

INVITATION TO TENDER

**International Union of Railways - UIC
16 rue Jean Rey 75015 Paris
France**

Reference: SP-New IRS 30345-2024

Paris, 15 April 2024

Subject: Invitation to tender “New IRS 30345 updating UIC leaflet 345 Environmental specifications for New rolling Stock” reference **SP-New IRS 30345-2024**.

Dear Sir/Madam,

The International Union of Railways (UIC) is planning to award the contract in subject in the framework of the UIC project “New IRS 30345 updating UIC leaflet 345 Environmental specifications for New rolling Stock”. The procurement documents consist of:

- This invitation letter.
- The tender terms of reference.
- The draft contract.

The tender must be sent in electronic version to email address dekeyzer@uic.org **no later than 30 May 2024 at 16:00 (UTC +1)**.

Tenders must be signed by a duly authorised representative of the tenderer.

The period of validity of the tender, during which tenderers may not modify the terms of their tenders in any respect, is six months from the reception deadline.

Submission of a tender implies acceptance of all the terms and conditions set out in the call for tenders (invitation letter, tender terms of reference and draft contract) waiving of the tenderer's own general or specific terms and conditions. The submitted tender is binding on the tenderer whom the contract is awarded to for the whole duration of the contract.

All costs incurred for the preparation and submission of tenders are to be borne by the tenderers and will not be reimbursed.

Upon request, UIC may provide additional information solely for the purpose of clarifying the procurement documents.

UIC is not bound to reply to requests for additional information received less than six working days before the date of receipt of tenders indicated above.

UIC may, on its own initiative, inform interested parties of any error, inaccuracy, omission or any other type of clerical error in the text of the procurement documents.

Should obvious clerical errors in the tender need to be corrected or confirmed with regards to any specific or technical element after the opening of tenders, UIC shall reserve the right to contact the tenderer. This shall not lead to substantial changes to the terms of the submitted tender.

Invitation to tender is in no way binding on UIC. UIC's contractual obligation commences only upon signature of the contract with the successful tenderer.

Up to the point of signature, UIC may cancel the award procedure at any moment, without the candidates or tenderers being entitled to claim any compensation. This decision must be substantiated, and candidates or tenderers notified.

Once UIC has received the tender, it becomes the property of UIC. Tenders shall be treated confidentially. Tenderers will be informed in writing of the outcome of the procurement procedure, by e-mail provided in the application.

If processing the call for tenders involves recording and processing personal data (such as names, addresses and CVs), such data will be processed pursuant General Data Protection Regulation (GDPR) and to French Law on the protection of personal data. Unless otherwise indicated, tenders' replies to the questions and any personal data requested are required to evaluate tenders in accordance with the specifications of the invitation and shall be processed for that sole purpose by the UIC staff in charge of the procurement. Tenderers have the right to access, modify, rectify or delete their personal data (Article 34 of the French Data Protection Act of 6 January 1978) by sending a message to the UIC Data Protection Officer (DPO) at dpo@uic.org. While doing so, please include a photocopy of both sides of your ID document or passport.

Note: Please be informed that this tender is a UIC document compliant with the UIC Statutes, Internal Regulations and internal procedures related to suppliers' management. It does not fall under the French public procurement law.



INTERNATIONAL UNION
OF RAILWAYS

CALL FOR TENDERS - TERMS OF REFERENCE

**IRS 30345 – Updating UIC Leaflet 345
“Environmental specifications for new rolling stock”**

Union Internationale des Chemins de fer
International Union of Railways - UIC
16 rue Jean Rey, 75015 Paris, France

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ACRONYMS AND TERMINOLOGY

UIC Union Internationale des
 Chemins de fer

1. PREAMBLE AND BACKGROUND

The international Union of Railways (UIC) is the worldwide organisation tasked with promoting rail transport and developing the railway system to support the strategies of its members: rail operators, infrastructure managers, railway service providers and other industry stakeholders. The UIC founded in 1922, counts more than 200 members across 5 continents, including railway companies, infrastructure managers & rail-related transport operators & research institutes. Representing a rich and diverse membership across the globe, the UIC relies on its collective knowledge and technical expertise to develop and enhance the reputation of the railway sector so that it is associated with flexibility, simplicity, freedom and comfort.

The UIC and its members work continuously to demonstrate how rail can be part of the solution to the challenge of sustainable development as part of the work assigned to the UIC Sustainability Platform (SP). The SP Platform manages five expert sectors, namely Noise & Vibration, Sustainable Land Use, Energy efficiency & CO₂e Emissions, Air Quality, and Circular Economy (CE) and a portfolio of projects focusing on the development of best practice, benchmarking for environmental sustainability and reporting of corporate and social responsibility. For more information, please visit the website of the UIC sustainability platform: <https://uic.org/sustainability/>

The UIC Circular Economy Sector (CE Sector) has been set up under the umbrella of the UIC Sustainability Platform to help find ways to integrate the principles of the circular economy into the way railways (infrastructure and rolling stock) are designed, built, maintained and operated. The CE Sector aims to share information and foster collaborative knowledge exchanges on how to improve material and resource management and reduce the environmental impact of industrial railway activities by reducing waste and pollution. It constitutes a centre of excellence; it supports transfer of knowledge, coordinates events and activities, leads research projects and facilitates communication with key stakeholders.

UIC publishes International Railway Solutions (IRS)© that are a structured framework of documents prepared and published by UIC for use within the railway sector. IRS are the outcome of independent work conducted by UIC members in order to harmonise global railway practices in an efficient and realistic way. They blend together a range of voluntary solutions to support the design, construction, operation and maintenance of the railway system and the services that the sector provides. Moreover, the target of such documents is to combine "best practices," "guidelines," "recommendations," and "requirements," aligning with legislative requirements and established international and regional standards, while aiming to serve society and the economy.

2. CONTRACTING PARTY

The contract for this study will be managed by the International Union of Railways (UIC), headquartered at 16 rue Jean Rey, 75015 PARIS, FRANCE, Intracommunity VAT number FR43784601841, represented by Mr. François DAVENNE, Director General.

