OPEN TENDER

RSSB INVITATION TO TENDER FOR THE PROVISION OF: RSSB2724 -T1132 Development of Supplementary Freight Container Gauges

Deadline: Monday 10th December 2018

ITT Reference: RSSB2724 -T1132 Development of Supplementary Freight Container Gauges

# TENDER DOCUMENTS

1.1 Tenders shall be submitted in accordance with the following instructions. It is important that all the information requested is provided in the format and order specified. If the Tenderer does not provide all of the information RSSB has requested within the tender pack, RSSB may reject the tender as non-compliant.

1.2 Tenderers must obtain for themselves, at their own responsibility and expense, all information necessary for the preparation of their tender. Tenderers are solely responsible for any costs and expenses in connection with the preparation and submission of their Tender, and all other stages of the selection and evaluation process. Under no circumstances will RSSB, or its advisors, be liable for any costs or expenses Tenderers, their sub-contractors, suppliers or advisors incur in this process, including if this tendering process is terminated or amended by RSSB.

1.3 Tenderers are solely responsible for obtaining the information that they consider is necessary in order to prepare the content of their tender and to undertake any investigations they consider necessary in order to verify any information RSSB provides during the procurement process.

1.4 All pages of the tender submission must be sequentially numbered (including any forms to be completed and returned).

1.5 All specifications, plans, drawings, samples and patterns and anything else that RSSB issues in connection with this ITT, remains the property of RSSB and are to be used solely for the purpose of tendering.

1.6 At any time prior to the deadline for receipt of questions, RSSB may modify the tender documents by amendments in writing.

1.7 RSSB (at its sole discretion) may extend the deadline for receipt of Tenders.

RSSB reserves the right to modify or to discontinue the whole of, or any part of, this tendering process at any time and accepts no obligation whatsoever to award a contract.

# GENERAL, LEGAL & COMPLIANCE

2.1 RSSB will check each tender for completeness and compliance with the tender instructions. RSSB reserves the right to reject any tenders it considers substantially incomplete, or non-compliant (each tender will be assessed on its own merit, according to the level/importance of omitted or non-compliant content).

2.2The Tenderer will be excluded should any of the grounds for mandatory rejection or discretionary rejection be triggered. Mandatory requirements can be viewed within the Public Contracts Regulations 2015.

2.3 Tenderers are required to confirm in their tender response, they are able to meet all mandatory and discretionary requirements.

2.4 The Tenderer will be excluded should it be assessed that it has a high risk of:

* + Insolvency over the lifetime of the contract; e.g. the Tenderer may be excluded if its current assets to current liabilities ratio is less than 1;
	+ Insufficient financial capacity to deliver the services effectively; or
	+ Over-dependence on RSSB (e.g. the Tenderer may be excluded if its turnover is less than £ [no more than2x the contract value]

# 3.0 TENDER INSTRUCTIONS

3.1 “RSSB” means the contracting authority, seeking to invite suppliers to participate in the procurement process.

“You” or “Supplier” means the legal entity completing these questions, seeking to be invited to the next step of the procurement process Invitation to Tender (ITT)

3.2 Please ensure all questions are completed in full and in the format requested. Failure to do so may result in your submission being disqualified. If the question does not apply you need to clearly state N/A.

3.3 If it is necessary for you to provide additional information this should be provided as an appendix and clearly referenced as part of your declaration.

3.4 **RSSB REPRESENTATIVE**

Your main point of contact is: shareditt@rssb.co.uk

**RSSB OVERVIEW**

If you wish to find out more about RSSB, please visit our website at [www.rssb.co.uk](http://www.rssb.co.uk)

**Timetable**

The timetable for this procurement follows. This is intended as a guide and whilst RSSB does not intend to depart from the timetable, it reserves the right to do so at any stage.

The expected milestones are set out below:

|  |  |
| --- | --- |
| **Activity** | **Date** |
| Expression of interest meeting  | 15 Aug 2018 |
| ITT issued | 12 Nov 2018 |
| Supplier clarification questions deadline  | 3 Dec 2018; 12:00 hours |
| **Deadline for Submitting Tenders** | **10 Dec 2018; 12:00 hours** |
| Post Tender & Evaluation Clarification  | W/C 10 Dec 2018 |
| Estimated notification of award decision | 24 Dec 2018 |
| Target contract commencement date | W/C 7 Jan 2019 |

Note: RSSB reserves the right to amend these dates as business requirements demand and will communicate any changes to tenderers.

3.5 **QUESTIONS**

Should you have any questions relating to the project, please email these before the deadlines detailed in the project timeline above to ensure that these questions can be effectively addressed? To ensure equal and fair treatment to all potential suppliers, RSSB will circulate all questions and responses anonymously.

Questions should be emailed to: shareditt@rssb.co.uk

# 4.0 Evaluation Information

4.1 In the interests of an open, fair and transparent assessment, this document sets out how RSSB intends to evaluate tender responses. It outlines the evaluation criteria and respective weightings, as well as the evaluation methodology to be applied.

