OPEN TENDER

RSSB INVITATION TO TENDER FOR THE PROVISION OF: RSSB2725 – IMP-ADCI - Trial of Automated Driver Competence Indicators using On Train Data Recorders, to support driver management

Deadline: Wednesday 28th November 2018

ITT Reference: RSSB2725 – IMP-ADCI - Trial of Automated Driver Competence Indicators using On Train Data Recorders, to support driver management

# 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:

|  |  |
| --- | --- |
|  | **Start Date** |
| Expression of interest meeting (already held) | Aug 2018 |
| I.T.T issued | 23 October 2018 |
| Supplier clarification questions deadline  | 21 November 2018; 12:00 hours |
| **Deadline for Submitting Tenders** | **28 November 2018; 12:00 hours** |
| Post Tender Evaluation & Clarification | W/C 3 December 2018 |
| Estimated notification of award decision | W/C 10 December 2018 |
| **Target** contract commencement date | W/C 17 December 2018 |

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)

|  |
| --- |
|  |

**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)

|  |  |  |
| --- | --- | --- |
| **Selection criteria** | **Specific question(s)** | **Evaluation Criteria** |
| S1 Experience in working in GB railway [Max 1 page] | Could you provide a short description of **at least two** projects delivered in the **last 5 years** where the supplier has **worked with GB railway companies**. Please provide a short explanation on why they are relevant to our needs. | **Pass:** The tenderer has provided a short description of at least two projects delivered in the last 5 years where the tenderer has worked with GB Railway companies. Further the tenderer has provided a short explanation as to “Why?” said projects are relevant to RSSB’s needs. Additionally, the tenderer, through the above, has provided RSSB with a strong degree of confidence in it’s experience.**Fail:** The tenderer fails to provide a short description of at least two projects delivered in the last 5 years where the supplier has worked with GB Railway companies or fails to provide a short explanation as to “Why?” the projects are relevant to RSSB’s needs or the tenderer fails to provide RSSB with sufficient confidence in its experience.**Note:** Should a “Fail” mark be achieved for this question the remainder of the tenderer’s bid will not be evaluated. |
| S2 Experience with handling and processing data to a professional standard[Max 1 page] | Could you provide a short description of **at least one** project delivered in the **last 3 years** which have used **data**.Please provide a short explanation on why the project is relevant to our needs. | **Pass:** The tenderer provides a short description of at least one project delivered in the last 3 years in which the tenderer has used data. Further the tenderer provides a short explanation as to “Why?” said project is relevant to RSSB’s needs. Through the above the tenderer. provides RSSB with a strong degree of confidence.**Fail:** The tenderer either fails to provide a short description of at least one projects delivered in the last 3 years which has used data or has failed to provide a short explanation as to “Why?” the project is relevant to RSSB’s needs or the tenderers fails to provide evidence or fails to provide RSSB with sufficient confidence in its experience.**Note:** Should a “Fail” mark be achieved for this question the remainder of the tenderer’s bid will not be evaluated. |
| S3 Experience with trialling and evaluating new technical systems for users [Max 1 page] | Could you provide a short description of **at least one** project delivered in the **last 3 years** where the supplier(s) have **delivered and evaluated new technical systems for users, including the provision of training and support throughout the trial.**Please provide a short explanation on why they are relevant to our needs. | **Pass:** The tenderer provides a short description of at least one project delivered in the last 3 years where the supplier has delivered and evaluated new technical systems for user, including the provision of training and support throughout the trial. Further the tenderer provides a short explanation as to “Why?” the project is relevant to RSSB’s needs. Additionally the tenderer provides RSSB with a strong degree of confidence.**Fail:** The tenderer either fails to provides a short description of at least one project delivered in the last 3 years where the supplier has delivered and evaluated new technical systems for user, including the provision of training and support throughout the trial or the tenderer fails to provide a short explanation as to “Why?” the project is relevant to RSSB’s need or the tenderer fails to provide evidence of an examples or fails to provide RSSB with sufficient confidence in its experience. **Note:** Should a “Fail” mark be achieved for this question the remainder of the tenderer’s bid will not be evaluated. |
| S4 Breakdown of cost and resource before and after stage gate[Max 1 page] | Has the supplier has been able to provide a **breakdown of the effort and charge for the work packages before and after the stage gate**? | **Pass:** The Tenderer has provided a breakdown of the effort and charge for the work packages before and after the stage gate. The tenderer provides this as a separate and distinct answer from question A6. Further through the tenderers response provides RSSB with a strong degree of confidence in the costings being suitable.**Fail:** The Tenderer either fails to provide a breakdown of the effort and charge for the work packages before and after the stage gate or the tenderer fails to provides this as a separate and distinct answer from question A6 or the tenderers response does not provide RSSB with a strong degree of confidence in the costings being suitable.**Note:** Should a “Fail” mark be achieved for this question the remainder of the tenderer’s bid will not be evaluated. |
| S5 Strengths and key points of proposal[Max 2 page] | The supplier has provided a 1 page summary of the strengths and key points of the proposal. | Pass: The tenderer provides RSSB with a 1-page summary of the strengths and key points of their proposalFail: The tenderer does not provide RSSB with a 1-page summary of the strengths and key points of their proposal**Note:** Should a “Fail” mark be achieved for this question the remainder of the tenderer’s bid will not be evaluated. |