3. SCOPE AND CONTENT OF THE SERVICE

In the pursuit of sustainable and environmentally responsible practices, the integration of circular economy principles in railway operations has emerged as a transformative strategy. Circular economy emphasises the reduction, reuse, and recycling of resources to minimise waste and promote a regenerative approach.

The railway sector, a vital component of global transportation, has a unique role to play in advancing the circular economy agenda. One key aspect of circularity in railways involves the procurement of new rolling stocks. By adopting circular economy principles in rolling stock procurement, railway undertakings can significantly contribute to resource conservation and environmental preservation.

In the context of the recent developments of sustainability reporting obligations and circularity indicators, especially with the adoption of the Corporate Sustainability Reporting Directive (CSRD) by the European Union, the railway sector's commitment to sustainability principles has gained increased significance. Therefore, the integration of circularity and other sustainability approach into rolling stock procurement aligns seamlessly with the evolving landscape of sustainability reporting.

In line with this approach, UIC plans to establish an IRS to update knowledge and align with sustainability regulations for drafting new rolling stock specifications which can be easily adapted and implemented to the procurement processes.

Therefore, UIC is undertaking a project to transform UIC leaflet 345 “Environmental specifications for new rolling stock” (2006) into a new IRS. To achieve the goals above, UIC intends to hire a contractor.

The project shall include three (3) key tasks, namely: a desktop literature review, a benchmarking exercise, and a list of potential sustainability indicators. The indicators should be holistic and include (without being limited to) topics covering the five sectors (i.e. member working groups) of the UIC Sustainability Platform (Noise & Vibrations, Energy and CO₂e Emissions, Air Quality, Circular Economy).

The contractor is expected to consult these stakeholder groups (see list of STAKEHOLDERS OF THE PROJECT) in the drafting of the new IRS with the supporting coordination of the UIC project coordinator.

NOTE: The IRS should be fit for purpose according to needs of European UIC members to become CSRD compliant, but it should also foresee the application of the specifications on a global level.

3.1 Expected project deliverables

Deliverables of the project subject of this call for tenders include the following three products:

3.1.1 Literature review report

The contractor will identify important reference documents relevant to the scope and produce a bibliography with key learning points extracted or referenced. The contractor should consult stakeholders to complete the bibliography. A non-exhaustive list of reference data published can be found at section 6 REFERENCE DATA PUBLISHED: of this call for tenders.

The literature review will provide the basis for best benchmarking and identification of potential indicators and will not be published by UIC as a separate document.

3.1.2 Benchmarking report

The contractor will produce a collection of state-of-the-art information/best practice case studies on vehicle design, performance and procurement, drawn from within and outside the rail sector that bring learning value to the scope of the project. The report can be supported by a survey to UIC members and stakeholders on current practice. UIC project coordinator can circulate the survey using UIC applications and platforms based upon questions designed by the contractor. The summary report will bring out any key learning points and recommendations that will feed into the IRS draft.

3.1.3 IRS 30345

The contractor is required to draft the content of the IRS based upon the inputs of project members and other stakeholders as well as their own experience and expertise. The project members and other key chosen stakeholders will comment on drafts and the contractor will be required to review and consider those comments and proposed edits. The contractor will consult with the UIC project coordinator to decide how comments should be addressed.

UIC has prepared the draft table of content of the IRS as a guide and in line with the UIC template provided in Annex 1. The contractor is recommended to consider this draft when preparing the proposal.

It is anticipated that there will be at least 2 draft revisions for comment before the final document is finalised. UIC will carry out a proof reading, formatting and design, and this will not be the responsibility of the contractor. UIC will get in touch with the Contractor to get approval during this process.

3.2 Planned distribution of responsibilities

To facilitate this approach, the responsibilities are distributed as follows:

- Contractor: Performing literature review, benchmarking activities, consideration of stakeholder inputs and drafting of the IRS.
- UIC project coordinator: Ensuring coordination among internal and external parties, liaising between subcontractor and stakeholders, coordination of reviewing the deliverables.
- IRS 30345 working group members: Providing guidance and case studies (if any) and reviewing the deliverables. Enabling access to information on existing specifications regarding sustainability for rolling stock to allow the contractor to understand current practice in the project member railways in 2024.

3.3 Identified open points from UIC leaflet 345

UIC project members have reviewed the current Leaflet 345 and note the following areas that require update or improvement:

- The document is too long and detailed, making it difficult and difficult to use for procurement teams and processes for tendering of new rolling stock.
- Ambitions need to be raised, for example, the target of 85% minimum recyclability rate of new rolling stock is no longer aligned with most circularity specifications currently applicable (which are 95% or above).
- The primary issue is the inconsistency in approaches to identifying potential indicators for monitoring environmental impact, making seamless integration into technical specifications difficult.

Therefore, the project members are aiming at making the new IRS document shorter, more succinct, and more ambitious (containing new concrete requirements, percentages, and goals).

More generally, the new IRS should include the following aspects:

- 1) Clear & lean **PURPOSE/GOAL** of the document
- 2) Clear **SCOPE**:
 - a. foresee Environment, Social, and governance (ESG) requirements in line with the Corporate Sustainability Reporting Directive (CSRD) of the European commission, including **definitions and measurement methodologies**.
 - b. the new IRS should be fit for purpose for the European UIC members but should also foresee application of the specifications to global level by including regional annexes.
- 3) An updated cross-reference to most recent legislative / regulatory trends (including **EuroSpec** and ISO standards)
- 4) **Guidelines** for requirements for the chosen scope (subjects)
 - Applicable from today (as is)

- with growth path towards 2040.
- 5) **Options to award (ESG) criteria** to give extra weight to sustainability in the tender.

The UIC expects the contractor to investigate the following points:

The contractor shall first identify the main KPIs/indicators that should be in the IRS and the outlook on those indicators.

Regarding Circularity, EuroSpec Circularity 1.0 should be considered an important reference document.