4.2 **Verification of Information Provided**

 Whilst reserving the right to request information at any time throughout the procurement process. RSSB may enable the Supplier to self- certify that there are no mandatory/ discretionary grounds for excluding their organisation. When requesting evidence that the supplier can meet the specified questions relating to Technical and Professional Ability RSSB may only obtain such evidence after the final tender evaluation decision and only from the winning Supplier only.

4.3 **Please self-certify whether you already have, or can commit to obtain, prior to the commencement of the contract, the levels of insurance cover indicated below:**

* Employer’s (Compulsory) Liability Insurance = £2M
* Public Liability Insurance = £1M
* Professional Indemnity Insurance = £1M

4.4 **Sub- contracting Arrangements**

 Where the Supplier proposes to use one or more sub- contractors to deliver some or all of the contract requirements, a separate Appendix should be used to provide details of the proposed delivery model that includes members of the supply chain and percentage of work being delivered by each sub -contractor and the key deliverables that each sub- contractor will be responsible for.

RSSB recognises that sub- contracting arrangements may be subject to change and not finalised until a later date. However, Suppliers should be aware that where information provided to RSSB indicates that sub- contractors are to play a significant role in delivering the key requirements and any changes to those sub- contracting arrangements significantly affect the ability of the supplier to deliver key requirements the Supplier should notify RSSB immediately of any changes in the proposed supplier sub-contractor arrangements. RSSB reserves the right to deselect the Supplier prior to any award of contract based on an assessment of the updated information.

4.5 **Consortia Arrangement**

 If the Supplier completing this tender submission is doing so as part of a proposed consortium the following information must be provided:

* Names of all consortium members;
* The lead member of the consortium who will be contractually responsible for delivery of the contract (if a separate legal entity is not being created); and
* If the consortium is proposing to form a legal entity, full details of the proposal should be submitted as an Appendix with this Tender.
* RSSB may require the consortium to assume a specific legal form if awarded the contract. If it is deemed that a legal incorporation is necessary for the satisfactory performance of the contract.
* All members of the consortium will be required to provide the information required in all sections of the Tender as part of a single composite response to RSSB i.e. each member of the consortium is required to contribute to completing the response document.

4.6 **Confidentiality**

 RSSB reserves the right to contact the named customer contact and the nominated customer does not owe RSSB any duty of care or have any legal liability, except for any deceitful or maliciously false statements of fact.

 RSSB confirms that it will keep confidential and will not disclose to any third parties for any information obtained from the named customer contact, other than to the Crown Commercial Services and or contracting authorities defined by the Public Contract Regulations.

# 5.0 Evaluation Process

5.1 The process that will be used to select an appropriate Tenderer and award the contract for this procurement is available in more detail in the Evaluation Criteria.

The open procedure is a single stage process.

5.2 **Marking for Award Criteria**

An evaluation panel consisting of representatives of key stakeholders within RSSB will carry out the evaluation. The procurement team will only act as moderator during the assessment phases of the evaluation.

Each evaluation area is weighted to show the relative importance significance of the criteria specific area’s for assessment.

# 6.0 PROCESS AND PREPARATION OF RESPONSES

6.1 The Supplier shall not enter in 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.

6.2 The Supplier shall not approach any Customer employee, the Customer’s Representative or its agents to discuss any aspects of the Tender. All communication should be conducted via the Customers Representative.

6.3 The Supplier shall not canvass support for the award of the contract by approaching any employee of RSSB, its Representative or its agents.

6.4 The documents as enclosed are to be accepted in their entirety. No alteration Representative before the date stated for the receipt of tenders. If any alteration is made or these instructions to Suppliers are not fully complied with the tender may be invalidated.

6.5 The conditions of contract included in this Invitation to tender apply. The Suppliers standard terms of business or trade will not be accepted.

6.6 Any requested changes to the conditions of contract must be detailed on the Contract Issues Memo document included for consideration. If this is not completed, it is assumed that the Supplier has accepted all terms and conditions detailed and no further changes will be accepted.

6.7 The Supplier 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.

6.8 All prices quoted to be GBP (unless otherwise requested in the Invitation to Tender) exclusive Value Added Tax and firm.

 It is the Suppliers responsibility to ensure the tender is correct at the time of submission. No amendment to the tender will be allowed after the due date.

6.9 Any questions must be emailed to the main point of contact no less than five days before the return date. Note: questions/responses will be circulated anonymously to all Suppliers invited to tender. Tenders received after the closing date and time will not be considered.

6.10 The Customers Representative reserves the right to correct any omissions or inaccuracies in the Invitation to Tender and to clarify and/or amend any of the Customers’ requirements, up to seven days before the return of tenders.

6.11 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 tenders required during the preparation of the Tender. All information provided by Suppliers will be treated in confidence except in stances where references may be sought.

6.12 RSSB reserves the right to cancel this Tender at any point and any cost incurred in the preparation of this Tender is at the Bidder’s expense.

