CER-EIM-UNIFE

Recommendation to apply the Most Economically Advantageous Tender (MEAT) & Good practices in the domain of railway procurement

1. Strategic importance of public procurement and MEAT for rail

Public procurement is the most common process for railway projects in Europe including infrastructure, rolling stock, rail control or energy as well as maintenance. The vast majority of railway operators and infrastructure managers in the single European railway area (SERA) are contracting authorities. Therefore, it can be a driver for more sustainable, performant and innovative products, and ensure contracting authorities achieve best value for money.

The EU public procurement framework was revised in 2014, with 3 new directives entering into force on 18 April 2016 (2014/24/EU; 2014/25/EU; 2014/23/EU). In particular, it is important to underline the contract award criteria described in Article 82 of Directive 2014/25/EU and Article 67 of Directive 2014/24/EU:
"*Without prejudice to national laws, regulations or administrative provisions on the price of certain supplies or the remuneration of certain services, contracting entities shall base the award of contracts on the most economically advantageous tender.*

The most economically advantageous tender from the point of view of the contracting authority shall be identified on the basis of the price or cost, using a cost-effectiveness approach with a total cost of ownership (TCO) in accordance with Article 68, and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked to the subject-matter of the public contract in question."

However, and depending on the transposition of these articles in national law, contracting authorities might assess the MEAT in different ways. Indeed, value is a combination of "what" is important and "how much" it is important (criteria and weighing). Ultimately, awarding contracts based on price only is still a possibility to be decided by the contracting entity. While this may be justified in certain cases, an approach rather based on the best-price quality ratio over the lifetime of the products and services may provide extra **benefits** such as:

- Maximisation of the value of procurement and improvement of business conduct through a shift from a "one-size-fits-all" approach;
- Reduced obsolescence due to more advanced products likely to be maintainable for longer time, in a sector that has long life-cycles;
- Increased competition and advancement of sustainable policy objectives;
- Fair competition between all bidders, irrespective of their nature (i.e. private or State-owned companies).

There are also **challenges to overcome** for contracting authorities that wish to move towards a best price-quality ratio over the lifetime of the products and services:

- How to avoid creating additional burden in procurement procedures and evaluation of tenders?
- How to professionalise procurement departments – which may not be used to award criteria other than price – to new methodologies and approaches?
- How to incentivise and support contracting authorities in their transition?

2. Award criteria and best practices of rail contracting authorities

Beside the mere purchase price, numerous other factors directly or indirectly determine the best price-quality ratio.

CER, EIM and UNIFE have jointly established a list of potential criteria that contracting authorities could take into consideration in tendering procedures and contract awarding of railway related projects. This does not constitute an exhaustive list, but rather a list of topics that could be addressed in priority in the framework of a step-by-step approach. Other criteria include for example the long-term strategy, performance or quality. The objective is not to add administrative burden or create complexities for contracting authorities, but rather to provide them with non-binding guidance and concrete ideas.

2.1 Technical/technological criteria

Technical/technological award criteria can be important to ensure the long-term sustainability of a rail product and reduce its obsolescence. They have to be linked to the subject matter of the contract. Without prejudice to the legality, criteria can include:

- System competence, full premium product range/portfolio of products, Key Performance Indicators (KPIs) analysis (KPIs to be defined and published in the respective tenders), for instance relating to RAMS(HE);[1]
- Quality competence; proven process and production quality performance in all project phases;
- Forward thrust R&D capability and proven innovation power (including the demonstration of the qualitative and quantitative benefits of premium products with regard to potential savings and performance increases);
- Assessment of supplier management systems including integrated mapping (authentic on-site inspections for companies offering for the first time could be part of this) covered by reference list;
- Technical customer service (including engineering and training competence, on-demand availability, evaluated e.g. in tabular form based on specific requirements and experiences, etc.).

It should be noted that some criteria are more suitable for the supplier qualification phase[2], while others more for the tender evaluation.

[1] *RAMSHE: Reliability, Availability, Maintainability, Safety, Health, Environment*

[2] The Supplier qualification is carried out according to a product group and is usually independent of any specific award procedure. A product group defines a specific range of products or services. A company can be qualified for several product groups.

2.2 Life-cycle costing

The cost of initial purchase is often the most influential factor, as contracting authorities may argue that the least expensive offer can enable budgetary savings. However, during the life cycle of the product further costs will be generated by the use of the procured products or services (especially operational and maintenance expenditure)[3]. All of these additional costs will – dependent on the situation – have to be paid by either taxpayers' money or purchasers' and earned back from business. From an economic perspective, the most logical approach is to evaluate all the costs over the life-cycle of the products or services[4]. It is worth mentioning the importance of taking into account core components when addressing life-cycle costing (LCC) from a system perspective.

