**SCOPE 41 ЛИ**

**Sofia, 31.03.2025**

**TECHNOTEST AD**

**TESTS DIRECTORATE**

**Management and laboratory address**:

1528 Sofia, Iskar District, 10 Poruchik Nedelcho Bonchev Str.

**To perform testing of:**

| **Type of the scope:** *flexible* |
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| **№** | **Tested Products** | **Type of test/Characteristic** | **Testing methods****(standard/ validated method)** |
| 1 | 2 | 3 | 4 |
| 1. | Passenger Cars (category M1) | 1.1. Linear and/or angular dimensions | БДС EN 1789+A1Ordinance № 60 45)Regulation (EU) 2018/858 43) UNECE Regulation № 21 5)UNECE Regulation № 26 б)UNECE Regulation № 46 11)UNECE Regulation № 48 12)UNECE Regulation № 67 20)UNECE Regulation № 79 24)UNECE Regulation № 100 28)UNECE Regulation № 110 32)UNECE Regulation № 121 34)UNECE Regulation № 125 35)Implementing Regulation (EU) 2021/535, Annexes III, V, II, VIII, X, XIII 36)Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6 47) |
| 1.2. Mass, load, strength | БДС EN 1789+A1UNECE Regulation № 46 11)UNECE Regulation № 79 24)Implementing Regulation (EU) 2021/535, Annexes VII, XIII 36) |
| 1.3. Time\*\* | UNECE Regulation № 79 24) |
| 1.4. Driving distance\*\* | БДС 16287 |
| 1.5. Driving speed\*\* | БДС 16287UNECE Regulation № 39 8)UNECE Regulation № 46 11)UNECE Regulation № 79 24) |
| 1.6. Fuel consumption\*\* | БДС 16287UNECE Regulation № 84 (Annex 4, item 3.3.1.) 26) |
| 1.7. Noise level\*\* | БДС ISO 5128ISO 5130Ordinance № 61 46)Directive 70/157/EEC 42)UNECE Regulation № 51 13)UNECE Regulation № 103 29) |
| 1.8. Audible alarm sound level\*\* | UNECE Regulation № 28 7) |
| 1.9. Light transmission through the windows | UNECE Regulation № 43 10) |
| 1.10. Braking performance\*\* | Ordinance № Н-32, Annex 5, Part II, 44)UNECE Regulation № 13-Н 3)UNECE Regulation № 79 24) |
| 1.11. Carbon monoxide content and fume | Ordinance № Н-32, Annex 5, Part II, Section I, III, 44) |
| 2.  | Commercial vehicles (categories N1, N2 and N3) | 2.1. Linear and/or angular dimensions | Ordinance № 60 45)Regulation (EU) 2018/858 43)UNECE Regulation № 46 11)UNECE Regulation № 48 12)UNECE Regulation № 67 20)UNECE Regulation № 79 24)UNECE Regulation № 100 28)UNECE Regulation № 110 32)UNECE Regulation № 121 34)UNECE Regulation № 55 15)UNECE Regulation № 58 16)UNECE Regulation № 61 18)UNECE Regulation № 73 21)UNECE Regulation № 105 30)UNECE Regulation № 111 33)Implementing Regulation (EU) 2021/535, Annexes III, II, X, V, VIII, XIII 36)Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6 47) |
| 2.2. Mass, load, strength | UNECE Regulation № 46 11)UNECE Regulation № 58 16)UNECE Regulation № 73 21)UNECE Regulation № 105 30)UNECE Regulation № 79 24)UNECE Regulation № 111 З3)Implementing Regulation (EU) 2021/535, Annexes VII, XIII 39) |
| 2.3. Time\*\* | UNECE Regulation № 79 26) |
| 2.4. Driving distance\*\* | UNECE Regulation № 13 2) |
