Zgodnie z art. 9 ust. 1 i 5, art. 11 ust. 5 oraz w celu wykonania art. 12 ustawy o metrologii (Dziennik Urzędowy Republiki Słowenii [*Uradni List RS*] nr 26/05 – skonsolidowana wersja urzędowa) minister gospodarki, turystyki i sportu wydaje:**R U L E S**

AMENDING THE RULES ON METROLOGICAL REQUIREMENTS FOR SPEED MEASURING DEVICES IN ROAD TRAFFIC

Article 1

In the Rules on metrological requirements for speed measuring devices in road traffic (Official Gazette of the Republic of Slovenia [*Uradni List RS*] No 91/15), the second paragraph of Article 1 is deleted, and the existing first paragraph becomes the text of the article.

Article 2

After Article 1, a new Article 1.a is inserted, which reads as follows:

‘Article 1.a

(Information procedure and clause)

(1) These Rules have been issued with regard to the information procedure under Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification) (OJ L 241, 17. 9. 2015, p. 1).’.

(2) The provisions of these Rules shall not apply to products that are legally produced or marketed in other Member States of the European Union and Turkey or produced in the countries of the European Free Trade Association (EFTA), which are also signatories to the Agreement on the European Economic Area, in accordance with national legislation ensuring an equivalent level of protection of the public interest as determined by the legislation of the Republic of Slovenia.

(3) These Rules shall be implemented in accordance with Regulation (EU) 2019/515 of the European Parliament and of the Council of 19 March 2019 on the mutual recognition of goods lawfully marketed in another Member State and repealing Regulation (EC) No 764/2008 (OJ L 91, 29. 3. 2019, p. 1).

Article 3

Article 2 shall be amended to read as follows:

‘Article 2

The terms used in these Rules have the following meanings:

1. “speed measuring device” means a measure for measuring the speed of vehicles in road traffic;

2. “radar speed measuring devices” means speed measuring devices using the RADAR principle and Doppler effect for their operation;

3. “RADAR” means detecting and measuring distance or position by means of radio signals;

4. “Doppler effect” means a physical phenomenon where the change of frequency of a wave occurs for an observer moving relative to its source;

5. “laser speed measuring devices” means speed measuring devices that use laser signal transmission and reception according to the LIDAR principle for their operation;

6. “LIDAR” means the measurement of distance by means of a light beam;

7. “distance/time speed measuring devices” means speed measuring devices for measuring the speed of a vehicle based on the measured vehicle travel time over a route with a measured length;

8. “detection speed measuring devices” means a sub-type of distance/time speed measuring devices which measure the speed of a vehicle over a short distance by measuring the travel time between at least three consecutive vehicle positions, where the vehicle position detectors are tied to the same time source, with known distances between detectors;

9. “section speed measuring devices” means a sub-type of distance/time speed measuring devices which measure the average speed over a longer distance by measuring the travel time and identifying the vehicle at the start and end points of a measuring section of a known length;

10. “tracking-based speed measuring devices” means a subtype of distance/time speed measuring devices, which are installed in a measuring vehicle that follows the measured vehicle, and based on the measured distance of the section or route travelled and the travel time of the measuring vehicle, measures the average speed of the measured vehicle;

11. “measuring vehicle” means a vehicle in which a speed measuring device is installed, which enables the measurement of its own speed and the speed of the measured vehicle based on measurement from a moving point;

12. “measured vehicle” means a vehicle, the speed of which is measured with a speed measuring device;

13. “operator” means the person who handles the speed measuring device and performs speed measurements;

14. “automatic speed measuring devices” means speed measuring devices that perform the measurement automatically without the intervention of the operator;

15. “non-automatic speed measuring device” means speed measuring devices that perform a measurement at the request of an operator;

16. “measurement from a stationary point” means that the speed measuring device measures the speed of the measured vehicle from a point that does not move;

17. “measurement from a moving point” means that the speed measuring device measures the speed of the measured vehicle from a moving point;

18. “maximum permissible error” (hereinafter: MPE) means the extreme value of the measurement error, which is allowed by the specifications or regulations according to a known reference value for a given measurement, measure or measurement system;

19. “influencing quantity” means a quantity that is not a measured quantity, but that affects the result of measurement;

20. “rated operating conditions” means the operating conditions that must be met during measurement for the speed measuring device to function as designed;

21. “disturbance” means an influencing quantity having a value within the limits specified in the relevant requirement, but outside the specified rated operating conditions of the measure; an influencing quantity is a disturbance if the rated operating conditions are not determined for this influencing quantity;

22. “field test” means a procedure where the speed measuring device is tested based on measuring the speed of vehicles with a known speed under realistic conditions of use;

