.g. collating, managing and sharing best practice for design).	Enables continuous improvement and sharing of best practice across the programme to drive improvements in efficiency (e.g. speed of delivery/design) and ability to meet KPIs.
Design Integration	Integrate a series of standard products together to advance the REM into a holistic detailed design for construction.	Ongoing development of the REM enables faster and more predictable Scheme design, and improvements in product specification in the REM enable more efficient and more predictable production.
Surveys	Conduct programme-wide asset, environment and site surveys required to support detailed design.	Programmatic approach to surveys enables surveys to be conducted in the most efficient manner, with suppliers managed at the programme level and demand understood programmatically to enable optimum sequencing of work and

Service	Description	Outcomes
		volume purchasing. Survey outputs stored in common systems, with an information management approach to knowledge management prevents data loss.
Statutory and Consent Management	Manage the end to end statutory approvals and consent process ensuring key milestones are met.	Compliant designs prepared within the required time, cost and quality and safety standards

Table 4: Digitally Enabled Design services

5.7 On-site Assembly and Delivery overview

75.   The On-site Assembly and Delivery Function is responsible for the on-site aspects of construction works, assembly and delivery, interfacing with members to support efficient and safe design and delivery with predictable cost and schedule outcomes.

76.   It is expected that the Partners involved in this function will

- identify off-site construction methods and opportunities, and

- share best practice through the use of common systems and processes.

77.   Table 5: On-site Assembly and Delivery services outlines the definitions for each of the services within the On-site Assembly and Delivery Function.

Service	Description	Outcomes
Principal Contractor	Plan, manage, monitor and coordinate health and safety in the construction phase, liaising with the principal designer and others involved in the project to identify any risks to health and safety and the control measures which need to be put in place.	An incentive for the Principal Contractor to maintain strong relationships with the Principal Designer as well as other contractors working across the programme to enable more effective planning and early Subcontractor involvement for improved safety from better buildability, and common approaches to construction phase plans, alongside the provision and flow of information to ensure that health and safety is considered when making decisions.
Handover Management	Ownership of the process to handover the site for operation following commissioning and testing.	Common processes across the programme enable more efficient use of resources, with staff gaining familiarity with the processes and standard products used, thereby simplifying and reducing the number of different approaches to O&M manual creation.

Service	Description	Outcomes
		The incentive to outperform results in a continuous improvement approach to the creation of O&M manuals and commissioning data, to support timely handover / completion.
Commissioning Management	Management of commissioning activities to ensure equipment operates as intended - supported by specialists from the Supply Chain as required - and formal receipt of the asset from the project following mandated governance procedures & information.	The use of e.g. the product catalogue enables ongoing efficiencies as common processes and solutions become widely understood and continually improved by Alliance resources.
Site Preparation and traffic management	Prepare site in accordance with construction plan, including NRTS and traffic management procedures.	Resource sharing across the Alliance enables a team with the right skills to work on the right task at the right time, with a lower overall resource requirement. An incentive to outperform means that a continuous improvement approach is applied. Adopting common processes improves consistency and enables the best approaches to be applied for optimum traffic management The use of standard products leads to improved health and safety and a consistent user experience (both end customer and for Alliance resource). Digital rehearsals result in improved construction phase processes, minimizing time lost as a result of sub-optimal sequencing and logistics.
Site Logistics	Manage day-to-day operational interactions, materials and plant management with the Supply Chain	A common incentive to outperform, alongside a package (rather than Scheme by Scheme) approach to work allocation and closer supply chain integration, and programmatic approach to asset registers, supports more efficient materials and product routing thereby reducing time on-site and minimizing under-utilisation of resource, and improved planning for the most effective materials use. Resource sharing across the

Service	Description	Outcomes
		Alliance enables a team with the right skills to work on the right task at the right time, with a lower overall resource requirement.
Construction Management	Co-ordination of construction activities carried out in accordance with the detailed construction phase plan.	Programmatic approaches to resource, such as integrated commercial management at a programme rather than site level, result in reduced man-marking. Package (rather than Scheme by Scheme) approach to work allocation enables programme scheduling to smooth resource peaks, and to optimization of the scale of site offices, plant use and other aspects to reduce overall prelims cost.
Site Level Engineering	Conduct site engineering activities required to prepare site for construction.	Programmatic approach to resource enables skills to be retained and, together with the adoption of common processes, enables improved site set-up, setting out and survey activities, and more efficient and effective site-level planning and resource use.
Site Performance Control	Ensure all construction is delivered to design drawing specifications on-site and to programme quality and safety standards.	Programme approach to performance control, enabled by standard products and processes. More reliable information management and control enabled by common incentive to perform Potential/number of changes from design drawings are reduced as a result of digital rehearsal.
Provision and Installation Inspection	Provision of standard products, equipment, plant and resource to deliver Schemes. Including • installation of equipment on-site (e.g electrical), • mechanical, • communications, and technology.	Incentive for early involvement of specialist Subcontractors alongside the Digitally Enabled Design Partners supports development of standard products which can be manufactured off-site, and/or assembled/constructed more easily on-site.

Table 5: On-site Assembly and Delivery services

6. Work allocation and optimisation

6.1 Packages

78. The *Client* intends to issue work to the Alliance in three main packages

- RIS1 including mobilisation work shortly after the Contract Date,

- RIS2 work within a year of the Contract Date, and

- RIS3 work prior to March 2025

These packages of work may change, and additional packages of work may be issued to the Alliance, depending on the funding available to the *Client.*

79. Packages will contain one or more Schemes. Types of Scheme could vary and include

- Smart Motorway Schemes that the Alliance is required to deliver,

- Alliance mobilisation activity,

- technology overlay on non-motorways, and

- supporting work for the Smart Motorway Programme.

80. These Schemes and the work contained in them will be allocated using the process below, to Partners (and potentially the *Client)* who will then become the Responsible Partner for that work. The allocation of the Schemes and work can be moved around between the members of the Alliance within the terms below, to enable more efficient delivery.

81. The *Client* will notify the Alliance of a potential Package and provide the Alliance with information on the Scheme(s) contained within, together with draft Scheme Scope, Scheme Level Contract Data, and Scheme Budget assessed in accordance with the Quotation Information. The below allocation and optimisation process will be run to identify the Responsible Partners for each Scheme. Each Scheme within a package will then be awarded to the Alliance. Partners who are not Responsible Partners will still be required to support the delivery of Alliance work.

6.2 Transition strategy

82. It is anticipated a number of Schemes will transition into the Alliance part-way through the PCF process.

83. Within three months of the Alliance Start Date, the Alliance will develop a transition plan to manage the acceptance and progression of these schemes.

84. Activities and timescales are to adhere to the requirements set out by the *Client.*

6.3 Initial Scheme and Work Allocation

85. The work required to deliver a Scheme will be delivered by Partners on Lot 1, Lot 2 and Lot 3 and the Client. The default allocation of this work between the Lots and the Client is contained in the default scope allocation in Annex F Alliance Scope and Scheme Scope, which identifies the work required by each Lot to deliver a Scheme. However, the Alliance as a whole remains responsible for delivering the Scheme.

86. A Partner from each Lot is then selected to carry the work of that Lot for the Scheme

- Lot 1: The one Production Management Partner will be initially allocated all Lot 1 work where the *Client* does not have existing resource,

- Lot 2: The Digitally Enabled Design Partner awarded to the geographic region where the Scheme is will be initially allocated all Lot 2 work, and

- Lot 3: The On-site Assembly Partner awarded to the geographical region where the Scheme is will be initially allocated all Lot 3 work.

  The geographical boundaries of each lot are outlined in Annex E Lot regional boundaries.

87. The *Client* is keen that all Partners participate in the Alliance so that they are collectively engaged as well as collectively incentivised. On that basis it is the intention for the volume of work to be split between Partners on the same Lot. The volume of work is then moved within tolerances to achieve a more equal split of work between Partners in the same Lot

- The tolerances are 40% - 60% for the Digitally Enabled Design Partners and 25% - 40% for the On-site Assembly Partners.

