

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 23	Austria	CR_SW 04.09.05	analogue			31.12.2019	Complies with Network Statement of ÖBB-Infrastruktur AG (2019 and 2020) for communication systems; only with radio module <i>MT5E</i>	For recommendations see website of ÖBB-Infrastruktur AG
MESA 23	Austria	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	31.12.2019		
MESA 23	Belgium	CR_SW 04.09.03	digital	14.04.2018	2012/88/EU, 2012/696/EU	unlimited	only with radio modules <i>GSM-R MT5</i> , <i>GSM-R MT5E</i>	
MESA 23	Belgium	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	unlimited	exclusively with radio module <i>MT5E</i>	
MESA 23	Czech Republic	CR_SW 04.05.05	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.05.05	digital	---	2012/88/EU	unlimited	EC Certificate Modul CB (2012) only for Bombardier Transportation GmbH	
MESA 23	Czech Republic	CR_SW 04.07.03	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.07.03	digital	14.04.2018	2012/88/EU	unlimited		
MESA 23	Czech Republic	CR_SW 04.08.02	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.08.02	digital	14.04.2018	2012/88/EU	unlimited		
MESA 23	Czech Republic	CR_SW 04.08.03	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.08.03	digital			unlimited		
MESA 23	Czech Republic	CR_SW 04.09.03	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.09.03	digital	14.04.2018	2012/88/EU, 2012/696/EU	unlimited		
MESA 23	Czech Republic	CR_SW 04.09.05	analogue			unlimited	as from 01.09.2015 not longer compatible to SRV lines	see SŽDC network statement, Annex F "Rail line radio systems"
MESA 23	Czech Republic	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	unlimited	exclusively with radio module <i>MT5E</i>	

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 23	Czech Republic	CR_SW 04.10.01	analogue			unlimited		
MESA 23	Czech Republic	CR_SW 04.10.01	digital			unlimited		
MESA 23	Germany	CR_SW 04.09.05	analogue			01.03.2020		GluV acc. to §27 EIGV
MESA 23	Germany	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	01.03.2020	exclusively with radio module <i>MT5E</i>	GluV acc. to §27 EIGV
MESA 23	Hungary	CR_SW 04.08.02	analogue			unlimited	with radio module <i>Funkmodul 2-70</i>	
MESA 23	Hungary	CR_SW 04.09.03	analogue			unlimited	with radio module <i>Funkmodul 2-70</i>	
MESA 23	Hungary	CR_SW 04.09.05	analogue			31.12.2021	with radio module <i>Funkmodul 2-70</i>	
MESA 23	Hungary	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	31.12.2021	exclusively with radio module <i>MT5E</i>	
MESA 23	Italy	CR_SW 04.09.03	digital	14.04.2018	2012/88/EU, 2012/696/EU	see notes	in line with a train vehicle approval	compatibility test report of RINA for the component available
MESA 23	Italy	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	see notes	in line with a train vehicle approval, exclusively with radio module <i>MT5E</i>	compatibility test report of RINA for the component available
MESA 23	Poland	CR_SW 04.07.03 CR_SW 04.08.02 CR_SW 04.09.03 CR_SW 04.09.05	analogue			unlimited	with radio module <i>Kolibër</i>	
MESA 23	Romania	CR_SW 04.08.02 CR_SW 04.09.03 CR_SW 04.09.05	analogue			18.01.2021		
MESA 23	Serbia	from CR_SW 07.09.03	analogue			unlimited		

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 23	Slovakia	CR_SW 04.05.05 CR_SW 04.06.03 CR_SW 04.07.03 CR_SW 04.08.02	analogue			unlimited	only UIC 751-3 radio mode (0,7 m band)	
MESA 23	Slovakia	CR_SW 04.05.05 CR_SW 04.06.03 CR_SW 04.07.03 CR_SW 04.08.02	digital	14.04.2018	2012/88/EU	unlimited		
MESA 23	Slovakia	CR_SW 04.08.03	analogue			unlimited	UIC 751-3 radio mode and 2 m band (limited)	
MESA 23	Slovakia	CR_SW 04.08.03	digital			unlimited		
MESA 23	Slovakia	CR_SW 04.09.03	analogue			unlimited	UIC 751-3 radio mode and 2 m band	
MESA 23	Slovakia	CR_SW 04.09.03	digital	14.04.2018	2012/88/EU, 2012/696/EU	unlimited		
MESA 23	Slovakia	CR_SW 04.09.05	analogue			unlimited		
MESA 23	Slovakia	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919	unlimited	exclusively with radio module <i>MT5E</i>	
MESA 23	Slovakia	CR_SW 04.10.01	analogue			unlimited	UIC 751-3 radio mode and 2 m band	
MESA 23	Slovakia	CR_SW 04.10.01	digital			unlimited		
MESA 23	Switzerland	CR_SW 04.09.05	digital	20.05.2021	2016/919/EU	31.12.2027	exclusively with radio module <i>MT5E</i>	
MESA 24	Belgium	CR_BE 1.05.08	digital	---	2012/88/EU, 2012/696/EU, 2015/14/EU	unlimited 30.01.2018	with radio module <i>MT5E-B</i> with radio module <i>MRM</i>	
MESA 25-01	Austria	all software packages with EC-certification	digital			see notes	GSM-R only, no component approval neccessary, EC certificate sufficient	
MESA 25-01	Germany	CR_M25 1.06.02	digital	20.05.2021	CR (EU) 2016/919	16.10.2019	exclusively with radio module <i>MT5E</i>	