Article 83 of Directive 2014/25/EU defines more specifically the costs over the life cycle of a product, service or works that can be covered in a life-cycle costing approach. For the railway sector, the following three categories shall be considered:

- Project costs of the buyer;
- Rolling stock, infrastructure and signalling equipment investment cost;
- Operation cost, which includes maintenance at different periods (start, operation, end), but also energy use, impact on tracks, 'risk' (i.e. 'maturity' of the product and supplier)…

2.3 Environmental and social criteria

It must first be reminded that all award criteria must be related to the subject matter of the procurement. Furthermore, all criteria and respective measurement processes have to be defined in view of the specific system/product/service to be tendered.

The following criteria are important:

- Environmental performance factors: Regarding the products, low-carbon mobility and ecological efficiency could be encouraged, while zero emission technologies could be privileged. The production phase could also be considered (raw materials, energy consumption and emission savings in the various industrial/processing states…). Furthermore, the operational lifetime of a product/system is decisive, since high-quality products may enable to avoid further investment within the same cycle and thus also avoid emissions. Considering the significant use and cost of energy, particular attention should be paid to energy efficiency.

- Sustainability evaluation: When it comes to sustainability evaluation, transparency of the methodologies, references and standards used are important elements. This is true for economic (e.g. LCC), environmental (environmental impacts shall be evaluated based on established European or international standards like ISO 14025:2011 and ISO 14040/14044:2006) and social evaluation (e.g. responsible sourcing and social standards; the evaluation could be based on established and internationally agreed standards like the OECD Due Diligence Guidance for Responsible Business Conduct and the 8 Fundamental Conventions of the International Labour Organisation (ILO)). Criteria related to ethical values (to assess eligibility) could also ensure fair and equal treatment of tenders.

[3] E.g. for rolling stock approx. 25% of LCC is CAPEX and approx. 75% is OPEX

[4] OECD/SIGMA, Public procurement Brief 9, Tender Evaluation and Contract Award 2016

As an illustration, performance measurements have shown that steel grades conforming to EN R400HT are able to reduce damage in track by a factor of 6 in comparison with standard grades (R260), and by a factor of 2 compared with heat-treated rails in the conventional performance category (R350HT)[5]. If further investments are avoided thanks to the elongation of service life of the rails, CO2 emissions occurring with the reproduction of the material are correspondingly reduced. However, wheel wear and tear also depends on the track steel grade and a good profile management. A high track steel grade can be beneficial in reducing damage on both sides of the interface. However, good profile management of both is necessary because the high steel grade rail or wheel shape will persist for longer. A poor profile shape could cause higher forces and increased wear and will lead to more maintenance costs for rails as well as wheelsets, consequently a careful consideration of adequate steel quality/profile combinations to minimize the total costs is absolutely indispensable.

3. Examples of good practice

3.1 Round Table Rail (RTR)

This joint initiative between rolling stock suppliers and major train operators was launched in Zürich on 28th August 2018 with the aim of simplifying main line rail vehicle development and procurement. Founding members of Round Table Rail (RTR) were DB, SBB, NS, NMBS/SNCB, Alstom, Stadler Rail, Bombardier, Siemens and CAF.

RTR aims at defining a taxonomy for product specifications in tender documents, maturity levels for main line rolling stock and developing a joint structure for a TCO (total cost of ownership) structure. This TCO structure will help to award contracts on the basis of total cost of ownership of the tendered product's life cycle. Even if the operation is different, the structure takes into account all cost-related aspects. For instance, RTR has identified the following categories for TCO of rolling stock[6]:

1. Project cost of buyer: acquisition cost until contract signature, project management cost, training cost, quality assurance and management cost, warranty cost, finance cost, infrastructure integration cost, maintenance integration cost…;
2. Investment cost: price for basic vehicle, price for optional features, price for customisation requirements, one-time project cost of supplier (tender specific);
3. Operation cost: maintenance cost, repair cost, modernisation cost, cleaning cost, fleet supervision and management cost, commercial operations cost (train driving, train preparation and prearrangement, train accompaniment and safety, track access charges, energy consumption), infrastructure cost (maintenance facilities/tools/machines, infrastructure modifications), inventory cost, risks and opportunities (obsolescence…), financing cost, service contract cost, withdrawal from service.

The trend is clearly moving in the direction to a TCO structure. Some operators which are already tendering are taking life-cycle costs into account. Upon completion, the RTR TCO structure aims at ensuring a standardised approach and foster transparency.

[5] This reduction is linked to the final use of rail infrastructure.

[6] This list is not exhaustive as the work is still ongoing.

3.2 Railsponsible

Railsponsible is an industry initiative focused on sustainable procurement, with the aim to continuously improve sustainability practices throughout the railway industry supply chain. The initiative is open to all railway operators and companies across the railway industry value chain, along with key industry associations, that share its vision, mission and commitments.