- If the total value of the

  o design element from the Alliance Budget Pricing Model (as per the Quotation Information) for the Digitally Enabled Design Partners,

  o construction element from the Alliance Budget Pricing Model (as per Quotation Information) for the On-site Assembly Partners,

- of Schemes already and proposed to be allocated to a Partner as a proportion of the proposed total design/construction element are greater or less than the tolerances above then proposed Schemes are moved between Partners.

- Schemes already and proposed to be allocated to a Partner as a proportion of the proposed Alliance Budget are greater or less than the tolerances above then proposed Schemes are moved between Partners.

- the *Client* will move the single lowest valued Scheme to the smallest value region to meet the tolerance criteria, and

- if moving a single Scheme does not meet tolerance criteria, move the second smallest Scheme to the smallest value region and continue this process until within tolerance levels.

- Note that optimisations made by the Partners following the initial proposal are at the behest of the Partners and future work allocations will be based on the initial work allocation proportions as opposed to the post-optimisation proportions.

88. Following this process, proposed Schemes and the work within them will all be initially allocated to a Responsible Partner to carry out.

89. For Lot Two, a North-South split of Schemes will take until year two of the Alliance for the share to fall within the tolerance levels however, from year four onwards, the split remains within the 55:45 proportions which provides the additional flexibility if new unforeseen Schemes are added to the spend profile.

6.4   Pre-award Optimisation & Award

90.   The Alliance reviews the initial Scheme and work allocation and considers any improvement opportunities against the initial allocation in two stages

- Within Lot – Digitally Enabled Design Partners and On-site Assembly Partners review initial work allocations and determine if whether improvements can be made.

- Across Lot – the Partners review the default allocation of the flexible activities as defined in the Alliance Scope and identify opportunities for optimisation.

91.   Once improvement opportunities have been identified the Alliance prepares an optimisation business case (in accordance with Annex D Optimisation business case template) recommending the proposed changes to the allocation.

92.   In order for the business case to be approved and allocation amended accordingly

- the optimisation must be in accordance with the pre-determined criteria (budgetary / time efficiencies and outcomes against the *Client's* imperatives (safety, customer and delivery of the RIS)),

- the optimisation must be approved by the Alliance Board, and

- the optimisation must be approved by the *Client.*

93.   If the three conditions above are not met the change will not be approved and the initial allocation will stand.

94.   Following approval or rejection, the Partners' Lump Sum Fees are assessed in accordance with the Quotation Information, and the *Client* issues the Scheme Orders in accordance with Clause Z19.

6.5   Allocation following a Change in Alliance Membership

95.   In the event a Partner is terminated from the Alliance, work will be allocated/ reallocated in the following way. The remaining Partners are obliged to complete the works of the terminated Partner if the Partner is not replaced in accordance with the *conditions of contract.*

96.   Existing Alliance Work

- Non-terminated Partners will keep their existing work

- if a Digitally Enabled Design Partner is terminated, the remaining Digitally Enabled Design Partner will become the Responsible Partner for the terminated Partner's work,

- if an On-site Assembly Partner is terminated, the remaining On-site Assembly Partners will become the Responsible Partner for the terminated Partner's work. The terminated Partner's work will be put through the initial work allocation mechanism above to allocate it to the two remaining Partners, however using Lot 2's geographical region split and the tolerance of 40% - 60%. The Partner who previously had the most northern geographical preference will have the North lot, and the southern-most geographical preference will have the South lot.

- if the Production Management Partner is terminated, the *Client* will cover the role of the Production Management Partner with the support of the Digitally Enabled Design Partners and On-site Assembly Partners.

- Following the reallocation of work, as outlined above, the Alliance can make further optimisations through post-allocation flexibility (see post allocation flexibility below).

97. New Alliance Work

- New work is put through the work allocation mechanism above, however with the regional boundaries modified as per Annex E Lot regional boundaries.

98. In the event a new Partner is procured

- New work is put through the work allocation mechanism outlined in Section 6.3 and Section 6.4.

- For tolerance calculations, the previously awarded packages will not be taken into account (i.e. the tolerances will be re-set).

- The regional splits revert to the original boundaries as they were before the loss of the Partner. This is to avoid any distortion of allocation as a result of attempting to re-balance work across the Partners factoring in historic allocation

- Work for new Partner than Alliance was already undertaking – Option T1 Z19.9.

- As part of this process, the incoming Partner can understand the Alliance ways of working through an onboarding exercise delivered by the incumbent members of the Alliance. This will ensure optimal allocation of work within the Alliance.

6.6   Post-allocation flexibility

99. At any time, the Alliance may further optimise the allocation of work within the Alliance. Opportunities to optimise may still arise and fall into one of the two categories below

- Minor change – where one Partner supports another Partner in their work, however with no changes to responsibility and liabilities of the Responsible Partner, and

- Major change – changes resulting in the transfer of responsibilities and liabilities from the Responsible Partner to another Partner.

Note that optimisation opportunities post-allocation can be within or across lots.

100. If a minor change is identified, the Alliance Manager presents the recommendation to the Alliance Board. Unanimous approval is required by the Alliance Board with the agreement of the Partners affected. The Alliance Board instructs the relevant Partner to support the Responsible Partner in Providing the Scheme.

101. If a major change is identified, the Alliance follows the same optimisation process for pre-allocation optimisation whereby the Alliance prepares an optimisation business case recommendation (in accordance with Annex D Optimisation business case template) for approval by the Alliance Board and the *Client* together with the proposed change to the Lump Sum fees in accordance with the Quotation Information. If approved the change is instructed in accordance with Clause Z19.5

102. The *Client* may instruct the Alliance that the *Client* will become the Responsible Partner for elements of Lot One work.

6.7   Periodic Instruction for Production Management Partner

103. The Partner Fee and resources required to deliver the Production Management Partner work will be agreed on a periodic basis.

104. Periodically, the *Client* instructs the Alliance Manager to produce a Production Management Partner cost resource profile to deliver the work for which the Production Management Partner is a Responsible Partner. The *Client* includes in the instruction the relevant period of time and relevant Scheme Scope for which the cost resource profile is to cover.

105. For the first Period Instruction the Partner Fee will be paid on a percentage basis and captured as a lump sum at the end of the period.

106. For every period thereafter, the Partner Fee is set and the Partner Fee Projection is produced in accordance with the Quotation Information using the cost resource profile.

107. If the Alliance Board unanimously agrees the proposed Periodic Instruction, the *Client* issues the Periodic Instruction in accordance with Clause Z20.

7.   Supply chain

7.1   Supply chain aims and objectives

108. The members of the Alliance produce, within six months of the Alliance Start Date, a supply chain strategy which is aligned with the Alliance vision and values. The strategy will support the creation of an supply chain which delivers sustainable value for money solutions within mutually beneficial, long term relationships (the "Supply Chain Strategy").

109. The Supply Chain Strategy will be developed collectively by the members of the Alliance and will address the strategic planning, procurement and management of third party organizations that supply goods and services to the Alliance.

110. The objectives of the Supply Chain Strategy are

- create an environment where safety, health and wellbeing is not compromised

- to deliver innovative, value for money solutions at a fair and appropriate cost with zero defects at handover

- be compliant with all relevant legislation, public sector guidance (including Procurement Policy Notes issued by the government) and Alliance/*Client* governance;

- create a high performing Supply Chain based on long term, mutually beneficial relationships

- create a Supply Chain Strategy focused on value creation not cost reduction

- ensure activities are conducted in a fair, objective and transparent manner

- adoption of sustainable and responsible procurement practices, and

- enables effective risk management and mitigation strategies.

111. The Alliance approach to supply chain management will ensure that opportunity to work collectively is maximised resulting in an effective Supply Chain able to achieve efficiencies.

112. The Supply Chain Strategy is expected to have a five-year time horizon, with annual strategic refreshments to ensure it remains aligned to programme needs and Alliance Objectives.

7.2   Alliance Supply Chain Strategy and principles

113. The Alliance, through the Production Hub, will collectively develop the Supply Chain Strategy which will be approved by the Alliance Board and recommended for acceptance by the *Client*.

114. The Alliance Supply Chain Strategy will build on industry best practice and lessons learned from past programmes and other industries. It will be founded on the nine principles set out below which will ensure that the *Client* imperatives of Safety, Customer and Delivery are met.