Summary of Approvals

Train Radio Systems and Data Radio Systems

Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 25-01	Switzerland	CR_M25 1.04.05	digital	14.04.2018	2012/88/EU	31.12.2020		
MESA 25-01	Switzerland	CR_M25 1.05.01	digital	14.04.2018	2012/88/EU, 2012/696/EU	31.12.2020		
MESA 25-01	Switzerland	CR_M25 1.05.02	digital			31.12.2020		
MESA 25-01	Switzerland	CR_M25 1.05.06	digital			31.12.2027		
MESA 25-01	Switzerland	CR_M25 1.06.02	digital	20.05.2021	CR (EU) 2016/919	31.12.2027		
MESA 26	Austria	BASE 02.00.19 ATR_AT 02.00.31	analogue			31.12.2019	Complies with Network Statement of ÖBB-Infrastruktur AG (2019 and 2020) for communication systems; only with radio module <i>MT5E</i>	For recommendations see website of ÖBB-Infrastruktur AG
MESA 26	Austria	BASE 02.00.19	digital	20.05.2021	CR (EU) 2016/919	31.12.2019		
MESA 26	Austria	BASE 02.01 ATR_AT 02.00	analogue			31.12.2019	Complies with Network Statement of ÖBB-Infrastruktur AG (2019 and 2020) for communication systems; only with radio module <i>MT5E</i>	For recommendations see website of ÖBB-Infrastruktur AG
MESA 26	Austria	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	31.12.2019		
MESA 26	Belgium	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	unlimited	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	DeBo Assessment by Belgorail
MESA 26	Belgium	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	unlimited		DeBo Assessment by Belgorail
MESA 26	Bulgaria	BASE 02.00 ATR_BG 02.00	analogue			see notes	in line with a train vehicle approval	DeBo Assessment by EL Trans Engineering (ETE)
MESA 26	Bulgaria	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	see notes	in line with a train vehicle approval	DeBo Assessment by EL Trans Engineering (ETE)
MESA 26	Bulgaria	BASE 02.01 ATR_BG 02.01	analogue			see notes	in line with a train vehicle approval	DeBo Assessment by EL Trans Engineering (ETE)
MESA 26	Bulgaria	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	see notes	in line with a train vehicle approval	DeBo Assessment by EL Trans Engineering (ETE)
MESA 26	Czech Republic	CR_M26 1.00.15	digital	14.04.2018	2012/88/EU, 2012/696/EU	unlimited		replaced by ≥ BASE 02.00

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 26	Czech Republic	BASE 02.00 ATR_CS 02.00	analogue			unlimited		
MESA 26	Czech Republic	BASE 02.00	digital	20.05.2021	2012/88/EU, 2012/696/EU, 2015/14/EU	unlimited	BASE 02.00 (Patch 15)	
MESA 26	Czech Republic	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	unlimited	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	
MESA 26	Czech Republic	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919	unlimited		
MESA 26	Germany	BASE 02.00.19 ATR_DE 02.00.31 ATR_DE_VZF 02.00.30	analogue			20.05.2021		
MESA 26	Germany	BASE 02.00.19	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	20.05.2021	exclusively with radio module <i>MT5E</i>	
MESA 26	Germany	BASE 02.01.19 ATR_DE 02.00.31 ATR_DE_VZF 02.00.30	analogue			16.10.2019		
MESA 26	Germany	BASE 02.01.19	digital	20.05.2021	CR (EU) 2016/919	16.10.2019	exclusively with radio module <i>MT5E</i>	
MESA 26	Hungary	BASE 02.00 ATR_HU 02.00.23	analogue			31.12.2021	BASE 02.00 (Patch 19)	
MESA 26	Hungary	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	31.12.2021	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	
MESA 26	Italy	BASE 02.00	digital	20.05.2021	2012/88/EU 2012/696/EU 2015/14/EU	see notes	BASE 02.00 (Patch 15)	in line with a train vehicle approval; compatibility test report of RINA for the component available
MESA 26	Italy	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	see notes	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	in line with a train vehicle approval; compatibility test report of RINA for the component available
MESA 26	Italy	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919	see notes	BASE 02.01 (Patch 17) in line with a train vehicle approval	compatibility test report of RINA for the component available
MESA 26	Italy	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	see notes	BASE 02.01 (Patch 19) in line with a train vehicle approval	compatibility test report of RINA for the component available

