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İşin Adı
The Name of the Job : Mersin-Adana-Osmaniye-Gaziantep Yüksek Standartlı Demiryolu Hattı İnşaatı ile Elektromekanik Sistemlerinin Temini

Construction of Mersin-Adana-Osmaniye-Gaziantep Hight Standard Railway Line With Supply Of Electromechanical Systems

Report Name
Report Name : # RAILWAY SAFETY PLAN

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1. PURPOSE

The Mersin-Adana-Osmaniye-Gaziantep High Standard Railway Project provides the determination of the methods and principles in the work done on the railway.

2. SCOPE

It includes all persons (employees, interns, etc.) operating in the MAOG Project, all consultants, consultants, intermediary persons and companies operating in the MAOG Project, and subcontractor employees.

3. RESPONSIBILITIES

REC Project Manager : responsible for overseeing the construction of the Project, including planning and delivery. They will be suitably competent and have a strong understanding of construction best practice. The Project Manager is accountable for overall HSE performance and making the human and financial resources available to ensure compliance with HSE requirements of the Contract. The Project Manager will be responsible for coordinating the internal management response of the Contractor to a major emergency. The Project Manager will also be responsible for appointing First Aid competent person(s) on site, as well as a team responsible for site security.

Construction Manager : responsible for implementation of the CESMP measures through method statements and site working practices.

Project HSE Manager : responsible for the implementation of health and safety practices during construction. Project HSE Manager will be suitably competent and have a strong understanding of health and safety best practice including the Project EHSS Requirements.

Headquarter E&S Manager:

Responsible for managing infrastructure and superstructure projects regarding environmental and social governance issues and member of the Executive E&S Committee on behalf of the REC.

PIU (Project Implementation Unit)

PIU Department Manager (Superstructure / Civil Engineer) will be responsible for overseeing the implementation of all health, safety and social measures, as specified within the disclosure package of the Project, and regular reporting to AYGM PIU.

PIU Physics Engineer who is responsible for supervising health and safety for the Project.

Executive Environmental and Social Management Committee

- Executive E&S Committee Project Manager (Department Head / Branch Manager /Head of Department) will be ultimately responsible for overseeing

the activities undertaken by the AYGM/TCDD specialists (listed below), overseeing the implementation of mitigation measures and management procedures specified within the disclosure package of the Project, and overseeing the preparation and implementation of a CESMP, which will be based on this ESMP.

- Executive E&S Committee Environmental, Health and Safety, and Social (EHSS) Manager (Specialist / Engineer) will be responsible for overseeing all matters that relate to environment, health, safety and social aspects of the Project. Also, s/he will be appointed to be responsible for supporting the implementation of the SEP, by conducting regular consultation with affected communities on any concern regarding the Project. CLOs will also have responsibility for disseminating the Project disclosure package as described in the SEP. They will also conduct regular inspections of records relating to grievances received and their resolution. S/He will report regularly to AYGM PIU.

Further technical staff may be required during the course of the Project, who will be assigned internally by the AYGM, either by means of permanent or temporary basis until the completion of relevant tasks under the Project whilst they undertake their current responsibilities

4. TENDER STAGE

In the tender stage of Mersin-Adana-Osmaniye-gaziantep Railway project, All the related specifications for both design and constrcution were presented by the client. All the bidders are obligated to consider those standards and specifications while preparing their bids.

5. SPECIFICATIONS & CRITERIAS

The main categories of specisifications given during tender stage are;

