

## **SUMMARIZED RESULTS OF THE MEETINGS WITH INTERESTED SUPPLIERS REGARDING CONTROL COMMAND AND SIGNALLING SUBSYSTEM PROCUREMENT FOR THE RAIL BALTICA GLOBAL PROJECT**

### **Dates of the meetings:**

22 – 25 August 2022

### **Location:**

In RBR Riga office and via Microsoft Teams;

### **Participants from RB Rail AS:**

Aiga Benfelde – Procurement Manager;

Vineta Ezergaile - Senior Procurement Specialist;

Jean-Marc Bedmar – Head of Systems & Operation Department;

Andris Losāns - CCS Project Manager;

Andrejs Mislēvičs – Signalling & Communications Team Leader/Deputy Head of S&O Department;

Valdemar Kačanovskij - Deputy Head of Legal Department;

Māra Saukante - Technical Project Coordinator;

Ieva Štrausa - Business Relationship Manager.

### **Other participants:**

Representatives of CCS Engineer;

Representatives of interested Suppliers.

### **Meetings' agenda**

- Brief introduction to the Rail Baltica project, project status and project schedule.
- Information on the planned scope and timeline for the implementation of full scope of CCS subsystem.
- Supplier's presentation:
  - Support to Rail Baltica in reaching the targets
  - Single design concept across 3 Baltic states resulting in scale and maintenance economies, limited number of interfaces
  - Implementation of ETCS Baseline 4 Release 1; RMR Baseline 1; ATO Baseline 1
  - Interfaces according to EULYNX Specifications
  - Traffic Management System TD 2.9
  - No trackside signals on secondary tracks and shunting areas
  - No copper cables on open line
  - Usage of local renewable power Supply sources for CCS equipment
- Q&A session:
  - Part 1: RB Rail AS questions to Suppliers
  - Part 2: Suppliers' answers
  - Part 3: Suppliers' questions
  - Part 4: RB Rail AS answers.

### **Scope and structure of consultation**

The consultation was structured on two main moments:

1. A questionnaire to be completed by the participating companies and sent before the face-to-face session.
2. A one and half an hour meeting with each of the participating companies in which to transfer some general information on the project and deepen some topics of interest to the parties.

This structure made it possible to obtain a larger amount of information through the questionnaire while leaving room for direct debate and questions from companies.

### **Project information provided during consultation**

In relation to the state of development of the design and the project in general, and in line with the first two points of the agenda planned for meetings with the participating companies, the following information was provided:

- General technical information about the Rail Baltica Global Project
- Some specific parameters related to the CCS Subsystem
- Information about Rail Baltica's Governance Structure
- General information about the procurement platform that will be used
- General information on procurement procedure and time planning
- General information on the general plan for the implementation of the project
- General information about the scope of work
- Information about the CCS Subsystem time-line
- General technical information about the complexity of the project
- Information on CCS Subsystem Breakdown structure

The information briefly described above is given in the attached presentation (Annex 1)

### **Applying Companies**

Sixteen companies have joined the initiative and participated either in person or remotely to the consultation. In the section below "Analysis of the consultation results" are analysed several parameters characterizing the panel of respondents in terms of:

- Company size,
- Geographical presence
- Offering concerning CCS Systems

### **The Questionnaire**

The questionnaire proposed to the participating companies is shown in the list below. The questionnaire has been reclassified according to the following main areas of investigation:

1. Supplier Profile
2. Evaluation of market trends
3. Project Delivery Risk Assessment
4. Risk Response Strategies
5. Killer Concerns
6. Expectation from market consultation
7. Other

**The first group of questions: 1- Supplier Profile** is aimed at investigating the characteristics of the potential contractor in terms of size, financial capacity, experience and technical capacity. The section was

structured also to understand the key features of the offering of each company, their geographical presence and some key inputs on TSI certified projects.

**The second group: 2 - Evaluation of market trends.** The section was structured in order to confront the perception of future enablers and challenges shaping the industry with the analysis already performed during the project. Each consulted company could also enrich the landscape of the future of CCS market by adding new items which in their opinion will become more and more relevant.

**The third group: 3 - Project Delivery Risk Assessment.** Risk analysis in long term infrastructural projects, like Rail Baltica one, is key to figure out potential barriers which may lead to an unsatisfactory result of the engagement. Sharing with potential partners their understanding of the risks both in terms of probabilities and in terms of impact on the desired outcome of the project, represents a very important moment to get alignment on issue considered crucial to guarantee a consistent performance of all the actors.