Principle 1: Collaborative leadership and management

115. The Alliance will act as an intelligent client to a high performing and fully integrated Alliance Supply chain. The *Client* envisages a Supply Chain which works seamlessly with the members of the Alliance to deliver value for money solutions in an open innovative culture built around ISO 44001 collaborative working framework.

116. To design, manage and execute the Supply Chain Strategy, the members of the Alliance will form an integrated Alliance Supply Chain team. Facilitated from the Production Hub, The Alliance Supply Chain team will manage strategic supply chain activities on behalf of the Alliance which will work collaboratively to create an Alliance Supply Chain. The Alliance Supply Chain team will support the members of the Alliance and individual Schemes to operate standard policies and processes supported by the sharing of information and data and a culture of continuous improvement.

117. The Alliance Supply Chain team will demonstrate a clear understanding of the stakeholder needs and will develop an Alliance industrial plan to ensure the Alliance funding is reinvested intelligently through an effective regional sourcing plan.

Principle 2: Safety, health and wellbeing

118. The Supply Chain will embrace an environment where safety, health & wellbeing is at the heart of everything the Alliance does, designing safety into its solutions and ensuring everyone has the skills to do their job in a manner that keeps themselves and others safe and healthy.

119. Supplier's commitment to upholding Alliance safety, health and wellbeing will be a priority when procuring and selecting the Alliance Supply Chain Partners.

Principle 3: Effective market engagement

120. The Alliance will actively engage with the Supply Chain through industrial briefings, meet the buyer events etc. on a regular basis to enhance market intelligence, communicate information to attract the best Suppliers and attract new entrants to the Alliance Supply Chain.

121. The Alliance Supply Chain Strategy will set out the member*s of* the Alliances' plan for engaging with Suppliers, demonstrating an understanding of capacity, capability and resilience, creating opportunities through early supplier involvement, shaping the market, removing barriers to new suppliers to bring new and innovative solutions and technologies.

122. The Alliance will actively share market and Supplier intelligence with the *Client*.

Principle 4: Intelligent Procurement and Strategic Sourcing

123. In line with industry best practice, the Alliance will adopt a programmatic approach to the sourcing of goods and services and will manage the extended Supply Chain from a strategic position. The Alliance will appoint companies on the demonstration of best value and this will be achieved through

- demand planning and publishing of an annual procurement pipeline of future opportunities,

- advertising of Alliance procurement prospects on Government Contracts Finder websites to remove barriers to SME participation and drive greater transparency of opportunities,

- developing a clear understanding of the supply market and 'shaping' the market to build a sustainable and resilient Supply Chain able to meet the Alliance's future needs,

- developing product, material and services segmentation strategies portfolio of appropriate procurement routes which are efficient, fair and transparent, and demonstrate how value will be achieved,

- collaborative sourcing by the members of the Alliance to aggregate requirements and procure using common conditions of contract,

- commit to long term, collaborative relationships with key Suppliers featuring mechanisms to resolve issues in a non-adversarial manner, and

- ensure effective governance and procurement award procedure aligned to UK government principles of transparency, equal treatment, proportionality in contract awards.

Principle 5: *Client* & Crown Commercial Services (CCS) government supply agreements

124. To fully optimise the *Client*'s/UK government's market position and enable standardisation of products and services across its wider programme the Alliance will be required to procure specific goods, works and services via *Client* or CCS Supply Agreements (provided annually by the *Client*) unless the Alliance identifies an alternative solution that offers tangible commercial, quality or sustainability benefits and submits a business case for the alternative solution which has been approved or accepted by the *Client*.

Principle 6: Sustainable procurement

125. The Alliance will design and adopt a plan for

- Ethical and sustainable sourcing, promoting equality & diversity, effective environmental management (including energy, waste and water), and compliance with legislation including employment of labour and materials production

- Prompt Payment through the Project Bank Account (PBA) – ensuring Supply Chain is paid in the quickest practical terms.

- Economic Growth - the Supply Chain Strategy will set out its proposals to distribute supply chain investment equitably into the English regions through an industrial plan which supports local economic growth and SME participation.

- Materials Management - proposals concerning the procurement of steel to reflect recent HM Government guidance on sourcing steel for major projects.

Principle 7: Equitable contracting and commercial models

126. The Partners will be required to appoint the Supply Chain directly, either by way of direct subcontracts or through frameworks procured on behalf of the Alliance and capable of being called off by each Partner. The Alliance will create a contracting framework which is consistent with the contract and includes the following key provisions, in addition to those specified in the conditions of contract and the Scope

- appropriate flow down of main contract conditions with fair and proportional allocation of risk to the party(s) best able to manage it,

- insurance backed guarantees or collateral warranties from manufacturers of Plant and Materials,

- no retention will be withheld in respect of payments to Subcontractors,

- whilst Material Subcontractors will be expected to adhere to the provisions of the Supply Chain Strategy, the appointment of Material Subcontractors will not be subject to acceptance by the Alliance Manager.

Principle 8: Collaborative working

127. The Alliance supply chain team will create an environment where the extended Supply Chain can be engaged to work collaboratively to develop innovative value for money solutions via

- following the principles of collaborative working (e.g ISO44001 collaborative working framework),

- creation of joint objectives and an Alliance Supply Chain charter,

- identify efficiencies and lean processes to optimise interfaces and reduce risk,

- ensuring that the relationships are productive and enduring,

- tier two and three Suppliers will not as routine be reimbursed for early supplier advice. However, such involvement will be proportionate to investment and longer-term Supplier involvement will be paid via business case signed off by Alliance Board, and

- working with the Partner's and *Client's* procurement teams to create knowledge economy and sharing of best practice and industry insights.

Principle 9: Supplier management

128. The Alliance will have a Supplier management system. These systems will include:

- Supplier Risk Management – A system to assess the suitability of Suppliers to be invited to join the SMA Supply Chain. The Supplier accreditation system will provide assurance over safety performance; financial standing; capacity and capability; management systems and resilience across all levels of the Supply Chain.

- Supplier Induction – A methodology for inducting Suppliers into the Alliance ensuring Suppliers are clear on the Alliance objectives; the culture and behaviours which are expected; what Suppliers can expect of the members of the Alliance and what is expected of the Suppliers themselves.

- Supplier Relationship Management – A relationship plan which recognises the need for differentiated relationships for the different segments of the Supply Chain. The plan will set out a full engagement and development plan to nurture close collaborative relationships with key Suppliers whilst ensuring commodity Suppliers enjoy productive relationships which ensure they value the SMP business and respond with preferential levels of service.

- Supplier Performance Management - A 360° performance management process which stimulates improvement across the Alliance and Supply Chain identifying areas for development and supporting Suppliers to improve performance and deliver greater value for money in a safe, collaborative environment.

7.3 Implementing the Alliance Supply Chain Strategy

129. The members of the Alliance establish a collaborative procurement hub (CPH) which is responsible for delivering and executing the Supply Chain Strategy which is supported by a team of a procurement, logistics and supply chain specialists from across the *Client* and the Partners.

130. The members produce a collaborative procurement hub plan that contains proposals concerning the composition of the CPH. This is submitted by the Alliance Manager to the Alliance Board for acceptance within six months of the Alliance Start Date.

131. Contracting and operation of the Supply Chain will be the responsibility of the individual Partners who will also be accountable for ensuring compliance with the Supply Chain Strategy.

7.4 Developing the Supply Chain Management Plan

132. The Alliance produce a supply chain management plan for acceptance by the Alliance Manager within six months of the Alliance Start Date (the "Supply Chain Management Plan"). A reason for not accepting the plan is that it does not address all the requirements set out in this section.

133. The Supply Chain Management Plan is drafted to reflect the Supply Chain management principles and includes

- *Client*-led procurement activities,

- Alliance-led procurement activities,

- category planning including details of market engagement,

- Material Subcontractors,

- governance,

- proposals to employ affiliate companies,

- proposals for engagement with and maximising opportunities for small and medium sized and Voluntary, Community and Social Enterprise (VCSE) organisations,

- proposals concerning the procurement of steel,

- contingency plans and mitigation strategies in event of Supply Chain failure,

- proposals around innovation and standardisation,

- procedures to ensure the procurement of Subcontractor and Supplier works is undertaken on a fair and transparent basis demonstrating open market or competitively tendered pricing to deliver value for money and/or lowest whole life cost award criteria,

- Supplier management including

  o   accreditation,

  o   induction,

  o   relationship management, and

  o   performance management,

- tender management, evaluation, validation and reporting process,

- responsible procurement practices,

- potential tier two and three suppliers for inclusion within the Production Hub;

- a commitment to the construction supply chain payment charter, and

- Project Bank Account details.