With consideration of:

- research into the feasibility of applying ‘circular inflow’ rates for the types of materials in trains so that minimum percentages of circular inflow can be added from 2025 to 2050. (considering other sectors such as the automotive industry)
- research into the feasibility of increasing the ‘circular outflow’ rate from today to 2050 (now it is 95%, how to build this up to 100%?).
- research on how to integrate the impacts addressed by CSRD into the new IRS (main impacts of climate change (E1), pollution (E2), water (E3), ecosystems (E4), material use-CE (E5).) taking into account the aspects of Energy and Emissions, Air quality, Noise & Vibrations, and circularity)
- work on sustainability reporting indicators being updated as part of the ongoing UIC project IRS 30330
- defining the key indicators to be integrated into the technical specifications.

Regarding Noise and Vibrations

The issue of noise from running trains in operational service has been well explored, and huge progress in noise reduction has been made over the years. However, an increasing number of complaints are now being received from lineside neighbours about other noise sources from trains, even when the trains are parked. Modern multiple units (EMU/DMU) are equipped with many different mechanical parts (compressors, HVAC, power converters, traction units, etc.), which have been causing noise disturbances for close-by residents. Moreover, rolling stock with new propulsion technologies is gradually being introduced, including battery, hybrid, and hydrogen propulsion systems. Although these are generally considered to be quieter than diesel-powered vehicles, potentially louder operating conditions need to be identified in order to consider whether noise limits are required and what these should be. IRS 30345 should provide support for the identification of performance indicators to identify the main noise sources and enable them to be monitored under operating conditions. The literature review should also refer to European or international norms (ISO 3095) compliant noise measurement framework for rolling stocks. The UIC Vehicle Noise Working Group will provide support on this issue.

Regarding Air quality

Exhaust emissions are quantifiable, and requirements/specs are defined according to known optimum levels (see Leaflet 345 and reference documents). If possible, specifications for alternative fuel capable engine emissions could be considered.

Wear emissions are (still) not accurately assessed and quantified (neither in a harmonised way) and can vary a lot according to the type of rolling stock (pantographs, brakes, rails, catenary). Specifications should be suggested as optimal guidance according to literature or potential public outcomes for rolling stock non-exhaust emissions. As this is a complex, sensitive and competitive topic, decisions as to whether details should be included or not have to be made with Members. The UIC Air Quality Sector can advise.

It is in the interest of railways to avoid or reduce as much as possible wear emissions from brakes, catenary-pantograph friction and rail-wheel wear. Emphasis should be put on the fact that even though rail emits particulate matter, this is still anecdotal compared to the number of similar wear dust emission sources from road (e.g. Number of vehicles x number of brakes + tyre wear x number of vehicles).

Regarding Energy and greenhouse gas

Motivation: Further than a competitive edge for rail vs other modes, energy efficiency has been pushed to the forefront by the 2022 energy crisis. It has been shown that even though rail is efficient, traction energy consumption is so large that there are reasons to fear any increasing cost, and thus working on reducing any energy consumption spot is useful. Even more because energy consumption is directly linked with greenhouse gas emission levels.

Focusing as much as possible on the alternative to diesel traction is necessary, as there are alternative fuels that can be used as a transition (and have reduced environmental impacts), and more flexibility to propose electrified operations (partial electrification) to decarbonise operations by relying on green electricity provision as possible.

Alternatives are listed below:

- Partial electrification (onboard storage for non-electrified parts, and charging or electrified segments to charge), = no exhaust = carbon impact of electricity provision
- Fully-battery operated (100% electric traction over non-electrified tracks) = no exhaust = carbon impact of electricity provision
- Hydrogen fuel cells (FCH) = Water emission = carbon impact of hydrogen provision
- Biodiesel forms: Hydrotreated vegetable oil (HVO) or Fatty acids/Methyl esters (FAME) that can be blended in with diesel of fossil origin or exclusively used on adapted engines to reduce carbon and air pollutant emissions.

For this specific issue, energy efficiency is not directly linked to emissions: A traction system reducing/cutting exhaust emissions is not necessarily more efficient (e.g. Hydrogen electrolysis requiring twice the electricity equivalent, or biodiesel generating less power in the engines), thus energy efficiency criteria should be adapted to the traction system (electric/provision/combustion engine).

Besides, as road electric vehicles are being rolled out, railways might lose a bit of competitiveness in the green electricity procurement, as the road sector will also want to prove efforts to decarbonise.

Thus, even more than before, it is important that energy efficiency of new equipment is set to its optimal, so that at a train's scale, the consumption per passenger ratio is the lowest possible.

The techniques to achieve this, however, haven't changed much in theory:

- train rolling resistance (mass and aerodynamic)
- traction system efficiency and the HVAC system efficiency
- braking energy recovery capability (the higher the rate, the better)

The IRS should put emphasis on the innovative smart traction and HVAC management systems for the most sober driving & comfort consumption and ecoparking / ecostabling (running efficiency + idling modes). Train mass is deeply linked to the "material" aspect, that also needs to follow circularity requirements.

Energy measurement systems onboard train has become mandatory for new rolling stock: requirements for EMS in Europe are defined in EU regulations, LOC&PAS TSI and in the harmonised standard EN 50463.

More specific and updated consumption (reference) levels and details to specifications proposed in Leaflet 345 (2006). Most general aspects cited in the leaflet are still up-to-date and can be reused with updated values.

Regarding greenhouse gas emissions and adaptation to climate change

The new IRS shall consider the sustainability performance of HVAC systems to cope with higher temperature and humidity rates to include climate change adaptation in the environmental specifications for new rolling stock. But also putting emphasis on the most effective ways to control comfort system with state-of-art information: i.e. CO2 sensor-based control and felt comfort with lower heating temperature in cold conditions, or with higher AC temperature in hot conditions.

Regarding Procurement

The new IRS shall provide ad-hoc verification processes of indicators for all stages of the procurement process (Offer of Tenderers, Design review, First Article Inspection (FAI) of components, First Integration Inspection (FI), Authorization for Service and Warranty) that may apply.

It is intended to expand this European focused work by collaborating with the global railway community (i.e. by involving the industry via European industrial associations such as UNIFE etc.) in the review process of the draft IRS. The UIC ERPC group will be contacted during benchmarking activities.