**The fourth group: 4 - Risk Response Strategies.** The immediate consequence of the risk analysis is the definition of possible path of actions which, not only mitigate the impact of risks in case of their materialization, but also that can substantially avoid the occurrence of the risks themselves. Understanding the point of view of potential contractors Supports RBR in defining a path of action with a larger and stronger probability of success.

**The fifth group: 5 - Killer Concerns.** One of the main targets of RBR is to keep up to the end of the competitive process, a fear and consistent competition among those who present competencies and capabilities to Support RBR's project. Understanding which may be the events/decision that, from the perspective of the potential competitor, may strongly affect their capability to participate to the competitive bid is very important for RBR

**The sixth group: 6 - Expectation from market consultation.** The last section of the concerns the market consultation process itself. In order to get the maximum efficiency and effectiveness of the 1,5 hour meeting was very important to get in advance the expectations of the companies coming to the consultation and showing interest in the project

The questions asked are aimed at identifying:

- The appetite of companies to compete for the project
- The skills to be requested in terms of access to the competition in order not to limit the competition itself
- The possibility of pursuing the preferred scheme: a single Design & Build contract for the entire CCS Subsystem while maintaining a good level of participation
- The risks most perceived by companies in the sector
- Suggestions from the business world

### **Analysis of the consultations results**

In the following paragraphs is summarised the group-by-group analysis containing the answers provided by potential Suppliers concerning the Deployment Strategy.

#### **First group of questions: 1- Supplier Profile**

Eighteen (18) companies responded to the questionnaire and declared the following data in terms of turnover and employees (see figure 1) below:

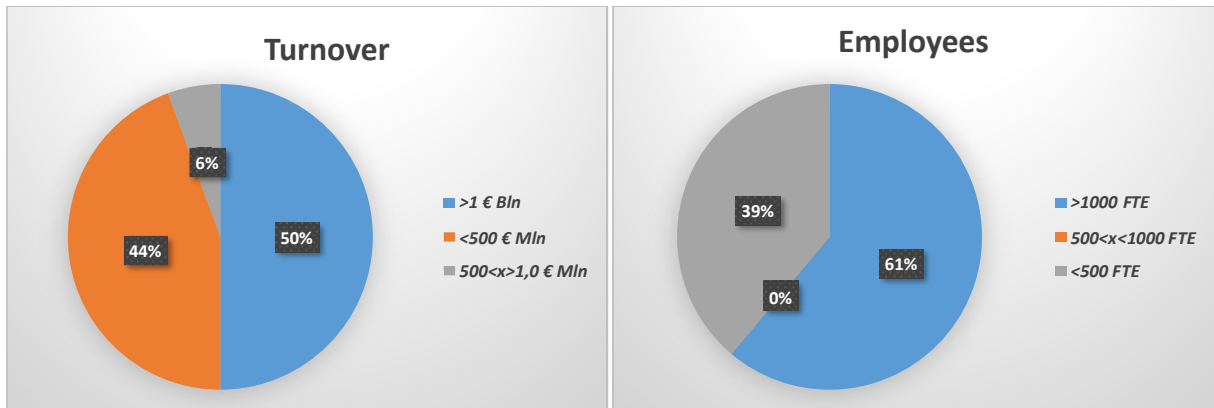


Figure 1 – Turnover and Employees

All the respondents were active in more than seven countries (all but one), and all of them had operations in Europe.

Fifteen (15) of them have also operations in Asia.

Thirteen (13) in Africa.

Fourteen (14) in America.

Among the respondents, different companies presented different systems as part of their core offers. The figure 2 below shows the number of respondents that indicated each of the listed systems as part of their core offer.