134. The Supply Chain Management Plan is updated by the supply chain team and submitted to the Alliance Manager for acceptance every six months or if there is a significant change to the processes within it.

7.5   Supply chain governance and reporting

135. The Alliance Board will provide governance over the Alliance Supply Chain and ensure it is aligned to the *Client's* wider procurement strategy.

136. The Alliance Board will ensure there are effective resources, processes and systems in place to deliver an effective strategic procurement and Supply Chain management service to the Alliance. The Alliance Board will also

- assign ownerships of supplier relationships at an appropriate level within the Alliance, recognising any formal *Client* / Partner level relationships which may exist,

- ensure members comply with their obligations under the strategy, and

- review and sign off wider supply chain agreements.

137. The Alliance supply chain team will be expected to work with the *Client* to providing insightful business reporting including procurement programme, supplier performance, supply chain risk, benefits forecast and realisation.

8. Performance monitoring and reporting

8.1 Performance management overview

138. The *Client* has identified the need for closer alignment between the three business imperatives safety, customer and delivery of the Road Investment Strategy (RIS), and the performance management of work across its programmes.

139. Furthermore, the performance environment now needs to support the *Client*'s transition from project-based, transactional relationships to an alliancing arrangement. To drive this transition, key requirements for performance management of the Alliance include

- management information based on existing data – deliver objective, transparent reporting that relies on naturally occurring data in the contract management process,

- measure what is important to the business rather than what is possible – reducing administration-intensive supplier monitoring resulting in improved efficiencies,

- drive business transformation – creating a data rich, performance environment that encourages improved dialogue between all members of the Alliance to support more effective working, and

8.2 Performance management approach

140. The performance framework applies at Alliance level to target performance against a balanced scorecard and benchmark Alliance performance against the wider *Client* portfolio. The performance framework is linked to the Alliance performance improvement process.

141. 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.

142. The relationship between performance indicators (outlined in Figure 7: Alliance performance indicators) and the *Client*'s imperatives and outcomes is shown below.
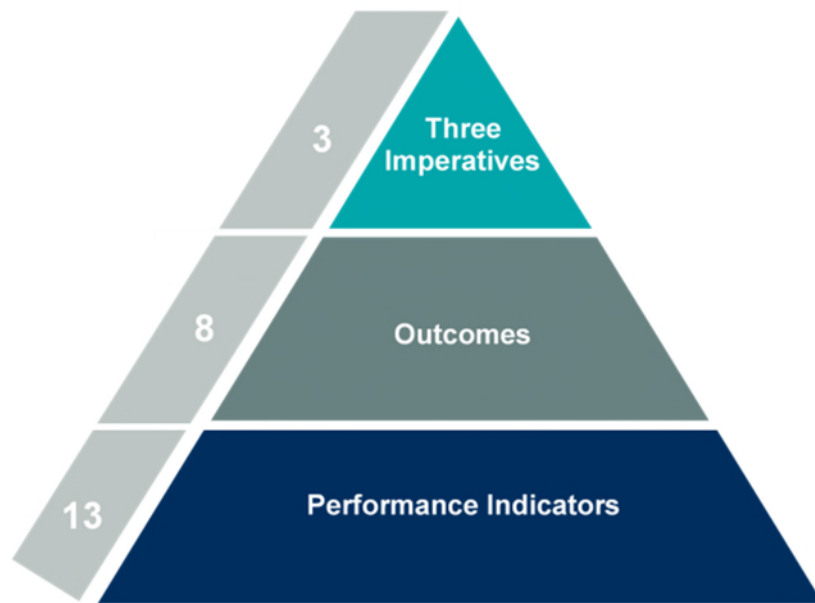
Figure 6: Alliance performance management pyramid

143. Beyond a method of measurement, the balanced scorecard provides an opportunity to cascade the *Client*'s priorities within the Alliance.

144. It is the intention that the *Client* will use the performance model to assess the success of the Alliance and it will be the responsibility of the Alliance to assess the success of the Partners. Partner-specific measures have been drafted and are to be reviewed by the members of the Alliance in the six months following the Alliance Start Date (ensuring that additional metrics are aligned to overall Alliance metrics).

145. Figure 7: Alliance performance indicators below shows the detailed composition of performance indicators design to respond to the *Client*'s imperatives and Outcomes.
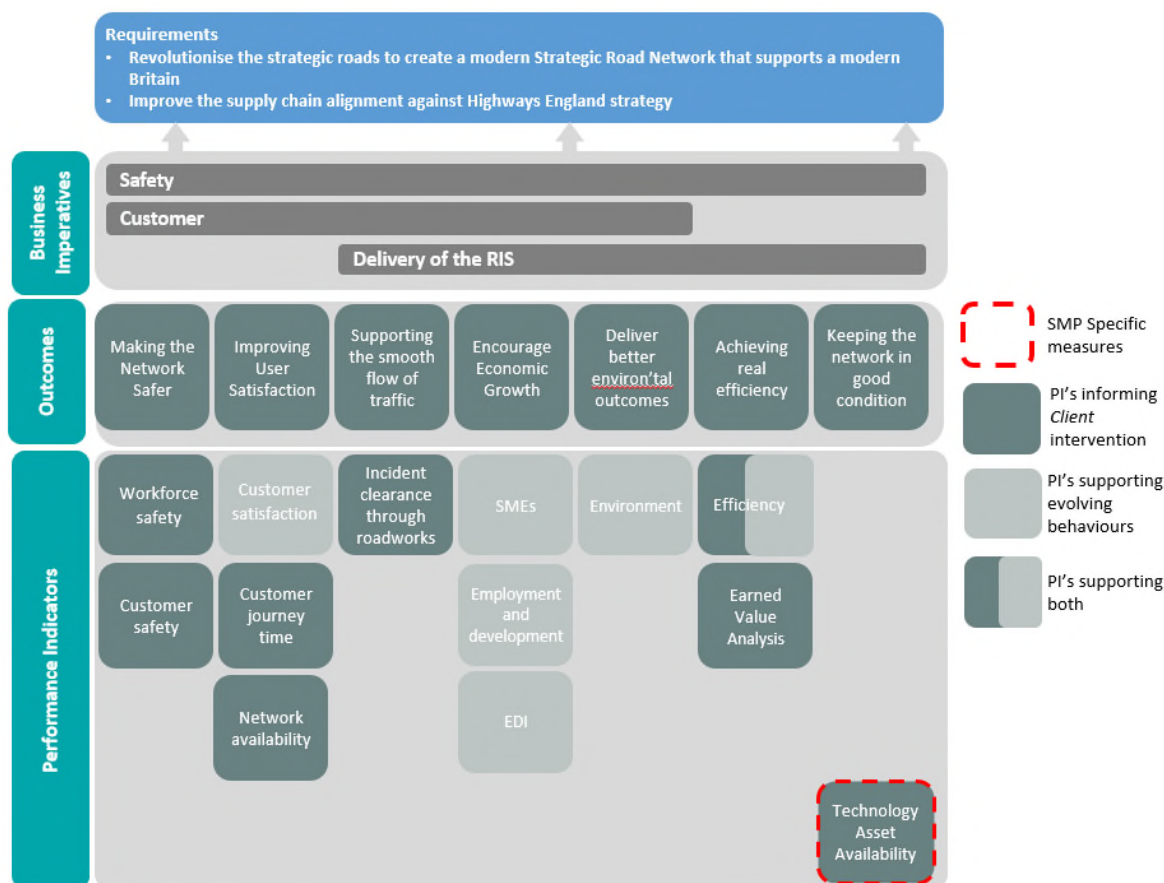
Figure 7: Alliance performance indicators

8.3 Metric development

146. Performance metrics are used to assess performance against the 13 performance indicators outlined above. Within the balanced scorecard, the metrics fall into two categories, those that

- support evolving behaviours – these metrics will support the development of behaviours which will broaden the focus of the Alliance into areas such as customer service, environment and driving local economic growth.