| 2.5. Driving speed\*\* | UNECE Regulation № 39 8)UNECE Regulation № 46 11)UNECE Regulation № 79 24)UNECE Regulation № 89 27) |
| 2.6. Fuel consumption\*\* | БДС 16287:1985UNECE Regulation № 84 (Annex 4, item 3.3.1) 26) |
| 2.7. Noise level\*\* | Ordinance № 6146)Directive 70/157/EEC 42)UNECE Regulation № 51 13)UNECE Regulation № 103 29) |
| 2.8. Audible alarm sound level\*\* | UNECE Regulation № 28 7) |
| 2.9. Light transmission through the windows | UNECE Regulation № 43 10) |
| 2.10. Braking performance\*\* | Ordinance № Н-32, Annex 5, Part II 44)UNECE Regulation № 13 2)UNECE Regulation № 79 24) |
| 3. | Buses (categories M2 and М3) | 3.1. Linear and/or angular dimensions | Ordinance № 60 45)UNECE Regulation № 14 4)UNECE Regulation № 46 11)UNECE Regulation № 48 12)UNECE Regulation № 55 15)UNECE Regulation № 67 20)UNECE Regulation № 79 24)UNECE Regulation № 100 28)UNECE Regulation № 107 31)UNECE Regulation № 110 32)UNECE Regulation № 121 34)Regulation (EU) 2018/858 43)Implementing Regulation (EU) 2021/535, Annexes III, II, X, XIII 36)Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6 47) |
| 3.2. Mass, load, strength | UNECE Regulation № 14 4)UNECE Regulation № 46 11)UNECE Regulation № 79 24)UNECE Regulation № 107 31)Implementing Regulation (EU) 2021/535, Annexes VII, XIII 36) |
| 3.3. Time\*\* | UNECE Regulation № 79 24) |
| 3.4. Driving distance\*\* | UNECE Regulation № 13 2) |
| 3.5. Driving speed\*\* | UNECE Regulation № 39 8)UNECE Regulation № 46 11)UNECE Regulation № 79 24)UNECE Regulation № 89 27) |
| 3.6. Fuel consumption\*\* | БДС 16287:1985UNECE Regulation № 84/15.07.1990 (Annex 4, item 3.3.1) 26) |
| 3.7. Noise level\*\* | Ordinance № 61 46)Directive 70/157/EEC 42)UNECE Regulation № 51 13) |
| 3.8. Audible alarm sound level\*\* | UNECE Regulation № 28 7) |
| 3.9. Light transmission through the windows | UNECE Regulation № 43 10) |
| 3.10. Braking performance\*\* | Ordinance № Н-32, Annex 5, Part II 44)UNECE Regulation № 13 2)UNECE Regulation № 79 24) |
| 4. | Trailers, including semi-trailers, centre axle trailer(s) (categories O1, O2, O3 and O4) | 4.1. Linear and/or angular dimensions | Ordinance № 60 45)Regulation (EU) 2018/858 43)UNECE Regulation № 48 12)UNECE Regulation № 55 15)UNECE Regulation № 58 16)UNECE Regulation № 73 21)UNECE Regulation № 79 24)UNECE Regulation № 105 30)UNECE Regulation № 111 З3)Implementing Regulation (EU) 2021/535,Annexes III, II, VIII, XIII 39)Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6 47) |
| 4.2. Mass, load, strength | Implementing Regulation (EU) 2021/535, Annex XIII 36)UNECE Regulation № 58 16)UNECE Regulation № 73 21)UNECE Regulation № 79 24)UNECE Regulation № 105 30)UNECE Regulation № 111 З3) |
| 4.3. Braking performance\*\* | Ordinance № Н-32, Annex 5, Part II 44)UNECE Regulation № 13 2)UNECE Regulation № 79 24) |