The initiative aims at improving environmental and social practices of companies of the railway sector and railway sector supply chain through best practice sharing and capability building. It also aims at improving efficiency in the analysis of supply chain CSR practices, and to promote greater transparency to meet increasing stakeholder requirements.

Railsponsible requirements can be used as prequalification requirements.

3.3 Infrastructure-related good practices

Network Rail
Various supplier working groups have been set-up to help increasing supplier engagement and development and act as platform for suppliers to share good practice. The idea is that suppliers understand Network Rail's challenges in delivering its renewal strategy and what they will need to deliver and understand Network Rail requirements in an easier way. It also works as a feedback mechanism for the strategies to understand what the challenges may be for suppliers to meet those requirements.

Examples of groups:
- Strategic Supplier Interface Group
- Tier 2 Interface Group
- National SME forums
- Greater use of industry groups (RICA (Rail Industry Contractor Association), RSG (Rail Supply Group), CECA (Civil engineer contractors associations) and RIA)
- Next stage: Route/Regional Supplier Groups

Consideration of other criteria than price in tenders
- Scandinavian countries: There have been interesting cases in which evaluation criteria are explicitly based on the most economically advantageous tender, with a weighing for other criteria than price (quality, environmental performance, innovation etc.) that can reach 30 to 40%.
- United Kingdom: A recent project has even requested a higher weighing for the technical score.
- Netherlands: Among all the possible options to apply the MEAT, the choice has been made to use the option of awarding contracts based on value. The infrastructure applies three criteria in the MEAT method, being: 1. (Past) Performance, 2. Safety, and 3. CO2-emmission.

Finally, it is worth noting that forthcoming rail projects plan to fully implement the MEAT principle in their procurement plans, as can be seen from **Rail Baltica's "Common Procurement Standards and Guidelines"** ("*Price only will be used as a contract award criterion only as an exception in those cases when the technical specifications are clear and other award criteria are of no significance. All such exceptions must be objectively substantiated and such reasoning shall be recorded on file for audit purposes*").

4. Other initiatives

The members of the European railway operating community – comprising both railway undertakings and infrastructure managers – make great efforts to facilitate procurement processes. Some approaches like the Round Table Rail (RTR) were explained above.

Procurement of railway rolling stock or infrastructure and its components is treated in a holistic way and therefore the rail operating community put focus on the simplification and harmonisation of the requirements in the call for tenders, e.g. **EULYNX** to standardise interfaces and elements of the signalling systems, or **EuroSpec** for providing harmonised product specifications for use in train procurement and refurbishment.

The aim of these initiatives is:

- An increase of reliability by sharing good practice and experience;
- A simplification of the tender process in time and cost as a result of fewer variations in requirements between tenders;
- Standardised products and cost reduction due to harmonisation requirements.

5. Joint recommendations to the sector

- ✓ Complement this document with recommendations on other criteria such as long-term strategy of the purchaser, supplier performance and quality systems.
- ✓ Develop further guidance for various sub-systems such as rolling stock, infrastructure and signalling, including servitisation around these sub-systems (incorporating maintenance, repair and overhaul contracts, where the manufacturer takes some responsibility (or risk) for fulfilment, and is paid as the capability it offers is consumed).
- ✓ Pursue exchanges on rail procurement best practices and actively promote the recommendation to European railway undertakings and infrastructure managers.
- ✓ Advocate for 'strategic procurement' within the next EU legislative period 2021-2027, e.g. by encouraging further application of MEAT criteria in EU procurement.

NB: The European Commission was invited to support CER-EIM-UNIFE in drafting, and to implement a dissemination plan targeting contracting authorities, with the support of EU Member States.

The Associations

CER brings together more than 70 railway undertakings, their national associations as well as infrastructure managers and vehicle leasing companies. CER members represent 73% of the European rail network length, 77% of the European freight business and 93% of rail passenger operations in Europe.

EIM is a Brussels-based, international, non-profit association which represents the common interests of European Rail Infrastructure Managers. EIM currently has 12 full and 3 associate members which accounts for 11 European countries. The members of EIM are dedicated to improve railway infrastructure management and the service they provide to their customers. This is fulfilled by promoting self-improvement through benchmarking and the exchange of best practice. The organisational structure of EIM is designed to provide the best platform for this reason.

UNIFE is representing the European rail manufacturing industry in Brussels since 1992. With 23 fulltime staff, the Association gathers over 100 of Europe's leading large and SME rail supply companies active in the design, manufacture, maintenance and refurbishment of rail transport systems, subsystems and related equipment. UNIFE also brings together 14 national rail industry associations of European countries. UNIFE members have an 84% market share in Europe and supply 46% of the worldwide production of rail equipment and services. UNIFE advocates its members' interests at both the European and international level — actively promoting EU rail equipment and standards within Europe and abroad.