## LIST OF REQUIRED GOODS BY THE UKRANIAN GOVERNMENT

Nº	ltem	Aprox. quantity needed	Specifications/Features	Priority Need
		Parts	s/Components	
1	Rail fasteners (e.g. Schwihag)	1,2 million	for 1435mm track	+
2	Rail fasteners (e.g. Schwihag)	1,2 million	for 1520mm track	+
3	Rails	320 km	for 1435mm and 1520mm	+
4	Sleepers	600 000 / 600 000	for 1435mm and 1520mm	+
5	Rolled ferrous metals	500 tons	sheet steel, fittings	+
6	High-strength bolt with a length of 70, 80, 90 mm	10000		+
7	High-strength pin for slabs of ballastless bridge deck	15000		+
		Ca	rgo Handling	
1	Hydraulic lift 23 m Oil & Steel Scorpion 2313 on Hyundai EX8 chassis	2		
2	Mobile crane (MAN, Palfinger Sany SPC 320)	2	Carrying capacity 32 t	
3	LIEBHERR mobile crane	4	Carrying capacity of 40 tons and more	
4	A device for loading palletized goods in 20-f. and 40-f. Roll-on and Roll-off containers	2		
5	Gantry crane KK	1	Carrying capacity of 60 tons	
6	Caterpillar Wheel loader (bucket capacity 5 m3)	20		
7	Automobile crane (diesel engine) (Palfinger, DAF, MAN, VOLVO)	2	Load capacity up to 25 tons	

8	Gantry crane KKK-40	1	Load capacity 40 tons	
9	Toyota 8FD small truck loader with grabs for various types of cargo	4	Load capacity 2-3 tons	
10	Compact forklift diesel/electric	6	Load capacity 2 tons	
11	Toyota, Komatsu or similar diesel compact forklift	12	Load capacity 1.5 - 3.0 tons	
12	Toyota, Komatsu or similar diesel compact forklift	6	Load capacity 6.0 tons	
13	BOBCAT compact diesel forklift or similar	4	With a set of attachments, load capacity from 1.5 t, unloading height from 3 m	
14	Loader with attached equipment (back shovel, brush) Bobcat S650 High Flow	4	Engine power from 55 kW, load capacity from 1.2 tons	
15	JCB telescopic handler or similar	2	Load capacity from 5.0 t, working radius 4 m or more	
16	Loader-stacker for 20 lb and 40 lb containers KALMAR or similar	2	Load capacity from 7 tons	
17	Loader-stacker for 20 lb and 40 lb containers KALMAR or similar	2	Load capacity from 43 tons	
18	Terex Fuchs MHL380 loader	2	The power is 273 kW	
19	KALMAR DRG450-60S5 loader	1	Engine power is 210 kW Nominal load at COG 45 tons	
20	Platform electric trolley BALKANCAR ΕΠ 006,2, Goodsense FBT20 or similar	6	Load capacity 2 tons, electric	
21	CATERPILLAR 966H front loader	1	Bucket volume 3,4-4,2 m³	
22	JCB front loader, TO-25, 22520 SA (or similar)	5	Bucket volume 3,5 м³ or more	
23	CAT 950 GC front loader (manufacturer ZEPPELIN CAT)	27		+
24	Hyundai HL780-9S front loader	1	Bucket volume 6,8 м³	
25	SDLG front loader	3	Bucket volume 4,5 м <sup>3</sup>	