# 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 80%: Price 20%

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 Resources and Capability  | Who will be part of the delivery team? It is not necessary to produce bespoke CVs but it is necessary to clearly identify every team member’s role, their relevant experience and contribution to delivery.What specific skills and tools will be used to successfully deliver the project? The supplier should demonstrate competency in the required areas of work. | The Tenderer’s response includes:* Has identified relevant individuals against specific tasks to deliver the work
* The overall mix of skills covered is of a high degree of quality
* Has identified the skills and tools required for the work
* Demonstrates a high level of competency with them.
 | 25% |
| A2 Methodology  | What is the proposed methodology, and how will this methodology meet the project objectives?How will the supplier work with the other project members to deliver the project objectives?How will the supplier ensure a high quality technical output? | The Tenderer’s response shows that it:* Demonstrates an understanding of the project requirements
* Has proposed a credible and sound methodology
* Has demonstrated a plan to enable smooth working within the project members
* Has described how this will overcome specific technical challenges.
 | 25% |
| A3 Project planning | Provide adequate allocation of appropriate resources against deliverables.How will you work with RSSB to ensure the quality and the content of the deliverables is fit for purpose?How will key dependencies be handledHow will the plan ensure the critical success factors are met. | The Tenderer’s response includes:* A credible plan for delivering successful outcomes to time and quality.
* Has identified appropriate ways to engage with the consortia, including the TOCs, RSSB, and the University of Huddersfield
 | 15% |
| A4 Approach to intellectual property | Provides a clear description of  | The tenderer’s response includes:* A clear outline of any background IP that will or will not be shared in publication of the project
* Mechanism(s) for sharing packaging the technical project outputs so that they may be used by others , whilst protecting their own IP.
 | 10% |
| A5 Risk identification and mitigation | How it will manage risks to delivering the project? | The Tenderer’s response includes:* Has identified appropriate risks
* Has proposed effective management and mitigation
 | 5% |
| A6 Cost of project | Provide a fixed cost for the project and the associated cost break down. Describe how and why this represents value for money. | * The tender with the lowest total cost will receive 100% of the available weighted score (20%).

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%. | 20% |

# 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

Trial of Automatic Driver Competence Indicators using On Train Data Recorders, to support driver management

IMP-ADCI­

# Background and context

The rail industry invests significant amounts of time and money in driver training and in demonstrating driver competence through assessments, including manual analysis of data from On-Train Data Recorders (OTDR). OTDR data can also be used in investigating operational incidents such as signals passed at danger (SPADs), stop shorts, station overruns and wrong side door releases.

