



High Speed 2 Phase One

Supply Chain Conference

Beth West – Commercial Director

Phase One – Supply Chain Opportunity

- Duration and Budget:
 - 9.5 years
 - £17.16bn (HS2 Ltd target cost)
 - Average spend £2bn per year
- Infrastructure
 - 230km new high speed line
 - >50% route in cuttings or tunnels
 - Approximately 100 bridges and viaducts
 - Four stations
 - Associated railway systems
 - Rolling Stock and Depot
 - Links to HS1 and West Coast Main Line

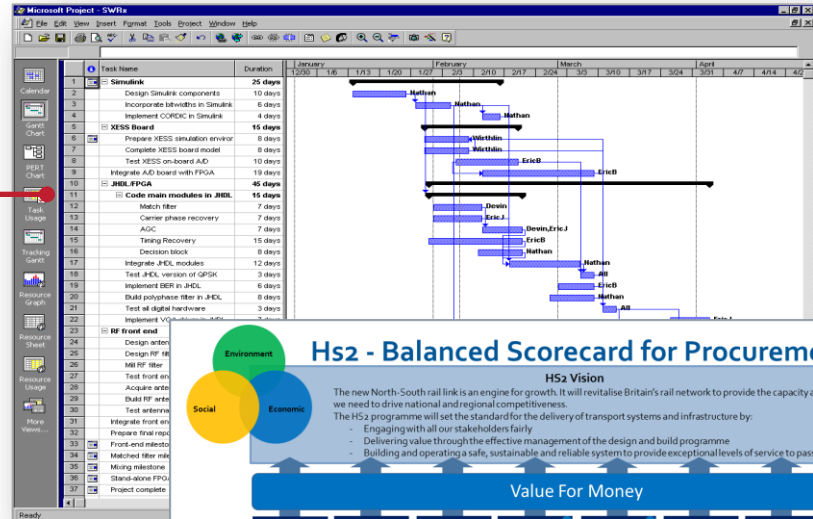
Programme



- Early Works Procurements:
 - Ground Investigation Services
- Phase 1 Categories:
 - Design Services £0.3bn
 - Enabling £0.6bn
 - Tunnels £2.9bn
 - Stations £2.6bn
 - Surface Route £2.7bn
 - Systems £1.5bn
 - Rolling Stock £2.0bn

Delivering Value for Money

- Detailed Procurement Plans

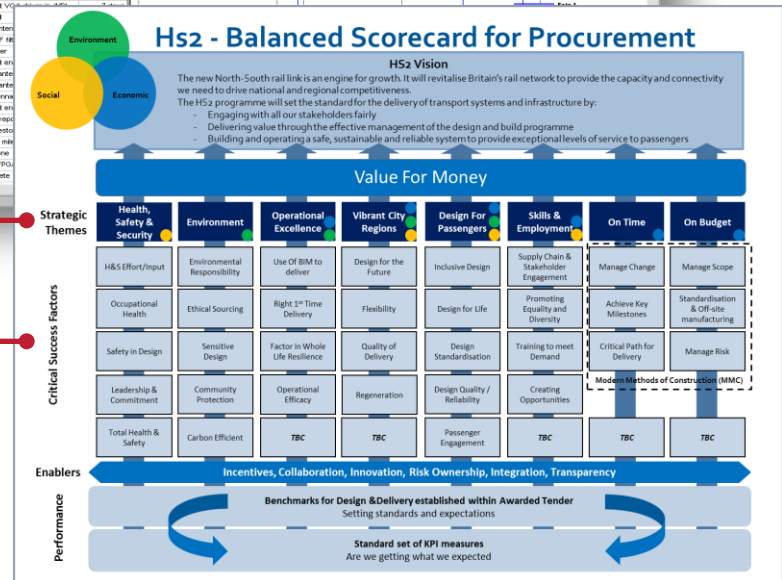


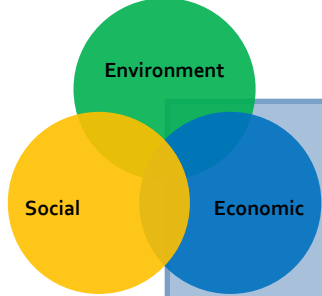
- Utilities Regulations



- Strategic Themes

- Balanced Scorecard





Hs2 - Balanced Scorecard for Procurement

HS2 Vision

The new North-South rail link is an engine for growth. It will revitalise Britain's rail network to provide the capacity and connectivity we need to drive national and regional competitiveness.