4. REFERENCE DATA PUBLISHED:

The proposal for this contract should include an analysis of publications from various organisations and institutions regarding environmental specifications. This non-exhaustive list of documents informs the understanding of the scope for the purposes of this tender, and is expected to be developed by the contractor:

General approach:

- EU CSRD Reporting Requirements

Rail relevant Circular Economy related documents:

- UIC Leaflet 345 – published in 2006
- EUROSPEC <https://eurospect.eu/publications-category/> (circularity and noise)
- ISO 21106:2019 Railway applications Recyclability and recoverability calculation method for rolling stock
- Relevant IEC documents
- UNIFE documents? UNI-LCA-001:00 (Recyclability and Recoverability Calculation Method Railway Rolling Stock)

Noise and Vibration related documents:

- UIC Noise from parked and stationary trains: An analysis of operational and technical solution - [link](#)
- Eurospec Parking Noise 0.1- [link](#)
- ISO 3095:2013 Acoustics – Railway applications – Measurement of noise emitted by rail bound vehicles (*Note:* The revised version, expected to be published in 2024, will incorporate details regarding parked trains).

Air quality related documents:

Regarding exhaust emissions, the contractor can consult the EU legislation https://single-market-economy.ec.europa.eu/sectors/automotive-industry/environmental-protection/non-road-mobile-machinery_en

Energy related documents:

- Annex to Guide for the application of the TSI, regarding energy subsystem of the rail system;
- OPEUS “Deliverable D7.2 Position paper on energy usage, generation and saving approach”

Procurement related documents:

Legal aspects of eco-procurement background paper (PROSPER project)

5. STAKEHOLDERS OF THE PROJECT

The document IRS 30345 is intended to be used by UIC members in their rolling stock procurement processes as a harmonised reference for their bidders.

The stakeholders to be considered and involved include but are not limited to:

UIC internal groups:

- The IRS 30345 project group and the CE Sector working group who are leading this activity,
- All members of UIC and specifically those active in the UIC sustainability Platform and its sectors,
- Other UIC working groups (including the Sustainable Procurement Working Group from ERPC, the RERA Project working groups on climate change adaptation, and the Rolling stock sector),

External groups who might provide support to the study:

- The EuroSpec – Circularity working group, and/or others
- RailSponsible,
- UNIFE circular economy working group and other bespoke industry association working groups (if possible),
- Others as identified by the contractor or the project working group, and in agreement with the project group.

The engagement of all UIC internal and external groups and contacts shall be coordinated by the UIC project coordinator.

The Contractor can present new ideas to UIC to ensure the quality of its assignment. Therefore, the Contractor can take the opportunity to request feedback from UIC members to conduct online surveys and one-to-one meetings to collect information on best practices related to sustainable procurement of new rolling stock.

6. FINANCIAL OFFER

The financial offer for the work described above must be all inclusive, i.e. including travel and subsistence costs, etc.

7. APPLICABLE LANGUAGE AND CONFIDENTIALITY

All communication will be in English. The deliverables will have to be delivered in English.

The draft material as well as the final outcome of the work of the contractor shall be treated confidentially and not disclosed to any third party without the explicit consent of UIC.

8. CONTENT OF THE TENDER

The tender must contain the following:

- An Application letter signed by the Authorised Representative of the tenderer. In the case of a joint tender, the application letter shall be signed by the leader, who will then be the single point of contact.
- A Power of Attorney in case of joint tender.
- The Evidence of the service provider's ability and experience to undertake the work and write the document. Preference will be given to a service provider with knowledge and experience as stated below:
 - Previous experience involving stakeholders engagement including those of the value chain for the validation of the updated specifications.
 - Previous experience in the drafting or determination of environmental specifications for railways, including procurement of rolling stocks and definition of sustainability indicators.
- CVs of the team/persons proposed to support the project.
- A Technical offer, outlining the proposed approach, the content layout of the final deliverables, and the identification of key milestones, with timescales (taking into account §17.1 Timetable), leading to the production of the final output. The work will commence on award of the contract (max 15 pages).

- A declaration of honour that there is no conflict of interest in business interest and its activity affecting this call for tenders
- A financial offer containing a detailed cost breakdown and daily rates for each deliverable.

Other complementary documents may be requested during the Tendering process.

Questions with respect to the content and scope of the tender should be addressed to the UIC Senior Advisor, dekeyzer@uic.org

9. PARTICIPATION

Participation in this procurement procedure is open on equal terms to all natural and legal persons coming within the scope of the Treaties, as well as to international organisations.

10. JOINT TENDERS

A joint tender is a situation where a tender is submitted by a group of economic operators (natural or legal persons).

Joint tenders may include subcontractors in addition to the members of the group. In case of joint tender, all members of the group assume joint and several liability towards UIC for the performance of the contract as a whole, i.e. both financial and operational liability. Nevertheless, tenderers must designate (through a power of attorney signed by each member) one of the economic operators as a single point of contact (the leader) for administrative and financial aspects as well as operational management of the contract.

After the award, UIC will sign the contract with the leader on behalf of all members of the group, authorised by the other members via powers of attorney.

11. SUBCONTRACTING

Subcontracting is permitted but the Contractor will retain full liability towards the Contracting Authority for performance of the contract as a whole. Tenderers are required to identify subcontractors whose share of the contract is above 20 % and those whose capacity is necessary to fulfil the selection criteria. During contract performance, the change of any subcontractor identified in the tender or additional subcontracting will be subject to prior written approval of UIC.

12. SELECTION PROCESS AND TIMING

Tenderers are invited to prepare their proposal for this study and submit a bid for this project, which is to be executed between June 2024 (estimated start date) and December 2025. Proposals shall be returned to the UIC by 30 May 2024.

The UIC is planning to organise virtual meetings during the contract term, and thus the offer should be submitted accordingly without the requirement for costs associated for travel.

The UIC is intended to award a contract for the work by 15 June 2024(estimated start date) with an online kick-off meeting to be held with Project Group members by 1 July 2024.

A specific contract will be drafted by UIC and signed between the UIC and the Contractor.