These activities, which are typically incorporated into a competence management system can be time-consuming to monitor, and therefore incur substantial cost. Additionally, there is presently no agreed industry approach to demonstrating the efficacy of competence management systems in an objective manner. Under the Strategic Partnership established with University of Huddersfield (UOH), a project[[1]](#footnote-1) was carried out to investigate the feasibility of developing of a range of Automated Driver Competency Indicators (ADCIs) based on the automatic analysis of OTDR data.

The results of the project were presented at an industry workshop in October 2016, which was jointly hosted by RSSB and UOH and attended by a wide range of industry stakeholders. The general conclusion was that it is possible to derive ADCIs from OTDR data that have the potential to support driver performance management, and a number of preferred metrics were identified. Potential benefits of ADCIs identified included:

1. Reducing the time taken for driver managers to manually check OTDR data, and the potential to reduce costs in doing so.
2. Improved visibility and frequency of driver performance
3. Having more objectivity, and consistency to assessment of driver performance
4. Capturing data over time, allowing monitoring of trends and precursors
5. Providing drivers with timely feedback on their performance
6. Allowing better targeting of competence management focussing on those drivers in need of support

Following the workshop, the project and its outcomes were discussed at the cross-industry Data & Risk Strategy Group (DRSG), in September 2017. DRSG recommended that a ‘demonstrator project’ be carried forward to implementation, in close partnership with a TOC, and involving suppliers and other relevant areas expertise as appropriate.

The current specification outlines the proposed way forward for this ‘demonstrator project’.

# Project structure

This project aims to develop, trial and demonstrate value from a tool to assist Train Operating Companies (TOCs) with driver competence support and management. To achieve the benefits from the tool, it is important for the ADCIs developed to be guided by the end users - the Train Operating Companies. It is for this reason that RSSB are partnering with both c2c and London North Eastern Railway (LNER), who have agreed to share their data and support the development of the ADCIs through guidance and feedback. The University of Huddersfield will support the project from a technical stand point and will be delivering one of the Work Packages (WP3). Additionally, RSSB will provide steer to the project from a human performance and competence measurement perspective.

The successful tenderer for the project will be working with RSSB to deliver the activities in the work packages as defined below and leading the majority of the activities as specified. The proposed project structure is proposed below and divided into 5 Work Packages (WPs). A stage gate review is placed between WP 3 & 4 based on a successful execution on the first three work packages and desire from TOC partners to continue with the trial.

|  |  |
| --- | --- |
| **Work Package Title** | **Lead Organisation** |
| **WP1**: Review of previous work and selection of ADCIs | *Selected Supplier* |
| **WP2**: Data collection, analysis and reporting of prototype ADCIs | *Selected Supplier* |
| **WP3**: Effectiveness and Validation of ADCIs | University of Huddersfield |
| **Stage gate review**  |
| **WP4**: Develop and implement ‘live demonstrator’ | *Selected Supplier* |
| **WP5**: Final assessment of ADCIs | *Selected Supplier* |

This project represents a good opportunity to work closely with the both RSSB and TOCs which will enable the selected supplier to develop insight into ADCIs, however, it is emphasised that the intention is for all foreground[[2]](#footnote-2) Intellectual Property (IP) (including reports, tools, software and methods) developed within the project will be owned by RSSB with the intention that this will be made publicly available, to facilitate further uptake and implementation of the ADCIs. Conversely, it is recognised that there is likely to be a requirement for suppliers to utilise previous background[[3]](#footnote-3) IP or build on previous tools developed, it is there for the intention for an agreement to be put into place that facilitates this. However, as RSSB are not in position to know the technical details of how this is best achieved and so the tenderers are asked explicitly to deal with this as part of the response and is explicitly included in the award criteria.