- inform *Client* intervention – these metrics will be used to commence the *Client*-led performance improvement process in the event of underperformance or performance failure.

147. As per the Decision Matrix, the Alliance Board reviews metrics annually and may issue updates as a result of these reviews. These updates may include

- changes to the performance thresholds of individual metrics (under the proviso that it is an improvement on existing performance thresholds), or

- changes to the methodology of calculating measures (as long as it is deemed an improvement by the *Client*).

148. The Alliance may submit proposed amendments to the performance management framework to the Alliance Board who must unanimously accept the changes.

149. Table 6: Alliance suite of performance metrics outlines the suite of performance metrics used to assess Alliance performance with metrics

- shaded a darker colour used to inform *Client* intervention, and

- the metrics shaded a lighter colour supporting evolving behaviours.

Imperative	Outcome	Performance indicator	Metric Title
Safety	Making the network safer	Workforce Safety	Accident Frequency Rate (AFR) for construction and maintenance workers
		Customer Safety	The number of Killed or Seriously Injured (KSIs) on the Strategic Road Network (SRN)
Customer	Improving User Satisfaction	Customer Journey Time	Average delay in works
		Customer Satisfaction	Customer Performance Assurance Assessment
			Customer audits
		Network Availability	Reduction in construction duration
	Supporting the smooth flow of traffic	Incident Clearance Through Roadworks	Percentage of motorway incidents cleared within one hour
Delivery of the RIS	Achieving real efficiency	Efficiency – Cost Reduction	Performance against programme efficiency targets
		Efficiency	Productivity target (£ per km)
		Efficiency	Productivity target (km per month)
		Efficiency	Cost Management target (% of investment retained in asset)
		Earned Value Management	EVM Variance
	Delivering better environmental outcomes	Environmental	Carbon dioxide equivalents (or CO2e) in tonnes associated with The *Client* and its supply chain
		Environmental	Natural, built and historic environment: Biodiversity Metric
		Environmental	Human wellbeing: Water quality
	Encouraging economic growth	SMEs	% of value spend through SME Subcontractors
		Employment and Development	Employment & development
		Employment and Development	Employee engagement

		EDI	Equality, diversity and inclusion (EDI)
	Keeping the network in good condition	Technology asset availability	Technology asset availability

Table 6: Alliance suite of performance metrics

150. For further detail on each of the metrics see Annex C Performance metric detail.

8.4   Performance scoring: Alliance and Scheme

Scoring mechanism

151. Each metric is scored on a scale of 0 to 10 increasing in increments of 2. When there are no active performance improvement plans the data required to report against each metric is collected quarterly to provide a score for each metric against each Scheme.

152. Each metric and Scheme is equally weighted to reflect their equal relative significance in achieving the outcomes and imperatives highlighted in the balanced scorecard (see Figure 7: Alliance performance indicators).

153. The average score of the Alliance across the four quarters of an annual period is taken to provide a final annual score.

154. Performance can be reported and monitored in a number of ways as reflected by the circles in Figure 8: Illustrative Alliance scoring mechanism

- Overall Alliance performance (red circle) – average performance of all metrics across all Schemes,

- Alliance-level metric performance (orange circle) – average performance of a metric across all Schemes within the Alliance,

- Scheme-level performance (blue circle) – average performance of a Scheme across all metrics, and

- Metric / component level (yellow circle) – performance of a specific metric on a chosen Scheme.

155. Figure 8: Illustrative Alliance scoring mechanism provides an illustration of the performance mechanism. Note that the number of Schemes and metrics is purely illustrative and has no relation on the actual number of Schemes or metrics delivered by and used to assess the Alliance, respectively.

Metric \ Schemes	Metric 1	Metric 2	Metric 3	Metric 4	Metric 5	Metric 6	Metric 7	Metric 8	Average
Scheme 1	8	8	6	4	8	10	10	8	7.8
Scheme 2	2	10	8	6	2	8	8	10	6.8
Scheme 3	10	10	6	8	4	8	8	10	8.0
Scheme 4	2	8	8	10	4	6	6	6	6.3
Scheme 5	4	8	4	6	10	10	4	4	6.3
Scheme 6	2	6	2	4	8	4	4	4	6.0
Scheme 7	8	8	8	6	6	6	6	8	7.0
Average	6.1	8.3	6.0	6.3	6.0	7.4	6.6	7.1	6.8

Figure 8: Illustrative Alliance scoring mechanism

156. Differing performance improvement processes are set out given the differing levels performance is reported on (see Figure 9: Poor performance scenarios for more detail).

8.5   Performance reporting process

157. The Alliance collects data relating to the measures assessing performance on an ongoing basis and it is expected that the Alliance Manager monitors and manages this performance on a day-to-day basis.

158. The process for doing so will be defined by the Partners within the six months from the Alliance Start Date and will be aligned to the reporting requirements into the Alliance Board and *Client*.

159. Each quarter, the Alliance collates Scheme-level performance data and submits to the Alliance Board and the *Client* a view of performance at Alliance-level.

160. The balanced scorecard is provided to

- the Alliance Board for information highlighting overall Alliance performance, and

- the *Client* for acceptance and comparability against other programmes.

8.6   Alliance poor performance

Alliance performance improvement principles

161. The *Client* manages the collective performance of the Alliance while the performance of individual Partners and Schemes is managed within the Alliance.

162. The *Client* has the right to issue a *Client*-defined performance improvement process in the event of

- Sustained poor performance, or

- Widespread poor performance across the Alliance.

163. There are two tiers of poor performance

- Underperformance – score between two and six, and

- Performance failure – score lower than two.

Performance improvement scenarios

164. The balanced scorecard collects performance information at Scheme level and therefore allows the ability to drill down to Scheme performance as well as overall Alliance performance. Given this performance can be viewed from three levels

- Overall Alliance performance – the average performance of the Alliance across all Schemes and metrics.

- Alliance metric or Scheme level – the average performance of the Alliance (across all Schemes) on a single metric or the average performance of a Scheme across all metrics.

- Scheme metric level – the performance of a single metric on a specific Scheme.

165. Given the three levels to view performance from and the two tiers of poor performance (underperformance and performance failure), there are six possible performance improvement scenarios shown in Figure 9: Poor performance scenarios below.

		Performance Failure Score of less than 2		**Underperformance** Score greater than 2 and less than 6	
Overall Alliance Performance	Client / Alliance	Client-initiated	Client / Alliance	Client-initiated
	Client intervention	Immediate	Client intervention	Immediate
	Reporting frequency	Monthly	Reporting frequency	Monthly
	Right to initiate termination process	3 months	Right to initiate termination process	9 months
Alliance Metric / Scheme Performance	Client / Alliance	Alliance-initiated	Client / Alliance	Alliance-initiated
	Client intervention	3 months	Client intervention	6 months
	Reporting frequency	Monthly	Reporting frequency	Monthly
	Right to initiate termination process	9 months	Right to initiate termination process	12 months
Scheme / Metric Component Performance	Client / Alliance	Alliance-initiated	Client / Alliance	Alliance-initiated
	Client intervention	N/A*	Client intervention	N/A*
	Reporting frequency	Quarterly	Reporting frequency	Quarterly
	Right to initiate termination process	N/A	Right to initiate termination process	N/A

*with the exception of continual poor performance against a health and safety measure.

Figure 9: Poor performance scenarios

166. For each poor performance scenario, four variables are outlined

- *Client* / Alliance – is the performance improvement process *Client*- or Alliance-initiated?

- *Client* intervention – when does the *Client* have the right to intervene in the performance improvement process?

- Reporting frequency – how frequently does the Alliance need to provide performance reports to the *Client*?

- Right to initiate termination process – after what period of insufficient improvement will a right to terminate arise?

167. The following provides descriptions of the performance improvement process for each scenario

168. Scenario One: Performance failure at the overall Alliance level

- In this scenario the Alliance has failed across the majority of Schemes and metrics.