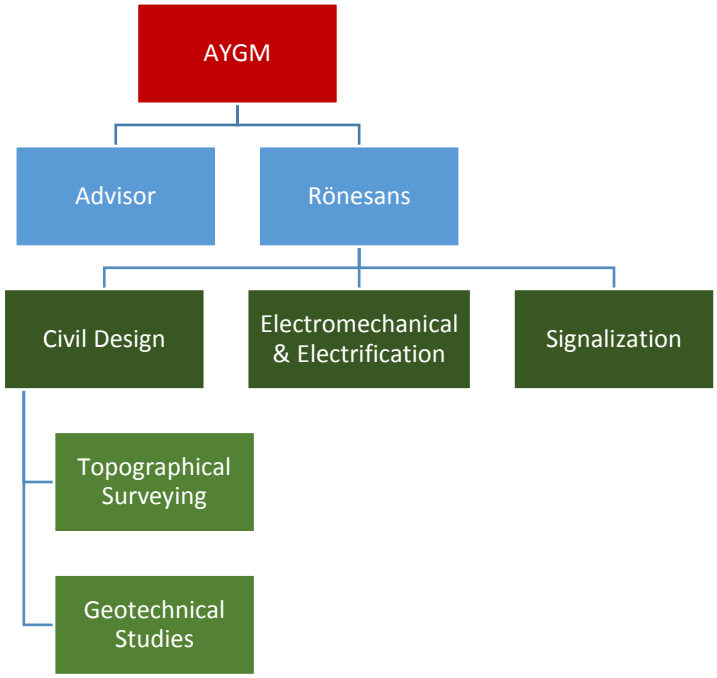
- Infrastructure & Superstructure
  - *Ballast*
  - *Rail*
  - *Welding*
  - *Superstructure*
  - *Slab Track*
  - *Route Surveying*
  - *Construction*
  - *Bridge & Culverts*
  - *Switches*
  - *Sleeper*
- Electrification
- Signalization

Beside all these specifications, design criteria reports have been prepared by the prepared and presented to the client.

Criteria Reports for Route & Superstructure, Geotechnical, Concrete Works are given in the attachments.

6. DESIGN & APROVAL STAGE

Main route is determined by Turkish Railroads Authority and Ronesans is responsible for all the detailed designs. Rönesans will present all the necessary drawings and reports to both client and his technical advisor. Technical advisor's aproval is prior and the final approval will be given by the client, AYGM.



The design related measures in the Railway Safety Plan should be implemented including the development of a Hazard Log, during the development of the final design.

During, Preconstruction, the manufacturing related measures in the Railway Safety Plan) including updating the Hazard Log should be implemented. During Construction and Commissioning, the integration, system validation and system acceptance related measures in the Railway Safety Plan, including updating the Hazard Log should be implemented. The plan should be prepared by REC with consultation of independent Safety Assessor / Assessment Body (ISA / AsBO) and shoul be approved by PIU.

7. APPLICABLE DOCUMENTS

The list below is a reference list of the standards and specifications that are required to be complied with as part of this Plan

- AASHTO-LRFD 2017 Bridge Design Specifications
- EN1990 Eurocode Basis of strcutural design
- EN 1991 Eurocode 1 Actions on structures
- EN 1991-22:2003 Traffic loads on bridges
- EN 1992 Eurocode 2 Design of concrete structures
  EN 1992-2:2005 Concrete bridges - Design and detailing rules
- EN 1997 Eurocode 7 – Geotechnical Design
- EN 1998 – 2 Eurocode 8 Design of structures for earthquake resistance
- EN 1998-2:2005 Bridges
- EN 206 Concrete. Specification, performance, production and conformity
- EN 10080 Steel For The Reinforcement Of Concrete
- EN 10138 Prestressing steels
- EN 13803-1 : 2010, Railway Applications – Track – Track Alignment Design
- parameters – Track Gauges 1435mm and Wider
- EN 447 Grout for prestressing tendons. Basic requirements
- EN 523 Steel strip sheaths for prestressing tendons. terrminology, requirements, quality control
- UIC 776-1 Loads to be considered in railway bridge design
- UIC 776-3 Deformation of Bridges
- UIC 774-2 Distribution of axle-loads on ballasted railway bridges
- UIC 702 Rules governing vertical static rail traffic loads
- UIC 774-3 Track / Brıdge Interactıon Recommendatıons For Calculatıons
- UIC 777-1 Measures to protect railway bridges against impacts from road vehicles
- UIC 777-2 recommendations for managing the risk from derailed trains near structures built over railway lines
- UIC 772-1 Standard principles for the use of bearings made from various materials for railway bridges
- UIC 772-2 Code for Railways for Rubber Bearings
- BS 5400 Steel, Concrete and Composite Bridges
- BS 8081 Code of Practice for Grouted Anchors

- BS TS 498 Design Loads for Buildings
- TS 500 Requirements For Design And Construction Of Reinforced Concrete Structures
- EN 1537 Execution of Special Geotechnical Work

8. MONITORING, ASSURANCE AND VERIFICATION

Key success indicators (KPIs) of this procedure will be monitored, verified and evaluated by the relevant parties in accordance with their responsibilities set forth in the E&S Governance document, within the scope of the MAOG-RECU-GB-GNL-IS-PRG-0007-0 HSE Monitoring, Assurance and Verification Procedure.