6.13 Tenders must remain open for acceptance for a period of 180 calendar days from the submission date.

6.14 The tenderer should include the following information as part of their tender response:

Legal entity name of Tenderer

|  |
| --- |
|  |

Contact person's name, email address, telephone number and postal address for enquiries relating to this procurement

|  |
| --- |
| Name: |
| Postal address: |
| Telephone number: |
| Email address: |

Tenderer’s registered address

|  |
| --- |
|  |

Tenderer’s website address (if available)

|  |
| --- |
|  |

Please tick the box for the legal form of the Tenderer

|  |
| --- |
| * Sole Trader [ ]
* Partnership [ ]
* Limited Liability Partnership [ ]
* Private Limited Company [ ]
* Public Limited Company [ ]
* Local Council [ ]
* Voluntary/ charitable/ not for profit organisation [ ]
* Other (please specify below) [ ]
 |

If ‘Other’ has been selected from the question above please provide details.

|  |
| --- |
|  |

If your business is a registered company, charity or any other registered organisation (including limited, non-limited or Industrial and Provident Society), please state your registration number. This must be the registration number of the Tenderer, providing the country and date of incorporation / registration if other than the UK.

|  |
| --- |
|  |

Name of ultimate parent company (if this applies)

|  |
| --- |
|  |

Companies House Registration number of ultimate parent company (if this applies)

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| --- |
|  |

**Additional Notes**

* Fully answer the question given and consider the weighting for the section
* Explain how you will meet the criteria and provide evidence to support your response.
* Further reading on how to complete the tender is available in section 10

# 7.0 TENDER EVALUATION (SELECTION CRITERIA)

| **Heading** | **Specific question(s)** | **Evaluation Criteria** |
| --- | --- | --- |
| S1 Experience of the Tenderer in gauging analysis projects[Max 1 page] | The Tenderer must provide a short description of two projects involving the analysis of gauges. Please provide a short explanation of why they are relevant to this project. | Pass: The tenderer provides a short description of two projects involving the analysis of gauges. Further the tenderer provides a short explanation as to “Why?” the aforementioned are relevant to this project. Additionally, the tenderer through the above provides RSSB with sufficient confidence in its experience.Fail: The Tenderer either fails to provide a short description of two projects involving the analysis of gauges or the tenderers fails to provide a short explanation as to “Why?” the aforementioned are relevant to this project or the tenderer fails to provide RSSB with sufficient confidence in its experience. |
| S2 Experience of the Tenderer in economic assessments[Max 1 page] | The Tenderer must provide a short description of two projects developing economic analysis for clients over the last five years. Please provide a short explanation on why they are relevant to our needs. | Pass: The Tenderer provides a short description of two projects developing economic analysis for clients over the last five years. Further the tenderer provided a short explanation as to “Why?” the aforementioned are relevant to RSSB’s needs. Additionally, through the above the tenderer provides RSSB with a strong degree of confidence in the tenderers experience.Fail: The Tenderer either fails to provide a short description of two projects developing economic analysis for clients over the last five years or the tenderers has failed to provide a short explanation as to “Why?” the aforementioned is relevant to RSSB’s need or the tenderer fails to provide RSSB with sufficient confidence in its experience. |
| S3 Summary of the Proposal[Max 1 page] | The Tenderer must provide a concise summary highlighting the key aspects of the proposal. | Pass: The Tenderer has provided a concise summary highlighting the key aspects of the proposal of the supplier.Fail: The Tenderer has not provided a concise summary or has not provided a summary highlighting the key aspects of the proposal of the supplier. |

# 8.0 TENDER EVALUATION (AWARD CRITERIA)

8.1 **ITT Assessment**

**The Contract Award decision is solely based on the basis of Tenderer proposal and price offering.**

8.2 RSSB uses the following quality / price ratio to determine the outcome of the evaluation where quality (technical evaluation) and price are weighted and scored individually before being combined.

 Quality 75%: Price 25%

8.3 Technical criteria are weighted and scored as a percentage of the maximum score available with a minimum quality threshold set.

 **Technical Evaluation**

8.4 Tenders are assessed on how well they satisfy the technical evaluation criteria.

 The relative importance of each criterion is established by giving it a percentage weighting so that all the weightings equal 100%. The Evaluation Matrix provides details of the weightings that RSSB will use in assessing Tenderer proposals.

 The Technical Evaluation will be carried out using Tenderer responses to the tender specification using the scoring scheme (identified in Table below).

8.5 The scored responses are generally assessed out of a maximum of five (5). The Evaluation Panel will not be allowed to give partial scores (for example 3.5); however, once all scores are aggregated, the technical scores will be rounded to two decimal places prior to consolidating with the price evaluation.

