



Invitation to Tender

RSSB1931 – Development of a 26m vehicle standard gauge

Dear Sir/Madam

We are pleased to invite you to tender for the above project. The following documents are enclosed.

Please read the instructions carefully.

- A. Instructions to Tenderers
- B. Conditions of Contract
- C. The Specification
- D. Pricing Schedule
- E. Tender Declaration (to be signed and returned with the tender)
- F. Invitation to Tender Acknowledgement

You must submit a compliant tender.

Tenders must be submitted by 5pm on Friday 15th May

Yours faithfully

Janita Vara
Procurement Team

A Instructions to Tenderers

TENDER

This Tender is for the development of a 26m vehicle standard gauge

Please see section C for the full specification of these services.

RSSB REPRESENTATIVE

Your main point of contact is: Janita Vara

Janita.Vara@rssb.co.uk and shareditt@rssb.co.uk

Should you have any queries please email the above.

RSSB OVERVIEW

We help the industry understand risk, guide standards, manage research, development and innovation and collaborate to improve.

The rail industry in Britain is made up of many different organisations, but they all form a system and share a common purpose, to move people and freight safely and efficiently by rail. RSSB bring all parts of this system together to support shared decisions, products and services, to help industry drive out unnecessary cost, improve business performance and develop long-term strategy.

Our activities involve:

- **Understanding risk** – Using safety intelligence from across the rail industry and elsewhere with the latest risk modelling to inform members and support safe decision making.
- **Guiding standards** – Creating, reviewing and simplifying GB standards to align with European requirements; managing the Rule Book and making it easier for the railway to deliver efficiently and safely.
- **Managing research, development and innovation** – Undertaking, commissioning and managing research and innovation programmes to address current needs, provide knowledge for decision making now and for the future, and promoting step changes to deliver the Rail Technical Strategy.
- **Collaborating to improve** – As an independent cross-industry body with a critical mass of technical expertise, supporting activities which require collaboration. These range from supplier assurance schemes (RISQS, RISAS) to confidential reporting (CIRAS), from health and wellbeing strategies to sustainability principles.

We are run by the industry, for the industry, with member companies from across the mainline system. The demand for our services comes from the industry itself, and from the involvement of cross-industry groups. For more information go to www.rssb.co.uk

BEST OVERALL VALUE

RSSB's policy is to select suppliers that offer the best overall value for itself and its Members. Price is only one component of overall value. Other factors considered include: the management, strength of the company; ability to control costs; emphasis on providing a quality service; technical capabilities and abilities.

TENDER TIMELINE

The expected project milestones are set out below

Project Objective	Date	Time
Tender Issue Date	20th April 2015	N/A
Tender Clarification Presentation	28th April 2015	15.00hrs
Question submission deadline	7th May 2015	17.00hrs
Response to questions	11th May 2015	17.00hrs
Tender Submission Date	15th May 2015	17.00hrs
Tender Evaluation Period	18th – 27th April 2015	N/A
Supplier Award	1st June 2015	N/A
Contract commencement Date	5th June 2015	N/A

Note: RSSB reserves the right to amend these dates as business requirements demand

TENDER CLARIFICATION PRESENTATION

Tenderers are invited to attend a tender clarification meeting where the Project Team will explain the scope and technical specification in more detail. This meeting will take place on the date detailed in the project timeline above. The venue for the meeting will be:

RSSB, Block 2, Angel Square, 1 Torrens Street, LONDON EC1V 1NY

Tenderers should endeavour to submit questions in advance to ensure responses to these can wherever possible, be dealt with during the presentation. A brief Q&A session will take place at the end of the presentation.

Should you wish to attend, please confirm and advise the name and title of the attendees in your acknowledgement email together with their contact details (email, mobile telephone numbers). **The maximum number of attendees is two.**

Tenderers not able to attend the presentation can request telephone conference details to dial in.

The agenda for the Tender Clarification Presentation will be made up as follows:

1. Opening and introduction
2. Background, objective and scope
3. Tenderers Q&A
4. Close

A copy of the presentation will be provided to all Tender participants. Therefore if you wish to participate in this tender and receive all questions and answers, please email Janita.Vara@hotmail.com to ensure that your organisation is included in all communications.

QUESTIONS

Should the Tenderer have any questions relating to the Tender Documents, please email these before the deadline detailed in the Project Timeline above. To ensure equal and fair treatment to all Tenderers, RSSB will circulate all questions and responses anonymously. Questions should be emailed to:

Janita.Vara@rssb.co.uk and shareditt@rssb.co.uk

REQUIRED RESPONSE FORMAT

You are required to provide a full written response to the requirements outlined within this Tender document. All questions/statements, where applicable, should be answered even if this requires a Not Applicable (N/A) response. Any numbering, where applicable, should be followed so it is clear when RSSB reviews the proposal which items can be met and which cannot.

1 Process and Preparation of Tenders

- 1.1** The fact Tenderers have been invited to submit a tender, does not imply RSSB satisfaction regarding all matters raised in any pre-tender information previously submitted.
- 1.2** The Tenderer shall not, before the date and time specified for return of the tender, communicate to any person the amount or approximate amount of the tender or proposed tender. Exception applies where the tenderer needs to obtain insurance premium, guarantees or bond quotations required for the purpose of the tender.
- 1.3** The Tenderer shall not enter into any agreement or arrangement with any third party which would in any way cause RSSB or its members to incur any financial obligations to the Supplier or any third party.

- 1.4** The Tenderer shall not canvass support for the award of the contract by approaching any employee of RSSB, its Representative or its agents.
- 1.5** The Tenderer shall not be, represent itself to be or act as an agent for RSSB or its members.
- 1.6** The documents as enclosed are required to be accepted in their entirety and no alteration will be allowed before the date stated for the receipt of tenders, unless notified and confirmed in writing by RSSB's representative. If any alteration is made or these Instructions to Tenderers are not fully complied with, the tender may be invalidated.
- 1.7** The conditions of contract included in this Invitation to Tender shall apply to any resultant contract and the Tenderer's standard terms of business or trade will not be accepted.
- 1.8** Any requested changes to the conditions of contract must be detailed on the Contract Issues Memo document included in the Tender pack for consideration. If this is not completed it is assumed the Tenderer has accepted all terms and conditions detailed and no further changes will be accepted.
- 1.9** The tender must include the Tender Declaration completed, signed by an authorised representative and accompanied by the detailed offer. Tenderers are required to tender prices in the Pricing Schedule, which incorporate everything necessary for and incidental to the provision of the goods, services or works, in accordance with the requirements of the tender. Any proposed contract amendments must be detailed in the Contract Issues Memo and submitted with the proposal.
- 1.10** The Tenderer shall be deemed to have satisfied itself as to the nature, extent and the content of the goods, services or works, to be provided, the extent of staff required and all other matters, which may affect the tender.
- 1.11** The Supplier will prepare and submit the Tender entirely at its own cost.
- 1.12** All prices quoted shall be in GBP (unless otherwise requested in the Tender Documents), exclusive of Value Added Tax and shall be firm.
- 1.13** It is the responsibility of the Tenderer to ensure calculations in the proposal are correct at the time of submission. No amendment to the Tender Documents will be allowed after the due date.
- 1.14** Where volumes are stated in this Invitation to Tender, RSSB gives these as estimates only and without commitment.
- 1.15** Any questions must be emailed to the main point of contact by the date detailed in the Project Timeline. Note: questions/responses will be circulated anonymously to all Tenderers.
- 1.16** Tenderers are requested to submit a tender for the specification outlined in Section C, **as one file only** in an unrestricted PDF format. The tender submission is required to include full details and all pages must be sequentially numbered. The tender should not comprise more than 12Mb of data including appendices. The size of the email submission must not exceed 15 Mb in total.

- 1.17** **Deadline:** The tender must be sent by email to janita.vara@rssb.co.uk and shareditt@rssb.co.uk by the deadline detailed above. Tenders emailed after the closing date and time will not be considered.
- 1.18** **Mailbox security:** Once a tender has been emailed it cannot be recalled or edited. If a supplier realises they have made an error in their tender, the only remedy for this is to email another tender which supersedes the original provided the deadline has not passed.
- 1.19** **Viruses:** The server virus checker will scan all documents when they are emailed; if a virus is detected the file will be deleted and the supplier notified. Provided that the deadline has not passed, the supplier will have the opportunity to replace with a clean file.
- 1.20** **Filenames:** The file name should be relevant to the tender number, supplier name and supplier reference and Issue number (For example, RSSB1100 Supplier name Supplier reference Issue number).
- 1.21** All response documents are to be completed in full giving details of pricing and related items. No further copies are to be supplied elsewhere unless requested or agreed in writing by the undersigned.
- 1.22** Tenders received after the closing date and time will not be considered.
- 1.23** RSSB does not bind itself to accept the lowest or any tender received, and reserves the right to call for new tenders should it consider this necessary. RSSB will not assign a reason for rejecting any response.
- 1.24** RSSB's Representative reserves the right to correct any omissions or inaccuracies in the Tender Documents and to clarify and/or amend any of RSSB's requirements, up to seven days before the return of tenders.
- 1.25** Tenders are required to remain open for acceptance for a period of 180 calendar days from the Tender Submission Date.
- 1.26** All information supplied by RSSB must be treated in confidence and not disclosed to third parties except insofar as this is necessary to obtain sureties or quotations for the purposes of submitting a tender. All information supplied by Tenderers similarly will be treated in confidence except that references may be sought from banks, existing or past clients or other referees submitted by Tenderers.