169. Scenario Two: Underperformance at the Alliance level

- In this scenario the Alliance has underperformed across the majority of Schemes and metrics.

170. Process for Scenarios One and Two

- The *Client* intervenes immediately and initiates the *Client*-led performance improvement process.

- Reporting on performance is increased to monthly and if performance is not improved to satisfactory levels after three months (Scenario One) or nine months (Scenario Two) the *Client* may terminate in accordance with Clause 91.4 of the conditions of contract.

171. Scenario Three: Performance failure of a Scheme or metric at Alliance level

- In this scenario the average score of a Scheme across the full suite of metrics is below a two (performance failure) or an average metric score across all Schemes is below a two (performance failure).

172. Scenario Four: Underperformance of a Scheme or metric at Alliance level

- In this scenario average Scheme performance across the full suite of metrics is between two and six (underperformance) or an average metric score across all Schemes is between two and six (underperformance).

173. Process for Scenarios Three and Four

- The Alliance initiates a performance improvement process which will be defined collectively during mobilisation.

- Performance reporting to the *Client* increases to monthly and if performance is not improved to satisfactory levels within three months (Scenario Three) or six months (Scenario Four) the *Client* may initiate its performance improvement process.

- If performance is not improved to satisfactory levels within a further six months (Scenario Three – 9 months in total; Scenario Four - 12 months in total) the *Client* may terminate in accordance with Clause 91.4 of the conditions of contract.

174. Scenario Five: Performance failure of a metric at Scheme level

- In this scenario a specific metric on a Scheme scores below a two (performance failure).

175. Scenario Six: Underperformance of a metric at Scheme level

- In this scenario a specific metric on a specific Scheme scores between two and six (underperformance).

176. Process for scenarios Five and Six

- There is no formal process for *Client* intervention, nor the right to terminate for performance failure in these scenarios.

- The expectation is that the Alliance will investigate continued underperformance of a specific metric on a Scheme. The incident management process below defines a mechanism whereby the Alliance Manager may open an investigation and subsequent performance improvement process in the event of an incident (often a cause of underperformance).

8.7 *Client*-led performance improvement process

177. If the Alliance is subject to a *Client*-initiated performance improvement process the Alliance must follow the outlined process

- on initiation of the *Client* performance improvement process, the Alliance must create a performance improvement plan within 14 days to outline how they intend to improve performance in the failing areas to an acceptable level,

- the performance improvement plan is taken to the Alliance Board to be reviewed by the *Client* and is approved once all queries raised by the *Client* are addressed,

- the Alliance reports against the performance improvement plan on a monthly basis to the Alliance Board also providing a full performance report to assess Alliance performance across the full suite of metrics,

- during the monthly reviews, an assessment is made on the effectiveness of the performance improvement plan and a decision is taken on whether to make amendments or additions to the plan,

- in the event that sufficient performance improvement has not been made, the *Client* may order an audit of a particular Scheme and will be a Client's Cost.

- if sufficient improvement is not made in the time periods stipulated in Figure 9: Poor performance scenarios, a right to terminate will arise in accordance with the *conditions of contract*, and

- in addition, if the Alliance improves performance to a sufficient level but does not sustain performance improvements for a period of six months then the performance improvement process recommences at the point at which it ended (e.g. if the Alliance had been failing performance for two months, improved for zero to six months but then began failing again, they would have one month before the *Client* retains the right to terminate).

8.8 Alliance-led performance management

178. Within six months of the Alliance Start Date, the Alliance will develop a Partner-level performance framework that

- seamlessly aligns with the Alliance-level performance framework,

- ensures performance can be attributed to an individual Partner,

- identifies when a Partners participation in the Alliance can be terminated.

179. The approach will be reviewed and approved by the Alliance Board to ensure alignment to the *Client*-led performance management approach.

8.9   Incident management process

180. Following an incident on a particular Scheme (as referenced in section S1118 of the Scope), the Alliance Manager determines whether a formal investigation is required.

181. If a formal investigation is undertaken and it is determined that a formal performance improvement process is to be undertaken the Alliance/Partner is required

- to produce a performance improvement plan in accordance with the respective performance improvement processes (Section 8.7 and 8.8), and

- increase performance reporting to the *Client* to a monthly basis.

182. The Alliance Manager reviews the plan and approves once all queries have been addressed.

183. The Alliance Manager monitors progress against plan and makes judgement to close incident management process when they believe sufficient progress has been made.

184. Note that this process is in addition to the formal performance reporting process.

9.   Common systems and processes

9.1   Mandated common systems

185. The Alliance uses technology solutions, standards, and processes in order to ensure

- compliance with the statutory obligations of the *Client* as a government company,

- direct comparability between programmes delivered by the Alliance and other programmes within the remit of Major Projects, and

- compatibility with the *Client's* technology architecture.

186. Systems are split into two categories

- defined systems – where the Partners must use a particular system for the duration of the Alliance. Changes from defined systems are permitted if the information is provided in accordance with the information requirements (outlined in S1700 of the scope) and a business case is approved, and

- undefined systems – where the Partners have the gift to use systems of their choice, as long as the data is provided in accordance with the information requirements.

187. The following defined systems are used by the Alliance for the activities stipulated in brackets

- Primavera P6 (Project management/ scheduling),

- Business Collaborator (Document management),

- Xactium (Risk management),

- CEMAR (Contract administration),

- AIRSWeb (Safety reporting),

- PRISM,

- REM (Design), and

- Project Wise.

188. Defined systems part of the Client System, the costs of licensing and training would be treated as *Client's* Cost. Both the number of licenses and level of training will be determined within 6 months of the Alliance Start Date, with the *Client* retaining the right to consider (and determine) the reasonableness of requests for licenses and training from the Partners.

189. Revised or additional systems (to the above list) may be implemented if notified by the Alliance Manager or introduced by the *Client*.

190. The Partners may request the *Client* to provide training for all the systems listed above.

191. The Partners propose a list of appropriate staff to be trained for each requirement for acceptance by the *Client*. The Partners liaise with the *Client* to programme the training.

192. Where the *Client* needs to use the systems being implemented by the Partners, the Partners will identify what training the *Client* needs and will provide this to the *Client* for acceptance. The Partners then provide the training following acceptance.

9.2   Alliance workflow

193. Four Alliance workflows have been drafted to illustrate the stages through which each programme of works and each Scheme will pass, and the involved parties during each.

194. Note that the workflows developed depict the Alliance operating in an enduring state. There will likely be an interim state at the start of the contract period, where as much of the enduring state will be implemented as possible.

195. An overview of the Alliance workflows illustrates the differences from the traditional approach to design and delivery in more detail. There are four workflow areas for the Alliance in its enduring state (i.e. following formation of the Alliance). These workflows set out the process whereby the programme budget is set (including the interface with Department for Transport), and the *Client* with the Alliance then plans, designs and delivers the programme. These workflows include

- progression for funding approval,

- programme level strategy and plan development,

- Scheme level planning and design, and

- Scheme level delivery.

Progression for funding approval

196. Programmatically, as the project comes on stream, the *Client* in collaboration with the Alliance will have defined the timing and phasing of the works. This will provide a clear line of sight to the pipeline of activity and will provide confidence of future revenue. This in turn will enable investment to improve products and services delivered within the Alliance.

Programme level strategy and plan development

197. The members of the Alliance come together within the Production Hub to define an efficient programmatic approach. This will support the delivery of the Supply Chain Strategy. Pre-assembly of standard products off-site will be arranged to minimise time

on-site. The Production Hub will be resourced from all members of the Alliance to create centres of excellence in functions and services previously dispersed and duplicated, reducing cost and improving standardisation. The Production Hub will then drive through the solution from start to end to optimise the total solution, and will lead the continuous improvement cycle to ensure that lessons learnt are used to improve both future projects as well as the programmatic approach.

Scheme level planning and design

198. The Digitally Enabled Design Function will input survey data through the REM to determine the key elements of the solution and utilise standard design principles. Digital rehearsals will run through the design with the On-site Assembly and Delivery Function and the supply chain to confirm readiness of the design and construction plan, that all parties have a single version of the truth, and as a hold point in advance of the start of work. This will reduce time on site and give the greatest chance for success. The Digitally Enabled Design Function will take design from initial concept through design evolution to design delivery, removing hand-offs and increasing the resilience of designs, while reducing the design repeats. Standardisation in design will allow us to deliver design closer to delivery in terms of timing.

