

## Assortment Schedule of Technically Approved Material to the road and railway infrastructure

Last updated: 2021-08-31 Version 6.9

Technically approved material consists predominantly of rail- and IT related materials for Trafikverket's projects within road and railway. The tabs in the Assortment Schedule follow Trafikverket's facility structure and indicate where the Contractor or Employer shall search for the material that is needed for the performance of the Contract Works.

Materials which is classified as technically approved material (TGM) according to TDOK 2014:0307 follows from the columns "Material to be acquired from Trafikverket" and "Material to be acquired from a supplier based on a nationally procured framework agreement", and is always to be used.

Routines for purchase and supplies from Trafikverket can be seen from supply conditions for ordering material (TDOK 2012:195). When Trafikverket has framework agreements, the client organisation provides information and documents.

In those cases where the assortment schedule states that materials must be purchased from the Swedish Transport Administration, but the assortment is missing in the Material Catalog, procurement is by the project choosing a supply solution based on requirements in dialogue with the technical manager in the field of technology.

### Version 6.9. means...

2021-08-31 Supply model for station control system changed.

### Version 6.8. means...

2021-06-28 Name of column three changed.

New assortment within electrical installations, 16.7 Hz Medium Voltage Switchgear.

Clarification station control system, electrical installations.

### Version 6.7. means...

2020-06-09 Correction track, check rail removed.

### Version 6.6. means...

2020-04-28 Correction supply model for track points.

### Version 6.5. means...

2020-02-14 Clarification remote control system 9.10

### Version 6.4. means...

2019-11-04 Anti trespass panels added to shunting-yard facilities

### Version 6.3. means...

2019-10-19 Clarification how to handle missing assortment. Clarification Autotransformer.

### Version 6.2. means...

2019-05-03 New assortment within electrical installations, 50 Hz Medium Voltage Switchgear for converter/transformation station, distribution centre and network station.

Clarifications 9.1 and 9.2. Clarifications 9.4-9.18. Clarification track without ballast 6.1.

### Version 6.1. means...

2018-06-12 Corrected cable installation.

### Version 6.0. means...

Questions can be addressed to Niklas Aldin, Procurement and logistics, on +46 (0)10-1231411.

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			Material to be acquired from Trafikverket	Material to be acquired from a supplier based on a nationally procured framework agreement	The project procures materials based on a requirement	Comments
<b>6</b>	<b>Track superstructure</b>					
6.1	Track	Rail	x			Determined supply model for rail is from Trafikverket with distribution via rail workshop in Sannahed as standard solution. Mobile flash-welding is primarily used when there is undercapacity at Sannahed or other reasons exist. Trafikverket shall always be contacted before mobile flash-welding is used.
		Sleeper	x			
		Attachment	x			For track without ballast, please contact Underhåll Teknik och Miljö.
		Joints	x			Rails with glued joints: To be selected before joints for field mounting. Joints for field installation: Unglued joints selected before glued.
		Rail creep obstructions	x			
		Ballast			x	
		Thermite welding kit			x	
6.2	Points	Determined supply model for track points is prefabrication as standard solution.				
		Ballast			x	
		Attachment	x			
		Rail	x			
		Joint	x			
		Sleeper	x			
		Heavy unit	x			
		Intermediate section	x			
		Check rail	x			
		Crossing	x			
		Relaying device	x			
		Inspection device	x			

	Locking device	x			
	Points heater	x			Points heater and associated materials.
	Rail creep obstruction	x			
	Snow protection	x			
	Thermite welding kit			x	

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<b>7</b>	<b>Track substructure</b>					
7.1	Embankment				x	
7.2	Cutting				x	
7.3	Culvert				x	
7.4	Bridge				x	
7.5	Tunnel				x	