23. “simulation” means a process where the driving of the measured vehicle is replaced by another physical phenomenon, which can represent the driving speed of the vehicle, the driving direction of the vehicle, the distance travelled by the vehicle or the driving time of the vehicle;

24. “laboratory test” means a procedure where a speed measuring device is tested on a simulation basis;

25. “own speed” means the speed of the measuring vehicle when measuring speed from a moving point;

26. “measuring axis” means the apparent line in the direction of which the speed measuring device measures the speed of the measured vehicle;

27. “vehicle driving direction” means the apparent straight line along which the measured vehicle is driven;

28. “cosine phenomenon” means a physical phenomenon that occurs when the measurement axis of the speed measuring device is displaced from the direction of travel of the measured vehicle at a certain angle in a plane or space;

29. “carrier frequency” means one or several frequencies at which the radar speed meter transmits;

30. “position detector” means a sensor or device that determines when the measured vehicle has passed a selected point;

31. “entry point” means the area in which a measured vehicle enters a measuring section;

32. “exit point” means the area in which a measured vehicle exits a measuring section;

33. “measured section length” means the length representing the shortest apparent curve between the entry and exit points and runs along the road section limited on both sides by road markings or the edge of the carriageway;

34. “motion sensor” means a component of the vehicle that enables the measurement of the vehicle's own speed;

35. “time difference between the two measured vehicles in traffic” means the time, at the measured speed, needed by the second measured vehicle driving behind the first measured vehicle to reach the point at which the speed of the first measured vehicle is measured;

36. “safety difference” means the numerical value of the speed that is taken into account in favour of the measured vehicle in each measurement;

37. “expanded measurement uncertainty” means the product of the combined standard measurement uncertainty by a factor greater than 1;

38. “gauge” means the part of the speed measurement device which allows the measurement axis of the speed measuring device to be aligned to the vehicle being measured and must reflect the permissible position and expansion of the measuring beam;

39. “individual vehicle speed measuring device” means a speed measuring device which, on the basis of its mode of operation, can simultaneously measure and document the speed of only one vehicle;

40. “multi-vehicle speed measuring device” means a speed measuring device which, on the basis of its mode of operation, is capable of simultaneously monitoring, measuring and documenting the speed of several vehicles.’.

Article 4

In Article 18, in the third paragraph, after the word ‘speed’, the words ‘or after movement of the vehicle by at least 10 m’ are added.

Article 5

Article 19 shall be amended to read as follows:

‘Article 19

(additional requirements for documenting measurements from a moving point, except for tracking-based speed measuring devices)

‘Documented measurement of speed when measured from a moving point with speed measuring devices, except for speed measuring devices according to the principle of tracking, shall include, in addition to the requirements of Article 17 of these Rules, the speed of the measuring vehicle at the time of the measurement.’.

Article 6

Article 26 shall be amended to read as follows:

‘Article 26

(requirements for test interface)

(1) Speed measuring devices shall be equipped with a test interface enabling the speed measuring device to be operated and to obtain the data or signals necessary to carry out conformity assessment, verification and metrological control.

(2) The test interface shall provide access to at least the following data:

measured speed,

measured distance or position of the measured vehicle (for speed measuring devices where the principle of measurement allows this),

measured vehicle’s own speeds (for speed measuring devices measuring from a moving point),

unique identification of the speed measuring device and its components,

the identification of the speed measuring device software and its control sum, and

the result of self-checking.

(3) The test interface shall be protected against unauthorised interference.'.

Article 7

Article 29 shall be amended to read as follows:

'Article 29

(additional requirements for radar speed measuring devices measuring an individual vehicle)

(1) The individual carrier frequency of the radar speed measuring device measuring an individual vehicle shall not deviate more than ± 0.15 % from the nominal value specified by the manufacturer.

(2) The width of the radar speed measuring device measurement beam measuring an individual vehicle shall not exceed the beam width specified by the manufacturer.

(3) The centreline of the radar speed measuring device antenna measuring beam shall not deviate more than ± 1° from the centreline of the antenna.'.

Article 8

After Article 29 a new Article 29.a is inserted as follows:

'Article 29.a

(additional requirements for multi-vehicle radar speed measuring devices)

Multi-vehicle radar speed measuring devices shall, for the purposes of laboratory and field testing, demonstrate the position and distance of the vehicle being measured from the speed measuring device.'.

Article 9

Article 30 shall be amended to read as follows:

Article 30

(additional requirements for laser speed measuring devices measuring an individual vehicle)

(1) The frequency of transmitted laser speed measuring device pulses measuring an individual vehicle shall not deviate more than ± 1 % from the nominal value specified by the manufacturer.