Scheme level delivery

199. The On-site Assembly and Delivery Function will receive clear designs that have considered manufacturing throughout the process, having played an active role in design, planning and alignment of the supply chain. The function's role will be far more focussed on the on-site assembly activities as opposed to the support and preparatory work, which will have moved into the Production Hub. This will reduce the focus on contract and commercial management. The preparatory work, tested design and the pre-assembly of key products, will reduce onsite time. The potential for sharing of specialised resources will help drive down costs and help retain critical resource. The Alliance will work together to standardise the methods of delivery. This consistency and reduced on-site working will improve safety and the customer experience.

200. The Supply Chain, whilst sitting outside of the contracted Alliance, will have visibility of the pipeline of workload well in advance. Long term partnering arrangements, supported by the programmatic approach to category management and the supply chain, and driven through the Production Hub, will enable and them to invest in new technology and to innovate, improving the products in terms of total cost to operate. They will be involved far earlier in the process to input design and delivery planning experience to the Production Hub, digital rehearsal and logistics, enabling efficiencies to be realised. Off-site pre-assembly of standardised products will reduce costs and improve consistency of the solution.

10. Mobilisation Plan

10.1 Mobilisation overview

201. The mobilisation phase is critical for all the members to come together and agree how to proceed. In particular, for full mobilisation and benefits realisation, whereas accelerated mobilisation will need to have more pre-work and prescription.

202. Our approach to mobilisation is impacted and influenced by the time between the Alliance Start Date and the commitments to SoW made by the *Client*, which has led us to adopt a two-stage mobilisation approach

- stage one will be an accelerated mobilisation to meet the SoW commitments, conscious that this will be a mobilisation with the primary objective of satisfying those commitments, and not to provide the foundation for sustainable delivery of the business case benefits which underpin our move to an Alliance operating model, and

- stage two will be a full mobilisation to enable the delivery of the business case benefits which underpin our move to an Alliance operating model, as soon as possible within the contract duration.

203. The two stages of mobilisation will form one integrated plan (as opposed to two separate plans) and any mobilisation effort will be proportionate to the work awarded at the Alliance Start Date.

10.2   Purpose of the proposed approach

204. Figure 10: High level mobilisation approach below provides a visual representation of the approach to be taken during mobilisation.
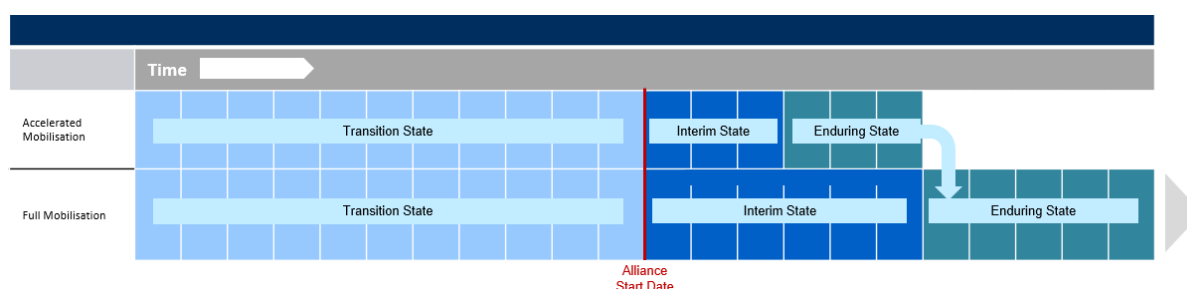

Figure 10: High level mobilisation approach

205. The accelerated and full mobilisation will run concurrently for a period of time. The accelerated mobilisation ends six months after the Alliance Start Date and the enduring phase of the full mobilisation commences.

206. The approach taken for mobilisation has been selected to ensure the delivery of the following benefits

- to meet Scheme milestones – the two stage approach ensures that Schemes, or components thereof, with a SoW date shortly after Alliance Start Date commence on time with the necessary work done prior to the start date to ensure a safe and efficient delivery, and

- to enable realisation of the benefits outlined in the business case – conducting a more comprehensive mobilisation for remaining Schemes ensures the Alliance is set up for success increasing the probability of realising business case benefits.

10.3   Approach to mobilisation

207. The members of the Alliance will actively be involved in mobilisation for both accelerated and full mobilisation.

208. The mobilisation of the Alliance has been split into three phases

- **transition phase** prior to Alliance Start Date, the *Client* completed the transition phase of mobilisation. This consisted of "no regret" investments that could be completed pre-Alliance Start Date. A number of these activities completed were focussed on ensuring the *Client* meets its SoW dates on Schemes due to commence construction shortly after the Alliance Start Date,

- **interim phase** from the Alliance Start Date for six months (for full mobilisation) and three months (for accelerated mobilisation).

- the **enduring phase** includes activities that can be completed following the interim mobilisation phase to take the Alliance from an interim state to an enduring state.

209. At the end of each phase, an assessment against go / no-go criteria (to be provided to the Alliance at the Alliance Start Date) is conducted. The criteria will be formed of Scheme-level and Alliance-level criteria to ensure the Alliance is set up to deliver, both, the schemes starting shortly after the Alliance Start Date and the broader SMP over the longer term.

210. Mobilisation is split into two stages: accelerated mobilisation and full mobilisation

- **accelerated mobilisation** focuses on the critical activities required to ensure the on time commencement of Schemes starting shortly after the Alliance Start Date. These activities will require input from all members of the Alliance (and therefore could not be complete during the transition phase) for example the appointment of senior or operational roles and the establishing of internal performance reporting processes, and

- **full mobilisation** is the broader, longer-term mobilisation which includes all activities identified as required to set the Alliance up for success. The full mobilisation process will seek to create the foundation for the Alliance to establish itself and mature over future years and realise business case benefits.

211. The activities outlined across all phases of the mobilisation plan are split into six dimensions

- **pure mobilisation** – focuses on the general activities required to ensure the successful delivery of all Schemes delivered under the Alliance including the development of a delivery plan,

- **commercial and supply chain** – includes activities to support the development of the Supply Chain Strategy ensuring the Alliance effectively develops and manages its supply chain,

- **people, structure and location** – details the activities required to support: onboarding, establishing of key forums (e.g. Business Readiness Implementation Group (BRIG)) and development of an environment/culture that drives the right behaviours,

- **digital and innovation** - outlines the plan to harness digital technologies and innovations delivering efficiencies across Alliance,

- **performance** – outlines the activities required to manage, measure, report and improve performance of individual Partners and the Alliance, and

- **systems and processes** – includes the activities required to define and implement the systems landscape in addition to the development of processes

across design, construction and production management identifying opportunities for standardisation and simplification.

10.4   High level mobilisation plan

212. The following list provides a view of the products that need to be produced by the Alliance following the Alliance Start Date. Note that this is not an exhaustive list of products.