8.6 The following shall constitute a failure to evidence satisfactory delivery of the requirement(s) of the procurement and will automatically disqualify the Tenderer:

1. A grade of zero (0) in any of the evaluated technical/quality questions in Section D of Schedule One (a) of Part B of the ITT before the weightings are applied; or
2. a grade of one (1) in more than one of the evaluated technical/quality questions in Section D of Schedule One (a) of Part B of the ITT before the weightings are applied

8.7 Those Tender Responses which fail to demonstrate satisfactory delivery of the requirement(s) of the procurement by reason of failing to achieve these minimum thresholds will be set aside and not considered further.

|  |  |
| --- | --- |
| **Grade** | **Definition of grade** |
| 5 | A wholly excellent Tender Response that (where applicable):* Addresses all aspects of the question in an informed and comprehensive manner;
* Demonstrates a thorough understanding of what is being asked for;
* Provides evidence of how that understanding can be applied in practice;
* Offers full confidence that the Tenderer will deliver the service in full;
* Addresses the majority of areas of doubt and uncertainty; and
* Provides certain, unambiguous commitments or statements of intent that permit reliance through translation into contractual terms
 |
| 4 | * A good Tender Response that (where applicable):
* Addresses all aspects of the question and is generally of a good standard;
* Demonstrates a good understanding of what is being asked for;
* Provides a worked-up methodical approach;
* Offers confidence that the Tenderer will deliver the service in full with limited areas of doubt or uncertainty;
* Addresses key areas of doubt and uncertainty; and
* Provides commitments that can be translated well into contractual terms
 |
| 3 | A satisfactory Tender Response that (where applicable):* Addresses the majority of the question and is generally of a good standard but lacks substance or detail in some areas;
* Demonstrates an understanding of what is being asked for;
* Provides a satisfactory approach;
* Offers a general level of confidence that the Tenderer will deliver the service (but with room for doubt in some areas);
* Address some areas of doubt and uncertainty; and
* Provides some commitments that can be translated well into contractual terms.
 |
| 2 | A Tender Response that (where applicable):* Addresses some of the question but *either* lacks relevant information and detail *or* lacks substance in a manner that would suggest the response is a “model answer”;
* Demonstrates some understanding but with a lack of clarity in key areas;
* Provides an approach which is not wholly appropriate or viable orlacks evidence;
* Shows that the level of confidence that the supplier can deliver does not outweigh the doubt;
* Does not address many areas of doubt and uncertainty; and
* Does not offer sufficient commitment (with doubt as to the extent to which would translate into contractual terms)
 |
| 1 | A generally unsatisfactory Tenderer response that (where applicable):* Does not address the question or has omissions;
* Lacks understanding in significant areas:
* Provides an approach which has gaps or creates concerns;
* Shows that the level of confidence that the supplier can deliver is low;
* Creates uncertainty; and
* Displays significant lack of commitment (with doubt as to the extent to which would translate into contractual terms)
 |
| 0 | A wholly unsatisfactory Tenderer response that (where applicable):* Provides no response or omissions/oversights that prevent scoring;
* Refuses to deliver the requirement; and
* Creates concerns so significant that the response would be detrimental to the interests of RSSB
 |

#  9.0 ITT Evaluation Matrix (Award Criteria)

|  |  |  |  |
| --- | --- | --- | --- |
| **Heading** | **Specific question(s)** | **Evaluation Criteria** | **Weight** |
| A1 Method statement: Evidence of the Tenderer’s ability to meet the specified deliverables through a robust methodology[Max 5 pages] | The Tenderer should provide evidence of their expertise to deliver this project in the form of a method statement. This should set out how it will fully meet the objectives and scope of the project, adding value where possible. | The Tenderer’s response:1. Explains how they would apply their expertise to meet the specification, including how they would conduct the study
2. Demonstrates their understanding of the objectives
3. Provide a coherent and systematic approach to meet these objectives.
 | 25% |
| A2 Evidence of the Tenderer’s technical ability [Max 3 pages] | The Tenderer should:1. Provide evidence of relevant previous projects from the bidding organisation(s).
2. Provide detail of relevant experience and knowledge of the project team.
 | The Tenderer’s response demonstrates that it:1. Has identified relevant projects as experience
2. Has identified relevant individuals to deliver the work and that the overall skills covered is of a high degree of quality
3. Has displayed how it will access the required industry experience and knowledge (if expertise is not in-house).
 | 25% |
| A3 Project Delivery: resources, budget, communication and management [Max 6 pages] | The Tenderer should:1. Provide adequate allocation of appropriate resources against deliverables. This includes team members’ roles, their relevant experience and contribution to the delivery.
2. Provide a well-structured plan for completion, including a clear deadline for the delivery of each deliverable.
3. Identify how they will work with RSSB to ensure the quality and the content of the deliverables is fit for purpose.
 | The Tenderer’s response shows that it:* Has provided a credible plan for delivering successful outcomes to time and quality
* Has identified relevant individuals to deliver the work and that the overall mix of skills covered is adequate
* Has identified appropriate ways to engage with RSSB
 | 20% |
| A4 Risk and opportunity management[Max 2 pages] | The tenderer will identify and propose mitigations and responses to key risks and opportunities | * Has identified risks and proposed to effective management and mitigation
 |  |
| A5 Cost of project | The Tenderer should provide a fixed cost for the project and the associated cost break down. This should cover both phases of work and assume 6 supplementary gauges are developed.While unmarked, the Tenderer should also provide a breakdown of the cost should the project develop more or fewer supplementary gauges. | * The tender with the lowest total cost will receive 100% of the available weighted score (25%).