The candidate will have to provide their offers via email to dekeyzer@uic.org no later than 30 May 2024 at 16:00 (UTC +1).

During the process, additional questions can be addressed in writing to dekeyzer@uic.org, no later than six working days before the date of receipt of tenders indicated above.

UIC may publish a Frequently Asked Questions document and / or Tender updates in the Procurement section of the UIC website (<https://uic.org/procurement/>), this is up to the tenderer to check regularly this section for any updates.

13. AWARD CRITERIA

The contract will be awarded based on the most economically advantageous tender, according to the 'best price-quality ratio' award method. The quality of the tender will be evaluated based on the following criteria. The maximum total quality score is 100 points.

1. Understanding of and previous experience with the topic

(30 points – minimum threshold 15 points)

2. Quality of the proposed methodology

(40 points – minimum threshold 20 points)

3. Organisation of the work and resources

(20 points – minimum threshold 10 points)

4. Quality control measures

(10 points – minimum threshold 5 points)

14. Ranking of tenders

Tenders must score minimum 50% for each criterion and sub-criterion, and minimum 70% in total. Tenders that do not reach the minimum quality levels will be rejected and will not be ranked.

Applicants shall specify to what extent they can meet each individual criterion in the tender, providing example of previous work whenever possible.

No right of appeal shall exist on the selection procedure or its outcome.

The contract will be awarded to the most economically advantageous tender, i.e. the tender offering the best price-quality ratio determined in accordance with the formula below. A weight of 70/30 is given to quality and price.

Score of tender T = (cheapest price) / (price of tender T) * 100 * 30% + (total quality score out of 100 for all award criteria of tender T) * 70%

15. Contestation of the selected tender

Given that this invitation to tender does not fall under French public procurement law, UIC reserves the right to select the most appropriated tender in compliance to its needs and criteria previously assessed.

Contestations of the selected tender may be addressed to the contact person for the tender within 10 (ten) calendar days following the announcement of the results. Nevertheless, UIC is not bound to accept them, nor to give a written answer.

These Terms of Reference are a UIC document compliant with the UIC Statutes, Internal Regulations and internal procedures related to suppliers' management.

16. Tender confidentiality

Within this framework, UIC undertakes to respect confidentiality and privacy of all information received from and/or exchanged with tenderers.

17. Timetable and legal specifications

In order to carry out the deliverables the contractor is required to attend meetings described in the timetable on "section 17.1 Timetable" below.

17.1 Timetable

The period for the study is fixed to a maximum of 18 months, following an estimated schedule as follow:

15 April 2024	Sending out Call for Tender
30 May 2024	Deadline for tendering
15 June 2024	Final selection of consultants
1 July 2024 – 31 December 2025	Contract implementation
July 2024	Kick-off meeting by 1st half of July 2024 - Virtual (planning-TBC)
July 2024 – October 2025	Monthly progress meetings to be planned with IRS 30345 project group
January 2025 – November 2025	Interim drafts submission to the UIC standardisation unit
October 2025	Design will be finalised by the UIC. The Contractor shall check and answer by email if necessary.
November 2025	Final IRS draft to be submitted to standardisation platform

The UIC will supervise the work and lead the project. The general schedule of the regular progress meetings will be adjusted according to the needs, the state of progress on the assignment and the participation by videoconference will be requested. It is up to the Contractor to approach the UIC to arrange any additional meetings which seem necessary to it to perform its assignment satisfactorily. Any meetings related to the contract between the Contractor and outside organisations, or private individuals must receive the prior consent of the UIC. The schedule and purpose of these contacts or meetings must be submitted to the UIC beforehand.

For each progress meeting, the Contractor must provide the documents substantiating progress on the services and allowing their validation by the UIC; these documents must be forwarded by email at the latest one week before the date of each meeting.

17.2 Submission of tenders and contact information

The bid shall be based upon the information in the context which is prepared by the UIC. Participation in the tender must be done by sending all relevant documents by email to dekeyzer@uic.org, no later than 30 May 2024.

Questions with respect to the content and scope of the tender should be addressed to the UIC Senior Advisor, Isabelle De Keyzer dekeyzer@uic.org.

17.3 Intellectual property rights and licence

The tender will not be allowed to use the whole or parts of the results being the subject of future contract without the prior written permission of the UIC. After signing the contract with UIC, the contractor the contractor waives all intellectual property rights developed as part of the project for the duration of the schedule of services proposed by the Contractor. UIC will have a full-right to use all aforementioned intellectual property rights included in the deliverables.

All documents that the UIC will place at the disposal of the consultant to facilitate the realisation of the future contract will remain its property.

Annex 1

IRS 30345 Environmental specifications for new rolling stock

Aim and Audience:

The IRS 30345 Environmental specifications for new rolling stock should list environmental performance indicators to be included in invitations to tender, constitute a list of actions/elements to check to ensure sustainable procurement of new rolling stock with a particular focus on circular use of resources.

Objectives of this project are to create a standardised environmental, and circularity recommended specifications for new rolling stocks to ensure that rail transport remains the most sustainable, fully circular and environment friendly mode of mobility that is adapted to a future changing climate. This project will provide the rail community with an international discussion platform to reach consensus on environmental specifications. The IRS will support the railway stakeholders to align their procurement processes with the UN SDGs.