# Work package objectives

Work Package 1: Review of previous work and selection of ADCIs

|  |  |
| --- | --- |
| **Lead** | **Selected supplier** |
| **Supporting** | **Train Operating Companies:** Input into their processes, requirements and success criteria, specifically how ADCIs could be used in their Competency Management Systems. **RSSB:** In terms of the wider context of competence development and input on how driver self-report data are collated to support understanding of ADCIs**University of Huddersfield:** Provide support in understanding development of ADCIs developed in previous work  |

**The aim of this work package is to determine the scope of the study and agree on:**

* The Automatic Driver Competence Indicators (ADCI) to be used in the study, including both those that are taken from previous research and additional indicators to be developed identified in the engagement with the TOC partners.
* The data requirements for achieving the agreed ADCIs, including any relevant non-OTDR data (e.g. asset information) and responsibilities in providing this data.
* The route, trains and drivers to be used for the study

The study should make use of the work carried out under the Strategic Partnership between RSSB and the University of Huddersfield and liaise with the Train Operating Company (TOC) partners to identify further ADCIs. Advice should also be sought from the National Train Driver Academy and RSSB on the identified ADCIs to understand the fit with the wider training landscape.

Indicators should be prioritised based on the availability of resources, effort required, agreement with the TOC partner and the below considerations:

* Fit with existing driver competency regime, and other company processes.
* Objectivity and reliability of the performance indicators
* Ability for indicators to be automatically measured using existing available data from the On-train Data Recorder (OTDR) and other data sources.
* Highest values areas that would provide the most benefit from automatic monitoring.

The aim should be to explore as many ADCIs as possible, as far as practicable, to assist in *Work Package 2: Develop a methodology and prototype tool for deriving intelligence from OTDR data.* Ideas for further ADCIs will come through closely understanding the current processes and exploring the requirements of current and future driver competence management regimes.

For each of the ADCIs selected for the study, consideration should be given to identifying the end users for each, how the information will be presented to them, and what the critical success factors of the ADCIs are.

Work Package 2: Data collection, analysis and reporting of prototype ADCIs

|  |  |
| --- | --- |
| **Lead** | **Selected supplier** |
| **Supporting** | **Train Operating Company**: Accommodate access to relevant data and provide input into user requirements**University of Huddersfield:** Provide support in understanding development of ADCIs developed in previous work  |

**The aim of this work package is to:**

* Develop and implement the data collection and analysis process for the selected ADCIs
* Understand user requirements for visual outputs allow users to provide early feedback on the required tools

**The objectives of this work package are to:**

* Develop a database / architecture for collection, management storage and analysis of the data
* Develop and implement a methodology for, where necessary, adding or tagging the data with geo-location, linespeed, anonymised train driver identity, train service/head code and other relevant data (e.g. linespeed, ELR/TID/miles/yards, position of stations and junctions etc.)
* Collect and integrate relevant driver data, including consideration of privacy, and anonymisation as necessary. May include areas of manual correction for human processes (for example, where driver login details may be incorrect).
* Implement algorithms for and process the ADCIs[[4]](#footnote-4) for the selected route, trains, and drivers for three or more months of data.
* Production of outputs in a usable format with guidance to be used by the University of Huddersfield for Work Package 3.
* Produce a set of data processed data sets suitable for analysis. The data should be able to report the ADCIs for:
	+ The same drivers driving the same routes over the period
	+ Different drivers driving the same routes over the period
	+ Different periods of time (time of day, day of week etc)
* The data should be made accessible, with full explanation of the methodology used and the data structure. For any new ACDIs developed, a flow chart of the algorithm should be produced using notation consistent with UOH prior research.

It is foreseen that the prototype tool will likely use previously downloaded static data, but the design and methodology of the tool should not restrict the possibility of expanding use to processing automatic downloads. Where ADCIs are being used from the previous partnership work, consultation or handover will likely be required with the University of Huddersfield.

* Requirements gathering with the TOC partner to understand how they wish to visualise and use the ADCIs.
* Design, and development of beta/reduced functionality GUI/tool(s) for TOC users.
* Demonstration and collection of user feedback for initial iteration of the tools.

It is not expected at this point to have a fully functioning tool to be used by the TOC partners, but rather to allow for an early opportunity to provide feedback on visualisation of any tools developed to assist smooth progression into work package 4.