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<b>8</b>	<b>Shunting-yard facilities</b>					
8.1	Platform and loading quay				x	
8.2	Platform crossing	Surfacing			x	
		Substructure			x	
		Superstructure			x	
		Gate/Stile			x	
		Control equipment	x			
		Power supply	x			
		Control and inspection	x			
		Transmission (cable)	x			
		Lifting barrier device	x			
		Signal for passenger/truck traffic	x			
8.3	Shunting yard braking system	Beam rail brake			x	
		Spiral brake	x			Reparations included.
		Piston brake			x	
8.4	Track barrier		x			
8.5	Buffer	Concrete			x	
		Other	x			

8.6	Brake testing facility				x	
8.7	Wagon weighbridge				x	
8.8	Turnplate				x	
8.9	Anti trespass panels		x			

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<b>9</b>	<b>Electrical installations</b>					
9.1	Catenary	Tensioning	x			
		Line circuit-breaker	x			
		Insulator	x			
		Cable	x			
		Line bridge	x			
		Pole	x			
		Autotransformer including footing and building	x			3, 5 & 6 MVA transformer, building AT including selectable options, also hoists for footing.
		Booster transformer	x			100,5 & 158 kVA
		Wire, line	x			
		Cantilever	x			Agreement for prefabrication exists, non-mandatory. Sub-ordering via Trafikverket.
		Footing for pole	x		x	For projects and measures with minor requirements, footings (1 - 5 pcs depending on item number) can be purchased from Ma. Larger quantities to be purchased by the contractor directly.
9.2	Auxiliary power line		x			
		Distribution transformer	x			10 - 500 kVA
9.3	Supply line				x	
9.4	Converter/Transformer station	Spare parts	x* (maintenance)	x* (maintenance)		* For items not stocked at Trafikverket, contact the party Trafikverket has a support and administrative agreement with.

		Outbound 16.7 Hz single-phase Medium Voltage Switchgear	x			The assortment is preliminary possible to order from November 1st 2021, with delivery times according to agreement.
		Incoming 50 Hz Medium Voltage Switchgear	x			
		Station control system			x	
		Batteries	x			
		Standby power plant	x			Also see 9.11.
		UPS	x			
		Rectifier frame, direct current-system, power supply (DC)	x			
9.5 - 9.7	Connection centre Transformer station house Switching station	Outbound 16.7 Hz single-phase Medium Voltage Switchgear	x			Also see 9.4.
		Station control system			x	Also see 9.4.
		Batteries	x			
		Standby power plant	x			Also see 9.11.
		UPS	x			
		Rectifier frame, direct current-system, power supply (DC)	x			
9.8 - 9.9	Distribution centre Network station	Incoming 50 Hz Medium Voltage Switchgear	x			
		Medium voltage distribution transformer	x			2 MVA
		Batteries	x			
		Standby power plant	x			Also see 9.11.
		UPS	x			
		Rectifier frame, direct current-system, power supply (DC)	x			
9.10	Remote control system	RTU	x			
9.11	Technical building	Batteries	x			
		Standby power plant	x			Power plants up to and including 120 kVA are covered. Standby power plants larger than 120 kVA may be procured externally, but must meet "TDOK 2014:0785 BVS 543.14610 Elkraftanläggningar Kravspecifikation för reservkraftstationer".
		UPS	x			
		Rectifier frame, direct current-system, power supply (DC)	x			



9.12	Train and locomotive heating plant 16.7 Hz		x			
9.13	Lighting installations		x (batteries)			
		Shunting-yard lightning	x			Shunting-yard lightning and associated materials.
		Tunnel lightning			x	
		Platform lightning			x	
9.14	Points heater		x			Points heater and associated materials.
9.15	Distribution network <1000 V				x	
9.16	Operational control centre, - power supply	Batteries	x			
		Standby power plant	x			Also see 9.10-9.11.
9.18	Standby power plant Computer centre, power supply	UPS	x			
		Rectifier frame, direct current-system, power supply (DC)	x			