The HS2 programme will set the standard for the delivery of transport systems and infrastructure by:

- Engaging with all our stakeholders fairly
- Delivering value through the effective management of the design and build programme
- Building and operating a safe, sustainable and reliable system to provide exceptional levels of service to passengers

Value For Money

Strategic Themes

Health, Safety & Security	Environment	Operational Excellence	Vibrant City Regions	Design For Passengers	Skills & Employment	On Time	On Budget
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Critical Success Factors

H&S Effort/Input	Environmental Responsibility	Use Of BIM to deliver	Design for the Future	Inclusive Design	Supply Chain & Stakeholder Engagement	Manage Change	Manage Scope
Occupational Health	Ethical Sourcing	Right 1 st Time Delivery	Flexibility	Design for Life	Promoting Equality and Diversity	Achieve Key Milestones	Standardisation & Off-site manufacturing
Safety in Design	Sensitive Design	Factor in Whole Life Resilience	Quality of Delivery	Design Standardisation	Training to meet Demand	Critical Path for Delivery	Manage Risk
Leadership & Commitment	Community Protection	Operational Efficacy	Regeneration	Design Quality / Reliability	Creating Opportunities	Modern Methods of Construction (MMC)	
Total Health & Safety	Carbon Efficient	TBC	TBC	Passenger Engagement	TBC	TBC	TBC

Enablers

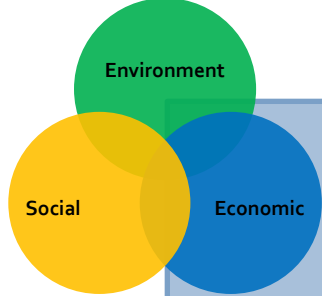
Incentives, Collaboration, Innovation, Risk Ownership, Integration, Transparency

Performance

Benchmarks for Design & Delivery established within Awarded Tender
Setting standards and expectations

Standard set of KPI measures
Are we getting what we expected





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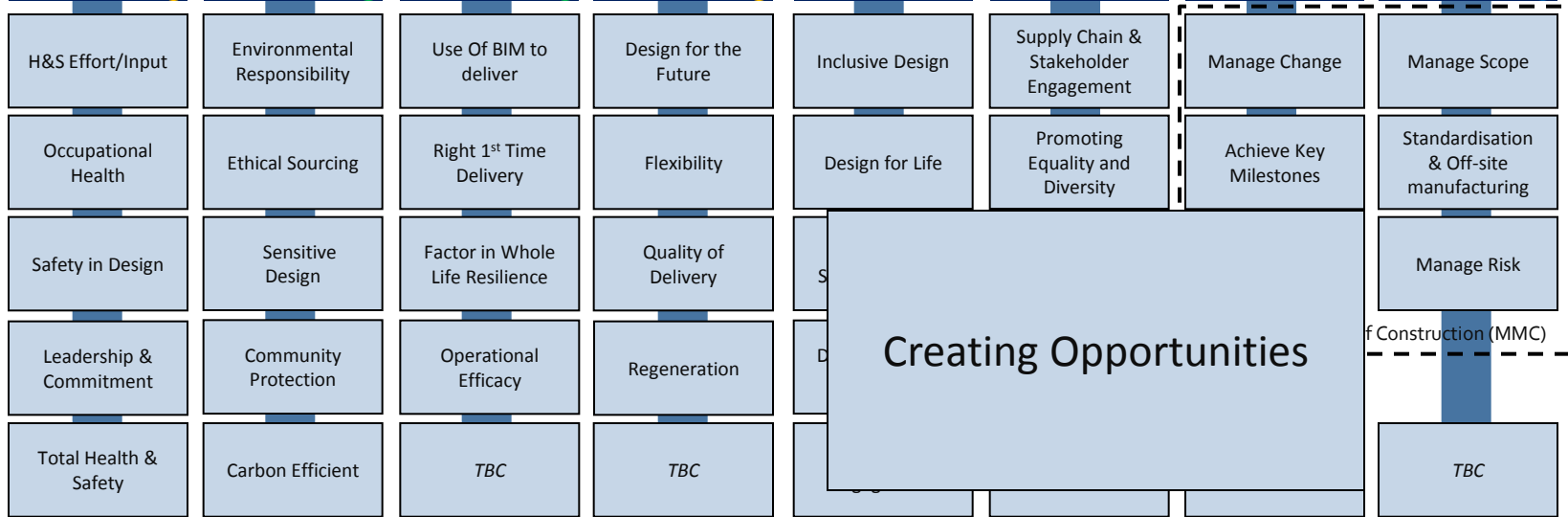
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HS2 - Balanced Scorecard for Procurement

- Regional Economic Stimulation
- Training / Apprentices
- Local Employment
- Engage Local Businesses
- Opportunities for SME's
- Community Enrichment

Creating Opportunities

Enablers

Incentives

Collaboration

Innovation

Risk Ownership

Integration

Transparency

- Programme level incentives, cascading incentives through the whole supply chain
- Strong client leadership / Demonstrable Ability to Work Collaboratively
- BIM / Modern Methods of Construction: off-site and pre-fabrication
- Fair and Appropriate / Work Jointly to Manage
- Seeking Integrated teams / Use of a common BIM Framework
- Regular engagement / supply chain input

