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

Phase One

|------|------|------|------|------|------|

- **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 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

**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

- Right 1st Time Delivery
- Flexibility
- Design for Life
- Promoting Equality and Diversity
- Achieve Key Milestones
- Manage Scope

- Safety in Design
- Factor in Whole Life Resilience
- Quality of Delivery
- Design Standardisation
- Training to meet Demand
- Standardisation & Off-site manufacturing

- Sensitive Design
- Operational Efficacy
- Regeneration
- Design Quality / Reliability
- Creating Opportunities
- Critical Path for Delivery

- Occupational Health
- Ethical Sourcing
- Carbon Efficient
- TBC
- Passenger Engagement
- TBC
- Manage Risk

- Leadership & Commitment
- Community Protection
- TBC
- TBC

- Total Health & Safety
- Health, Safety & Security
- Carbon Efficient
- 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

**Total Health & Safety**

- Sensitive Design
- Operational Efficacy
- Regeneration
- Design Quality / Reliability
- Creating Opportunities
- Critical Path for Delivery
- Manage Risk

- Health, Safety & Security
- Carbon Efficient
- TBC
- TBC

- Environmental Responsibility
- Use Of BIM to deliver
- Design for the Future
- Inclusive Design
- Supply Chain & Stakeholder Engagement
- Manage Change

- Right 1st Time Delivery
- Flexibility
- Design for Life
- Promoting Equality and Diversity
- Achieve Key Milestones
- Manage Scope

- Safety in Design
- Factor in Whole Life Resilience
- Quality of Delivery
- Design Standardisation
- Training to meet Demand
- Standardisation & Off-site manufacturing

- Occupational Health
- Ethical Sourcing
- TBC
- TBC

- Leadership & Commitment
- Community Protection
- TBC
- TBC

- Total Health & Safety
- Health, Safety & Security
- Carbon Efficient
- TBC
- TBC

**H&S Effort/Input**

- Environmental Responsibility
- Use Of BIM to deliver
- Design for the Future
- Inclusive Design
- Supply Chain & Stakeholder Engagement
- Manage Change

- Right 1st Time Delivery
- Flexibility
- Design for Life
- Promoting Equality and Diversity
- Achieve Key Milestones
- Manage Scope

- Safety in Design
- Factor in Whole Life Resilience
- Quality of Delivery
- Design Standardisation
- Training to meet Demand
- Standardisation & Off-site manufacturing

- Occupational Health
- Ethical Sourcing
- Carbon Efficient
- TBC
- TBC

- Leadership & Commitment
- Community Protection
- TBC
- TBC

- Total Health & Safety
- Health, Safety & Security
- Carbon Efficient
- TBC
- TBC
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**

- **Health, Safety & Security**
  - H&S Effort/Input
  - Occupational Health
  - Safety in Design
  - Leadership & Commitment
  - Total Health & Safety

- **Environment**
  - Environmental Responsibility
  - Ethical Sourcing
  - Sensitive Design
  - Community Protection
  - Carbon Efficient

- **Operational Excellence**
  - Use Of BIM to deliver
  - Right 1st Time Delivery
  - Factor in Whole Life Resilience
  - Operational Efficacy
  - TBC

- **Vibrant City Regions**
  - Design for the Future
  - Flexibility
  - Quality of Delivery
  - Regeneration
  - TBC

- **Design For Passengers**
  - Inclusive Design
  - Design for Life
  - Promoting Equality and Diversity
  - Design for the Future
  - Regeneration

- **Skills & Employment**
  - Supply Chain & Stakeholder Engagement
  - Promoting Equality and Diversity

- **On Time**
  - Manage Change
  - Achieve Key Milestones

- **On Budget**
  - Manage Scope
  - Standardisation & Off-site manufacturing
  - Manage Risk

**Creating Opportunities**

**Enablers**

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

**Benchmarks for Design & Delivery established within Awarded Tender**

- Setting standards and expectations
- Standard set of KPI measures
- Are we getting what we expected
HS2 - Balanced Scorecard for Procurement

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

Creating Opportunities
Enablers

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
# Outline Packaging Strategy

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

<table>
<thead>
<tr>
<th>Package</th>
<th>Contract</th>
<th>Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunnels</td>
<td>ECI</td>
<td>Employer prepares Preliminary Design approx. RIBA C / GRIP3 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.</td>
</tr>
<tr>
<td>Surface Route</td>
<td>ECI</td>
<td>Approach as tunnels.</td>
</tr>
<tr>
<td>Stations</td>
<td>ECI</td>
<td>Approach as tunnels.</td>
</tr>
<tr>
<td>Enabling Works</td>
<td>Framework</td>
<td>Amount of Employer design and NEC3 option to be tailored to the work package.</td>
</tr>
<tr>
<td>Railway Systems</td>
<td>ECI or D&amp;B</td>
<td>Employer prepares a performance specification. ECI approach as tunnels, or Design and Build (D&amp;B), i.e., an integrated contractor and designer team appointed to an incentivised 1-stage contract.</td>
</tr>
<tr>
<td>Design Services</td>
<td>Framework</td>
<td>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.</td>
</tr>
<tr>
<td>Rolling Stock, Depots and Signalling</td>
<td>Bespoke</td>
<td>Employer prepares a performance specification. Term contract to supply and maintain the rolling stock, depots and signalling.</td>
</tr>
</tbody>
</table>
Market Engagement going forward

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month</td>
<td>Nov</td>
<td>Dec</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Next 6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beyond 6 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Procurement Strategy
- Engage Industry (email scc@hs2.org.uk)
- Enterprise Agencies
- Programme Industry Day (May 2014)

Key:
- Major Milestone
- Key Activity

Direct Opportunities Pipeline
Supplier Days – Common Components and Commodities
Project Industry Days
Direct Supplier Engagement (eg Market Soundings)
Develop and Publish Supplier guide
Begin Regional Engagement