Other Tenderer’s tenders will receive a pro-rated relative to the lowest cost according to the following formula:Score of other tender = lowest tender total cost / other tender total cost x 100%. | 25% |

# 10.0 PRICE EVALUATION

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

10.2 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.

10.3 Failure to provide adequate detail may cause your tender to be judged non-compliant.

10.4 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. Mileage reclaim will be linked to maximum levels set by HMRC.
		- The above breakdowns should be further broken down into individual work packages.

# 11.0 TENDER EVALUATION CRITERIA AND MINIMUM REQUIREMENTS

11.1 In evaluating tenders, the most economically advantageous tender(s) will be sought. This will be using the evaluation criteria and weightings detailed in **ITT Evaluation Matrix** **Award Criteria**.

11.2 The evaluation criteria detail the minimum requirements. Therefore, any tender which cannot demonstrate that it meets any of the minimum requirements will not be marked and will automatically score zero.

Tenderers are advised to carefully consider the attached specifications, ask clarification questions to ensure these are understood.

# 12.0 CONDITIONS OF CONTRACT

The terms and conditions of the contract are contained with a separate document.

**Qualification of the Contract**

Where Tenderers have any queries or concerns with any specific condition of the terms and conditions of the contract, these should be submitted in writing to **shareditt@rssb.co.uk** as soon as possible, and in any case no later than 10 days prior to the deadline for submission of tenders.  Please ensure the specific condition(s) and proposed amendment(s) are provided.  These will be reviewed by RSSB on a case by case basis, and, if accepted, revised terms and conditions will be issued to all Tenderers.  Failure to accept the terms and conditions of the contract or to qualify the tender in any way, may result in the tender being rejected by RSSB.

## 13.0 RSSB Company Information

 ***Insert Work Package Title*Introduction**

RSSB was established in April 2003. The Company’s primary objective is to facilitate the railway industry’s work to achieve continuous improvement in the health and safety performance of the railways in Great Britain, and thus to facilitate the reduction of risk to passengers, employees and the affected public. The railway is a complex system with multiple interfaces delivered by many different organisations. At RSSB we bring these different organisations together to make collective decisions. We help the rail industry carry out research, understand risk, set standards and improve performance. We provide a constant point of reference in a changing environment.

We support rail in the areas of safety standards, knowledge and innovation and a wide range of cross- industry schemes requiring our knowledge and independence. Our work involves close collaboration, but as technical experts we also appoint suppliers in the wider market to provide an informed view.

**Key elements of the company’s remit are to:**

* Manage Railway Group Standards on behalf of the industry
* Lead the development of long-term safety strategy for the industry, including the publication of annual Railway Strategic Safety Plans
* Propose change through facilitation of the research and development programme, education and awareness
* Measure, report and inform on health and safety performance, safety intelligence, trends, data and risk
* Support cross-industry groups in national programmes which address major areas of safety concern
* Facilitate the effective representation of the UK rail industry in the development of European legislation and standards that impact on the rail system

RSSB is a not-for-profit company owned by major industry stakeholders. The company is limited by guarantee and is governed by its members, a board and an advisory committee. It is independent of any single railway company and of their commercial interests.

# Background

## RSSB Overview

*RSSB* is a membership organisation in the railway that helps industry by understanding risk, guiding standards and managing research. 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* brings all parts of this system together to make collective decisions, products and services, to help industry drive out unnecessary cost, improve business performance and develop long-term strategies.

*RSSB’s* activities include:

* **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.

**Specification for research project**

T1132 Development of Supplementary Freight Container Gauges

# Background

The total amount of freight in 2017-18 fell to 75m tonnes, the lowest since 1984-85, a 5.6% decrease on 2016-17.[[1]](#footnote-1) Additionally, since a ten-year high of 22.71b net tonne km in 2013-14, the amount of freight moved[[2]](#footnote-2) on the rail network has steadily declined by 25% to 16.95b net tonne km in 2017-18[[3]](#footnote-3). In part, this can be attributed to declining coal usage[[4]](#footnote-4), which accounted for approx. 35% of the total amount of freight moved in 2013-14. Despite the overall decline, international, domestic intermodal and other commodities grew by approx. 21%, 4%, 8% and 25% between 2013-14 and 2017-18, respectively, and represent almost 80% of the total freight moved in 2017-18. Therefore, it can be observed that the landscape of the freight market is shifting from its traditional composition and a response is needed for the community to retain its competitiveness in comparison to other transport modes.

W7, W8, W9 (including W9Plus), W10 (including W10A) & W12 are the standard gauges used for container/ wagon combinations. However, it has been observed that these do not align with some common Load Unit/Wagon combinations that are used in various, and in some cases, expanding markets within the industry e.g. international and domestic intermodal. Consequently, many emerging traffic opportunities can only be authorised through the ‘out of gauge loads’ process. This entails the analysis of the Load Unit/Wagon combination against every structure along the route where the traffic is deemed to be out-of-gauge and can take several weeks to undertake. Furthermore, an out-of-gauge load can only be authorised for a maximum of one year, so the analysis must be repeated annually, regardless of whether the underlying data has changed. An assessment has identified that the existing container gauges could allow more traffic to use routes cleared to the gauge if they were defined differently.