26	SEM front loader	5	Bucket volume 5 m <sup>3</sup>	
27	Backhoe loader JCB 4CX or similar	2		
28	Sanitation machine (vacuum machine) based on chassis (DAF, MAN, RENAULT, DAYUN)	3	Barrel volume 5-6 m³	
		Raily	way Machinery	
1	Draisine for a railway track with a manipulator and attachments (for 1520mm/1435mm gauge track)	92/10	for 1435mm and 1520mm	+
2	Rail milling machine (train)	2	for 1435mm and 1520mm	
3	Railgrinder	2	for 1435mm and 1520mm	
4	Track renewal train	6	for 1435mm and 1520mm	
5	Plasser & Theurer duomatic 09-32 csm or similar	12	for 1435mm and 1520mm	+
6	Tamping machine Unimat 08-475/S or similar	12	for 1435mm and 1520mm	+
7	Dynamic track stabilizer DGS-62N or similar	2	for 1435mm and 1520mm	
8	Track laying complex	6	for 1435mm and 1520mm	+
9	Tracklayer TL-70 turnout installation complex or similar	6	for 1435mm and 1520mm	
10	Cuvette Cleaning machine KOM-300 or similar	4	for 1435mm and 1520mm	
11	Ballast loader FATRAVAC 17000/U or similar	6	for 1435mm and 1520mm	
12	Ballast levelling and profiling machine SSP 110 SW or similar	4	for 1435mm and 1520mm	
13	Ballast cleaning machine (Plasser & Theurer RM-80 or similar)	6	for 1435mm and 1520mm	
14	Multipurpose Stoneblower (HARSCO RAIL or similar)	6	for 1435mm and 1520mm	
		Tra	ack Building	
1	4-axle semitrailer Trawl	5		+
2	Concrete mixing truck	12	10 m3 or more	

3	Motor grader CAT 150 (manufacturer ZEPPELIN CAT)	27		+
4	Mobile crane with a load capacity of 30 tons	10		+
5	Mobile crane with a load capacity of 70 tons	4		+
6	Tanker truck	10		
7	Dump truck, with a carrying capacity of 20 tons	20		+
8	Bulldozer CAT D4 (manufacturer ZEPPELIN CAT)	54		+ (20)
9	Caterpillar bulldozer	10		+
10	Drilling rig for bored piles (Rotary bored piling)	2		
11	A hydraulic manipulator with a working radius in a vertical plane of at least 15 m, equipped with attachments: circular saw for cutting branches with a thickness of at least 100 mm; mower-shrubber;	100		
12	Caterpillar crawler excavator, bucket volume 1-1.7m3	10		+
13	Caterpillar pneumatic excavator, bucket volume 1-1.7m3	15		+
14	Excavator-loader on a combined drive with attachements	92		+ (50)
15	Backhoe loader CAT 444 (manufacturer ZEPPELIN CAT)	40		+ (20)
16	Timber trailer with Loading Crane	100		+ (6)
17	Self-propelled mulcher BTC-150	100		+ (30)
18	John Deere tractor series 6125-6135	200		
19	Forwarder 910 G	25		
	Means of sma	all mechani	zation (track tools) and equipment	
1	Railway torque wrench	200		+ (79)

2	Rail saw	200		+	
3	Rack grinding machines with internal combustion engines	200		+	
4	Rail drilling machines with internal combustion engines	200		+	
5	Rail grinding machines for turnouts	92		+	
6	CEMENTECH mobile concrete plant	3		+ (1)	
7	Caterpillar power plant with a capacity of 10 kW	200		+	
8	Caterpillar power plant, with a capacity of 4-7 kW	600		+	
9	Universal movable formwork, m <sup>2</sup>	500		+	
10	Movable metal scaffolding up to 30m high, m <sup>2</sup>	3000		+	
11	Hydraulic jack 50m3	20		+	
12	Water motor pump	30		+	
13	Deep railway vibrator	30		+	
14	Welding unit	30		+	
15	Light tower with a generator	30		+	
16	Electric screwdrivers	50		+	
17	Electric perforator with a power of 2.0 kW	50		+	
18	Drilling device on a magnetic stand	50		+	
20	Chainsaw with power from 3 kW, tire length from 45 cm	500		+	
21	Battery-operated electric paint sprayers	500		+	
22	Laser metal cleaning device	100		+	
	Restoration/maintenance of railway automation and telecommunications				
1	Railcar for 1520 mm track with a crane installation with a carrying capacity of at least 1.5 tons	12	carrying capacity of at least 1.5 tons	+ (1)	
2	Cable layer machine on a crawler (VERMEER or CATERPILLAR, or similar)	6	laying of main copper cables, protective tubes of fiber-optic cable	+ (1)	