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<b>10</b>	<b>Signal installations</b>							
10.1	Track coil (beacon) group			x				
10.2	Level crossing	Substructure				x		
		Superstructure				x	Acquisition as per TDOK 2014:0358 (BVS 525.31).	
		Surfacing					x	
		Portal					x	
		Control equipment			x			
		Power supply			x			
		Control and inspection			x			
		Transmission (cable)			x			
		Lifting barrier device			x			
Signal and board			x					
10.3	Positioning system	Rectifier-track line		x				
10.4	Signal			x				
10.5	Signal box RBC and line blocking			x (maintenance)	x (newbuilding)			

10.6	Shunting signal box			x* (maintenance)	x** (maintenance), x (newbuilding)		* Refers to common signal box spare parts and used relay sets for older installations ** Support and maintenance agreement exists incl. spare parts apart from those supplied by Trafikverket.	
		AlisterCargo						
		NovoCargo		x* (maintenance)	x** (maintenance)			
		BV PLC, 3A, 3B		x (maintenance)		x (maintenance)		
10.7	Board			x				
10.8-11	Train control system	ARGUS				x		
		EBICOS TMS				x		
		EBICOS 900 & EBICOS NT						
			PC platform				x	
			APN platform		x			Not new construction
		Sub-station						
			EBISAT 890		x			
			Siemens S5		x			Not new construction
			Siemens S7		x			
			JZA 700				x	
			JZA 41				x	
	RTU				x			

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11	Telecom&IT installations							
11.1	Detectors	FUES, Servo, SATT, Schenck, KIKA and other detectors.		x (maintenance)	x* (new building)		Trafikverket's framework agreement for deliveries of detectors.	
		Detector presentation DPC II				x		
		Detector kiosk		x			Power supply for technical buildings intended for radio base stations and detector installations.	
11.2	Cable installation	Metal cable, fibre-optic cable, control cable, pair cable, KOAX, single conductor incl. accessories as microduct assemblies, splicingbox/cabinet, fiber joint closure, patch cable, connectors etc.		x			Product that are item-identified in the Material catalogue are purchased via Trafikverket. The project organisation is free to choose other products for supply solutions on the basis of specifications.	
11.3	Radio installation	Radio mast			x		Trafikverket's framework agreement for installations of MobiSir radio masts.	
		Radio base station			x		Trafikverket's framework agreement for detector and radio installation buildings.	
		Other radio equipment				x		

			Antennae, cables, contacts				x	
			Radio link			x		
			Tunnel radio repeater		x*	x*, x**		* Spare parts for older versions available at Trafikverket, spare parts for the newest version is available through the framework agreement. ** Framework agreement for radio repeaters in tunnels and buildings, to be used.
11.4	Signal telephone						x	
11.5	Telecom centre						x	
11.6	Telecom station facility				x (maintenance)		x (new building)	
11.7	Telecom transmission facility		Pressure protection equipment		x			
			Pressure protection monitoring equipment			x		
11.8	Dynamic and fixed sign		Mitron signs		x			
			TFT signs		x			
			RGB-signs		x			
			Terminals and prator units		x			
11.9	Loudspeaker system					x		
11.10	Clocks					x		

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<b>12</b>	<b>Other installations</b>						
12.1	Property	Building					
			Cabinet	x			
			Technical building, kiosk, hut	x (detector)	x* (MobiSir)	x (maintenance)	* Refers to framework agreement - Technical building for detectors and radio installations (MobiSir).
			Fire safety equipment			x	
12.2	Fencing					x	
12.3	Ductwork					x	
12.4	Rail lubrication device					x	
12.5	Snow fence					x	
12.6	Road					x	
12.7	Dewatering, pump system					x	
12.8	Surveillance cameras			x			

12.9	Cable installation	Metal cable, fibre-optic cable, control cable, pair cable, KOAX, single conductor incl. accessories as microduct assemblies, splicingbox/cabinet, fiber joint closure, patch cable, connectors etc.		x			Product that are item-identified in the Material catalogue are purchased via Trafikverket. The project organisation is free to choose other products for supply solutions on the basis of specifications.
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