| 5. | Two-, three- and four-wheel vehicles (category L) | 5.1. Linear and/or angular dimensions | Delegated Regulation (EU) № 3/2014, XII, Annexes II, VI, IX, X, XII, XIII, XV, XVI 38)Delegated Regulation (EU) № 44/2014, Annexes V, VIII, XI, XIV, XVI 39)Implementing Regulation (EU) № 901/2014, Annex V 41)UNECE Regulation № 46 11)UNECE Regulation № 53 14)UNECE Regulation № 55 15)UNECE Regulation № 60 17)UNECE Regulation № 74 22)UNECE Regulation № 78 23)UNECE Regulation № 81 25)UNECE Regulation № 121 34)Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6 47) |
| 5.2. Mass, load, strength | Delegated Regulation (EU) № 3/2014, Annexes III, VIII, IX, X 38)Delegated Regulation (EU) № 44/2014, Annexes XI, XIII, XVI 39)UNECE Regulation № 46 11)UNECE Regulation № 81 25) |
| 5.3. Time\*\* | Delegated Regulation (EU) № 3/2014, Annex III 38)UNECE Regulation № 78 23) |
| 5.4. Driving distance\*\* | UNECE Regulation № 78 23) |
| 5.5. Driving speed\*\* | Delegated Regulation (EU) № 3/2014, Annex III, VIII 38)UNECE Regulation № 39 8)UNECE Regulation № 46 11)UNECE Regulation № 78 23) |
| 5.7. Noise level\* | Regulation (EU) № 168/2013 Annex VI D 37)Delegated Regulation (EU) № 3/2014, Annex II 38);Delegated Regulation (EU) № 134/2014, Annex IX, Appendix 1, item 2.1 and 2.2; Appendix 2, item 2.1 and 2.2;Appendix 3, item 2.1, 2.2 and 2.3 40)UNECE Regulation № 9 1)UNECE Regulation № 41 9)UNECE Regulation № 51 13)UNECE Regulation № 63 19) |
| 6. | Road vehicles for transport of dangerous goods | 6.1. Mass, load, time, driving distance, driving speed | БДС EN 12972 |
| 6.2. Tightness | БДС EN 12972 |
| 6.3. Hydraulic pressure | БДС EN 12972 |
| 7. | Electric forklifts and forklift trucks. | 7.1. Linear dimensions | БДС EN ISO 3691-1/А1БДС EN ISO 3691-5/А1 |
| 7.2. Mass and load | БДС EN ISO 3691-1/А1БДС EN ISO 3691-5/А1 |
| 7.3. Traction and braking forces; forces applied to controls | БДС EN ISO 3691-1/А1БДС EN ISO 3691-5/А1 |
| 7.4. Time | БДС EN ISO 3691-1/А1 |
| 7.5. Driving distance | БДС EN ISO 3691-1/А1 |
| 7.6. Driving speed | БДС EN ISO 3691-1/А1 |
| 7.7. Hoisting speed | БДС EN ISO 3691-1/А1 |
| 7.8. Stability | БДС EN ISO 3691-1/А1БДС EN ISO 3691-5/А1 |
| 7.9. Ambient noise level | БДС EN 12053 + A1 |
| 7.10. Vibrations | БДС EN 13059 + A1 |
| 8. | Safe deposit boxes, vault doors | 8.1. Full/partial access resistance | БДС EN 1143-1БДС EN 14450 + A1 |
| 8.2. Anchor connection strength | БДС EN 1143-1БДС EN 14450 + A1 |
| 9. | Deposit systems | 9.1 Full/partial access resistance | БДС EN 1143-2 |
| 9.2 Anchor connection strength | БДС EN 1143-2 |
| 9.3 Attack on deposit | БДС EN 1143-2 |
| 10. | Pedestrian doors, windows, grilles and shutters | 10.1 Static load resistance | БДС EN 1628 |
| 10.2 Resistance under dynamic loading | БДС EN 1629 |
| 10.3 Resistance to manual attack | БДС EN 1630 |
| 11. | Security glass | Falling object impact resistance | БДС EN 356 |