Aims:

- 1 Developing a harmonised framework related to environmental and circularity requirements for technical specifications for new rolling stocks;
- 2 Supporting harmonisation and economic efficiency in the railways;
- 3 Setting realistic and measurable environmental performance data are requested in technical specifications;
- 4 Developing an environmental framework that is applicable by railway operators in their procurement processes;
- 5 Blending a range of technical environmental solutions to support the procurement process for the new rolling stock design;
- 6 Achieving compatibility between the emerging trends and environmentally friendly specification and universal and global objectives while also incorporating regional variations;
- 7 Improving procurement of new rolling stocks allowing for energy consumption reductions, GHG emissions reductions, noise and vibrations reduction, sustainable management of resources, compliance with electromagnetic compatibility requirements and responsibility over the whole supply chain;
- 8 Enabling all UIC members to use common language and specifications towards the supply industry when tendering rolling stock;
- 9 Relying on the principle of the “extended producer responsibility” as stated in the Directive 2018/851 of the European Parliament And Of The Council of 30 May 2018 amending Directive 2008/98/EC on waste, the railway companies will be able to take advantage of the eco-design

of components and therefore improve the sustainable management of raw materials along the whole supply chain to close the raw material loop;

- 10 Helping secure the product supply and market availability with the global recognition of standardised environmental specifications;
- 11 Making clear reference to previous UIC leaflets, existing documents relating to circularity applications for railways (CEN, ISO...);
- 12 Making clear reference to sustainability concerns specific to railways (Circular Economy, Energy efficiency and GHG emissions, Noise and Vibrations...);
- 13 Making clear reference to circular economy as a means to address the root causes of climate change, resource scarcity, pollution, and biodiversity loss and as a powerful means to reduce costs (manufacturing companies dedicate about 40% of their expenses to raw materials procurement);
- 14 Improving rolling stock parts lifespan, to increase their repairability, reusability and recyclability (recyclability rate should be above 95%).

The target audience is therefore:

- 1 Individual railway companies, in particular operating companies (engineering, purchasing staff...)
- 2 Rolling stock manufacturers and supply industry
- 3 Other rolling stock owners (local governments)
- 4 Standardisation organisations (international and regional)

Size: The new IRS 30345 should be maximum 40 pages long.

The draft plan of the document below may be modified by the authors.
UIC will use this document to invite the tenderer to submit their proposals

Table of Contents

- 1. Summary (1 page)**
- 2. Introduction (1 page)**
 - IRS structure
 - Purpose of the IRS,
 - Scope of the IRS,
 - **Regulatory framework and standards (2-3 pages)**

This part should refer to each of the sustainability fields addressed by railways:

Energy and emissions, Air quality, Impact on biodiversity, Noise & Vibrations and the corresponding regulatory documents.

2.1. International level

- 2.2. EU policy (Directives, Corporate Sustainability Reporting Directive,
- 2.3. National level: specifications published by national operators
- 2.4. ISO documents
- 2.5. CEN/CENELEC documents
- 2.6. IEC documents
- 2.7. others

- 3. Environmental indicators/specifications to consider in sustainable procurement of rolling stock**
- 4. Recommendations to embed IRS approaches in technical specifications others**
- 5. ...**

Annexes

CONTRACT FOR THE PROVISION OF SERVICES

Between:

The International Union of Railways (UIC), an association under French law, headquartered at 16, rue Jean Rey, F-75015 Paris, EU VAT number FR 43784601841, SIRET (French business registration number) 784 601 841, represented by Mr. François Davenne, Director General,

hereinafter referred to as “UIC” or “the Customer”,

on the one hand,

and

Company X, legal form of the company,, headquartered at, EU VAT number, business registration identification number (SIRET in France), represented by.....with full power to sign on behalf of the company,

hereinafter referred to as “the Service Provider”, recognised for its technical skills and expertise in the domain of the present Contract,

on the other hand,

identified hereinafter as “the Parties” or individually as a “Party”,

have agreed on the terms hereafter:

Article 1. Purpose and nature of the Contract

The purpose of this Contract is to define the rights and obligations of the Parties resulting from the performance by the Service Provider of Services within the framework of UIC Project no. relating to

It is clear from the will of the parties that this contract is intended to formalise the provision of services and in no way constitutes an employment contract involving a relationship of subordination. The Service Provider shall execute the Services as an independent contractor. The Service Provider and its employees and agents cannot be considered as employees and/or agents of UIC. Furthermore, the contract may not be interpreted as establishing a partnership or joint company between the Parties.

Article 2. Entry into force, duration and end of Services

The Contract shall take effect on for a duration of months.

Article 3. Description of Services, place of performance, methods and schedule of implementation

3.1 Description of Services

The Service Provider undertakes to provide the Services described below, which UIC accepts.

The Services are of an intellectual nature, and more specifically: XXXXXX.

The Services covered under this Contract, as well as the format for submission of work, are defined and detailed in Annex A to this Contract.

3.2 Methods of performance of the Services

The Service Provider is responsible for the performance of the Services covered by this Contract and exercises direct and permanent control over its employees: the Service Provider organises and performs the Services by involving its own staff and/or by calling upon specialists or external bodies under the conditions set out below.

The Services shall be performed under the responsibility of Mr or Ms XY, who is in charge of composing their team.

The Service Provider undertakes to have the Services performed by qualified personnel, duly accepted by UIC prior to the start of the Contract. In the event that a person in charge of performing the Services becomes unavailable for any reason whatsoever, the Service Provider undertakes to immediately appoint a person on a temporary basis and to appoint a permanent employee of equivalent competence, duly accepted by UIC, within eight days of the occurrence of this event.

Subcontracting by the Service Provider shall be authorised only with the express written consent of UIC. In such cases, the Service Provider shall ensure that its subcontractors comply with the obligations arising from the French Labour Code, as well as those referred to in Article 7, as recalled in this Contract.

3.3 Schedule for performance of Services

The Services must be performed in accordance with the schedule in Annex A.

In the event of a delay in the performance of its Services on the basis of the deadlines scheduled and for reasons for which it is responsible, the Service Provider may, without prior notice, have to pay a penalty for the delay to UIC, corresponding to the amount indicated per working day of the delay and specified in Annex B.

Any event relating to a case of force majeure within the meaning of Article 1218 of the French Civil Code (including a pandemic) shall be liable to give rise to a suspension of the obligation affected by force majeure, and the Service Provider shall be relieved of its obligation accordingly.

If the impediment is permanent or exceeds XXX weeks/months, the Contract shall be terminated automatically, and the Service Provider shall be relieved of its obligation accordingly.

Article 4. Financial clauses: Fees – travel costs – invoicing and payment

4.1 Fees

In return for performance of the Services, UIC undertakes to pay the Service Provider an all-inclusive fee in the form of an overall flat-rate sum of (.....) euro excl. tax, this amount to be considered final (*amount in letters and figures*).