(2) A laser speed measuring device measuring an individual vehicle shall indicate the distance of the measured vehicle with a division of not more than 0.1 m. The measured distance of the measured vehicle shall not deviate more than ± 0.2 m from the true value at a distance of up to 50 m or 0.4 % for distances greater than 50 m.

(3) The maximum permissible distance of the measured vehicle when measured with a laser speed measuring device measuring an individual vehicle shall be 1 000 m.

(4) The maximum permissible spatial angle of the laser speed measuring device measurement beam measuring an individual vehicle in a horizontal and vertical direction shall be 3 mrad.

(5) The shape of the laser speed measuring device measurement measuring an individual vehicle shall clearly show the limit of 3 mrad.

(6) The gauge of the laser speed measuring device measuring an individual vehicle shall be clearly visible to the naked eye and with measuring equipment for checking the alignment of the gauge and the measurement beam.

(7) The laser speed measuring device measurement beam measuring an individual vehicle shall be fully located within the limits of the gauge.

(8) Laser speed measuring devices measuring an individual vehicle shall be equipped with at least two magnifications of the field of vision of the gauge for measuring the speed of the measured vehicle at a distance of 300 m to 600 m and for measurements at a distance of more than 600 m at least three times the field of vision of the gauge. The magnification can be integrated into the speed measuring device or implemented as a separate attachment that can be attached to or removed from the speed measuring device. In the case of a separate attachment, the attachment must bear the same serial number as the speed measuring device.

(9) A laser speed measuring device measuring an individual vehicle shall permit a 0 km/h speed measurement test at a fixed target.'.

Article 10

After Article 30 a new Article 30.a is inserted as follows:

'Article 30.a

(additional requirements for multi-vehicle laser speed measuring devices)

Multi-vehicle laser speed measuring devices shall, for laboratory and field testing purposes, show the position and distance of the vehicle being measured from the speed measuring device.'.

Article 11

In Article 32, in the third paragraph, the words 'and must be at least 200 times longer than the length of the area of identification' are deleted.

The paragraph 5 is amended to read as follows:

'(5) The beginning and end of the measuring section shall be marked by a retro-reflective strip across the whole road and by means of wedges of measurement along the road surface. The retro-reflective tape shall be visible on a documented measurement together with the vehicle being measured.'.

Article 12

After Article 37 a new Article 37.a is inserted as follows:

'Article 37.a

(additional codes)

(1) The Metrology Institute of the Republic of Slovenia may affix additional identification marks to the speed measuring devices for their identification in the verification procedures.

(2) Holders of speed measuring devices shall not remove the markings referred to in the preceding paragraph.'.

Article 13

After Article 39 a new Article 39.a is inserted as follows:

'Article 39.a

(specific measuring equipment and access to the criterion)

(1) If it is necessary to use dedicated hardware, software, connection cables or interfaces that are not freely available on the market or that are protected by intellectual property rights, the manufacturer must provide this equipment and leave it for free use to the Metrology Institute of the Republic of Slovenia.

(2) In the procedures referred to in the preceding paragraph, the manufacturer must provide the Metrology Institute of the Republic of Slovenia with the highest level of user access to the software that the manufacturer has, as well as free access to the hardware of the speed measuring device.'.

Article 14

In Article 42, after the words of the Article, which is designated as paragraph 1, a new paragraph 2 is inserted, which reads as follows:

'(2) In case of doubt as to the conformity of the speed measuring device with the requirements of these Rules, other examinations and tests may be carried out in order to confirm compliance with the requirements laid down in the preceding paragraph.'.

Article 15

Article 44 shall be amended to read as follows:

'Article 44

(special tests for radar speed measuring devices)

(1) For radar speed measuring devices a measurement accuracy test is performed according to the requirements referred to in Article 5 of these Rules with field testing in at least three measurement points or according to the requirements referred to in Article 6 of these Rules with laboratory testing in at least 10 measurement points.

(2) When testing the accuracy of the radar speed measuring device, the performance of the transmitting and receiving antennas shall be checked simultaneously.

(3) For radar speed measuring devices measuring an individual vehicle, compliance with the requirements referred to in Article 7 of these Rules shall be verified.

(4) The measurement beam width shall be checked in the case of radar speed measuring devices measuring an individual vehicle under the following conditions:

at attenuation of –3 dB relative to the maximum power value of the signal transmitted; and

based on an overview of the overall antenna beam diagram drawn relative from –45° to +45°, where the remaining peaks of the measuring beam shall be attenuated by at least –15 dB relative to the basic signal.

(5) For multi-vehicle radar speed measuring devices at the same time, the correctness of the positioning of the vehicle referred to in Article 29.a of these Rules shall be verified.'.