*\*\* The characteristic test is performed on a test range.*

***\*Flexible Scope:*** *Implementing a new version of standards/documents or standards/ documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by laboratory.*

**References:**

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|  | UNECE Regulation № 9 Series of amendments08/15.10.2019 | Uniform provisions concerning the approval of category L2, L4 and L5 vehicles with regard to sound emission. |
|  | UNECE Regulation № 13 Series of amendments13/22.10.2024 | Uniform provisions concerning the approval of vehicles of categories M, N and O with regard to braking. |
|  | UNECE Regulation № 13-Н Series of amendments01/09.02.2017 | Uniform provisions concerning the approval of passenger cars with regard to braking. |
|  | UNECE Regulation № 14 Series of amendments09/29.12.2018 | Uniform provisions concerning the approval of vehicles with regard to safety-belt anchorages, ISOFIX anchorages systems, ISOFIX top tether anchorages and i-Size seating positions. (items 5.4.3, 6.3.1, 6.3.2, 6.3.3, 6.3.4, 6.4.1, 6.4.2, 6.4.3) |
|  | UNECE Regulation № 21 Revision 2/12.10.1993 | Uniform provisions concerning the approval of vehicles with regard to their interior fittings. |
|  | UNECE Regulation № 26 Series of amendments02/25.09.2020 | Uniform provisions concerning the approval of vehicles with regard to their external projections. |
|  | UNECE Regulation № 28/ 31.10.1972 | Uniform provisions concerning the approval of audible warning devices and of motor vehicles with regard to their audible signals. |
|  | UNECE Regulation № 39 Series of amendments01/15.10.2019 | Uniform provisions concerning the approval of vehicles with regard to the speedometer equipment including its installation. |
|  | UNECE Regulation № 41 Series of amendments04/13.04.2012 | Uniform provisions concerning the approval of motor cycles with regard to noise. |
|  | UNECE Regulation № 43 Series of amendments01/08.10.2015 | Uniform provisions concerning the approval of safety glazing materials and their installation on vehicles. |
|  | UNECE Regulation № 46 Series of amendments05/08.10.2022 | Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices. |
|  | UNECE Regulation № 48 Series of amendments07/25.08.2022 | Uniform provisions concerning the approval of vehicles with regard to the installation of lighting and light-signalling devices. |
|  | UNECE Regulation № 51 Series of amendments03/20.01.2016 | Uniform provisions concerning the approval of motor vehicles having at least four wheels with regard to their noise emissions. |
|  | UNECE Regulation № 53 Series of amendments02/08.10.2016 |  Uniform provisions concerning the approval of category L3 vehicles with regard to the installation of lighting and light-signalling devices. |
|  | UNECE Regulation № 55 Series of amendments02/09.06.2021 | Uniform provisions concerning the approval of mechanical coupling components of combinations of vehicles. |
|  | UNECE Regulation № 58 Series of amendments03/29.05.2020 | Uniform conditions concerning the approval of:1. Rear Underrun Protection Devices (RUPDs) ;
2. Vehicles with regard to the Installation of an RUPD of an approved type;
3. Vehicles with regard to their Rear Underrun Protection (RUP).
 |
|  | UNECE Regulation № 60 Series of amendments01/03.11.2013 | Uniform provisions concerning the approval of two-wheeled motor cycles and mopeds with regard to driver-operated controls including the identification of controls, tell-tales and indicators. |
|  | UNECE Regulation № 61/ 15.07.1984 | Uniform provisions for the approval of commercial vehicles with regard to their external projections forward of the cab’s rear panel. |
|  | UNECE Regulation № 63 Series of amendments02/08.11.2013 | Uniform provisions concerning the approval of L1 category vehicles with regard to sound emission. |
|  | UNECE Regulation № 67 Series of amendments04/05.06.2023 | Uniform conditions concerning:I. Approval of specific equipment of motor vehicles using liquefied petroleum gases in their propulsion system;II. Approval of M and N category vehicles fitted with specific equipment for the use of liquefied petroleum gases in its propulsion system with regard to the installation of such equipment. |