Structures on the route are generally cleared to the top corner of the gauge, potentially leaving additional space adjacent to that corner unused. It is therefore possible that revised container gauges could be developed to make use of this additional space. In turn, this could facilitate a significant increase in the number of existing Load Unit/Wagon combinations that can be used on routes without needing to modify infrastructure.

For instance, it is estimated that there are about 200 Load Unit/Wagon (5 load unit widths, about 40 wagon types) combinations available in the current W7 Gauge which provides for only 14 of those 200 combinations (7% of all total combinations utilised). Revising the gauge would potentially provide for 146 combinations (73% of all total combinations utilised), that does not require infrastructure clearance work.

Therefore, there is an opportunity to create a set of ‘supplementary’ container gauges that allow for the dynamic movements of all common bogie types, common box sizes and fastening systems, over a range of suitable deck heights and bogie centres. These supplementary container gauges could allow more wagon types and more container sizes to be carried on existing cleared routes, without costly infrastructure work.

RSSB project T1132 will assess the technical and economic feasibility of possible options, before developing suitable supplementary container gauges for inclusion in the revised gauging standard (GERT8073). In turn, the outputs from this project should allow the freight community to respond to changing market demands, enhancing its competitiveness against other modes of transport.

# Overall Project Objectives

The project aims to create a set of supplementary freight container gauges that allow for the dynamic movements of all common bogie types, common box sizes and fastening systems, over a range of suitable deck heights and bogie centres. By assessing the technical and financial feasibility of the possible container gauge options, and then defining the supplementary container gauges, this project should provide suitable options for incorporation into the revised GERT8073 and Network Rail’s Sectional Appendix. Thus, allowing the industry to seize more traffic opportunities in dynamic markets such as the short-sea and the domestic intermodal.

It is proposed that the aims of the project should be achieved using the Work Package structure detailed below[[5]](#footnote-5). Work Package 2.1 requires the supplier to make an economic assessment of the gauges to identify the needs and potential benefits of creating supplementary gauges. Based on these findings the subsequent Work Package (2.2) will develop those gauges that have a positive cost benefit case.

## Work Package 2.1 Objectives

***Evaluation of potential container gauge options***

It is expected that suppliers will evaluate the possible container gauge options that are feasible to implement and demonstrate a significant financial benefit to the industry. Evaluation of the identified container gauges is essential in order to determine the appropriate container gauges to develop.

Work on each container gauge should include, but is not limited to:

1. A workshop with key stakeholders within the industry to gain an understanding of their requirements from the potential container gauges. Follow-up at the end of WP2.1 would be beneficial to ensure that industry is aware of the potential changes.
2. An economic assessment of the current and potential demand from high-growth areas (e.g. short-sea and domestic swap body market). The assessment of each supplementary gauge should estimate costs, benefits, and give a consideration of estimated implementation timeframes.
3. A technical feasibility study, including
	1. Defining the tallest practical container top corner to fit the 3990mm ARL set in the W6A gauge and/or to fit under the Overhead Line Equipment on electrified routes.
	2. A comparison between the proposed supplementary container gauge(s)[[6]](#footnote-6) and existing gauge(s). Similarity in size would mean that implementing the supplementary gauge(s) would likely be simpler.
	3. A consideration of infrastructure on the routes that the existing standard gauge is cleared for.
	4. An assessment of the Load Unit/Wagon combinations, and a consideration of the lifespan of assets.

Based on the economic assessment and technical feasibility study, a subsequent review and comparison of each container gauge should be undertaken. Upon completion of Work Package 2.1, the most beneficial supplementary gauges will be developed. If the case arises whereby the assessment demonstrates little to no economic benefit to the freight community from any of the supplementary gauges, no further work will be required, and the project will come to a close.

## Work Package 2.2 Objectives

***D******evelopment of the optimised ‘supplementary’ gauge profiles***

This Work Package will take the findings from WP 2.1 in order to define the beneficial supplementary container gauges. This should include, but is not limited to:

1. Defining an appropriate criteria for the optimisation of the supplementary gauges.
2. Modelling the supplementary container gauges in the RSSB J Table spreadsheet to determine the sizes of Load Units available
3. Confirming the viability through modelling the container gauges through the infrastructure on the routes that the existing standard gauge is cleared for. In order to ensure the viability of the container gauges, it is anticipated that there will be a large number of structures that would need to be cleared. Therefore, it is likely that some iteration of the defined container gauges would be required at this stage. – Exploring optimal trade-off between being able to transport the most amount of container combinations and maximising the route capability.
4. Proposing the text for inclusion in GERT8073, eventually leading to publication in the Sectional Appendix.