3	Horizontal drilling installation for laying cables (VERMEER or similar)	6		+ (1)
4	Trencher with bucket for laying cables (VERMEER or CATERPILLAR or similar)	6	narrow bucket for a cable trench	+ (1)
5	Trencher with bar installation for laying cables (VERMEER or CATERPILLAR, or similar)	6		+ (1)
6	Equipment with a compressor unit for blowing a fiber-optic cable into a protective tube laid in the ground	2		+ (1)
7	A laboratory on the basis of an all-terrain vehicle for the maintenance and repair of fiber-optic and copper cables (equipped with the appropriate set of devices and tools)	30	off-road vehicle, a set of devices and tools for installation work on fiber optic and copper cables	+ (2)
8	Battery OPzS 100 A*h, 2 V	20000		
9	Battery OPzS 350 A*h, 2 V	2500		+ (1000)
10	Battery OPzS 490 A*h, 2 V	1500		+ (500)
11	Sealed battery for telecommunications equipment (12V 125 A*h)	1800		+ (900)
12	Sealed battery for telecommunications equipment (12V 155 A*h)	600		+ (300)
		Other ve	hicles & Machines	
1	DAF aerial platform	2	Working radius 25m	
2	Vehicle for transportation of 8-20 workers and track equipment	10		
3	Ford F450 (if possible on a combined drive)	92		+
4	Ford Transit Van	27	Cargo and passenger	
5	Vehicle with manipulator MAN TGS 33.440 + KMU PM 47522 PX	1	Carrying capacity 10 tons	
6	Dump truck 20t Renault K430	1	Carrying capacity 20 tons	

7	Renault Master Van	5	Capacity 14.8 m <sup>3</sup>	
8	Demolition excavator (diesel engine) KOBELCO, CASE, VOLVO, DOOSAN, CATERPILLAR	1	Power of 150 kW or more; attached equipment for metal cutting	
9	Backhoe loader CAT 428	2	Engine power 93/101 hp. The curb weight is 8480 kg The capacity of the front bucket is 1.03 m³ Mechanical gear shifting	
10	Minitractor with cab LOVOL 504 CN (or similar)	10	Wheel formula 4x4 Power, 50 / 36.8 hp. / kW The number of cylinders is 4 Working volume, 3 3168 cm3 The type of fuel is diesel Number of gears in the gearbox Synchronized mechanical reversible (4 + 4) x 3 or 12 + 12 Clutch type Dry, double-disc Weight, 2610 kg Front / rear loads, 144 kg / no Load capacity of the hitch, 910 kg Maximum speed, 38.5 km / h Overall dimensions LxWxH, 4136/1870/2822 mm Wheelbase, 1,990 mm Clearance, 365 mm Fuel tank capacity, 65 l	
11	Mulcher (tractor-based)	10		

12	Sweeper Hecht 8616 SE (or similar)	10	<ul> <li>Drive source Gasoline engine</li> <li>HECHT 4-stroke gasoline engine</li> <li>Working volume 196 cm3</li> <li>Output power 6.5 hp.</li> <li>Starting Manual / from 230 V mains</li> <li>The working width of the brush is 62 cm</li> <li>The maximum rotation speed of the brush / milling cutter is 570 rpm. / Min.</li> <li>Front gears 4</li> <li>Rear gears 2</li> <li>There is a headlight for working in the dark</li> <li>Heated handles None</li> <li>HECHT 4-stroke oil is recommended</li> <li>Mobility</li> <li>Package size 840 * 630 * 635 mm</li> <li>Weight 72 kg</li> </ul>	
13	Ford F-150 four-wheel drive pickup or similar	174		+ (10)
14	Iveco at440s45 Tractor unit with semi- trailer (40 feet)	14	Engine power from 450 hp, load capacity 40 tons	
15	MAN Tractor unit with dump trailer	1		