2 Particular Requirements of RSSB

- 2.1** It is RSSB's policy to maintain the highest standards of safety throughout its offices and land, and to fulfil its legal health and safety obligations. Tenderers visiting RSSB will be required to comply with RSSB's Health and Safety requirements.

3 Resources

- 3.1** The Tenderer should demonstrate how it will deploy staff with the depth and range of relevant technical, managerial and professional expertise sufficient to assure RSSB of its ability to provide the Works.
- 3.2** The Tenderer should state the skill areas it believes are key in delivering the Works.

- 3.3** The Tenderer must identify the numbers of staff currently available and to be recruited and the management arrangements and key positions that will be used to secure their initial deployment and continued presence in the provision of the Works.
- 3.4** Tenders must detail the names, background and expertise of the proposed people to deliver the Works (not just the organisations credentials). To achieve this, subcontractors may be used and will be considered to ensure an optimal delivery team.
- 3.5** The Tenderer must have an effective plan for mobilising resources, a summary should be included.
- 3.6** The Tenderer must describe the systems and procedures that it will use to mobilise and manage resources.
- 3.7** The Tenderer must indicate any support it will require from RSSB as part of its mobilisation/implementation plan.

4 Experience

- 4.1** The Tenderer should demonstrate and provide information relating to its previous experience of successfully providing services of similar type to those required in this ITT within the last three (3) years. For each example, the outline should indicate, inter alia, the profiles of the staff utilised, duration of the assignment and contract amount. The Tenderer should also include any examples where it has successfully taken over responsibility for service provision from another contractor.

5 Criteria for Award of the Contract

- 5.1** Following initial evaluation of tenders received, a shortlist will be drawn up. Short listed Tenderers may be required to give a presentation of their tender proposal to RSSB and respond to questions (commercial, technical and contractual). In evaluating tenders, the most economically advantageous offer or offers will be sought, having regard to the following criteria:

Evaluation Categories	Evaluation Criteria	Criteria category weighting	Criterion weighting
Resources and capabilities	How suitable are the key personnel / allocation of resource	10	5
	How adequate is the evidence of the supplier's track record of carrying out similar research in the last 5 years?		5
Quality of proposal	How well does the proposal understand the problem?	45	10
	How practicable is the proposed solution for the scope of work that is envisaged?		10
	Has the supplier listed the deliverables? How well are the anticipated deliverables described? How useful are the deliverables?		5
	How does the proposal show the potential for added value from this new gauge?		5
	Is the proposal technically robust?		10
	Is the document error free and well presented? This also includes design quality of outputs.		5
Project Requirements	How adequate are the project management and quality control systems?	15	5
	How well are the risks and mitigating measures identified?		5
	Has the supplier provided a Project Plan showing timescales and key activities/tasks?		5
Pricing	Price of Proposal (average man day rate and other associated costs clearly defined)	30	30

B Conditions of Contract

Below is an outline of the proposed form of Contract. Please detail any proposed clause amendments on the attached RSSB Contract Issues Memo for consideration. If you do not submit any proposed amendments, it will be assumed you have accepted all terms and there will be no further discussion. Please note acceptance of the standard contract may be taken into account during the evaluation process.

Research and Development Terms and Conditions

1 Definitions and Interpretation

1.1 In these Conditions the "Agreement" means the Agreement concluded between RSSB and the Contractor, including all specifications, plans, drawings and other documents which are relevant to the Agreement.

1.2 The following provisions shall have effect with respect to the interpretation of the Agreement except where the context requires otherwise:-

1.2.1 The "Work" means all work which is described in Schedule A to the Agreement together with all technical reports required to be supplied to the representative of RSSB and any modifications or amendments thereto that may be subsequently agreed in writing;

1.2.2 "RSSB" means Rail Safety and Standards Board Limited;

1.2.3 The "Contractor" means the person who by the Agreement undertakes to carry out the Work or to render such services for RSSB as is provided by the Agreement and, where the Contractor is an individual or a partnership, the expression shall include the personal representatives of that individual or of the partners, as the case may be, and the expression shall also include any person to whom the benefit of the Agreement may be assigned by the Contractor with the consent of RSSB;

1.2.4 The "Contractor's Personnel" means the employees of the Contractor employed on the Work and, where the Contractor is an individual, includes the Contractor himself;

1.2.5 The "RSSB's Delivery Manager" means the officer appointed by RSSB to act as RSSB's Delivery Manager for the purposes of the Agreement. RSSB's appointed Delivery Manager is named in Schedule B to the Agreement;

1.2.6 The "Agreement Price" means the price exclusive of Value Added Tax, payable to the Contractor by RSSB under the Agreement for the full and proper performance by the Contractor of the Work as determined under the provisions of the Agreement;

1.2.7 "loss" includes destruction;

- 1.2.8 "month" means calendar month;
- 1.2.9 "person" includes a corporation;
- 1.2.10 "representative of RSSB" in any provision of the Agreement means the person duly authorised by RSSB to act for the purposes of the provision;
- 1.2.11 the masculine includes the feminine;
- 1.2.12 the singular includes the plural and vice versa;
- 1.2.13 references to any enactment, order, regulation or other similar instrument shall be construed as a reference to the enactment, order, regulation or instrument as amended by any subsequent enactment, order, regulation or instrument.

1.3 Schedules, Appendices and Headings

- 1.3.1 Schedules, Appendices and/or any other attachments to the Agreement are part of the Agreement.
- 1.3.2 The Headings to the following Conditions shall not affect the interpretation thereof.

1.4 Notices and Communications

- 1.4.1 All notices or other communications which RSSB is required or authorised by the Agreement to give or make to the Contractor shall be in writing and may be given by hand, transmitted by facsimile or sent in a prepaid letter addressed to the Contractor by name at the last known place of abode or business of the Contractor.
- 1.4.2 For the purposes of the Agreement notices or communications sent by letter shall be deemed to have been delivered at the time they would ordinarily be delivered unless they are returned undelivered by the Postal Authorities.

2 Scope and Duration of Work

- 2.1 The Contractor shall carry out the Work detailed in Schedule A to the Agreement between the dates specified therein.
- 2.2 Where the Work detailed in Schedule A involves an appraisal of whether or not a measure should be applied in order to manage safety so far as is reasonably practicable in accordance with the Health and Safety at Work. Act 1974, or the production of tools to support such an appraisal, the methodology as described in GB railway industry guidelines 'Taking safe decisions' <http://www.rssb.co.uk/risk-analysis-and-safety-reporting/risk-analysis/taking-safe-decisions> will be applied.
- 2.3 Where the Work detailed in Schedule A involves the use of railway safety risk estimates and statistics, the Contractor shall use RSSB's 'Safety Risk Model' as the primary source of such information <http://www.safetyriskmodel.co.uk>. If the risk information provided by the 'Safety Risk Model' is not, by itself, sufficient for the

needs of any of the Work the Contractor shall agree what alternative sources might be used, in advance with RSSB.

3 Duty of Care and Performance Key Personnel and Conduct

3.1 The Contractor shall exercise all reasonable skill, care and diligence in the discharge of all duties to be performed by him and all Work shall be completed to the satisfaction of RSSB. The correct and timely execution of the Work by the Contractor is a condition of the Agreement.

3.2 The Contractor acknowledges that the quality and availability of skilled personnel is essential for the proper performance of the Work. Any of the Contractor's Personnel named in Schedule B shall be regarded as key personnel and such key personnel shall carry out the duties and tasks allocated to them in the Work. The said duties and tasks may only be performed by other personnel with the prior written consent of RSSB and the Contractor shall ensure that such other personnel are suitably qualified and experienced to undertake the said tasks and duties

3.3 The Contractor's Personnel and any personnel engaged to perform the Work through a sub-contract or otherwise whilst carrying out the Work shall conduct themselves in strict accordance with the requirements of RSSB's Drugs and Alcohol policy.

4 Breach

4.1 In the event that the Contractor has committed or knowingly permitted remediable breach of any of the terms of the Agreement, and has not remedied the same within 14 days of a written request from RSSB, specifying the breach and requiring it to be remedied, RSSB may forthwith terminate the Agreement.

