

# Summary of Approvals

Train Radio Systems and Data Radio Systems

Document No: 1561.050.00001.B.EN.4 | V 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>Approval | Note 1:                                                                                                                                        | Note 2:                                                          |
|---------|----------------|----------------|----------|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| MESA 23 | Austria        | CR_SW 04.09.05 | analogue |                                             |                                                                                            | 31.12.2019           | Complies with Network Statement of<br>ÖBB-Infrastruktur AG (2019 and 2020) for<br>communication systems;<br>only with radio module <i>MT5E</i> | For recommendations see website of<br>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,<br>2012/696/EU                                                                 | unlimited            | only with radio modules<br><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<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>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<br>Bombardier Transportation GmbH                                                                      |                                                                  |
| MESA 23 | Czech Republic | CR_SW 04.07.03 | analogue |                                             |                                                                                            | unlimited            | as from 01.09.2015 not longer<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>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<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>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<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>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<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>Annex F "Rail line radio systems" |
| MESA 23 | Czech Republic | CR_SW 04.09.03 | digital  | 14.04.2018                                  | 2012/88/EU,<br>2012/696/EU                                                                 | unlimited            |                                                                                                                                                |                                                                  |
| MESA 23 | Czech Republic | CR_SW 04.09.05 | analogue |                                             |                                                                                            | unlimited            | as from 01.09.2015 not longer<br>compatible to SRV lines                                                                                       | see SŽDC network statement,<br>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 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>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,<br>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,<br>exclusively with radio module <i>MT5E</i> | compatibility test report of RINA for the component available |
| MESA 23 | Poland         | CR_SW 04.07.03<br>CR_SW 04.08.02<br>CR_SW 04.09.03<br>CR_SW 04.09.05 | analogue |                                             |                                                                                            | unlimited            | with radio module <i>Koliber</i>                                                    |                                                               |
| MESA 23 | Romania        | CR_SW 04.08.02<br>CR_SW 04.09.03<br>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 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>Approval    | Note 1:                                                                    | Note 2: |
|------------|-------------|----------------------------------------------------------------------|----------|---------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------------------------------|---------|
| MESA 23    | Slovakia    | CR_SW 04.05.05<br>CR_SW 04.06.03<br>CR_SW 04.07.03<br>CR_SW 04.08.02 | analogue |                                             |                                                                                            | unlimited               | only UIC 751-3 radio mode<br>(0,7 m band)                                  |         |
| MESA 23    | Slovakia    | CR_SW 04.05.05<br>CR_SW 04.06.03<br>CR_SW 04.07.03<br>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<br>(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,<br>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,<br>2012/696/EU,<br>2015/14/EU                                                  | unlimited<br>30.01.2018 | with radio module <i>MT5E-B</i><br>with radio module <i>MRM</i>            |         |
| MESA 25-01 | Austria     | all software packages<br>with EC-certification                       | digital  |                                             |                                                                                            | see notes               | GSM-R only, no component approval<br>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 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>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,<br>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<br>ATR_AT 02.00.31 | analogue |                                             |                                                                                            | 31.12.2019           | Complies with Network Statement of<br>ÖBB-Infrastruktur AG (2019 and 2020) for<br>communication systems;<br>only with radio module <i>MT5E</i> | For recommendations see website of<br>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<br>ATR_AT 02.00       | analogue |                                             |                                                                                            | 31.12.2019           | Complies with Network Statement of<br>ÖBB-Infrastruktur AG (2019 and 2020) for<br>communication systems;<br>only with radio module <i>MT5E</i> | For recommendations see website of<br>ÖBB-Infrastruktur AG |
| MESA 26    | Austria        | BASE 02.01                       | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>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),<br>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,<br>CIR (EU) 2019/776                                                     | unlimited            |                                                                                                                                                | DeBo Assessment by Belgorail                               |