Work Package 3: Effectiveness and Validation of ADCIs

**(note: this work package is not to be delivered, but is supported by, the supplier) a period of 3 months should be allowed within the supplier plan for Huddersfield to undertake this work.**

|  |  |
| --- | --- |
| **Lead** | University of Huddersfield |
| **Supporting** | **RSSB:** Support the analysis through input on relationship between indicators, competence and broader themes of human reliability and psychology**Selected supplier:** Availability for clarifications/support on data supplied from work package 2. |

**The aim of this work package is to:**

* Demonstrate that (some of) the ADCIs can consistently and effectively provide insights into train driver’s competence.

**The objectives of this work package are:**

* To analyse the results from WP2 to determine which indicators, or combinations of indicators are useful in assessing train driver competence
* To attempt to validate the ADCIs against the TOCs anonymised current competence records for the cohort of drivers examined
* To determine the extent to which the selected ADCIs provide reliable additional measures of driver competence beyond those available in the current regime
* To identify any limitations of the trial
* To investigate the scope for additional / improved ADCIs using additional data to that included in the current trial.

This work package forms the essential final step of the first phase of the project. At the end of this work package it is expected that there will be a clear understanding of two issues; whether or not automating OTDR analysis provides information that matches the current understanding of a driver cohort’s competence and whether it provides a new insights / measures of competence not available using the current download / unobtrusive monitoring regime. If successful, this would provide the necessary confidence to commit to a ‘live’ shadow running demonstrator trial in work package 4.

RSSB will work with the University of Huddersfield in agreeing and supporting the data analysis strategy.

Work package 4: Develop and implement ‘live demonstrator’

|  |  |
| --- | --- |
| **Lead** | **Selected Supplier** |
| **Supporting** | **Train Operating Company:** Consultation, testing and feedback on the tools. Use of the tools/ADCIs and continual provision of OTDR data. **RSSB:** Support on the usability of prototype in terms of development of user stories and usability principles. |

**The aim of this work package is to:**

* Further develop the visualisation/outputs of the tool for improved usability.
* Develop and implement a ‘live’ demonstrator of ADCIs, where live does not necessitate real-time processes but rather the embedding of these processes into normal use.
* Support ongoing trials of the ADCIs in ‘shadow’[[5]](#footnote-5) running trial with the TOC.
* Qualitatively understand the implications of using ADCIs on users wellbeing and performance

**The objectives of this work package are to:**

* Develop the process from work package 2 to allow the collection and analysis of ‘live’ OTDR data, including provision of data storage and processing for the trial.
* Enhance the design of the tool through continual consultation/testing with the users
* Further develop a dashboard / GUI to allow drivers and driver managers to access and interrogate the results of the ‘live’ ADCIs
* Undertake a period of (3 – 6 months) ‘shadow’ running of the ADCIs live tool with a number of participating TOC driver managers
* Provide maintenance and support for the system during the trial period
* Support ongoing improvements and developments of the tool(s) and guidance documentation
* Gather continual feedback on the value of the ADCIs tool and identify areas for future development / improvement.
* Gather feedback on driver and driver manager interactions and attitudes towards the tool
* Highlight any relevant instances and how the tool has impacted behaviour or performance

During this phase it may not be strictly necessary for the demonstrator tool to be live. The data and analysis presented to users would be as up-to-date as possible, ideally no more than 24 – 36 hours old. However, it may be necessary to reduce this to 1 – 2 weeks in order to control costs within this phase of the work. It would be preferable to demonstrate a tool using slightly less up-to-date information than not carry out the demonstrator phase at all.

The results would be available in a user-friendly dashboard format and would be routinely examined by a number of selected driver managers. Consideration should be given to access rights for different levels of members of staff. This would allow a full test of the ADCI principles in an operational environment but would not replace or form part of the TOCs competence management regime during the trial. Consideration should be given to how the supplier can evaluate the ongoing use of the ADCIs.