4.2 Where RSSB have determined the Agreement under Condition 4.1 hereof RSSB may direct the Contractor, when Work has not commenced, to refrain from commencing the Work, or RSSB may complete all or any part of the Work as respects which the Agreement is so determined by allocating resources to complete the Work, or by employing other contractors to complete the Work; and there shall be recoverable from the Contractor the amount by which the aggregate of the cost of completing the Work in this way exceeds the amount which would have been payable to the Contractor in respect of all the Work so completed if it had been completed in accordance with the Agreement, provided that RSSB shall endeavour to ensure that these costs are reasonable and will not seek to make such recovery in cases where the delay in executing the Agreement is due to causes outside the Contractor's control.

5 Termination

5.1 Without prejudice to any other remedies, RSSB may terminate the Agreement for any reason by giving to the Contractor 30 days' notice in writing.

5.2 If the Agreement shall be determined pursuant to Condition 5.1 hereof prior to the completion of the Work:-

(a) RSSB may at any time before the expiration of the period of notice exercise, as soon as may be reasonably practical within that period, such of the following powers as may be considered reasonable:

(i) to direct the Contractor, when Work has not commenced, to refrain from commencing the Work;

(ii) to direct the Contractor to complete in accordance with the Agreement all or any part of the Work in the course of performance at the expiration of the notice and to complete the same at such time or times as may be mutually agreed, or in default of such agreement, at the time or times provided by the Agreement. All Work done by the Contractor in accordance with such directions and accepted by RSSB shall be paid for in accordance with Schedule C;

(iii) to direct the Contractor to determine on the best possible terms such sub-contracts or orders as may have not been completed, observing in this connection any direction given under (a) (i) and (ii) above.

(b) The Contractor shall prepare and submit to RSSB a report on the Work prior to the determination making recommendations (if such were required) as may be based on such Work as shall have been done prior to determination. All Work done by the Contractor in accordance with this provision and accepted by RSSB shall be paid in accordance with Schedule C.

(c) RSSB shall indemnify the Contractor against any commitments, liabilities or expenditure which are reasonably and properly chargeable by the Contractor in connection with the Agreement to the extent which the said commitments liabilities or expenditure would otherwise represent an unavoidable loss by the Contractor by reason of the determination of the Agreement.

Provided that in the event of the Contractor not having observed any direction given to him under (a) above RSSB shall not under this provision pay any sums in excess of those which RSSB would have paid had the Contractor observed that direction.

(d) If in any particular case hardship to the Contractor should arise from the operation of this Condition it shall be open to the Contractor to refer the circumstances to RSSB who, on being satisfied that such hardship exists, shall make such allowance, if any, as in its opinion is reasonable and the decision of RSSB on any matter which arises out of this paragraph shall be final and conclusive;

(e) RSSB shall not in any case be liable to pay under the provisions of this condition any sum which when taken with any sums paid or due or becoming due shall exceed the Agreement Price specified in Schedule C.

(f) The Contractor shall in any sub-contract or order the value of which is £10,000 or over made or placed by him with any one sub-contractor or supplier in connection with or for the purposes of the Agreement take power to determine such sub-contract or order in the event of the determination of the Agreement under 5.1 upon the terms of (a), (c), (d) and (e) above save only that:

(i) the name of the Contractor shall be substituted for that of RSSB throughout except in(d) of this Condition and the name of the sub-contractor substituted for that of the Contractor throughout except in (d) and (f) of this Condition;

(ii) the period of determination shall be 28 days.

5.3 RSSB may terminate the Agreement forthwith if;

(a) the Contractor, being an individual, or being a firm, any partner in that firm, shall at any time become bankrupt or shall have a receiving order or administration order made against him or shall make any composition or arrangement with or for the benefit of his creditors or shall make any assignment for the benefit of his creditors, or shall purport to do so, or if in Scotland he shall become insolvent or notour bankrupt, or any application shall be made under any Bankruptcy Act for the time being in force for sequestration of his estate, or a trust deed shall be granted by him for and on behalf of his creditors; or

(b) the Contractor, being a Company shall convene a meeting of his creditors or if a proposal is made for a voluntary arrangement within Part 1 of the Insolvency Act 1986 or a proposal for any other composition scheme or arrangement with (or assignment for the benefit of) his creditors or if he shall be unable to pay his debts within the meaning of Section 123 of the Insolvency Act 1986 or if a Trustee, Receiver, Administrative Receiver or similar officer is appointed in respect of all or any part of the business or assets or if a petition is presented or a meeting is convened for the purpose of considering a resolution or other steps are taken for the winding up of the Contractor or for the making of an administration order (except for the purpose of an amalgamation or reconstruction); or

(c) the Contractor, or being a Company, any director shall be convicted of a criminal offence.

Provided always that such determination shall not prejudice or affect any right of action or remedy which shall have accrued or shall accrue thereafter to RSSB.

6. Progress and Final Report/s

The Contractor shall render reports on the progress of Work as detailed in Schedule B. The submission and acceptance of these reports shall not prejudice the rights of RSSB under Condition No. 5.

7 Agreement Price

7.1 The Agreement Price payable to the Contractor by RSSB in consideration of the Work shall be the sum specified in Schedule C.

7.2 The Agreement Price must not be exceeded without the prior written agreement of RSSB's Supply Chain Department

8 Payment of the Agreement Price

Payment of the Agreement Price shall be made by RSSB in the manner prescribed in Schedule C. Invoices for such payment shall be rendered to RSSB at the time and in the manner specified by RSSB in Schedule C.

9 Value Added Tax

9.1 RSSB shall pay to the Contractor in addition to the Agreement Price any VAT chargeable on the Agreement Price but only after receiving from the Contractor a tax invoice issued in accordance with the VAT Act 1994.

9.2 The Contractor shall, if so requested by RSSB, furnish such information as may reasonably be required by RSSB as to the amount of VAT chargeable on the value of the Work provided in accordance with the Agreement and payable by RSSB to the Contractor in addition to the Agreement Price. Any overpayments by RSSB shall be recoverable from the Contractor under Condition 10.

10 Recovery of sums due

Whenever under the Agreement any sum of money shall be recoverable from or payable by the Contractor, the same may be deducted from any sum then due, or which at any time thereafter may become due, to the Contractor under the Agreement or any other Agreement with RSSB.

11 Transfer and sub-letting

11.1 The Contractor shall not give, bargain, sell, assign, sub-let, or otherwise dispose of the Agreement or any part thereof or the benefit or advantage of the Agreement or any part thereof without the previous consent in writing of RSSB.

11.2 In the event that RSSB consent in writing to Work being carried out by a sub-contractor, the Contractor shall be solely responsible for Work carried out by the sub-contractor and shall make good any loss suffered or expense incurred by RSSB by reason of any default or failure, whether partial or total, on the part of the sub-contractor to complete the Work to RSSB's satisfaction.

11.3 RSSB has the right to assign the Agreement and all rights and liabilities relating to the Agreement to a third party nominated by RSSB.

12 Use and Ownership of Information, Documents, etc.

12.1 Any information, materials and/or documents issued by or on behalf of RSSB for the purposes of the Agreement remain the property of RSSB and must be returned on completion of the Work. The Contractor shall not make use of the Agreement or such information, materials and/or documents otherwise than for the purposes of the Agreement except with the consent in writing of RSSB.

12.2 Except with the prior consent in writing of RSSB the Contractor shall not, either during, on termination or after completion of the Agreement, disclose the Agreement or any provision of the Agreement to any third party other than for the purposes of the Agreement. Such disclosure shall be in confidence.

13 Ownership and Disclosure of Results

13.1 Subject to any pre-existing rights of the Contractor (or of any third party), the results of the Work arising from this Agreement and any rights therein shall be the absolute property of RSSB and the Contractor hereby assigns to RSSB the future copyright and the future design right in the said results.

13.2 Without prejudice to its generality, the term "results" as used herein includes information, reports, drawings, designs, semiconductor topography, computer software, inventions and trade and service marks.

13.3 The Contractor shall, if so requested by RSSB and at RSSB's expense, make applications for patents in the United Kingdom and elsewhere on any such inventions and shall assign the patent rights to RSSB.

13.4 The Contractor shall not impart to anyone or publish any information concerning any matter or thing arising out of this Agreement, without the prior consent, in writing, of RSSB.

13.5 The Contractor shall ensure the Work provided by the Contractor or any sub-contractor and its use by RSSB shall not infringe any Intellectual Property Rights or Moral Rights of any third party.

13.6 Subject to Clause 13.5 of these terms and conditions, the Contractor and all relevant sub-contractors confirm that:

- (i) they own or have the right to use or otherwise exploit, and shall, at all relevant times, own or have the right to use or otherwise exploit, all Intellectual Property Rights necessary to provide the Work;
- (ii) they shall not infringe any third party's Intellectual Property Rights in supplying the Work;
- (iii) they have, and shall at all relevant times have, full right to grant the licences and use any Intellectual Property and to allow RSSB to use such Intellectual Property as set out in this Agreement.

14 Infringements

For the avoidance of doubt any breach of Conditions 11, 12 or 13 shall be a material breach entitling RSSB to terminate the Agreement forthwith in accordance with Condition 4.1.

15 Exploitation

At RSSB's sole discretion RSSB may permit the use and/or exploitation of the results as defined in Condition 13.2 by the Contractor under separate arrangements.