16	Gasoline snow blower STIGA ST 5266 PB (or similar)	90	<ul> <li>Power source: Gasoline</li> <li>Engine power: 5 kW / 6.75 hp</li> <li>Engine type: 4-stroke</li> <li>Engine: B &amp; S 1150 Snow Series</li> <li>Wheel size: 16 ""</li> <li>Type of start: Manual / Electric</li> <li>Number of speeds (forward / backward): 6 forward / 2 backward</li> <li>Cylinder volume, cm3: 250</li> <li>Grip width, cm: 66</li> <li>Grip height, cm: 51</li> <li>Screw diameter, cm: 30</li> <li>Range of snow ejection, m: up to 12</li> <li>Type of snow blower auger: toothed, steel</li> <li>Headlight: Two</li> <li>Volume of the fuel tank (liters): 3</li> <li>Handle heating: Yes</li> <li>Dimensions: 1425 X 673 X +1136 mm</li> <li>Weight (kg): 96</li> </ul>	
17	Low frame trawl	1	Load capacity 50 t, 5 axles	
18	MAN truck unit	1	Euro 5	
19	Automobile tractor (diesel engine) DAF XF(XT), VOLVO - FM, RENAULT, MAN	1	Number of axles: 2	
20	Drill pole setting machine (tractor base)	5		
		Worker	protection (PPE)	
1	Anti-noise inserts (earplugs)	15000		
2	Anti-vibration gloves	1500		
3	Apron (canvas, rubberized)	3200		
4	Canvas gloves	700000	with canvas cover, density 480g/m2, fire resistant	
5	Cloak, semi-cloak made of tent fabric	2500		
6	Closed protective goggles with indirect ventilation	2000		

7	Cotton gloves (double-threaded) with canvas palm pads	75000		
8	Cotton T-shirt	60000		
9	Crag Gloves	10000		
10	Dielectric galoshes/boots	700		
11	Dielectric gloves	12000		
12	Dielectric mats	4000		
13	Dielectric seamless gloves	1500	tested 9 kV	
14	Ear cap with sound-absorbing inserts	20000		
15	Filter half mask	10000	FFP2 NR D	+
16	Gas masks	600	EKASTU, CM-6S, TRAYAL B2G	
17	Heat protective suit	1000		
18	Insulated gloves	50000		+
19	Insulated jacket	6000		
20	Insulated pants	2500		
21	Insulated work boots	50000		
22	Jacket made of a raincoat-tent	6000		
23	Latex gloves	35000		+
24	Leather gloves (including union gloves)	3000		
25	Nitrile gloves	2500	Not less than 28 cm long	
26	Nitrile gloves	2500	Disposable	
27	Open protective goggles made of polycarbonate	30000		
28	Protective headphones	2500		
29	Protective helmets	5000		
30	Protective insulated work clothes	15000		
31	Protective shields	2000		
32	Protective work clothes	15000		

33	Raincoat, semi-raincoat made of rubberized fabric	20000		
34	Respirator	100000	FFP2	+
35	Respirators (dust-proof, gas-proof, anti- gas-aerosol)	24000		
36	Rubber boots	15000		
37	Rubber gloves for protection against acid and alkali solutions	50000	KarK80Щ50 or similar	
38	Safety belts	1500		
39	Safety glasses (welder, gas cutter)	1200		
40	Signal vest with reflective stripes	150000	Fabric: 45% polyester/elastane + 55% cotton, density 220 g/m2, with oil-water-repellent impregnation	
41	Suit for electricians	5000		
42	Summer headdress (including signal)	50000		
43	Summer underhelmet pad	1500		
44	Technical rubber gloves	10000		+
45	Waterproof suit made of rubberized fabric	5000		
46	Welder's insulated suit	100		
47	Welder's shield/ mask	1100		
48	Welder's suit	2500		
49	Winter underhelmet	2000		
50	Work robe (men's/women's)	7000		
51	Work suit (cotton with acid-proof impregnation)	1000		
52	Work suit (made of dustproof fabric)	8000		
53	Working leather boots (for summer/winter, m/w)	100000	on laces, cap and valve made of volumetric mesh material, toe box made of thermoplastic material, sole made of polyurethane with the casting method of attachment	
		Hea	Ith & Hygiene	