Document/Action	Reference	Timeframe due*
Develop the indicators to be included in the Performance Table and inform the goals fee	Performance Table	within three months of the Alliance Start Date
Alliance Business Plan	IP (Section 3)	within six months of the Alliance Start Date
Propose, and receive *Client* approval for, the Alliance tender commitments	IP (Section 13)	within three months of the Alliance Start Date
Produce methodology, and receive *Client* approval, for measuring Earned Value	Scope (S1530)	within three months of the Alliance Start Date
Select initial core Production Management Partner resources	IP (Section 5.5)	within three months of the Alliance Start Date
Transition plan	IP (Section 7.3)	within three months of the Alliance Start Date
Change impact assessment template (page 11)	IP (Section 2.4)	within six months of the Alliance Start Date
Risk management template	IP (Section 5.4)	within three months of the Alliance Start Date
Supply Chain Strategy	IP (Section 7.2)	within six months of the Alliance Start Date
Alliance industrial plan	IP (Section 7.2)	within six months of the Alliance Start Date
Partner-level performance framework	IP (Section 8.10)	within six months of the Alliance Start date
Partner-level performance reporting process	IP (Section 8.10)	within six months of the Alliance Start Date
Supply Chain Management Plan	IP (Section 7.4)	within six months of the Alliance Start Date
Collaboration Procurement Hub Plan	IP (Section 7.5)	within six months of the Alliance Start Date
Inclusion Action Plan	Scope (Annex D S275)	within six months of the Alliance Start Date
Alliance Employment and Skills Plan	Scope (S276)	within six months of the Alliance Start Date
Leading and lagging quality indicators	Scope (S645)	within six months of the Alliance Start Date
Audit Programme	Scope (S262)	within six months of the Alliance Start Date
Alliance Quality Register	Scope (S630)	within four weeks of the Alliance Start Date
Information Risk Assessment	Scope (S825)	within four weeks of the Alliance Start Date

Document/Action	Reference	Timeframe due*
Information Security Plan	Scope (S825)	within three months of the Alliance Start Date
Business Continuity Plan	Scope (S835)	within six months of the Alliance Start Date
Co-location Plan	Scope (S1000)	within six months of the Alliance Start Date
Supply Chain Health and Safety Maturity Matrix	Scope (S1105)	within three months of the Alliance Start Date
EVM Methodology	Scope (S1505)	within six months of the Alliance Start Date
Alliance Information Execution Plan (IEP)	Scope (S1705)	within six months of the Alliance Start Date
the Project Information Model (PIM)	Scope (S1705)	within six months of the Alliance Start Date
Alliance Master Information Delivery Plan (MIDP)	Scope (S1705)	within six months of the Alliance Start Date

Table 7 High level mobilisation plan

*document/action must be produced/completed as necessary but no later than the timeframe specified in the table

10.5   Developing the mobilisation plan

213. The Alliance Manager will collate the mobilisation activities of all Partners into a draft Alliance Mobilisation Plan prior to the Alliance Start Date.

214. Following Alliance Start Date, the Partners are expected to review, comment and approve the interim and enduring phases of the mobilisation plan. The Alliance Manager will then baseline the plan.

215. The members of the Alliance may co-locate (virtually and physically), as necessary, during the interim and enduring phase of the Alliance to ensure the most effective mobilisation as possible.

11.   Maturity plan

216. The Alliance will come together during the initial mobilisation phase to develop a maturity plan which will outline the aspirations of the Alliance to evolve from a standard operational and delivery method to Provide the Works through to an enterprise model of operation. In this context an enterprise model of operation is a fully integrated Alliance team with a management approach and culture that enables the collaborative pursuit of commercial efficiency and/or performance improvement to become a standard part of the Alliance's delivery process.

217. The Alliance will produce a five-year rolling maturity plan across a number of key areas of focus, including but not exhaustive of

- People structure and location,

  o SMP resources – ensuring the smooth running of all programmes across the SMP and transition to the Alliance sole delivery of the SMP,

  o *Client* presence in Alliance – the development of the *Client* in the Alliance to ensure resilience,

- o location – ensuring the co-location of resources where required to deliver core activities and maximise efficiency of Alliance operations,

- o EDI – delivering the EDI policy consistently across the Alliance,

- o integration of roles – the approach to rationalising and streamlining roles within the Alliance,

- o culture and behaviours – ensuring the right behaviours are observed and sustained within the Alliance as per the Behavioural Maturity Framework outlined in Annex B,

- o engagement strategy – delivery of a collaborative internal engagement strategy, and

- o skills and talent development – understanding current and future skills requirements, the skills gaps across the Alliance and the approach to addressing the gaps.

- Digitisation and innovation,

  - o digital strategy – the development of a digital strategy which supports the delivery of the Alliance objectives, and

  - o innovation strategy – the development of an environment where innovation is embedded into day-to-day Alliance operations and benefits tracked.

- Commercial and Supply Chain,

  - o Supply Chain integration – development of a single solution to sourcing Suppliers embedded across the Alliance,

  - o tier two Supply Chain involvement – integration of tier 2 and 3 suppliers into the planning process,

  - o primary contracts to manage SMP activity – development of a more centrally managed programme,

  - o SME spend – plan to meet the % SME spend set by the government,

  - o Subcontractor capability development – establishing present state capability of the Supply Chain and developing a plan to support the development of Subcontractors, and

  - o KPI alignment – ensuring alignment of Alliance outcomes and DfT outcomes throughout delivery of the SMP.

- Systems and processes,

  - o systems landscape – the development of a fully integrated, agile and scalable systems landscape,

  - o digital rehearsals (off-site) – development of an approach to digital rehearsals in order to prevent on-site issues arising,

  - o asset data integrity – the eradication of data integrity issues to ensure the delivery of the data strategy and support effective decision making,

   o management information – ensuring a single version of the truth for effective decision-making,

   o standardisation of design – the development of an agile, standardised process to design,

   o effectiveness of design – developing ways of working to limit the need for design rework (e.g. through strong relationship between designers and contractors),

   o standardisation of construction management processes – the productionisation of the delivery process with a standard approach to delivery, and

   o standardisation of Production Hub management processes – development of programme-wide strategies and processes, and

   o decision making authority – plan to provide the Alliance with increasing responsibility in discharging of duties.

- Performance

   o quality and continuous improvement – development of an integrated management system to deliver consistent quality across all Schemes and in overall Alliance operations,

   o efficiencies – the delivery of efficiencies throughout the life of the Alliance,

   o customer experience – ensure the best possible customer experience through roadworks, and

   o health, safety and wellbeing – development of an integrated approach to achieve industry-leading standards in health, safety and wellbeing.

218. The five-year rolling maturity plan should focus on phases including

- the six months following Alliance Start Date, and

- to the end of each subsequent year of operation.

219. The evolution should be clearly articulated in terms of the developing maturity from

- base level – the Alliance operating through each Partner targeting and meeting contractual requirements, to

- developing – integration of all Partner's people and functions, to

- advanced – high-performing collaborative integrated Alliance.

220. It is anticipated, but not mandated, that the plan will be pictorially represented by a plan on a page summary, backed up by a detailed document articulating each focus area and its evolution over the five-year rolling period.

221. The five-year rolling maturity plan should be updated annually, as a minimum, and signed off unanimously by the Alliance Board.

12. Performance Table

222. The Performance Table Information sets out rules and guidance and provides templates to inform the Alliance in agreeing the Performance Table, and is included in Annex H Performance Table Information

223. The Alliance agrees the first Performance Table within 3 months of the Alliance Start Date in accordance with the Performance Table Information.

224. The Alliance agrees an update to the Performance Table (in accordance with the Performance Table Information in Annex H Performance Table Information) within 3 months of any of the following

- issue of a Scheme Order,

- change in Alliance membership,

- termination of a Partner's participation in the Alliance, or

- cancellation of a scheme.

225. On an annual basis, the Alliance agrees a Performance Table for each Performance Period in accordance with the Performance Table Information.

13. Commitments

226. The Alliance Manager selects which commitments from the Commitment SLA Register are to be delivered by the Alliance in accordance with Clause Z15.

227. The Alliance Manager selects the first commitments and obtains necessary approval from the Alliance Board within 3 months of the Alliance Start Date. The Alliance Manager then reviews the commitments every quarter and selects/ deselects commitments for delivery by the Alliance with approval of the Alliance Board.

228. The Alliance Manager identifies which Partner is to deliver the commitment (the lead Partner). The lead Partner will be the Partner who submitted the commitment at tender stage and is identified as such in the Commitment SLA Register.

229. The Alliance Manager selects commitments from the Commitment SLA Register and obtains approval from the Alliance Board as follows

Commitment	Approval
Commitments to be delivered by the lead Partner that do not impact or have dependencies on other Partners must be selected.	No approval required
Commitments to be delivered by the lead Partner that are dependent on other Partners or affecting the Alliance must be selected with agreement of the other Partners	Alliance Board approval majority vote with *Client* veto
Commitments conflicting with each other or mutually exclusive must be selected between by the Alliance Manager with agreement of the other Partners.	Alliance Board approval majority vote with *Client* veto

Table 8 Commitments for selection and approval

230. The Alliance Manager identifies commitments to be delivered within the Performance Period for inclusion in the Performance Table in accordance with the Performance Table Information (see Annex H Performance Table Information).