16 Liabilities

16.1 The Contractor shall be liable for and shall indemnify, and keep indemnified RSSB against all damages, losses, compensation, expenses and/or costs howsoever or wheresoever incurred or suffered arising directly or indirectly from, out of or in connection with the Agreement (including but not limited to any damages, losses, compensation,

expenses and/or costs arising from the death or injury of any person and any loss of or damage to any physical property) caused by any act, default or negligence of the Contractor, its sub-contractors and/or agents and against all actions, claims, demands or proceedings in respect thereof or in relation thereto, provided that this liability and indemnity shall not apply to the extent that such damage, loss, compensation, expense and/or cost is wholly or partly attributable to any act, default or negligence of RSSB or a third party (other than the Contractor's sub-contractors and/or agents).

16.2 The Contractor will effect and maintain for the period of the Agreement an insurance policy or policies with a reputable insurance company for such sums as RSSB considers to be adequate, but in any event for not less than £1,000,000 (one million pounds sterling) for any one incident and which shall cover the indemnity set out above and the Contractor shall produce to RSSB on demand evidence of the policy and/or a form of a certificate prepared by the insurance providers.

16.3 In the case of liability from death or injury to persons there shall be no limit.

17 Professional Indemnity Insurance

The Contractor will effect and maintain for a period of six years after the end of the Agreement Professional Indemnity insurance cover for the type of work being carried out under the Agreement with a reputable insurance company for such sums as RSSB considers to be adequate, but which in any event shall not be less than £1,000,000 or the contract value if greater for any one incident and the Contractor shall produce to RSSB on demand evidence of the policy and/ or a form of a certificate prepared by the insurance providers.

18 Corrupt Gifts and Practices

18.1 RSSB shall be entitled to terminate the Agreement without notice at any time if the Contractor or anyone employed by or acting on behalf of the Contractor directly or indirectly:

- (i) gives or offers or agrees to give to any person employed or engaged by RSSB any gift or consideration of any kind for doing or forbearing to do any act in relation to the obtaining or execution of the Agreement; or
- (ii) enters into a business relationship of any kind with any person employed or engaged by RSSB without first obtaining the written approval of RSSB; or
- (iii) if commission has been paid or appears to have been paid by or on behalf of or to the knowledge of the Contractor in connection with the Agreement or any other agreement with RSSB without particulars of such commission being disclosed in writing to RSSB.

18.2 In any dispute, difference or question arising in respect of:

- (i) the interpretation of this Condition;
- (ii) the right of RSSB to determine the Agreement; or
- (iii) the amount of value of any such gift, consideration or commission;

the decision of RSSB shall be final and conclusive.

19 Access and Inspection of Documents

The Contractor shall allow the authorised representative(s) of RSSB, access at all reasonable times to the place where the Work is being carried out (including third party premises) to allow them to assess the progress of the Work and shall make available for inspection such documents as the said authorised representatives may request to assist them in the assessment of the progress of the Work and to enable them to satisfy themselves in relation to financial aspects of the Agreement. The Contractor shall provide such copies of the said documents as RSSB may reasonably request at the expense of the Contractor.

20 Agreement Document

20.1 Each party agrees that this Agreement alone constitutes the agreement between the parties in relation to the execution of the Work and supersedes and overrides all prior agreements and understandings whether oral or written.

20.2 No amendment to the Terms and Conditions of the Agreement shall be effective unless it is duly authorised by RSSB's Supply Chain department in writing.

20.3 If any provision of the Agreement is held to be unenforceable, invalid or illegal by any court of competent jurisdiction such unenforceable, invalid or illegal provisions shall not affect the remainder of the Agreement which should remain fully effective and enforceable.

20.4 Waiving by RSSB of any of its rights in respect of any breach of the Agreement shall not prevent the subsequent enforcement of any condition and shall not be deemed to waive the rights of RSSB in respect of any subsequent breach.

21 Entirety of Agreement

The Agreement shall be entire and entire fulfilment thereof shall be a condition precedent to any right of payment. In the case of any discrepancy between this Condition and any other provision of the Agreement, the provisions of this Condition shall prevail, and nothing done or omitted to be done by RSSB during the progress of the execution of the Work such as the payment of advances on account shall amount to a waiver of this Condition provided always that nothing in this Condition shall affect any of the rights and obligations of the parties under Condition 5 (Termination).

22 No Agency

Unless agreed in writing by RSSB the Contractor is not authorised to act as RSSB's agent in any respect or to represent RSSB's views, and must not hold himself out as having authority to contract or pledge the credit of RSSB.

23 Statutes, By Laws, Regulations etc.

23.1 The Contractor, his sub-contractors and their respective employees must comply with all statutes, by-laws, regulations or other legal obligations whatsoever applicable to the Work.

23.2 The Contractor and his sub- contractors and their respective employees, when working in or visiting any of RSSB's premises or premises of third parties in the course of the Work, shall additionally ensure compliance with all statutory regulations and the particular regulations and requirements in force for the time being at those premises, and with any special regulations which apply to any particular building or area within the boundaries of those premises.

24 Law

The Agreement shall be considered as an Agreement made in England and subject to the laws of England and to the sole jurisdiction of the English courts.

C The Specification

Project Overview

Project Number:	T1092
Project Title:	Development of a 26m vehicle standard gauge
Reporting Topic:	Infrastructure
Project Description:	<p>This research project is to develop a new passenger standard vehicle gauges, for 26m vehicles that is suitable for GE/RT8073 Requirements for the Application of Standard Vehicle Gauges and EN15273 Gauging.</p>
Abstract:	<p>The industry's Rail Technical Strategy has identified a need to rationalise the number of classes of vehicles in operation on Network Rail infrastructure. This rationalisation would improve economies of scale for future vehicle orders, and reduce costs for vehicle redeployment and cascade. In broad terms there are considered to be 3 passenger standard vehicle gauges categories in GB: InterCity, Suburban, and Go-anywhere.</p> <p>On behalf of the Vehicle/Structures System Interface Committee (VS SIC), this research project is to develop a new 26m vehicle gauge that is suitable for GE/RT8073 Requirements for the Application of Standard Vehicle Gauges and EN15273 Gauging. As part of the research to date, a feasibility investigation has shown that this nominal 20 m passenger vehicle gauge has good compatibility with the whole network and had shown application for potential for a 23 m vehicle application. Therefore, this work package has subsequently been set up to develop a nominal 26m passenger vehicle gauge based on the whole network and proposed 26 m vehicles.</p> <p>The deliverables from the research include a research brief, and a report that explains the rationale, decisions, trade-offs, and details of infrastructure constraints considered; a 26m gauge profile, a copy of the vehicle profiles and the NGD subset of data used; plus any background information in case of future challenge to or review of methodology. The future benefit envisaged is a simplified introduction of new rolling stock and a cascade of old rolling stock. Industry costs will also benefit by reducing the need for bespoke gauging studies.</p>
Business Case Executive Summary:	<p>The need for a standard set of vehicle gauges is widely recognised in the rail industry. Standardising vehicle gauges has formed part of the Gauging Strategy of the Department for Transport, and the Vehicle/Structures System Interface Committee (V/S SIC) has as one of its objectives the development of a standard set of gauges. Having a suite of standardised gauges enables vehicles to be introduced to a new route with a minimum amount of gauging compatibility analysis. This project is part of a larger stream of research on standard vehicle gauges, which includes T977</p>

(Development of revised lower sector vehicle gauge) and T978 (Suburban passenger vehicle standard gauges PG1 (20m) and PG2 (23m)) and T995 (Development of a new locomotive gauge), which is currently on hold until this project is completed.

This research project will develop a 26m gauge based on an InterCity type vehicle and using the methodology and processes developed in T978. Note that the main project risk is that the relevant information from the InterCity Express Programme is not made available for the research. This will be mitigated by the project team liaising with Hitachi prior to the contract being awarded.

The final deliverable of the project will be a single report detailing the proposed standard 26m vehicle gauge with the associated rules, accompanied by the necessary analysis and datasets. The vehicle profiles and National Gauging Database information used, as well as any background information, will be included in case of future challenges or reviews of the results/methodology.

The benefits of a standardised gauge include (i) a reduction in the cost of gauging analysis, (ii) wider opportunities for fleet deployment, (iii) enabling operators to respond faster and more accurately to changes in demand, (iv) supporting industry's strategic objective to increase capacity on the network (v) enabling route passenger gauging strategies to be drawn up, thus optimising the planning of infrastructure expenditure and (vi) reducing the risk relating to infrastructure modification. The quantified element of the business case is based on the estimated reduction in the cost of gauging analysis.

Primary Research Client Group:	Vehicle/Structures SIC
---------------------------------------	------------------------

Specification for Work Package T1092-01

1 Work Package ID

1.1 T1092-01

2 Work Package Title

2.1 Development of a 26m passenger vehicle standard gauge

3 Background

3.1 This gauge is the third in a series of standard gauges which will reduce costs for vehicle introduction and cascade. The existence of these gauges will enable route passenger gauging strategies to be drawn up, thus optimising the programming of infrastructure expenditure.