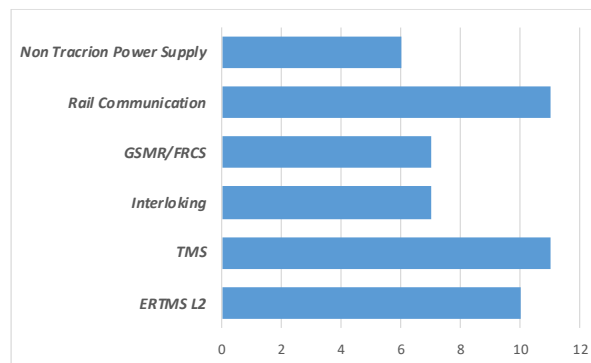



Figure 2 – Core systems

## Second group: 2 - Evaluation of market trends

It was requested to evaluate the key trends shaping the CCS Subsystem market in the near future (1 to 3 years) as well as in the long term. The figure 3 below shows the average answers received from the respondents.

|                                                                                                            | 1-3 Years<br>Impact | 4-10 Years<br>Impact | 1-3 Years<br>Impact | 4-10 Years<br>Impact |
|------------------------------------------------------------------------------------------------------------|---------------------|----------------------|---------------------|----------------------|
|  Regulations              | ➔                   | ➔                    | ➔                   | ➔                    |
|  Digitalisation           | ➔                   | ➔                    | ➔                   | ➔                    |
|  5G networks              | ➔                   | ➔                    | ➔                   | ➔                    |
|  Automation               | ➔                   | ➔                    | ➔                   | ➔                    |
|  Market consolidation     | ➔                   | ➔                    | ➔                   | ➔                    |
|  New UNISG members        | ➔                   | ➔                    | ➔                   | ➔                    |
|  Global standardisation   | ➔                   | ➔                    | ➔                   | ➔                    |
|  EU "Next generation"     | ➔                   | ➔                    | ➔                   | ➔                    |
|  Semiconductor's scarcity | ➔                   | ➔                    | ➔                   | ➔                    |

*Average Responses of consulted companies*

Figure 3 – Market trend

The consulted companies indicated the following critical trends (that may define the future market):

- Predictive Maintenance connected with automatic and proper data gathering
- Pricing increase of main materials (metal, concrete, etc.)
- Fast introduction and implementation of the FRMCS (Future Railway Mobile Communication System)
- Railway using mission critical network technologies
- Ensure the safety of passengers
- Human Resources with Signalling know-how
- BIM in projects design and construction
- Inflation
- Manpower availability

One of the main concerns is the availability of skilled human resources within the railway sector, the applications of new technologies and the construction of different subsystems of a Command Control and Signalling System able to be compliant with the TSI (Technical Specifications of Interoperability) at European level.

### **Third group: 3 - Project Delivery Risk Assessment**

Among the key risks identified in the project already in 2020, the items selected to be evaluated by the respondents were:

1. Tight project implementation time constraint causing a risk of cost increase
2. Train/Track side integration not working properly with different On-Board Units
3. Delay or reduced scope of 2022 CCS TSI may unable standards matching
4. Implementation of ATO alongside with ETCS introduces "unknown" parameters
5. Support services from contractor Suppliers are not set up on time (spare parts, staff, etc.)
6. FRMCS specifications for integration with TMS and ETCS in CCS 2022 might be not fully completed
7. Integration with existing systems in several sections may request reworking and may cause complexity of the solutions increase

These above mentioned uncertain events that, if they occur, have a negative effect on at least one of project objectives in terms of time, cost or quality compliance, may have different probability and/or different impact depending on the sourcing strategy defined by RBR.

In order to assess how different strategies may impact the performance of the project, Suppliers were asked to assess the risk level in the following cases:

- A. The delivery of the whole Command and Control System is awarded to one only contractor (company or consortium of companies)
- B. Each subsystem including each ancillary system is awarded to different specialized contractors (company or consortium of companies)

The Figure 4 below shows the average positioning of each risk in the two situations according to the judgment of potential contractors. Notwithstanding the dimension of the respondent or his offer capability, the majority of the companies evaluated a higher probability of occurrence and a stronger impact of the risks in the hypothesis that the delivery of the CCS is committed to multiple contractors.