1	First aid kit "Emergency and rescue"	10000		
2	First aid kit	3000	Recommended contents of the first aid kit:  - Non-sterile gloves - 4 pairs;  - Atraumatic scissors for cutting clothes or shoes;  - Sterile and non-sterile gauze bandage of different sizes — 5 units;  - Elastic bandage of different sizes — 2 units;  - Hydrogel anti-burn bandage (at least 10x10 cm)  — 2 units;  - Thermal blanket on a polyethylene base;  - Thermometer (non-mercury and in a protective case);  - Individual sterile bandage package with an elastic compression component of first aid with a protective moisture-resistant shell (of the "Israeli bandage" type) - 2 units;  - Valve mask for artificial lung ventilation — 2 units;  - Hypothermic package;  - Eye patch (shield);  - Bactericidal patch of various sizes — 25 units;  - Plaster on a non-woven base (length 3-5 m, width 3-5 cm);  - Sterile gauze napkins — 10 units;  - Medical bandaging handkerchief for immobilization of limbs — 2 units;  - Antibacterial ointment;  - Antiseptic (1 water-based, 1 alcohol-based);  - Analgesic/antipyretic agent (1 package);  - Enterosorbent;  - Tablets for water disinfection (1 package);  - Reinforced type;  - Marker for applying information (waterproof);  - A tourniquet, which can be used to stop massive bleeding from the limbs;  - A bandage with a pressure element, which can be used to stop massive bleeding from the limbs;	+

			<ul> <li>- Hemostatic bandage to stop bleeding in places where it is impossible to apply a tourniquet;</li> <li>- Medical mask;</li> <li>- Tweezers;</li> <li>- Safety pin</li> </ul>			
3	Alcohol-based hand sanitizer	50000				
4	Alcohol-containing antiseptic for hands (1 liter bottle with a dispenser)	70000		+		
5	Alcohol-containing antiseptic for hands (100 ml bottle with a dispenser)	2000				
6	Chlorine-containing agent for disinfection of surfaces, materials, equipment (in tablets or other)	200000				
7	Hemostatic tourniquet	200				
8	Medical thermometer	200				
9	Gauze section 500 cm x 90 cm	500				
10	Protective masks	2000000		+		
11	Hard (curd) soap	20000				
12	Detergent (for work clothing)	1000				
Organization of heating stations (points)						
1	Blankets	131500		+		
2	Individual thermos	131500	volume ~ 700 ml, heat preservation for at least 9 hours	+		
3	Thermopot electric, for 30 I, 3 per tent	528	volume 30 l	+		
4	Thermos for food, 36 l, 3 per tent	528	volume 36 l., heat loss up to 1.5 ° C per hour, withstands temperatures from - 40 ° C to +100 ° C	+		
5	Tents	176	with the capacity of a simultaneous stay of ~ 100 people	+		
7	Oxygen concentrator (volume 10L)	100		+		
8	Rechargeable flashlight	500		+		

9	Paraffin candle	3000	Burning time at least 3 hours	+
10	Diesel generator sets	30	Power plant capacity, kW - from 3 to 180 Output voltage, V - 380 Operating mode - Backup source Fuel - Diesel	+
11	Air-thermal curtains	41		+
12	Electric water heaters (boilers) (100 l)	81		+
13	Mobile heating devices (room heaters) (non-electric)	107		+
14	Tents	67	Length, m: 9.76 /9.60 Width, m: 6.26 /6.10 Height of side walls, m: 1.75 /1.75 Height to the roof ridge, m: 3.55 /3.31 Floor area, m2: -/53.50 Air volume, m3: -/138.00	+
15	Electric convector	666	Power 2500 W Thermostat: Yes Control type: Mechanical Protection class II Dimensions (HxWxD) 45x89x11 cm Weight 8.6 kg Frost protection Yes Overheat protection Yes Wall mounting Yes Additional characteristics Tubular heating element with finned aluminum radiator, stamped grid	+