Article 16

Article 45 shall be amended to read as follows:

'Article 45

(special tests for laser speed measuring devices)

(1) For laser speed measuring devices a measurement accuracy test is performed according to the requirements referred to in Article 5 of these Rules with field testing in at least three measurement points or according to the requirements referred to in Article 6 of these Rules with laboratory testing in at least 10 measurement points.

(2) For laser speed measuring devices measuring an individual vehicle, compliance with the requirements referred to in paragraphs 1, 2, 4 and 7 of Article 30 of these Rules shall be verified.

(3) For multi-vehicle laser speed measuring devices at the same time, the correctness of the positioning of the vehicle referred to in Article 30.a of these Rules shall be verified.'.

Article 17

In Article 46, paragraph 1 is amended to read as follows:

'(1) For detection speed measuring devices, the measurement accuracy test is carried out according to the requirements referred to in Article 6 of these Rules by laboratory testing in at least 10 measurement points or according to the requirements referred to in Article 5 of these Rules by field testing at three measurement points with a fully integrated detection speed measuring device test with vehicle driving. Field testing must be carried out successfully at three measurement points and can be carried out with a maximum of five runs, with three measurements being successful. If such testing is not successful after five runs, the test is terminated due to inadequate set-up of the meter.'.

A new paragraph 2 is inserted after paragraph 1, which reads as follows:

'(2) Detection speed measuring devices with position detectors installed on the road surface must be subject to field testing.'.

The existing paragraph 2 becomes paragraph 3.

Article 18

In Article 47, paragraph 1 is amended to read as follows:

‘(1) For section speed measuring devices a measurement accuracy test with respect to the requirements referred to in Article 5 of these Rules shall be carried out by means of field testing on three measurement points with the test of a fully integrated section speed measuring device by driving the vehicle. Field testing must be carried out successfully at three measurement points and can be carried out with a maximum of five runs, with three measurements being successful. If such testing is not successful after five runs, the test is terminated due to inadequate set-up of the meter.’.

Article 19

Article 48 shall be amended to read as follows:

‘Article 48

(specific tests for tracking-based speed measuring devices)

Tracking-based speed measuring devices shall be subjected to a test of measurement accuracy with respect to the requirements referred to in Article 6 of these Rules by laboratory testing with at least 10 own speeds or according to the requirements referred to in Article 5 of these Rules by testing in the field at minimally one own speed based on constant speed driving of the measuring vehicle, without the initial and final stopping of the measuring vehicle.’.

Article 20

Article 49 shall be amended to read as follows:

‘Article 49

(special tests for speed measuring devices measuring from a moving point, except for tracking-based measuring devices)

For speed measuring devices measuring from a moving point, except for tracking-based speed measuring devices, tests on the measurement accuracy of the speed measurement of the measured vehicle and the measurement of the vehicle’s own speed according to the requirements referred to in Article 6 of these Rules shall be carried out separately by laboratory testing at 10 measurement points or with respect to the requirements referred to in Article 5 of these Rules with field testing in at least three points.’.

Article 21

In Article 55, the words ‘and not measuring the distance to the vehicle or the angle of travel of the vehicle relative to the speed measuring device’ are replaced by the words ‘with conversion to a single selected angle’.

Article 22

Article 57 is deleted.

TRANSITIONAL AND FINAL PROVISION

Article 23

(placing on the market and initial verification)

Speed measuring devices which, on the date of entry into force of these Rules, have a valid type approval on the basis of the Rules on metrological requirements for speed measuring devices in road traffic (Official Gazette of the Republic of Slovenia [Uradni List RS] Nos 25/02 and 90/05) or the Rules on metrological requirements for speed measuring devices in road traffic (Official Gazette of the Republic of Slovenia [Ur adni List RS] No 91/15) may be placed on the market and initial verification under these Rules until the expiry of the type approval, provided that they meet the requirements of these Rules relating to the initial verification.

Article 24

(submitting to regular and extraordinary verification)

Speed measuring devices in use on the date of entry into force of these Rules and having a valid initial verification or regular verification on the basis of the Rules on metrological requirements for speed measuring devices in road traffic (Official Gazette of the Republic of Slovenia [Uradni List RS] Nos 25/02 and 90/05) or the Rules on metrological requirements for speed measuring devices in road traffic (Official Gazette of the Republic of Slovenia [Ur adni List RS] No 91/15) may be submitted to regular or extraordinary verification on the basis of these Rules, provided that they meet the requirements of these Rules relating to regular verification.

Article 25

(entry into force)

These Rules enter into force on the fifteenth day after their publication in the Official Gazette of the Republic of Slovenia.

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Matjaž Han

Minister of the Economy, Tourism and Sport