

Seq. No	Subject			Format	Language
<b>A</b>	<b>Design Requirements</b>				
1	All kinds of technical drawings (mechanical, pneumatic, hydraulic, etc.) for the manufacturing and assembly of the main and sub-components that make up the National Co-Co Type Mainline Locomotive  - All Interior Panelling Projects including manufacturing and assembly drawings	2D and 3D: Catia V5 R28 and .pdf	Turkish and English	Technical drawings shall be prepared in TÜRASAŞ format (project tracking list, TÜRASAŞ letterhead, numbering of projects, etc.).  All welded manufacturing projects shall be prepared in accordance with EN-15085-2.  Welded manufacturing projects shall be approved by certified welding engineers.	
2	All kinds of technical drawings for the manufacturing, assembly and commissioning of the bogies to be used in the National Co-Co Type Mainline Locomotive (mechanical, pneumatic, hydraulic, etc.)	2D and 3D: Catia V5 R28 and .pdf	Turkish and English	Technical drawings shall be prepared in TÜRASAŞ format (project tracking list, TÜRASAŞ letterhead, numbering of projects, etc.).  All welded manufacturing projects shall be prepared in accordance with EN-15085-2.  Welded manufacturing projects shall be approved by certified welding engineers.	
3	Technical drawings for laser cutting of sheet metal parts to be used in the National Co-Co Type Outline Locomotive.	2D: AutoCad .dxf (in R12/LT2 format)	--	Laser cutting plans shall be drawn in the Autocad Bylayer layer and the lines will be polyline.	
4	Required document packages to be transferred to TÜRASAŞ PLM system.	.xls and 2D and 3D Catia V5 R28 data package	Turkish and English	BOM (Bill Of Material) shall be in the form of a list of materials and levels in xls format.	
5	Parts lists suitable for product tree of all kinds of technical drawings for production and assembly (mechanical, pneumatic, hydraulic, etc.)	.xls	Turkish and English	Parts lists shall be prepared in TÜRASAŞ format.	
6	Design Handbook	.doc and pdf	Turkish and English		
7	Analysis compliance reports	.doc and pdf	Turkish and English		
8	Common Safety Method within the scope of Safety Management System – Risk Assessment (CSM-RA) Documents	.doc and pdf	Turkish and English		
9	RAMS and LCC Analysis for National Co-Co Type Mainline Locomotive	.doc and pdf	Turkish and English	Acc. to EN50126 and EN60300-3-3	
10	CBM (Condition Based Maintenance) Documents	.doc and pdf	Turkish and English		
11	Support and connection interface analysis	.doc and pdf Related FEM outputs	Turkish and English	FEM data reports and FEM data of support and connection interfaces designed for equipment connections	
12	Electrical Schematics / Diagrams	EPLAN 2.9 (.zw1)	Turkish and English		
13	3D Harness	CATIA Electrical (.CATProduct or .CATPart)	Turkish and English		
14	Cable Duct Formboard, Harness Diagrams, Internal Wiring Diagrams, Layouts, Wiring Diagrams	.CATDrawing	Turkish and English		
15	Earthing Points	.CATDrawing, .xls and .pdf	Turkish and English		
16	Cable Journal, E-BOM List	.xls	Turkish and English		
17	Terminal Connection Lists / Terminal Diagrams, Plug Diagrams	.xls and .pdf	Turkish and English		
<b>B</b>	<b>Other</b>				
18	Additional Technical Drawings and Documents	.doc and .pdf	Turkish and English	To be requested by the Notified Body during the TSI certification process; technical drawings, technical documents, etc.	