# Phasing

The project should be completed by October 2019 to ensure that the supplementary Gauges will be included in GERT8073 by the end of 2020. A report and presentation of the findings associated with Work Package 2.1 should be delivered by February 2019 to key stakeholders; however, suppliers may propose a different interim deadline which may be considered. This deliverable is expected to encompass the following:

* Presentation of Work Package 2.1 findings
* Delivery of report outlining key findings (above), in addition to methodology and reasoning behind approach

Through frequent communication and coordination during the project, the outcome should eventually lead to supplementary gauges that the industry can agree upon. Upon completion of the project, the current Standard Gauges must remain in GERT8073 whilst they continue to be required for freight traffic..

Success at the end of the project will be:

* Several supplementary container gauges that define the dynamic envelope of freight wagons (of different deck heights) running on a range of bogies including track-friendly types. The material will be presented in a manner that is immediately appropriate for incorporation into GERT8073. Inclusion of the supplementary container gauges in the Sectional Appendix can be achieved via engagement with Network Rail throughout the project.
* A comprehensive economic assessment of the potential financial benefits to freight operators of the new gauges.
* A compelling presentation, aimed at Freight Operating Company (FOC) decision-makers, detailing the quantified technical and economic advantages of the proposed supplementary gauges.

# Scope

|  |  |
| --- | --- |
| **In scope** | **Out of scope** |
| * Freight traffic and operators
* Current standard container sizes and swapbodies
* Refinement of existing freight gauges
* All current suspension/bogie types
* 15-year time horizon for freight demand
 | * Passenger traffic and operators
* Consideration of the Lower Sector Vehicle Gauge
* Development of new gauge(s)
* Consideration of novel bogies
 |

# Methodology

Suppliers are expected to develop and explain the methodology that they are intending to use to successfully meet the project objectives and cover the scope. This includes clarity on risks and mitigations, with reference to those that could impact the delivery timeframe. We welcome suppliers to consider where additional value can be provided beyond the outlined objectives and scope. They can draw on lessons learnt from previous research.

It is likely that the work will involve the following activities:

* Validation process whereby the appropriateness of the selected gauges would be verified
* Determination of optimised gauge profiles and creation of the modified gauges

# Deliverables

All deliverables must use an RSSB template and will be publicly available to RSSB members online via SPARK.

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Gauging Analysis | Report |
| **Description** |
| This report describes the background to the research, the methods used, and the project findings.  The report will include:1. Proposed draft requirements, rationale and guidance for GERT8073.
2. Completed RIS-2773-RST vehicle gauging data sheets
3. GORT 3056 J Tables of wagons/suspensions/containers conforming to the new gauges.
4. Route section compatibility for the new gauges.

The report will be in standard RSSB format and will be made available on SPARK. |

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Economic Analysis | Presentation |
| **Description** |
| Findings from the economic analysis undertaken will be presented to a panel of key stakeholders and industry representatives. This should include an overview of the project, the developed supplementary container gauges and their benefits to FOCs. The presentation will also provide the supplier with the opportunity to engage with industry and share their justification behind key decisions made throughout the project.The presentation will be in standard RSSB format and made available on SPARK. |

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Research Brief  | Report |
| **Description** |
| A four-page document summarising the research, key findings, and the potential benefits generated.This report will be in standard RSSB format and will be made available on SPARK. |

# Stakeholders’ Roles & Responsibilities

|  |  |  |
| --- | --- | --- |
|  | **General role in project** | **Specific role in acceptance of deliverables** |
| Project manager | The RSSB project manager is the first point of contact during project delivery. The RSSB project manager responsible for the coordination of RSSB activities to support the supplier delivery and reviews project schedules, cost reporting and other relevant project management tasks. The RSSB project manager leads the project in organising meetings, etc and supports timely and effective delivery towards project objectives. | Facilitates technical review and acceptance processes, identifies and monitors corrective actions where needed, including facilitating decision making. |
| Technical expert | Throughout the project, the RSSB technical expert ensures that technical aspects are reflected accurately. Technical aspects can refer to specific issues around railway signalling, track engineering, safety relevant operations or any other specialist field.  | Reviews emerging outputs from technical perspective. |
| Industry and RSSB sponsor | The Industry and RSSB sponsors act as figureheads for the research, championing its importance and its outputs. Their key role is to provide steer to the research as it progresses and exert pressure on the industry to make use of its findings. | Formally accepts deliverables  |
| Project supporters | The project supporters represent parts of industry complementary to the sponsor’s organisation. They offer expertise for effective project delivery and support the implementation of findings led by the champion through networking, advice and other support. | Formally accepts deliverables  |
| Project steering group | The project steering group ensures the project delivers to industry needs. As such, it helps formulate specifications, assesses tenders, reviews draft and final outputs and other relevant tasks. | Formally accepts deliverables  |

# Budget, Timescales & Dependencies

The indicative budget for this work is up to £120,000. Any bid exceeding this value will need to provide detailed explanation on why the supplier doesn’t feel that the budget is adequate, and in such case, we strongly encourage suppliers to provide costed options for RSSB to consider.