Work package 5: Final assessment of ADCIs

|  |  |
| --- | --- |
| **Lead** | **Supplier** |
| **Supporting** | **RSSB:** Review quality of output and alignment to other RSSB research in the area |

**The aims of this work package are to:**

1. Evaluate the use of ADCIsand disseminate the findings of the trial to wider industry
2. Inform the relevant Cross Industry Groups of the implications of the work
3. Package and handover relevant technical documentation and guidance processes

**The objectives of this work package are to:**

1. Document the methodology for achieving the trial
2. Report on the assessment of the effectiveness of the different ADCIs in meeting the critical success factors based on the evidence gathered through carrying out the study
3. Make recommendations on the use and implementation of ADCIs, including the consideration of how other suppliers and TOCs can implement them
4. Deliver any software or tools so that they can be disseminated
5. Highlight the benefits and potential risks of using ADCIs
6. Comment on the potential for further developments of ADCIs

There is likely to be both quantitative and qualitative evidence from the trial on the effectiveness of the use of ACDIs to improve performance. Thought should be given from the beginning of the project on how best to gather and disseminate this information.

This work will need to consider the different audiences for work, and so should be carried out with clear guidance from the project steering group. The primary audience are TOCs, who will need to be given enough information to understand the benefits of ADCIs and how to implement them, and secondary are Cross Industry Groups who may oversea relevant guidance document and standards.

RSSB and the project steering group will be consulted on the emerging results from the trial and analysis / conclusion should be agreed and approved with RSSB.

# Scope

|  |  |
| --- | --- |
| In scope  | Out of scope |
| * Engagement with the University of Huddersfield for understanding the development of previous ADCIs
* Engagement with TOCs in understanding requirements for the new ADCIs
* Development of ADCIs to support the driver competency management standards, including provision of:
	+ IT architecture system design
	+ Development of algorithms
	+ Storage, managing and processing of data
	+ Outputting of ADCIs in useable format
	+ Creation of graphical user interface
* Provision of support, development and guidance documentation where applicable throughout the duration of the project
* Collection of user feedback and ongoing developments
* Engagement with the project steering group throughout the duration of the project
 | * Design of collection of On-Train Data
* Development of competency management indicators for other staff
* Development of engineering performance indicators
* Development of new Driver Task Analysis or Competency management systems and Standards
* Assessment for driver competency
 |

# Methodology

Suppliers are expected to explain the methodology that they are intending to use to successfully meet the project objectives, cover the scope and produce the deliverables of the project. For context and completeness, the specification has included all work packages for the project. Although the supplier will not be leading on all work packages, where applicable, the supplier should indicate how they plan to interact with these.

# Deliverables

 **Work Package 1**

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

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Brief on selection of Automatic Driver Performance Indicators | Technical note |
| Documentation of the ADCIs considered, for each ADCI, this should include, a short description of its aims, source, it’s mapping against current performance management processes, data requirements, target end user, presentation requirements, critical success factors, priority, and rationale for priority. |
| **Delivered by**: Selected Supplier**Approved by**: Project Steering Group, LNER, c2c**Format requirement**: The ADCIs should be presented in a common table format capable of searching, editing, filtering and sorting. |

**Work Package 2**

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Full Technical documentation for ADCIs | Report |
| Documentation of the ADCIs selected and developed. Including* Full technical documentation and/or software as agreed in the project proposal (Award criteria A4).
 |
| **Delivered by**: Selected Supplier**Approved by**: Project Steering Group**Format requirement**: As per award criteria A4 with a minimum requirement to have new ADCI algorithms consistent with prior UOH formats. |

**Work Package 3****(note: this work package is not to be delivered, but it supported by, the supplier)**

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Effectiveness and validation of ADCIs | Report |
| * A report detailing the analysis carried out using the outputs of the ADCIs from work package 2, and the key results from the study.
* Recommendation to project steering group on progression of project to a full ‘live’ demonstrator.
 |
| **Delivered by**: The University of Huddersfield**Approved by**: Project Steering Group**Format requirement**: RSSB / University of Huddersfield Strategic Partnership standard format |