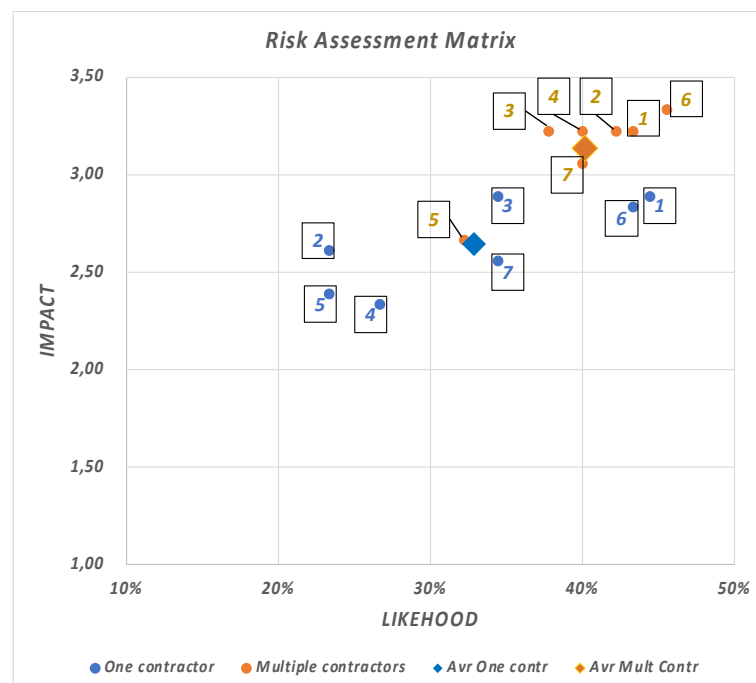


Figure 4 – Risk assessment matrix

**Fourth group: 4 - Risk Response Strategies**

In order to adequately respond to the risks faced by the project respondents were requested to indicate the intensity of adoption of different countermeasures in the different scenarios. An increase of risk perception (all the rest equal) should lead to adequate countermeasures or mitigation strategies by the contractors.

The strategies are listed as follows:

- Implement lean project management
- Set higher budget increase
- Increase staff resources budget
- Looking for local potential partners to be involved if required
- Strengthen project management processes by client expertise involvement

In the on-line questionnaire respondents were requested to evaluate the “level of adoption” of these (or other) mitigation strategies in two extreme scenarios.

Through the answers the scenario with the higher perception of risks requested a higher level of adoption of mitigation strategies.

#### ***Fifth group: 5 - Killer Concerns***

Most of the companies expressed their unavailability to prosecute in the competitive bid if some of the following events occur:

- Unclear or unbalanced financial scheme
- Timeline of the project not consistent or not coordinated with other project activities
- Liabilities too high or not consistent with rewarding system

In general, the vast majority of the respondents declared their willingness to abandon the bid if their perception about the balance of responsibilities and reward is not consistent.

#### ***Sixth group: 6 - Expectation from market consultation***

Most of the questions of the respondents who attended the meeting were concerning the scope, the structure and the timing of Rail Baltica Project.

#### ***Inputs of the one and half hour meetings***

During the market consultations hold in Riga in the week August 22nd - 26th 2022 sixteen companies had the chance to present their technological solutions concerning either the whole CCS system or part of it (single subsystems or vertical solutions). Among those who requested to interact with RBR in order to get a better understanding of the project both in terms of timing and in terms of scope, there were all the members of the UNISIG consortium were present. The attendance to the market consultation testified that the main actors on the CCS market are deeply interested in the Rail Baltica project and in the innovations it may bring. The main inputs gained from the discussions with the companies attending the consultation may be summarized as follows:

- Most of Suppliers recommend to have maintenance service contracts included in the tender
- FRMCS is a real concern for everyone (maturity of technical specifications)
- Many Suppliers pointed out that the new TSI 2022 are expected to be consolidated in 2025, and one Supplier did not recommend an early adoption of unstable versions.
- There is a feasible alternative to fill the gap till FRMCS is really available, if an early deployment is needed, by deploying a transitional GSM-R network (almost all infrastructure could be reused except a future swap to FRMCS radio equipment and a core upgrade).
- One Supplier suggested to split tender for radio/FRMCS.
- Small players recommend to split Ancillary systems from pure signaling classical scope
- No Supplier provided responsive feedback for shunting operations, as "no shunting signals" and "automated shunting" are goals of the project. Only one Supplier pointed out that the enhancement of shunting operation is expected in the new TSI, in particular for the Change Request CR1367 (Cab anywhere supervision) that is one of the CRs related to the Moving Block "Game Changer".
- ETCS Level 3 Hybrid potential will benefits for RB application (more an additional question for Innotrans meetings)

Market Consultation reinforced the perception of key risks of the project and gave even more ground to the adoption of mitigation plans which can consistently reduce the impact of adverse events.