RSSB expects the work to commence in December 2018 and to be completed by November 2019.

This work should be delivered to facilitate updates to relevant gauging standards.

# Critical Success Factors & Risk Management

The following critical success factors define what RSSB consider to be the key outcomes

at the end of this project:

* Definition of the supplementary container gauges in the form of proposed text to be included in the relevant standard(s)
* The supplementary container gauges open new freight pathways
* There is a net positive economic impact to FOCs in the adoption of the supplementary container gauges.
* Gaining industry buy-in (e.g. on the economic benefits) by establishing appropriate channels to communicate the results to industry members
* The supplementary gauges are future-proof and adaptable to changes in demand on the rail network
* The recommended solutions can be implemented and are considered feasible by FOCs and suppliers

The project risks identify potential threats to the supplier’s successful delivery of the project. RSSB expects the supplier to identify risks, propose effective management and

mitigation measures, and regularly review these risks as the project progresses. RSSB

have identified the following initial risks:

* The duration of the project will span the Christmas and Summer periods, thereby incurring a risk in limited staff availability. To mitigate this, the supplier should detail a robust project strategy.
* Securing access to vehicle models and wagon design information may be difficult but can be mitigated through engaging with industry contacts and the project steering group. RSSB will facilitate with the provision of information but cannot guarantee access. Suppliers are expected to identify information and communicate with RSSB in advance, if it is anticipated that additional support would be required.
* The suggested timeframe assumes that one iteration per gauge is likely to occur in Work Package 2.2. Should the number of iterations per gauge exceed this, the time of the project may increase, resulting in a greater risk that the findings may not be ready in time for the planned review of gauging standards.

A detailed risk assessment/register and assumptions register should be provided

highlighting areas where greater attention may be required to ensure success of the

project.

**Appendix X Form of Tender**

This section outlines how the offer from the Tenderer is to be constructed. Please return this Tender Declaration along with your Tender and retain a copy for your records.

Having examined the ITT email, the 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 that this tender shall remain open for acceptance by the Customer for 180 days from the date stipulated for the return of tenders.

We understand that you are not bound to accept the lowest, or any tender you may receive.

We certify that this is a bona fide tender, and that 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 that we have not done and we undertake that 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 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 that the Customer 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.

**Appendix X Subcontractors**

All suppliers to RSSB are asked to provide details of all sub-contractors that will be used to perform the contract.

|  |  |  |  |
| --- | --- | --- | --- |
| Name & Address of Sub-Contractor | Service performed for Contractor | Provide details of staff numbers[[7]](#footnote-7) | Provide latest year’s turnover |
| Name:  |  |  |  |  |
| Address: |  |
| Name:  |  |  |  |  |
| Address: |  |
| Name:  |  |  |  |  |
| Address: |  |

**Appendix X Conflicts** **of** **Interest**

**Tenderers have a continuing duty to disclose actual or potential conflicts of interest in respect of itself, its named sub-contractors and / or consortia members.**

**Please describe any (potential) conflicts of interest that the Tenderer has identified and how these will be managed\*:**

If you **DO** **NOT** have any conflicts to declare, please tick this box: **[ ]**

Tenderers are reminded that failure to identify material conflicts of interest may lead to rejection of its tender response.

Guidance to Tenderers:

Tenderers should describe in the detail the perceived conflict (how it could be perceived in the context of this procurement) and the measures it will take to mitigate the conflict through the procurement life-cycle and service delivery

1. ORR Freight Rail Usage Statistical Release – 2017-18 Q4 [orr.gov.uk/\_\_data/assets/pdf\_file/0010/.../freight-rail-usage-2017-18-quarter-4.pdf](file:///C%3A%5CUsers%5Camar.vasdev%5CDesktop%5CT1132%20-%20New%20Freight%20Gauges%5C03%20Specification%5Corr.gov.uk%5C__data%5Cassets%5Cpdf_file%5C0010%5C...%5Cfreight-rail-usage-2017-18-quarter-4.pdf) [↑](#footnote-ref-1)
2. Unlike freight lifted, freight moved accounts for the distance travelled [↑](#footnote-ref-2)
3. ORR Freight moved – Table 13.7 [http://dataportal.orr.gov.uk/displayreport/report/html/a201ed45-23cf-4785-8d71-881f93592314#](http://dataportal.orr.gov.uk/displayreport/report/html/a201ed45-23cf-4785-8d71-881f93592314) [↑](#footnote-ref-3)
4. Railfreight: ‘*Steep decline in coal demand sees UK rail freight down’* <https://www.railfreight.com/business/2017/06/09/steep-decline-in-coal-demand-sees-uk-rail-freight-plummet/> [↑](#footnote-ref-4)
5. This specification is for Work Package 2 as Work Package 1 refers to the development of the project carried out by RSSB [↑](#footnote-ref-5)
6. The new gauge could be narrower and taller, shorter and wider, or recommend utilising both. [↑](#footnote-ref-6)
7. This is the average annual numbers of both staff and managerial staff employed over the last trading year [↑](#footnote-ref-7)