| MESA 26    | Bulgaria       | BASE 02.00<br>ATR_BG 02.00       | analogue |                                             |                                                                                            | see notes            | in line with a train vehicle approval                                                                                                          | DeBo Assessment by EL Trans<br>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<br>Engineering (ETE)           |
| MESA 26    | Bulgaria       | BASE 02.01<br>ATR_BG 02.01       | analogue |                                             |                                                                                            | see notes            | in line with a train vehicle approval                                                                                                          | DeBo Assessment by EL Trans<br>Engineering (ETE)           |
| MESA 26    | Bulgaria       | BASE 02.01                       | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>CIR (EU) 2019/776                                                     | see notes            | in line with a train vehicle approval                                                                                                          | DeBo Assessment by EL Trans<br>Engineering (ETE)           |
| MESA 26    | Czech Republic | CR_M26 1.00.15                   | digital  | 14.04.2018                                  | 2012/88/EU,<br>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 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>Approval | Note 1:                                                             | Note 2:                                                                                                    |
|---------|----------------|---------------------------------------------------------|----------|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| MESA 26 | Czech Republic | BASE 02.00<br>ATR_CS 02.00                              | analogue |                                             |                                                                                            | unlimited            |                                                                     |                                                                                                            |
| MESA 26 | Czech Republic | BASE 02.00                                              | digital  | 20.05.2021                                  | 2012/88/EU,<br>2012/696/EU,<br>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),<br>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<br>ATR_DE 02.00.31<br>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,<br>CIR (EU) 2019/776                                                     | 20.05.2021           | exclusively with radio module <i>MT5E</i>                           |                                                                                                            |
| MESA 26 | Germany        | BASE 02.01.19<br>ATR_DE 02.00.31<br>ATR_DE_VZF 02.00.30 | analogue |                                             |                                                                                            | 20.05.2021           |                                                                     |                                                                                                            |
| MESA 26 | Germany        | BASE 02.01.19                                           | digital  | 20.05.2021                                  | CR (EU) 2016/919                                                                           | 20.05.2021           | exclusively with radio module <i>MT5E</i>                           |                                                                                                            |
| MESA 26 | Hungary        | BASE 02.00<br>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),<br>exclusively with radio module <i>MT5E</i> |                                                                                                            |
| MESA 26 | Hungary        | BASE 02.01<br>ATR_HU 02.01.07                           | analogue |                                             |                                                                                            | unlimited            | BASE 02.01 (Patch 19)                                               |                                                                                                            |
| MESA 26 | Hungary        | BASE 02.01                                              | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>CIR (EU) 2019/776                                                     | unlimited            | BASE 02.01 (Patch 19)                                               |                                                                                                            |
| MESA 26 | Italy          | BASE 02.00                                              | digital  | 20.05.2021                                  | 2012/88/EU<br>2012/696/EU<br>2015/14/EU                                                    | see notes            | BASE 02.00 (Patch 15)                                               | in line with a train vehicle approval;<br>compatibility test report of RINA for the<br>component available |
| MESA 26 | Italy          | BASE 02.00                                              | digital  | 20.05.2021                                  | CR (EU) 2016/919                                                                           | see notes            | BASE 02.00 (Patch 19),<br>exclusively with radio module <i>MT5E</i> | in line with a train vehicle approval;<br>compatibility test report of RINA for the<br>component available |
| MESA 26 | Italy          | BASE 02.01                                              | digital  | 20.05.2021                                  | CR (EU) 2016/919                                                                           | see notes            | BASE 02.01 (Patch 17)<br>in line with a train vehicle approval      | compatibility test report of RINA for the<br>component available                                           |