The applicable VAT rate is the rate in effect on the day the invoices are issued.

Multiple invoices	The Service Provider shall issue XX invoices for services rendered as follows: A first invoice in the amount of shall be sent to UIC upon signature of this Contract and shall be paid as a deposit for the start of Service provision. Subsequent invoices shall be paid by UIC in accordance with the schedule shown in Annex B.
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In the event that this Contract is terminated before its term for any reason whatsoever or in the event of force majeure, the Service Provider shall close the accounts and prepare an invoice for expenses incurred not covered by any previous invoices, and shall present it to UIC for payment. In the event of termination for a fault on the part of the Service Provider, UIC shall retain the possibility of claiming all compensation to remedy the damage suffered as a result of such termination.

4.2 Travel expenses

Non-reimbursement of travel costs by UIC	The Service Provider shall bear travel and accommodation expenses costs incurred, these being deemed to be included in its payment.
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4.3 Payment

Net payment shall be made by transfer sixty (60) days from the date of issue of the invoice, or thirty (30) days from the date of receipt of the invoice for members of the BCC.

The invoice must include the following information:

- Name of the bank
- IBAN code
- BIC
- EU VAT number

Article 5. General obligations of the Service Provider

In general, the Service Provider declares and guarantees compliance with all French and Community laws and regulations applicable to it listed in Annex C.

Article 6. Ownership of work

All results and work produced under this Contract are the exclusive property of UIC, excluding any possibility of transfer of ownership by the Service Provider for any reason whatsoever. The work shall be acquired as and when it is carried out in return for the fees referred to in Article 4.1 or, if the Contract is terminated, on the date of termination, provided that this work is paid for.

In return for the fees indicated in Article 4.1, the Service Provider grants to UIC, as well as to its beneficiaries, exclusively and throughout the world, all copyrights, including all reproduction rights on all known media, including placement online on a service accessible by digital data transmission network, in particular the Internet, for the duration of copyright protection granted by the regulations in force, international conventions and all judicial and arbitration decisions.

The Service Provider guarantees the peaceful exercise of the rights thus assigned against all claims or loss of rights and undertakes to compensate UIC for any expenses or damages which may result therefrom.

Article 7. Professional secrecy and obligation to exercise discretion

The Service Provider guarantees compliance on the part of its duly authorised employees, agents or subcontractors with the undertaking of confidentiality set out above within the meaning of Article 1204 of the French Civil Code.

The Service Provider acknowledges that it is bound by professional secrecy and the obligation of discretion in all matters relating to the facts, information, data, studies and decisions that have been communicated to it or that have come to its knowledge during performance of its Services. In particular, it shall refrain from any written or verbal communication on these subjects and shall not provide any documents to third parties without the prior consent of UIC.

Article 8. Liability and insurance

In the event of an accident occurring as a result of the performance of this Contract, UIC and the Service Provider provide an undertaking to their respective personnel to settle reparations for victims and social security within the framework of common law liability.

The Service Provider shall take out the necessary insurance to cover the risks involved in performance of the Services covered under this Contract, as well as those of any subcontractors, and undertakes to provide the certificates to UIC if so requested by the latter.

UIC has taken out an insurance policy to cover its civil liability.

Article 9. Completion, rescinding or termination of the contract

The present Contract may be terminated in the following circumstances:

- a) Due to full performance of the service (see Article 2)
- b) At any stage of completion of the contract if jointly agreed in writing by UIC and the Service Provider
- c) In the event of force majeure under the conditions provided for in Article 3.4
- d) At the request of one of the parties in the event of total or partial non-performance by the other party of its obligations, not resolved within a reasonable period of time as notified by registered letter registered with acknowledgement of delivery. If performance continues after the expiration of this period, a letter shall be sent to the defaulting party to notify it of the termination of the contract and the reasons for the termination.

Article 10. Non-solicitation of personnel

In the course of the execution of the present Contract, UIC undertakes not to approach, either directly or indirectly, any of the Service Provider’s staff participating in the work with an offer of employment unless previously agreed in writing by the Service Provider.

Article 11. Miscellaneous

The Contract constitutes the entire agreement between the Parties. It cancels and replaces any agreement, letter or other previous document of the same purpose. Amendments to any one of the provisions of the Contract shall be laid down in an addendum signed by both Parties. Any clause invalidated by a court decision shall not invalidate the other clauses of the Contract.

Article 12. Applicable law – language of the contract – jurisdiction clause

The Contract is drawn up in the English language and is governed by French law.

In the event of a dispute relating to the interpretation or execution of the present Contract which the parties cannot resolve amicably through conciliation, the dispute shall be referred to the law court of Paris, which shall have exclusive jurisdiction.

Signed in in copies on

Signatures of the parties

For UIC

For the Service Provider

Annex A

Service description and schedule

PHASE 1

- Description
- Date
- Results to be delivered and format

PHASE 2

- Description
- Date
- Results to be delivered and format

FINAL PHASE

- Description
- Date
- Final results to be delivered and format

Annex B

FORECAST OF ALL TRAVEL AND ACCOMMODATION EXPENSES INCURRED BY THE SERVICE PROVIDER

Not applicable

PENALTIES

Annex C

[IF THE SERVICE IS WHOLLY OR PARTIALLY PERFORMED IN FRANCE]

The Service Provider shall undertake to provide UIC with:

- A certificate, less than six months old, of provision of social declarations and payment of social security deductions and contributions as provided for in Article L. 243-15 from the social welfare agency responsible for collecting deductions and contributions, the authenticity of which shall be checked with the social security contribution collection body.
- As part of efforts to combat the employment of foreign nationals without a work permit, the Service Provider shall submit the documents referred to in articles L8254-1 and D8254-1 et seq. of the French Labour Code on the day of signature of the Contract and every six months until completion of performance of the Contract, to include the list of names of foreign employees employed by the Service Provider and subject to work authorisation as provided for in Article [L. 5221-2](#), specifying for each employee:
 1. his or her date of hire;
 2. his or her nationality;
 3. the type and serial number of the document constituting his or her authorisation to work.