There are considered to be three standard passenger vehicle gauges for NR controlled infrastructure: 26m (InterCity); 23m and 20m. Research project T978 has already successfully delivered the 20m and 23m standard vehicle gauges.

This research will develop a 26m passenger vehicle gauge, for longer length passenger vehicles that are typically used for intercity type journeys.

WP ID	Work Package Title	Expected Start Date	Expected End Date
T1092-01	Development of a 26m passenger vehicle standard gauge	05-Jun-2015	27-Nov-2015

4 Work Package Objectives

4.1 The objectives of the Work Package:

4.2 Establish an indicative 26m passenger vehicle gauge.

4.3 Confirm the bogie characteristics for the 26 m passenger vehicle gauge.

4.4 Interrogate route profiles to establish structure profiles that affect the size of the gauge.

4.5 Calculate the limiting space envelope in order to define the available space through all the structures and curves.

4.6 Determine passenger footstep arrangements.

4.7 With support from steering group optimise the 26m passenger vehicle gauge.

5 Scope

5.1 The Intercity Express Programme (IEP) is introducing a new fleet of 26m long Intercity trains (class 800) to both the Great Western Mainline and the East Coast Mainline. A considerable amount of gauging work has been undertaken to develop the new fleet and carry out infrastructure clearance works. It is important for the successful implementation of this research project and to avoid unnecessary costs that the results of the gauging work (the agreed IEP gauge) are taken account of in the development of a 26 m gauge from an early stage.

The scope of work includes the following steps in three stages:

Stage 1 (RSSB/ Project Steering Group)

1. Investigate and seek permission to use from Intercity Express Programme gauge related information providing necessary detail to inform development of 26 m gauge.
2. Review gauging information and consider implications for development of 26 m gauge. The intention is to determine whether this could provide the basis for the 26m passenger vehicle requirements.
3. Identify routes for gauge derivation.

Stage 2 (Supplier, for review by Project Steering Group/ RSSB)

1. Develop concept of the '26 m gauge' in terms of:
 - Vehicle length
 - Bogie arrangements (including articulation)
 - Bogie dynamic characteristics (not including tilting systems)
 - Taper arrangements
 - Overthrow principles
2. Confirm the details of the routes to form the basis of gauging data analysis.
3. Develop a limiting space envelope based on national gauging database information for 'Intercity routes'. The routes and provision of the associated data are to be agreed with the project steering group.
4. Derive a swept envelope of the gauge (including static envelope) based on limiting space envelope. This will be as delivered for the 20m and 23m standard vehicle gauges.
5. Compare swept envelope of the gauge (including static envelope) with existing agreed list of 'Intercity' (including class 373) stock to confirm usefulness of gauge.
6. Analyse 6 foot data and design rules to 26m gauge width and determine gauge height.
7. Determine footstep arrangement to achieve best trade off with gauging clearances and stepping distances.

Stage 3 (Supplier, for review by Project Steering Group/ RSSB)

1. Carry out full GB network analysis on 26m gauge and determine exception structures
2. Carry out 'Omnicom' analysis of exceptional structures.
3. Identify any refinements to 26m passenger vehicle gauge
4. Compare refined 26m passenger vehicle gauge with agreed list of 'Intercity' stock

The following principles should apply:

1. The project will determine an Upper Sector gauge that will work in practice with the lower sector vehicle gauge. Clearances in the upper sector and lower sector will need to be analysed to determine the 26 m passenger vehicle gauge.
2. The gauge should be consistent with the stepping requirements of GM/RT2149 and PRM TSI based on a platform position of 915 mm high with an offset of 730 mm. The outcome of the Platform Train Interface Strategy review managed by RSSB's National Programmes team will also be taken into account.
3. Where different rules for gauge enlargement apply to different parts of the gauge the parts of the gauge should cross to give unambiguous definition of vehicle envelope. (e.g. width dimensions for sleeper mounted components in the lower sector do not enlarge on curves, platform offset enlarges on curves).

4. Geometric gauge enlargement on curves should be based on the dominant vehicle dimensions for the route – e.g. 26m vehicle with appropriate bogie centres and bogie axle spacing, considering different taper arrangements and combinations of throws on the inside/ outside of curves.
5. Rolling stock suppliers adjust for vehicles with different dimensions, subject to defined minimum curves.
6. The gauge enlarges with speed and cant deficiency / excess and the definition is similar to a vehicle model for absolute gauging.
7. The methodology will entail a statistical analysis of the number of structures affected in terms of clearances (normal, reduced and special reduced). This will include providing information to understand the impact of marginally increasing the size of the 26m gauge.
8. The analysis will use the lower sector infrastructure gauge proposed for inclusion in GE/RT8073.
9. The gauging analysis will need to be carried out using GB rail industry recognised gauging software.

6 Deliverables

- 6.1 The deliverables will comprise:

Deliverable Name	Type
T1092 A detailed work package management document	Report
Description	
<p>A project plan that baselines the work package. It should identify the activities planned, including proposed and/or firm arrangements made with external stakeholders to complete the project within the specified timescales.</p> <p>This details how the supplier will deliver the requirements of the project and how the supplier will engage with key industry stakeholders in the project delivery and the RSSB delivery manager/ steering group. This is considered to be a live document and will require to be updated throughout the project.</p> <p>Content should include:</p> <ol style="list-style-type: none"> 1. Introduction 2. Mobilisation 3. Methodology 4. Project Team 5. Project / Quality Management 5a Decision log (recording key decisions made by the project team and steering group) 6. Risk register 7. Issues log 8. Change control log 9. Deliverables (assessment and review process) 10. Project Review Meetings <ol style="list-style-type: none"> 10.1 Progress Meetings 10.2 Deliverable Review Meetings 11. Invoice Dates 12. Stakeholder Engagement Plan <p>Appendices</p> <ol style="list-style-type: none"> 1. Project Plan 	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
These will be used as part of the project management of the work package/research delivery.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge Summary Report	Report
Description	
<p>This report will be the summary report with a maximum limit of up to 30 pages and available to SPARK members only.</p> <p>The report will set out a summary of the key findings and outputs contained in the full report.</p>	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
The report will be used to support the industry in understanding the research into the development of a 26m passenger vehicle standard gauge.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge Full Report	Report
Description	
<p>This report will be the full report setting out:</p> <ul style="list-style-type: none"> the rationale, decisions, trade-offs, details of infrastructure constraints considered analysis of footstep considerations and proposed detailed arrangements a 26m vehicle gauge profile with application rules (including a version suitable for incorporating into GE/RT8073) development of route potential maps indicating gauging feasibility of use of the 26 m gauge a copy of the vehicle profiles and the National Gauging Database subset of data used; plus any background information in case of future challenge to or review of methodology 	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
The report will be used to support the industry in understanding the research into the development of a 26m passenger vehicle standard gauge. This full report will support the inclusion of the 26 m passenger vehicle gauge in GE/RT8073 Requirements for the Application of Standard Vehicle Gauges.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge Gauge Profile and application rules	Analysis
Description	
This dataset will include gauge profile with associated application rules including rules for footsteps. It will be set out in the standard GE/RT8073 format.	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
The gauge profile and application rules will be suitable for including in GE/RT8073 subject to agreement by Standards Committees.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge Vehicle Profiles and the NGD subset of data	Analysis
Description	
This dataset will include all background information in case of future challenge, or review, of the methodology.	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
The dataset will be used to inform the development of the 26m vehicle gauge and for reference purposes in the future.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge Exception Structures Analysis	Analysis
Description	
This set of data will be the output from the Omnicom analysis	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
This will be used to provide 26m passenger vehicle standard gauge analysis of exceptional structures.	

Deliverable Name	Type
T1092 Development of a 26m passenger vehicle standard gauge - Implementation Plan - For information only; this is to be prepared by RSSB, but will need the support of the supplier during the delivery stage	Project Plan
Description	
<p>A coherent picture of the journey from the end of the research project through to the realisation of research benefits Structure:</p> <ol style="list-style-type: none"> Overall end goal – a statement of what will the industry look like at the point of benefits realisation. The end goal may relate to a single project or a programme of industry initiatives. End point of the current project – the starting point for the implementation plan Chronological outline of how the research findings will be communicated, who to, what will they do with them, when, and how this leads to benefits realisation. There may be one or many steps, and these may be well defined or uncertain. Where there is uncertainty, the means by which that uncertainty will be resolved should be stated. The outline may include: <ul style="list-style-type: none"> Decision points – who is the decision maker, how will they obtain the information they need to take the decision, what alternative futures follow? Barriers to implementation, and plans in place to overcome them through the design of the research or subsequent implementation approach/activities Will the research lead to a need for a demonstration / trialling / piloting? If there is the potential for the research to lead eventually to a commercial product, how is IPR being managed, what commercial model is expected to be followed? Multiple futures depending on the research findings - these should be acknowledged and the most probable futures developed to their end goals How the outcomes of the research project fit into a broader industry initiative or programme of activity What engagement with stakeholders involved in delivering the implementation is required? Where possible, identify who could take on responsibility for implementation after completion of the research. Identification of who (role/organisation) would be best placed to monitor implementation – ie who would you ask to find out if the overall end goal has been reached. How will RSSB / industry recognise that the activities in the plan have been achieved? Industry Innovation Capability Maturity assessment. The purpose of this is to identify whether there is a gap in maturity which means that the industry will not be able to implement.....and if so then what action is being taken within or beyond the project to address the gap. Consider Technology readiness levels (TRLs) where appropriate For technology related projects, an assessment of the technology readiness level at the start and finish 	
Publication Stream:	SPARK only: Confidential to RSSB members
Implementation Action Needed	
The report will be used to facilitate the industry in progressing the research findings and the realisation of benefits into standardisation of 26m vehicle gauge.	