# Summary of Approvals

Train Radio Systems and Data Radio Systems

Document No: 1561.050.00001.B.EN.4 | V 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>Approval | Note 1:                                                             | Note 2:                                                          |
|----------------|-------------|----------------------------|----------|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------|------------------------------------------------------------------|
| MESA 26        | Italy       | BASE 02.01                 | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>CIR (EU) 2019/776                                                     | see notes            | BASE 02.01 (Patch 19)<br>in line with a train vehicle approval      | compatibility test report of RINA for the<br>component available |
| MESA 26        | Romania     | BASE 02.00<br>ATR_RO 02.00 | analogue |                                             |                                                                                            | 18.12.2020           |                                                                     |                                                                  |
| MESA 26        | Romania     | BASE 02.00                 | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>CIR (EU) 2019/776                                                     | 18.12.2020           | exclusively with radio module <i>MT5E</i>                           |                                                                  |
| MESA 26        | Romania     | BASE 02.01<br>ATR_RO 02.01 | analogue |                                             |                                                                                            | 18.12.2020           |                                                                     |                                                                  |
| MESA 26        | Romania     | BASE 02.01                 | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>CIR (EU) 2019/776                                                     | 18.12.2020           |                                                                     |                                                                  |
| MESA 26        | Serbia      | CRA_M26 1.00.04            | analogue |                                             |                                                                                            | unlimited            |                                                                     |                                                                  |
| MESA 26        | Slovakia    | BASE 02.00<br>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),<br>exclusively with radio module <i>MT5E</i> |                                                                  |
| MESA 26        | Slovakia    | BASE 02.01<br>ATR_SK 02.01 | analogue |                                             |                                                                                            | unlimited            |                                                                     |                                                                  |
| MESA 26        | Slovakia    | BASE 02.01                 | digital  | 20.05.2021                                  | CR (EU) 2016/919,<br>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),<br>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,<br>2012/696/EU,<br>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 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>Approval | Note 1: | Note 2: |
|--------|---------|----------|------|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------------|---------|---------|
|--------|---------|----------|------|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------------|---------|---------|

## EC Certification of the Interoperability Constituent

### EC Type Examination (Module CB)

|              |                     |                |         |            |                                           |     |                                                              |                                                                      |
|--------------|---------------------|----------------|---------|------------|-------------------------------------------|-----|--------------------------------------------------------------|----------------------------------------------------------------------|
| MESA 23      | EC type examination | CR_SW 04.09.05 | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| MESA 24      | EC type examination | CR_BE 1.05.08  | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| MESA 25      | EC type examination | CR_M25 1.06.02 | digital | 20.05.2021 | CR (EU) 2016/919                          | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| MESA 26      | EC type examination | BASE 02.00     | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| MESA 26      | EC type examination | BASE 02.01     | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | BASE 02.01 (Patch 19)<br>see ERADIS,<br>NoBo EC Certificates | BASE 02.01 (Patch 19)<br>see ERADIS,<br>EC declaration of conformity |
| MESA 26      | EC type examination | BASE 02.01     | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | BASE 02.01 (Patch 26)<br>see ERADIS,<br>NoBo EC Certificates | BASE 02.01 (Patch 26)<br>see ERADIS,<br>EC declaration of conformity |
| MESA 26-N    | EC type examination | CR_M26 1.03.11 | digital | 20.05.2021 | 2012/88/EU,<br>2012/696/EU,<br>2015/14/EU | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| MESA 26-N    | EC type examination | CR_M26 1.04.06 | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| RIU-ETCS 800 | EC type examination | REL_2.3.27     | digital | 20.05.2021 | 2012/88/EU,<br>2012/696/EU                | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |
| RIU-ETCS 5E  | EC type examination | EDOR 1.1.1     | digital | 20.05.2021 | CR (EU) 2016/919,<br>CIR (EU) 2019/776    | --- | see ERADIS,<br>NoBo EC Certificates                          | see ERADIS,<br>EC declaration of conformity                          |

### Quality Management System Approval (Module CD)

|                           |                                    |  |  |            |     |     |                                     |  |
|---------------------------|------------------------------------|--|--|------------|-----|-----|-------------------------------------|--|
| MESA 2x,<br>RIU-ETCS 5E   | Quality Management System Approval |  |  | 20.05.2021 | --- | --- | see ERADIS,<br>NoBo EC Certificates |  |
| MESA 26-N<br>RIU-ETCS 800 | Quality Management System Approval |  |  | 20.05.2021 | --- | --- | see ERADIS,<br>NoBo EC Certificates |  |

# Summary of Approvals

Train Radio Systems and Data Radio Systems

Document No: 1561.050.00001.B.EN.4 | V 13.03 | 27.03.2020

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<br>Module CD<br>valid until: | EC Certificate <b>Module CB</b><br>(unlimited valid)<br>certified according to<br>TSI CCS: | National<br>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<br>sufficient |         |
|                                                                           | Finland       |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | France        |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Great Britain |          | analogue,<br>digital |                                             |                                                                                            | ---                  | DeBo Assessment necessary                       |         |
|                                                                           | Luxembourg    |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Netherlands   |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Norway        |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Slovenia      |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Spain         |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |
|                                                                           | Sweden        |          | digital              |                                             |                                                                                            | ---                  | EC certification of the component<br>sufficient |         |