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 K lleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
MESA 26	Romania	BASE 02.00 ATR_RO 02.00	analogue			18.12.2020		
MESA 26	Romania	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	18.12.2020	exclusively with radio module <i>MT5E</i>	
MESA 26	Romania	BASE 02.01 ATR_RO 02.01	analogue			18.12.2020		
MESA 26	Romania	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	18.12.2020		
MESA 26	Serbia	CRA_M26 1.00.04	analogue			unlimited		
MESA 26	Slovakia	BASE 02.00 ATR_SK 02.00	analogue			unlimited	BASE 02.00 (Patch 19)	
MESA 26	Slovakia	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	unlimited	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	
MESA 26	Slovakia	BASE 02.01 ATR_SK 02.01	analogue			unlimited		
MESA 26	Slovakia	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	unlimited		
MESA 26	Switzerland	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919	31.12.2027	BASE 02.00 (Patch 19), exclusively with radio module <i>MT5E</i>	
MESA 26	Switzerland	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919	31.12.2029	exclusively with radio module <i>MT5E</i>	
MESA 26-N	Belgium	CR_M26 1.03.11	digital	20.05.2021	2012/88/EU, 2012/696/EU, 2015/14/EU	unlimited		
CabRadio 3U/6U	Germany	1H16d	analogue			unlimited		
CabRadio 3U/6U	Germany	1H16d	digital			unlimited		
CabRadio 3U/6U	Switzerland	1M2	digital			31.12.2028		
CabRadio 3U/6U	Switzerland	1KM3	digital			31.12.2029		

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
EC Type Examinations								
MESA 23	EC type examination	CR_SW 04.09.05	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 24	EC type examination	CR_BE 1.05.08	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 25	EC type examination	CR_M25 1.06.02	digital	20.05.2021	CR (EU) 2016/919	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 26	EC type examination	BASE 02.00	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 26	EC type examination	BASE 02.01	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 26-N	EC type examination	CR_M26 1.03.11	digital	20.05.2021	2012/88/EU, 2012/696/EU, 2015/14/EU	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
MESA 26-N	EC type examination	CR_M26 1.04.06	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
RIU-ETCS 800	EC type examination	REL_2.3.27	digital	20.05.2021	2012/88/EU, 2012/696/EU	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity
RIU-ETCS 5E	EC type examination	EDOR 1.1.1	digital	20.05.2021	CR (EU) 2016/919, CIR (EU) 2019/776	---	see ERADIS, NoBo EC Certificates	see ERADIS, EC declaration of conformity

Summary of Approvals

Train Radio Systems and Data Radio Systems
Document No: 1561.050.00001.B.EN.4 | V 13.00 | 06.01.2020

Funkwerk Systems GmbH
Im Funkwerk 5
99625 Kölleda
Germany

Tel.: +49 (0) 3635 / 458 500
Fax: +49 (0) 3635 / 458 399
Internet: www.funkwerk.com



System	Country	Software	Mode	EC Certificate Module CD valid until:	EC Certificate Module CB (unlimited valid) certified according to TSI CCS:	National Approval	Note 1:	Note 2:
Countries where no national approval as component is necessary / possible								
	Croatia		analogue			---	in line with a train vehicle approval	
	Denmark		digital			---	EC certification of the component sufficient	
	Finland		digital			---	EC certification of the component sufficient	
	France		digital			---	EC certification of the component sufficient	
	Great Britain		analogue, digital			---	DeBo Assessment necessary	
	Luxembourg		digital			---	EC certification of the component sufficient	
	Netherlands		digital			---	EC certification of the component sufficient	
	Norway		digital			---	EC certification of the component sufficient	
	Slovenia		digital			---	EC certification of the component sufficient	
	Spain		digital			---	EC certification of the component sufficient	
	Sweden		digital			---	EC certification of the component sufficient	