Efficiencies

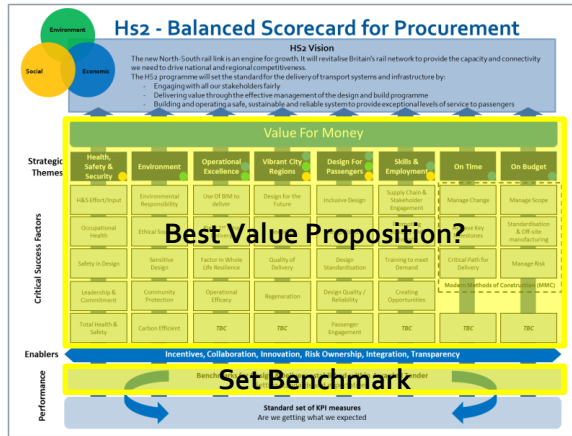
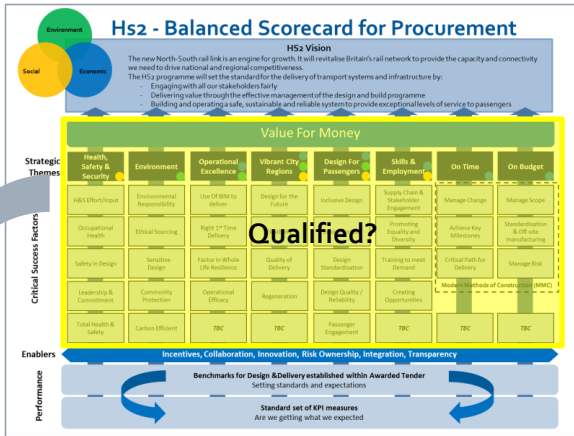
- No: redesign, rework, man marking
- More: successful methods, materials and manufacturing as used in other industries and countries
- Always: considering whole life costs and benefits

Procurement

EVALUATE

PQQ - Ability

ITT - Potential



Pre-qualification

- Organisational
- Historic
- Ability:
 - Qualifications
 - Policy

Tender

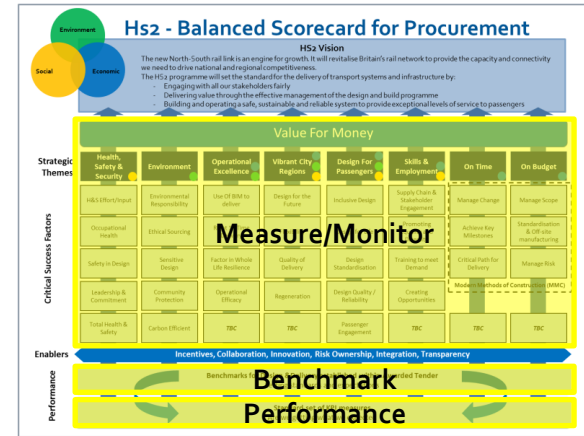
- Project
- Future
- Value proposition:
 - Methodology
 - Offer

Award

- Delivery
- Actual
- Value Added:
 - Activity
 - Outputs

Delivery

Actual



Halt / Proceed

Award

Manage Performance

Outline Packaging Strategy

Package (value £m)	Summary Approach
Tunnels (2,900)	4 main packages of work, geographically based with interfaces determined by tunnel type and construction methodology.
Surface Route (2,700)	3 to 6 main packages of work, geographically based with interfaces taking into account engineering issues.
Stations (2,600)	4 main packages (one main per station), but with the option of combining the Birmingham stations and splitting Euston into several packages.
Enabling Works (600)	New framework agreement established, using 'Lots' for different work types and locations.
Railway Systems (1,500)	4 to 6 route-wide packages, functionally based with number of systems per package based on market capability and technical interfaces.
Design Services (350)	Multi-disciplinary packages to progress design to a level appropriate to the contracting strategy and provide on-going Employer's agent duties as required.
Rolling Stock, Depots and Signalling (2,000+)	Single package, with location of depots to be established by HS2 Ltd.

Outline Contracting Strategy

Package	Contract	Approach
Tunnels	ECI Based on NEC ₃	Employer prepares Preliminary Design approx. RIBA C / GRIP ₃ Early Contractor Involvement (ECI), i.e., an integrated contractor and designer team appointed under an incentivised 2-stage contract with a break point between stages 1 and 2: stage-1, develop design, construction planning and agree works price; stage-2, detailed design and build.
Surface Route	ECI Based on NEC ₃	Approach as tunnels.
Stations	ECI Based on NEC ₃	Approach as tunnels.
Enabling Works	Framework Based on NEC ₃	Amount of Employer design and NEC ₃ option to be tailored to the work package.
Railway Systems	ECI or D&B Based on NEC ₃	Employer prepares a performance specification. ECI approach as tunnels, or Design and Build (D&B), i.e., an integrated contractor and designer team appointed to an incentivised 1-stage contract.
Design Services	Framework Based on NEC ₃	Use of HS2 Ltd's existing professional services framework (PSF) pre-Royal Assent until expiry, followed by replacement with a new PSF to include design services to suit the contracting strategy.
Rolling Stock, Depots and Signalling	Bespoke	Employer prepares a performance specification. Term contract to supply and maintain the rolling stock, depots and signalling.

Market Engagement going forward