7 Other Considerations

7.1 Proposals:

- Proposals should include a draft project management document which will be

updated throughout the project (further details below)

- Contractors and project team members should provide details of previous experience with projects relevant to this project and/or the railway
- Proposals from partnerships or with collaboration will be considered and will need to be supported with details of sub-contracting terms or collaboration agreements.
- Suppliers should provide a full risk assessment to project delivery that will be updated throughout the project in the project management document.
- Add other project specific aspects the supplier should consider in their proposal

The successful supplier for this work package will be expected to produce and work to a comprehensive stakeholder engagement plan (part of the project management document). This should include consideration of the needs of RSSB, the project steering group and other relevant stakeholders. The objective of this document is to aid effective project delivery.

The document should identify risks to the research project (initially those identified in the proposal) and mitigation for managing these obstacles.

The proposal should note and address the following where appropriate:

1. Steering Group:
 - a. The supplier will work with a research steering group if/as notified by RSSB.
 - b. The steering group is a key stakeholder.
 - c. For contractual purposes, RSSB is the client.
2. Meetings:
 - a. These will be arranged and led by the supplier, including telephone conferencing (where appropriate).
 - b. The needs and limitations of the steering group should be considered.
 - c. The agenda will be agreed with the RSSB delivery manager
 - d. Minutes for all steering group meetings including telephone conferences will be prepared by the supplier and circulated upon the RSSB delivery manager's acceptance
 - e. RSSB rooms can be used if available
 - f. Periodic or regular progress meetings will be held (possibly by teleconference)
 - g. A deliverable review meeting will be held circa 2 weeks after the deliverables have been submitted for steering group review.
3. Workshops and industry meeting/interviews:
 - a. These will be arranged and led by the supplier
 - b. The attendees/agenda/content will be agreed with the project steering group
 - c. RSSB rooms can be used if available
4. Comments:
 - a. Usually, the steering group will submit any comments within an email, or via notes/track changes in an MS Word document or via comments sheet. However, the supplier should also take into account verbal comments made during progress meetings.
 - b. The supplier will respond to all comments, either in a table or through additional notes/track changes in the master MS Word document. Note: this could be as simple as 'Corrected' in the case of a spelling or grammatical error, or a full justification as to why a comment has not been considered/included. This may be due to conflicting comments or the comment being outside scope the scope of work.
5. Deliverable/Documents:
 - a. All report deliverables should be submitted as a word version and a PDF version
 - b. Deliverables will only be accepted once all comments have been addressed

- c. The supplier should advise and manage full version control of documents
 - d. The project management document should include a document review plan which estimates the size of each deliverable and the amount of time it will take the steering group to review
 - e. As part of the deliverable review plan the supplier should consider reviewing the output in relevant sections, chapters or whole reports.
6. Communication facilities:
- a. The supplier will arrange telephone conferences
 - b. The supplier will be responsible for checking attendee availability, sending invitations, recording apologies, etc. this should be reported to the delivery manager prior to meetings
7. Presentations:
- a. The supplier should supply a cost for delivering two presentations. These will be delivered as required
 - b. The supplier will agree presentations with the steering group.
 - c. The presentation should consider content, context and pitch based on the audience.
8. File structure:
- a. The supplier will manage file sharing and distribution of documents (including meeting agendas, minutes, reports, and so forth)
 - b. If appropriate file sharing technology should be used
 - c. It is the supplier's responsibilities to provide and administer this, and to ensure the security and protection of RSSB's IPR at all times.
9. Recommendations and next steps:
- a. Recommendations and next steps should be well defined with consideration and identified indicative industry ownership and timescales/route to implementation

8 Stakeholder Engagement

- 8.1 This project is supported by rail industry stakeholders from the Vehicle/ Structures System Interface Committee (V/T SIC). The successful bidder for this work package will be expected to produce and work to a stakeholder engagement plan. This should include consideration of the needs of RSSB and should also include dialogue with the project steering group and all relevant stakeholders. Stakeholders will be expected to:

- 1) Engage in key project decision making.
- 2) Enable the project team to have access to all the data sets and mitigating any associated risks, including access to National Gauging Database and vehicle profiles.
- 3) Ensure that the outputs from the project will be applied for the benefit for any changes to GE/RT8073 and EN15273.

9 Critical Success Factors

- 9.1 Success will be a gauge that is defined for 26 m vehicles that is suitable for EN15273/RGS and could be specified for new rolling stock and reduces risks of future cascades of existing/new rolling stock and therefore reduces industry costs.

Critical factors, that will enable success include:

- 1) Senior industry buy-in.
- 2) Access to key data sets
- 3) Motivated project team
- 4) Supplier with the relevant expertise

10 Dependencies

- 10.1
- 1) Provision of information from DfT on how the gauging requirements for IEP were specified and achieved.
 - 2) Confirmation of the high speed routes to be used in the analysis and provision of the associated data as agreed with the project steering group.
 - 3) Stage 2 of the work package, Optimising the 26m vehicle profile, is dependent on identifying the initial profile, for example that stage1 is successful. Therefore, stage 2 can only take place if stage 1 is completed.
 - 4) That the project is able to access the vehicle profiles.
 - 5) Access to six foot data.

11 Risks

- 11.1 The major risks involved include:
- 1) Data provision – not being able to access IEP gauging information and to a lesser extent other Intercity vehicles. This is in part mitigated by working with SIC to agree which vehicles to use and start gathering/collating up front before get into contract.
 - 2) Challenge on choice of routes – mitigated by using DfT definition and sub-group pre-work to date, sense checked by VS SIC, with a possible statement that VS SIC considered these most significant routes to classify as 'Intercity'.
 - 3) Challenge on choice of rolling stock vehicles – not as significant as choice of routes, look to VS SIC to clarify
 - 4) Availability of supplier resources – no indication of this to date but could avoid too many projects working in parallel.

Work Package Control and Administration

1 Key Personnel

- 1.1 Throughout the work package the title 'Research Manager' applies to the individual in RSSB providing the single point of contact for communication and management of the work package; and the title 'Project Manager' applies to the single point of contact in the Contractor's organisation.
- 1.2 The Contractor's proposal will contain a list of key personnel including relevant details of experience, qualifications, and expertise. The list should clearly indicate which work packages those people will be undertaking.
- 1.3 Key personnel shall not be varied on the work package team without the agreement of the Research Manager.

2 Kick-off Meeting

- 2.1 When the successful bidder has been awarded the contract a kick-off meeting shall be held at which the Project Manager and the Research Manager make the necessary introductions and establish arrangements for mobilising and administering the work.
- 2.2 Technical personnel leading the main elements of the work package work should also attend the kick-off meeting. This may include the lead documentation editor, as well as researchers, and technical advisors.
- 2.3 At, or soon after, the kick-off meeting the audiences and questions to be addressed in the work package, and their corresponding information types will be identified. The questions and information types identified will guide the modules and structure of any deliverable documentation to be delivered by the work package.

3 Safety

The contractor will identify the work package safety arrangements, roles and responsibilities, and define duty holder interfaces. This section of the Contractor's proposal should also outline what support will be needed to discharge the work package, and outline how the safety arrangements (or safety plan) will be developed and introduced prior to the work package implementation and delivery phases.

4 Quality Plan

A work package quality plan is required as part of the *Invitation to Tender* (ITT) submission for evaluation and agreement prior to contract award. This plan should include the QA processes for production of documentation, as well as for the completion of the research.

5 Work Package Controls

- 5.1 Definition of a work package
 - 5.1.1 RSSB uses the term work package to describe all the work associated with one purchase order and one contract for work. This is the level at which RSSB manages all its research and development activities.
 - 5.1.2 A work package may contain several tasks; and several work packages may combine to constitute one project. It is possible that more than one Contractor may be involved in delivering a project, but only one Contractor will be involved in delivering a work package.
 - 5.1.3 Contractors and Project Managers are asked to mirror the use of these terms in their management processes and deliverables, in order to avoid confusion.
- 5.2 Work package schedule
 - 5.2.1 A work package schedule, illustrating the intended sequences and durations of work, milestones, and deliverable dates should be provided as part of the ITT submission, and

amplified with the Research Manager and technical team during post-tender discussions. The schedule will be prepared using MS Project software and may, depending on the nature of the work and research methods proposed, contain detailed information on costs, resources, and work breakdown.