Annex D

**CERTIFICATE CONFIRMING THAT
CLANDESTINE WORKERS ARE NOT
EMPLOYED**

Checks carried out prior to conclusion of a
subcontracting agreement or contract for the provision of services

French Decree 92-508 of 11 June 1992

Confirmation upon signature of the contract. After this time, any order shall be deemed unwritten.

Name or corporate name of the company _____, represented by
_____ acting as _____.

The undersigned certifies that it is compliant with the obligations of the French Labour Code relating to illegal work and, in accordance with the provisions of the French Decree of 11 June 1992, undertakes to attach the following documents to this sheet:

1. Choice of:

Certificate, less than one year old, of provision of social declarations from the social welfare agency (URSSAF, etc.) responsible for collecting social contributions.

Tax assessment notice relating to business tax for the previous year.

Certificates proving that the company is meeting its obligations with regard to Articles 52, 53, 54 and 259 of the French Code of Public Procurement.

Financial guarantee certificate (temporary employment agencies only).

2. As well as one of the two following documents:

SP-NEW IRS30345-2024/ UIC – Name of service provider

An extract of the entry in the French Companies Register (K or K bis).

An identification card providing evidence of registration in the French Trades Register.

If the company is established or domiciled abroad, attach as required:

A document indicating the identity and address of the person representing the company to the French tax authorities.

A document confirming that the company is meeting its obligations with regard to social conditions and personnel.

A document certifying that the subcontractor has been registered in a professional register in its country of origin where such registration is compulsory.

Furthermore, the undersigned certifies on its honour that the service provided for in the Contract shall be carried out by personnel employed in accordance with labour legislation and in particular with articles L 3243-1, L3243-2, L 3243-4, L 1221-10, L 1221-13 and L 1221-15 of the French Labour Code.

Signed in on

Signature and company stamp

<p>French Service Provider and service performed in France</p>	<p>In particular, the Service Provider declares that is it compliant with the provisions arising from the French Labour Code, particularly those relating to the prohibition of undeclared work arising from Articles L.8221-3 et seq. of said Code, and certifies that the Services covered by the Contract shall be performed in accordance with the labour legislation in force.</p> <p>Thus, in application of Article D8222-7 of the French Labour Code, it must submit to UIC, when the Contract is concluded and every six months until the end of its execution, all of the following documents so that UIC is deemed to have carried out the verifications required by Article L. 8222-1 of the French Labour Code:</p> <ol style="list-style-type: none"> 1. A certificate, less than six months old, of provision of social declarations and payment of social security deductions and contributions as provided for in Article L. 243-15 from the social welfare agency responsible for collecting deductions and contributions, the authenticity of which shall be checked with the social security contribution collection body. 2. When registration of the co-contractor in the Companies Register or in the Trades Register is compulsory or in the case of a regulated profession, one of the following documents: <ol style="list-style-type: none"> a) An extract of the entry in the French Companies Register (K or K bis); b) An identification card providing evidence of registration in the French Trades Register; c) An estimate, advertising document or professional correspondence, provided that the name or company name, the full address and the registration number in the French Companies Register, French Trades Register or a list or table of a professional body or a reference to accreditation issued by the competent authority are indicated; <p>A deposit slip for filing the declaration with a business start-up centre (CFE) for people in the process of registering.</p> <p>Furthermore, as part of efforts to combat the employment of foreign nationals without a work permit, the Service Provider shall submit the documents referred to in Articles L8254-1 and D8254-1 et seq. of the French Labour Code on the day of signature of the Contract and every six months until completion of performance of the Contract:</p>
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	<p>The list of names of foreign employees employed by the Service Provider and subject to work authorisation as provided for in Article L. 5221-2, specifying for each employee:</p> <ol style="list-style-type: none"> 1. his or her date of hire; 2. his or her nationality; 3. the type and serial number of the document constituting his or her authorisation to work.
<p>Service Provider established outside France and service performed in whole or in part in France</p>	<p>In particular, the Service Provider declares that it is compliant with the provisions of Articles L.8221-3 et seq. of the French Labour Code relating to the prohibition of undeclared work and certifies that the Services covered by the Contract shall be performed in accordance with the labour legislation in force.</p> <p>Thus, in application of Article D8222-7 of the French Labour Code, if the Service Provider is required to perform all or part of its Services on French territory, it must submit to UIC, when the Contract is concluded and every six months until the end of its execution, all of the following documents so that UIC is deemed to have carried out the verifications required by Article L. 8222-4 of the French Labour Code:</p> <ol style="list-style-type: none"> a) A document indicating its individual identification number assigned in application of Article 286b of the French General Tax Code. If the co-contractor is not obliged to have such a number, a document indicating its identity and address or, where applicable, the contact details of its ad hoc tax representative in France; b) A document, less than six months old, confirming that the Service Provider is meeting its obligations with regard to social conditions with regard either to Regulation (EEC) No 1408/71 of 14 January 1971 or to an international social security agreement or, failing that, a certificate of social security declarations from the French social welfare agency responsible for collecting the social security contributions incumbent on the Service Provider; c) In addition, if registration in a professional register is compulsory for the Service Provider in the country of its establishment or domicile, either: <ol style="list-style-type: none"> i) a document from the authorities keeping the professional register or an equivalent document certifying registration; ii) an estimate, advertising document or professional correspondence, provided that the name or company name, the full address and the type of registration in the professional register are indicated; iii) or, for companies in the process of being created, a document less than six months old from the authority empowered to receive entries for registration in the

	<p>professional register and certifying the application for registration in said register.</p> <p>Furthermore, as part of efforts to combat the employment of foreign nationals without a work permit, the foreign Service Provider posting foreign employees on French territory shall submit the documents referred to in Articles L8254-1 and D8254-3 et seq. of the French Labour Code on the day of signature of the Contract and every six months until completion of performance of the Contract:</p> <p>The list of names of foreign employees employed by the Service Provider and subject to work authorisation as provided for in article L. 5221-2, specifying for each employee:</p> <ol style="list-style-type: none">1. his or her date of hire;2. his or her nationality;3. the type and serial number of the document constituting his or her authorisation to work.
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