|  | UNECE Regulation № 73 Series of amendments01/09.12.2010 | Uniform conditions concerning the approval of:I. Vehicles with regard to their lateral protection devices (LPD);II. Lateral protection devices (LPD);III. Vehicles with regard to the installation of LPD of an approved type according to Part II of this Regulation. |
|  | UNECE Regulation № 74 Series of amendments02/30.09.2021 | Uniform provisions concerning the approval of category L1 vehicles with regard to the installation of lighting and light-signalling devices. |
|  | UNECE Regulation № 78 Series of amendments05/03.01.2021 | Uniform provisions concerning the approval of vehicles of categories L1, L2, L3, L4 and L5 with regard to braking. |
|  | UNECE Regulation № 79 Series of amendments04/07.01.2022 | Uniform provisions concerning the approval of vehicles with regard to steering equipment. |
|  | UNECE Regulation № 81/ 01.03.1989 | Uniform provisions concerning the approval of rear-view mirrors of two-wheeled power-driven vehicles with or without side-car, with regard to the mounting of rear-view mirrors on handlebars. |
|  | UNECE Regulation № 84/ 15.07.1990 | Uniform provisions concerning the approval of: passenger cars equipped with an internal combustion engine with regard to the measurement of fuel consumption. |
|  | UNECE Regulation № 89 01.10.1992 | Uniform conditions concerning the approval of:I. Vehicles with regard to limitation of their maximum speed or their adjustable speed limitation function;1. Vehicles with regard to the installation of a speed limitation device (SLD) or adjustable speed limitation device (ASLD) of an approved type;
2. Speed limitation device (SLD) and adjustable speed limitation device (ASLD).
 |
|  | UNECE Regulation № 100 Series of amendments03/09.06.2021 | Uniform provisions concerning the approval of vehicles with regard to specific requirements for the electric power train. |
|  | UNECE Regulation № 103 Series of amendments01/23.02.1997 | Uniform provisions concerning the approval of replacement catalytic converters for power-driven vehicles. |
|  | UNECE Regulation № 105 Series of amendments04/18.06.2007 | Uniform provisions concerning the approval of vehicles intended for the carriage of dangerous goods with regard to their specific constructional features. |
|  | UNECE Regulation № 107 Series of amendments09/30.09.2021 | Uniform provisions concerning the approval of category M2 or M3 vehicles with regard to their general construction. |
|  | UNECE Regulation № 110 Series of amendments 05/22.06.2022  | Uniform conditions concerning the approval of:I. specific components of motor vehicles using compressed natural gas (CNG) in their propulsion system; II.vehicles with regard to the installation of specific components of an approved type for the use of compressed natural gas (CNG) in their propulsion system. |
|  | UNECE Regulation № 111/ 28.12.2000 | Uniform provisions concerning the approval of tank vehicles of categories N and O with regard to rollover stability. |
|  | UNECE Regulation № 121 Series of amendments01/15.06.2015 | Uniform provisions concerning the approval of vehicles with regard to the location and identification of hand controls, tell-tales and indicators. |
|  | UNECE Regulation № 125 Series of amendments02/22.06.2022 | Uniform provisions concerning the approval of motor vehicles with regard to the forward field of vision of the motor vehicle driver. |
|  | Implementing Regulation (EU) 2021/535 | laying down rules for the application of Regulation (EU) 2019/2144 of the European Parliament and of the Council as regards uniform procedures and technical specifications for the type-approval of vehicles, and of systems, components and separate technical units intended for such vehicles, as regards their general construction characteristics and safety. Annex II: Statutory plate and the vehicle identification number;Annex III: Space for mounting and fixing of front and rear registration plates;Annex V: Wheel guards;Annex VII: Towing devices;Annex VIII: Spray suppression systems;Annex X: Vehicle access;Annex XIII: Masses and dimensions. |
|  | Regulation (EU) № 168/2013 | on the approval and market surveillance of two- or three-wheel vehicles and quadricyclesAnnex VI: (D): Sound-level limits - Euro 4 and Euro 5. |