- 5.2.2** The schedule may need to be developed further during the course of the contract, particularly where the scope and nature of later stages of research are determined by findings and decisions occurring during the earlier stages of work. However, under no circumstances is the work package schedule to be amended without the approval of the Research Manager.
- 5.2.3** The schedule should include milestones for RSSB agreement of all formal deliverables and clearly identify any associated milestone payments. As a general guide, the work package schedule should allow at least two weeks for RSSB agreement of each deliverable (the approval period may be extended in some cases where substantial stakeholder consultation may also be involved).
- 5.2.4** A research project is, as much as anything else, a technical documentation project. Similar consideration should be given to the production of deliverable documentation as is given to the research. A work package should include some input from an information designer and/or technical editor, and allow time for editing to be included in the work package schedule.
- 5.3** Progress meetings
 - 5.3.1** Initially the proposal should include provision for monthly progress meetings at which the Project Manager provides information to the Research Manager and technical team on the progress of the work and the research findings that are emerging. The frequency of, and attendance at, progress meetings may be reviewed during post-tender discussions between the Research Manager and Project Manager to confirm that the requirement is appropriate for each stage of the work.
 - 5.3.2** A key feature of such meetings is that they should also be forward-looking, identifying the issues arising, the factors affecting them, and the decisions to be made which influence the future direction of the work.
 - 5.3.3** Provision should be made in the proposal for attendance at progress meetings by appropriate technical personnel who are undertaking current tasks (particularly as the work package nears key decision points or deliverables), as well those who will soon be starting future tasks.
 - 5.3.4** It is the responsibility of the Contractor to minute all meetings and circulate those minutes to all attendees within two working days of the meeting.
- 5.4** Four-weekly progress reports
 - 5.4.1** Notwithstanding the requirement for progress meetings, the Contractor shall provide RSSB with four-weekly written progress reports, following a pre-agreed format. These will be quantitative reports showing percentage completion of activities, cost of work done, other cost information, and a brief commentary.
 - 5.4.2** A list of progress reporting dates will be provided to the successful bidder at the kick-off meeting.
- 5.5** Risk mitigation and dependencies
 - 5.5.1** In making submissions, suppliers should identify the key risks and uncertainties which affect the research, and provide proposals on how such risks might be mitigated. A risk workshop and/or risk register may be appropriate. The Project Manager and the Research Manager should review risks and mitigation measures during the course of the contract.
 - 5.5.2** Suppliers should also make clear the dependencies of one work package on another and, if appropriate and identifiable, any dependencies on other projects that are in progress, or any

projects that may be dependent on work packages in this proposed project.

5.6 Stakeholder engagement plan

5.6.1 The stakeholder engagement plan included in the Outline Business Case may be improved in the ITT submission. It may be further developed in discussion with the Research Manager, technical team, and the stakeholders concerned, during the post-tender period. A firm, written plan for stakeholder involvement should be in place at the time the contract is placed. The research will be conducted and administered with the stakeholder involvement defined in the plan.

5.6.2 When contacting stakeholders, contractors must be able to quote their contact point within RSSB. In work packages which involve an input from large organisations (such as Network Rail, TOCs) Research Managers need to ensure that a list of contacts is established and agreed with the supporter within the organisation, prior to the contractor contacting them.

5.7 Resource profile and cost breakdown structure

5.7.1 The Contractor's resource profile and cost breakdown structure may be adopted by the Research Manager as the principal tools for monitoring and controlling the work package against the programme and budget. The resource profile is typically a table defining the resource types, the nominated people, and fee rates. The cost breakdown structure is a table showing the tasks, the resource types and quantities allocated to each task, and the implied cost of each task.

5.7.2 Once agreed, the cost of each work package or task will be included in the MS Project schedule, thereby facilitating the easy production of automated work package financial reports using standard software functions.

6 Reports and Presentations

RSSB's requirements regarding reports and presentations should be discussed between the Project Manager and the Research Manager early in the course of the work package to establish in good time the particular needs of the work package.

The remaining paragraphs of section 6 describe RSSB's typical requirements and preferences.

6.1 Presentations

6.1.1 Where presentations of research progress and findings are made to RSSB and/or to stakeholders, requirements for providing hard copy and/or electronic copies of 'PowerPoint' slides or other presentation materials shall be agreed with the Research Manager in advance of the presentation.

6.1.2 The contents of any PowerPoint presentations shall also be made available in some other format, so that the information may be easily reused in other media.

6.1.3 Interim and work package management reports shall not be provided solely as PowerPoint presentations or as PDFs thereof. Some form of accompanying text is also needed, so that the information will make sense out of context and without a verbal explanation from the person presenting the research.

6.2 Deliverables

6.2.1 Each deliverable document required under the contract shall be submitted to the Research Manager in draft form initially for assessment by RSSB's technical team. Draft reports and other written deliverables shall have each page marked 'DRAFT'. (We suggest the use of a text watermark.)

6.2.2 Draft documentation should undergo some formal editing process before it is submitted. Deliverables submitted that may be published by RSSB should be developed on one of the approved Word templates provided by RSSB. These templates contain all the format options needed to develop a document for RSSB and no variations of those styles should be used by

the authors of deliverables. Documents that do not meet these standards will be returned as unacceptable. If the Contractor's author finds that the template is not suitable, or does not contain appropriate formats to present information in the most effective way, the author should discuss this with RSSB's senior technical writer.

- 6.2.3** The Research Manager shall inform the contractor if the document is satisfactory, or provide a commentary if further development of the document is needed.
- 6.3** Report format matters
 - 6.3.1** RSSB wants final reports unadorned with signatures, document history, or distribution details. The front of the report should have the title, the supplier's name, the T reference number and a version number and date. The titles of reports can sometimes be a contentious matter and should be established with the Research Manager in good time. Supplier confidentiality statements should be omitted unless specifically agreed prior to contract signature.
 - 6.3.2** The front page of a report may include a supplier logo. A supplier name or logo should not be included on every page of a document. These may serve to confuse readers about which company is responsible for the document, and logos may add considerably to file size.
 - 6.3.3** Any report submitted should conform to the most basic of information design principles. A report should be designed so that relevant information is easy to identify and easy to access. Teams developing reports should pay attention to characteristics such as readability, wayfinding, and navigation.
 - 6.3.4** No individual document should, without good justification, exceed 100 pages in length; nor, for ease of download should an original Word document file be much more than 5MB in size. Document authors should refer to the RSSB R&D Research Deliverables Guide for guidance on how deliverables should be structured and might be split into usable, user-friendly documents. The specifics of this aspect of a deliverable document should be agreed between the Contractor's author, the Research Manager, and the senior technical writer at, or soon after, the project or related work package kick-off meeting.
 - 6.3.5** RSSB is moving to a position that will allow it to reuse much of the content generated by research projects to enhance the value of that information and make it more widely available. It may do this using the Darwin Information Typing Architecture (DITA) and extensible markup language (XML). In order to facilitate this transition development teams are asked to write in a way that produces individual topics and avoids mixing information types. Writers should also avoid using locational references to other parts of a document, such as: above, below, earlier, or later. More specific information is provided in the RSSB R&D Research Deliverables Guide. The structure of deliverable documents should be agreed at or near the time of the kick-off meeting.
 - 6.3.6** RSSB may use the content developed in an approved Word template for final publication of a document using another publishing software package. If the Contractor provides RSSB with a finished deliverable document that has substantial non-conformance to the provided Word template, RSSB may rework the document so that it is fit for purpose and recharge the Contractor for any work required.
- 6.4** Final reports – electronic copies
 - 6.4.1** Electronic copies of all deliverable documents, associated images, charts, and tables, need to be provided on a CD-ROM in a format that is compatible with Microsoft Office Professional 2003 (Word, Excel, PowerPoint, Access, Visio), Adobe Photoshop CS2, InDesign CS2, or Adobe Illustrator, in a version to be agreed with the Research Manager. Where appropriate the CD-ROM may also contain a PDF version of the same deliverables. A PDF should not be supplied as the only version of any work package deliverable.
 - 6.4.2** Where deliverables are required in other electronic formats e.g. Gantt charts, network diagrams, CAD drawings, etc. the application and version shall be agreed with the Research Manager before the start of the work in question.