**Work Package 4 & 5**

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Final report on the trial and assessment of the ADCIs | Report |
| A final report detailing* Introduction and concept of ADCIs, summary of context and a brief summary of deliverables 1 & 2
* Details of the trials carried out and report on the effectiveness on the ADCIs (including details of analysis and methodology, and qualitative feedback where applicable)
* Learning, and recommendations from the trials, including possible risks and benefits.
* Guidance for implementing ADCIs, both technically and operationally
* Creation of an infographic to articulate the project outputs and benefits
 |
| **Delivered by**: Selected Supplier**Approved by**: Project Steering Group**Format requirement**: RSSB standard format template in both pdf and editable formats. |

 |

|  |  |
| --- | --- |
| **Deliverable Name** | **Type** |
| Research in Brief | Report |
| A four-page summary document of the project in its entirety, made accessible for a wide audience. |
| **Delivered by**: Selected Supplier, RSSB**Approved by**: RSSB**Format requirement**: RSSB standard format template in both pdf and editable formats. |

# Stakeholders roles and responsibilities

|  |  |  |
| --- | --- | --- |
|  | **General role in project** | **Specific role in acceptance of deliverables** |
| **Project Manager** | The Project Manager is responsible for the detailed project management including project schedules, cost reporting and other relevant project management tasks. The Project Manager leads the project in organising meetings, etc. and ensures 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 technical expert ensures that the research accurately reflects technical aspects. Technical aspects can refer to specific issues around Rail Operations, Performance, Recovery Planning, Stock and Crew Management, or any other specialist field.  | Reviews emerging outputs from technical perspective |
| **Industry and RSSB sponsor** | The Industry and RSSB sponsors act as a figurehead 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 champion’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 and dependencies

The budget for the supplier for this work is **up to** **£180k**. Any bid above this value will need to provide detailed explanation on why the supplier doesn’t feel that the budget is adequate and in such a case we strongly encourage suppliers to provide costed options for RSSB to consider. As the project is split with a stage gate review, as a bare minimum, suppliers are expected to provide costing for work packages 1-3 and 4-5 separately.

The work is expected to start in January 2019 this year and be completed within 12 calendar months following the project kick off. These are indicative dates and RSSB is prepared to consider bids that cannot meet these expectations if they have a robust project plan, and an explanation of why the expected start and end date cannot be met.

# Critical success factors and risk management

The below have been identified as critical success factors for the project.

* Access to data for the trial, and agreement from TOCs to continue with trials after work package 3.
* Suppliers must engage with the TOCs, and steering group throughout the course of the project, and users of the tool must be engaged throughout the course of the trial.
* A good solution is found that makes the tools developed available industry wide whilst protecting necessary background IP of the supplier. Any software and tools developed must be handed over in a fashion that will allow further development from various parties.

The ADCIs produced must be transparent and reproducible, and have clear documentation

**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[[6]](#footnote-6) | 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. RSSB project COF-UOH-18: IRR 110/150 Automated Train Driver Competence Performance Indicators using OTMR Data, El Rashidy. R (2016). See <https://www.sparkrail.org/Lists/Records/DispForm.aspx?ID=24932> [↑](#footnote-ref-1)
2. Foreground Intellectual Property refers anything developed during the course of the project [↑](#footnote-ref-2)
3. Background Intellectual Property refers to anything developed by the supplier before project kick-off. [↑](#footnote-ref-3)
4. Provision should be made for the inclusion of the 16 ADCIs developed previously by the University of Huddersfield and up to *at least* 10 more identified in the study. Although as previously stated the ambition is to explore as many ADCIs as possible. [↑](#footnote-ref-4)
5. During the trial it is expected that the TOCs will maintain their regular competency management processes, and that this trial shall not replace these but rather compliment them. [↑](#footnote-ref-5)
6. This is the average annual numbers of both staff and managerial staff employed over the last trading year [↑](#footnote-ref-6)