|  | Delegated Regulation (EU) № 3/2014 | Supplementing Regulation (EU) № 168/2013 of the European Parliament and of the Council with regard to vehicle functional safety requirements for the approval of two- or three-wheel vehicles and quadricycles.Annex II: Test procedures and performance. requirements applying to audible warning devicesAnnex III: Requirements applying to braking, including anti-lock and combined braking systems if any installed.Annex VI: Requirements applying to front and rear protective structures.Annex VIII: Requirements applying to driver-operated controls including identification of controls, tell-tales and indicators.Annex IX: Requirements applying to installation of lighting and light signalling devices, including automatic switching of lighting.Annex X: Requirements regarding rearward visibility.Annex XII: Requirements applying to safety belt. anchorages and safety belts.Annex XIII: Requirements applying to seating positions (saddles and seats).Annex XV: Requirements regarding the installation of tyres.Annex XVI: Requirements applying to the vehicle maximum speed limitation plate and its location on the vehicle. |
|  | Delegated Regulation (EU) № 44/2014 | Supplementing Regulation (EU) № 168/2013 of the European Parliament and of the Council with regard to the vehicle construction and general requirements for the approval of two- or three-wheel vehicles and quadricycles.Annex V: Requirements applying to coupling devices and attachments.Annex VIII: Requirements applying to external projections.Annex XI: Requirements applying to masses and dimensions.Annex XIII: Requirements applying to passenger handholds and footrests.Annex XIV: Requirements applying to the registration plate space.Annex XVI: Requirements applying to stands. |
|  | Delegated Regulation (EU) № 134/2014 | Supplementing Regulation (EU) № 168/2013 of the European Parliament and of the Council with regard to environmental and propulsion unit performance requirements and amending Annex V thereof.Annex IX: Test type IX requirements: sound level.Appendix 1: Sound level test requirements for powered cycles and two-wheel mopeds (category L1e), items 2.1 and 2.2.Appendix 2: Sound level test requirements for motorcycles (categories L3e and L4e), items 2.1 and 2.2.Appendix 3: Sound level test requirements for three-wheel mopeds, tricycles and quadricycles (categories L2e, L5e, L6e and L7e), items 2.1, 2.2 and 2.3. |
|  | Implementing Regulation (EU) № 901/2014 | Implementing Regulation (EU) № 168/2013 of the European Parliament and of the Council with regard to the administrative requirements for the approval and market surveillance of two- or three-wheel vehicles and quadricycles.Annex V: Model of the EU type-approval certificate for a separate technical unit or component. |
|  | Directive 70/157/EEC | On the approximation of the laws of the Member States relating to the permissible sound level and the exhaust system of motor vehicles. |
|  | Regulation (EU) 2018/858 | On the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles, amending Regulations (EC) № 715/2007 and (EC) № 595/2009 and repealing Directive 2007/46/EC. |
|  | Ordinance № H-32/2011 | On periodic roadworthiness tests for road motor vehicles, Issued by the Minister of Transport, Information Technologies and Communications, promulgated, SG 104 / 27.12.2011, effective as of 01.01.2012, amended and supplemented, SG № 99/14.12.2012, SG № 73 / 02.09.2014, effective as of 01.09.2014, SG № 40 / 27.05.2016, effective as of 27.05.2016, SG № 38 / 08.05.2018, effective as of 20.05.2018, SG № 80 / 11.09.2020, effective as of 12.11.2020, amended, SG № 84 / 29.09.2020; amended by Decision № 3934 of the Supreme Administrative Court of the Republic of Bulgaria of 29.03.2021, SG № 76 / 23.09.2022, effective as of 23.09.2022; amended and supplemented, SG № 88 / 20.10.2023, effective as of 20.10.2023, SG № 106 / 22.12.2023, effective as of 22.12.2023. |
|  | Ordinance № 60/2009 | For the type-approval of motor vehicles and their trailers |
|  | Ordinance № 61/2002 | On the type-approval of new motor vehicles with regard to the permissible sound level and the type-approval of the exhaust system. |
|  | Reference Book Metrology and Measurement Technology, ISBN 978-954-334-093-4/2010 | Metrology & Measuring Tools, ISBN 978-954-334-093-4, vol. 2, Chapter 6. |