- 6.4.3** RSSB prefers not to receive electronic documents in password protected form. Where password protection is agreed, the password shall be provided to the Research Manager.
- 6.4.4** Contractors may send advance copies of the deliverables by email. Email files should be compressed or zipped and should not exceed 5MB in total. The preferred formats for images are: jpeg, psd or tiff. (Where high-quality original images are available these should also be supplied separately on CD-ROM or DVD.) If the potential file size is large discuss with the Research Manager separating the report into more than one file. The RSSB 'firewall' does not permit transmittal of executable files. Documents containing images may be quarantined pending confirmation of legitimate business content.
- 6.5** Research brief and abstract
- 6.5.1** Research deliverables may, as determined by the Research Manager, include a research brief. The length of the research brief shall generally not exceed four pages (about 1500 words). One or two pages may be sufficient as long as all the highlights of the work package are described. The brief shall be 'free-standing' – that is to say, it shall describe the findings, background, context and aims of the research as well as the methods adopted, and any recommendations, so that the it can be read in isolation from the report. A standard template is available for the development of research briefs, and should be used for this purpose.
- 6.5.2** A research brief should, whenever possible, have appropriate illustrations in it; and these should be supplied in a high-resolution format suitable for print reproduction (usually a minimum of 200 pixels or dots per inch).
- 6.5.3** An abstract shall also be submitted (usually some 150–200 words) describing the research. Typically this will be a development of the abstract included at the front of the specification. At publication there will be only one version of an abstract used; where appropriate, the Research Manager and Project Manager should agree a form of words that fulfils the needs of all intended audiences.
- 6.6** Images, charts, and tables
- 6.6.1** Any images, charts, or referenced tables of data, used in any work package documentation, should be supplied in their original form, with source data. Photographs and illustrations should be supplied as high-resolution versions that are compatible with Adobe Photoshop (CS2), Adobe Illustrator, or Acrobat, and are suitable for high-quality reproduction via Adobe FrameMaker or InDesign. (Only providing images within a Word document is not acceptable because of the way in which the application handles images.) If any graphs or charts are used the original Excel spreadsheet, containing the raw data should be provided. Any tables of data drawn from databases created specifically for the work package should also be supplied in an acceptable form (the R&D Business Systems Manager should be consulted to define what is acceptable, at the beginning of the work package).
- 6.6.2** Any images supplied should be available to RSSB on a copyright free basis. RSSB may reuse the image to publish in a different format, or in different documents. Images will be used primarily for the purpose of illustrating the same or similar railway related subjects, which may include publicising the research project in which the image was used, or any other railway related subject.
- 6.6.3** Images, including flow charts and similar diagrams, should be included in documents as jpeg files. Flow charts and diagrams should be created in an appropriate software application such as MS Visio (not the Word drawing tool) and also saved as jpegs. Charts from MS Excel can be saved as a PDF and then in jpeg format. Those developing charts and diagrams should be aware of image dimensions in the final published deliverable and chose the font sizes for embedded text, such as keys for charts, appropriately for easy legibility.
- 6.6.4** Tables of data should not, where possible, break across pages. Under no circumstances should a table row break across pages. The font used in tables should be legible to the

majority of the audience, without resort to unusual optical aids, or the need to strain the eyesight. If needs be authors should use A3 format pages within a document to present a wide table with legible type.

6.7 Technical jargon

6.7.1 Railway industry research reports may be read by a wide audience; some will have specialist knowledge of the fields concerned but many readers may be 'intelligent laymen'. Reports should minimise the use of technical terms and jargon and, where necessary, provide a glossary of technical terms and abbreviations used. Writers should give regard to the identified target audiences for specific deliverables when making decisions about use of language and technical terms.

6.8 Copyright

6.8.1 Research reports submitted to RSSB shall include in a prominent position, within the first two or three pages, the following copyright statement:

'© RSSB Copyright 20XX Rail Safety and Standards Board. This publication may be reproduced free of charge for research, private study, or for internal circulation within an organisation. This is subject to it being reproduced and referenced accurately and not being used in a misleading context. The material must be acknowledged as the copyright of Rail Safety and Standards Board and the title of the publication specified accordingly. For any other use of the material please apply to RSSB's Head of Research and Development for permission. Any additional queries can be directed to research@rssb.co.uk. This publication can be accessed via the RSSB website www.rssb.co.uk.'

7 **Change Requests**

7.1 A formal process for managing changes should be agreed with the RSSB research manager. Contractors should not at any time work at risk. If any changes to the agreed work package programme, duration or quality are identified then they should be formally raised with the RSSB research manager as part of the periodic progress reporting process. The contractor should not deviate from the agreed work package specification without the formal consent of the RSSB research manager. The contractor should not undertake any additional work without formal consent from RSSB's Supply Chain department.

D Pricing Schedule

All prices quoted shall be in sterling (unless otherwise requested in the Tender Documents), exclusive of Value Added Tax and shall be firm.

1 Costs and Expenses

- 1.1** A full and comprehensive breakdown of all costs and expenses to provide the goods, services or works requested in this invitation to tender must be provided and all assumptions must be clearly stated.
- 1.2** Failure to provide adequate detail may cause your tender to be judged non-compliant.
- 1.3** The construction of the price must be clear and easy to understand. Where appropriate the use of tables to show pricing is preferred. We require the following information:
- A breakdown by grade and named individual, indicating the number of days to be worked on each task and the daily rate to be charged.
 - A list of sub-contracts with prices and copies of quotations where available (a similar breakdown by grade, named individuals and rates, as above, is required where the sub-contract is for manpower).
 - Details of any other costs, such as hire charges for equipment.
 - Details of travel and subsistence and all expenses to be incurred.
 - The above breakdowns should be further broken down into individual work packages.
- 1.2** For your convenience, a Cost Breakdown spreadsheet has been included with this ITT pack which can be used to submit information regarding all costs and expenses.

2 Payment Schedule

- 2.1** A suitable invoicing schedule must be provided in the tender.

For a firm fee, payment must be based on deliverables that must be accepted by the RSSB Manager before payment is released.

E Tender Declaration

Please submit a copy of this Tender Declaration on your company's letterhead and signed by an authorised signatory along with your tender by email in pdf. Format. Retain a copy for your records.

RSSB
3rd Floor - Supply Chain
Block 2 Angel Square
1 Torrens Street
London
EC1V 1NY

Dear Sirs

We have examined the ITT, Instructions to Tenderers, the Information Required from Tenderers, the Conditions of Contract, the Specification and this Form of Tender (the "Tender Documents"). we offer to supply all/part of (delete as applicable) the goods, services or works specified in these Tender Documents.

We undertake if selected, to perform the contract in accordance with the Tender Documents, including the Conditions of Contract contained herein.

We agree this tender will remain open for acceptance by RSSB for 180 days from the date stipulated for the return of tenders.

We understand RSSB is not bound to accept the lowest, or any tender received.

We certify this is a bona fide tender, we have not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other person. We also certify we have not done and we undertake we will not do, at any time before the hour and date specified for the return of this tender, any of the following acts:

1. Communicate to a person, other than the person calling for the tenders, the amount or approximate amount of the proposed tender. Except where the disclosure, in confidence, of the approximate amount of the tender was necessary to obtain insurance premium quotations required for the preparation of the tender.
2. Enter into an agreement or arrangement with any other person/company that he shall refrain from tendering or as to the amount of any tender to be submitted.
3. Offer or pay or give or agree to pay or give, any sum of money or valuable consideration directly or indirectly to any person, for doing or having done or causing or having caused to be done, in relation to any other tender or proposed tender for the said goods, services or works, any act or thing of the sort described herein.

We recognise RSSB reserves the right to clarify details of our offer prior to the award of any contract.

We hereby undertake that the period during which this tender remains open for acceptance not to divulge to any persons, other than the persons to whom the tender is to be submitted, any information relating to the submission of this tender or the details contained therein except where such is necessary for the purpose of submission of this tender.

We have included the following in our response:

1. Method Statement:
 - The purpose of the Method Statement is to enable us to evaluate your understanding of our requirements and the quality of your proposals for meeting them.
 - The Method Statement describes clearly how we would provide each of the requirements set out in the Specification.
 - The Method Statement also describes how we will ensure quality, and manage health and safety.
2. Organisational structure, including the identification of any parent body.
3. The extent of the goods, services or works, which could not, or shall not, be undertaken by 'in-house' controlled resources including details of the proposed subcontractors
4. A detailed project programme including implementation processes
5. Risk assessment/mitigation.
6. Pricing Schedule.
7. Whether the tender is for the goods, services or works, in whole or in part.
8. A review of the proposed agreement together with a completed RSSB Contract Issues Memo with proposed changes for consideration.

Tenderer's authorised representative;

Print:

Sign:

Date:

Legal name of organisation:

Full business address:

F Invitation to Tender Acknowledgement

Within two (2) working days of receiving the invitation to tender a reply email to RSSB's representative is requested to acknowledge receipt of the invitation to tender and to advise RSSB whether or not you will be submitting a tender by the due date. If you will not be submitting a tender a brief email detailing the reasons is requested.

Emails should be sent to:

Janita.vara@rssb.co.uk and shareditt@rssb.co.uk

The following statement must also be included in your email:

'We confirm that we will treat all information supplied by Rail Safety and Standards Board as confidential and will not communicate any of that information to any other party or make use of that information for any purpose other than preparation of a response to the Invitation to Tender.'