

Appendix G 1

Tender No. 42240

Timetabling & Track Possession System

Scoring Requirements

#	Subject	Requirement Description	Full Compliance with Requirement (100%)	Partial Compliance with Requirement (50%)	No compliance with the requirementt (0%)	Gap Description
	score		2	1	0	
1	Timetable planning	Enabling cross-horizon workflow through all modules The system supports planning for all ranges of time: strategic timetable (multiyear), basic operational timetable (periodic), daily timetable (short-term).				
2	Timetable planning	The System shall enable the planning of Timetabling (running-time computation, blocking-time computation) using two methods simultaneously: Cab-signalling by ETCS Level 2 and lateral signalling with INDUSI background supervision				
3	Possession planning	The system will include an ability for track possession management covering the entire process through a graphical map representation of the railway network.				
4	Timetable planning	The system must be capable of computing running times and blocking times in accordance with infrastructure parameters and rolling stock specifications.				
5	Timetable planning	The system must provide the capability to automatically optimize timetables according to multiple criteria, such as reduction of waiting times and enhancement of connectivity.				
6	Timetable planning	The ETCS braking curve model shall support lambda and gamma as input parameters				

7	Timetable planning	Consideration of ETCS speed supervision The running-time computation takes into account speed supervision resulting from ETCS, if approaching to a closed signal or to a speed change. Parameters can vary per Movement Authority (e.g. Release Speed, Supervised Location). Speed supervision may result from Permitted Curve or Warning Curve, depending on the local situation.				
8	Timetable planning	Consideration of INDUSI speed supervision The running-time computation takes into account speed supervision resulting from INDUSI I60R, if approaching to a closed signal or to a supervised speed change.				
9	Timetable planning	Storing of gamma-model Per rolling-stock unit, the parameters of the ETCS gamma-model can be stored. It is sufficient, that one confidence level for emergency brake safe deceleration on dry rails can be handled.				
10	Timetable planning	The system must provide automated calculations and graphical visualization of blocking steps, fully compliant with UIC-406 standard				
11	Timetable planning	Managing stations and operational points The system must enable the creation and editing of operational points. The following must be determined: a unique ID, the operational name, the commercial name (if available), the name in multiple languages, the type of operational point like station/junction, geocoordinates (if available).				
12	Timetable planning	The system must provide an automated generator and reporting capabilities, delivering data upon Israel Railways' request in MS Office/PDF formats. The system shall include tools enabling the creation of comprehensive reports in English (with optional Hebrew support) addressing schedules, performance, conflicts, and resource utilization.				

13	Timetable planning	The system stores data on a central database instance. A change made in one module in the system will affect and be displayed in the other modules. This ensures that all stakeholders have access to the most up-to-date information, reducing the risk of discrepancies.				
14	Timetable planning	The system computes technical running times in either delta-v or delta-t or delta-s steps with an appropriate precision.				
15	Possession planning	The system must display dependencies and possible conflicts (in terms of spatial and temporal overlaps) between requests				
16	Possession planning	Linking trains to track possession after approval If a request is approved, each affected train is linked to the track possession ID.				
17	Possession planning	Displaying affected trains in trains list The trains that are affected by the track possession in place (all trains pass at least one affected infrastructure element) or trains linked with track possession ID are displayed filtered in the trains list. The trains that are affected or not affected by the track possession in time are displayed in the trains list, indicated by separate fields. This is in case, for example, if trains on a line are to be diverted in their entirety during a track possession, even if the closure does not last the whole time.				
18	Possession planning	Showing all requested and approved possessions on infrastructure map Dynamic map shall show all requested and approved track possessions in parallel.				
19	Interfaces	The system shall provide interfaces capabilities with existing Israel Railways systems (including ARAMIS, PSIFAS, rolling stock scheduling, and other relevant platforms).				
20	Interfaces	The system shall support the export and import of files in commonly accepted formats, including but not limited to CIF and RailML.				

21	General	Multi-user support The system must support the work of multiple users simultaneously with different permission levels.				
22	General	AI integration will be developed within the next three years.				
23	IT	The proposed system must support operation on on-premise servers, ensuring independence from public cloud services.				
24	General	User guide in English (mandatory) and optionally in Hebrew language.				
25	General	The system must be usable in English language and optionally in Hebrew language.				
			0	0	0	
			0			
			Total			

Sincerely,

Company _____

Date _____

First name _____

Last name _____

ID _____

Signature _____