II

(Non-legislative acts)

REGULATIONS

COMMISSION DELEGATED REGULATION (EU) 2021/1958

of 23 June 2021

supplementing Regulation (EU) 2019/2144 of the European Parliament and of the Council by laying down detailed rules concerning the specific test procedures and technical requirements for the type-approval of motor vehicles with regard to their intelligent speed assistance systems and for the type-approval of those systems as separate technical units and amending Annex II to that Regulation

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, amending Regulation (EU) 2018/858 of the European Parliament and of the Council and repealing Regulations (EC) No 78/2009, (EC) No 79/2009 and (EC) No 661/2009 of the European Parliament and of the Council and Commission Regulations (EC) No 631/2009, (EU) No 406/2010, (EU) No 672/2010, (EU) No 1003/2010, (EU) No 1005/2010, (EU) No 1008/2010, (EU) No 1009/2010, (EU) No 19/2011, (EU) No 109/2011, (EU) No 458/2011, (EU) No 65/2012, (EU) No 130/2012, (EU) No 347/2012, (EU) No 351/2012, (EU) No 1230/2012 and (EU) 2015/166 ([1]), and in particular Article 4(6) and Article 6(6) thereof,

Whereas:

(1) Article 6 of Regulation (EU) 2019/2144 requires motor vehicles of categories M and N to be equipped with certain advanced vehicle systems, including intelligent speed assistance ('ISA') systems. Annex II to Regulation (EU) 2019/2144 lays down basic requirements for the type-approval of motor vehicles with regard to the ISA systems.

(2) Detailed rules are necessary concerning the specific test procedures and technical requirements for the type-approval of motor vehicles with regard to ISA systems as well as for the type-approval of those systems as separate technical units.

(3) In accordance with Article 3, point (3), of Regulation (EU) 2019/2144 the ISA system is a system to aid the driver in maintaining the appropriate speed for the road environment by providing dedicated and appropriate feedback. Currently there are several technical options for the feedback methodology to be used as a basis for an ISA system. However, not all of those options can be used in each motor vehicle due to their technical characteristics. It is therefore, necessary to specify feedback methodologies that are comparably safe and effective despite their functional differences. It is appropriate to specify several feedback methodologies and allow the manufacturers to choose any of those methodologies to base their ISA systems on.

([1]) OJ L 325, 16.12.2019, p. 1.

(4) The ISA system may rely on various input methods, such as camera observation, map data and machine learning, however, the actual presence of real-world explicit numerical speed limit signs, should always take precedence over any other in-vehicle available information.

(5) For testing the technical capabilities of the ISA system, it is necessary to establish a catalogue of road signs used in each Member State. The set of data in the catalogue should serve type-approval purposes without prejudice to the applicable national traffic rules.

(6) The ISA systems may be faced with ambiguous speed related information due to missing, vandalised, manipulated or otherwise damaged signs, erroneous sign placement, inclement weather conditions or non-harmonised, complicated and implicit speed restrictions. For this reason, the underlying principle should be that the driver is always responsible for adhering to the relevant traffic rules and that the ISA system is a best-effort driver assistance system to alert the driver, whenever possible and appropriate.

(7) The specific test procedures and technical requirements for the ISA systems should be to the greatest extent technology neutral and performance-based to allow innovative solutions.

(8) The specific test procedures and technical requirements for the ISA systems should also ensure that a system does not exceed the capability of an average human driver of interpreting and understanding the pertinent speed limit information. ISA systems should not be required to have self-driving levels of capability, but only provide assistance to drivers.

(9) The assessment of the effectiveness of the different feedback methodologies and control functions of the ISA systems in real-drive conditions will only be possible once a significant number of motor vehicles equipped with such systems are available on the market. On other hand, it is essential that an assessment of the performance of ISA systems based on different feedback methodologies in accordance with this Regulation is carried out without delay, and no later than 31 December 2025, in order to reap all the potential road safety benefits of the ISA systems. The relevant technologies and real-drive experience are expected to be available by July 2024, thus well in advance of the date for the overall review set out in Article 14 of Regulation (EU) 2019/2144. In order to enable the Commission to evaluate the performance of the feedback methodologies provided for by this Regulation as early as possible, it is necessary to require the manufacturers to provide the relevant information to the approval authority that granted the type-approval and to require the respective approval authorities to aggregate the information and provide it to the Commission.

(10) The real-world driving information, to be collected and provided for the assessment of the performance of ISA systems, should be generic and not linked to any individual motor vehicle or driver. Manufacturers may use any available means for gathering data such as for instance test vehicle fleet or voluntary arrangements directly with end users, following their explicit consent in accordance with Union data protection law ([2]). The Commission should support this process by providing, where necessary, guidelines on the modalities for data collection, its content, structure and means of submission.

(11) In order to minimise distracting or overloading drivers with false warnings caused by sub-optimal systems in the real-world, it is necessary to ensure that vehicle manufacturers employ appropriate technologies in the vehicle fleet and that manufacturers provide, where appropriate and necessary for a reasonable proportion of the vehicle's life-time, an unrestricted and easy access to system updates.

(12) ISA systems may use map data to ensure appropriate performance during real-world driving. However, there should be no obligation to require that the map data is of such detail and quality that turn-by-turn navigation is possible, given that it could also suffice to incorporate only coordinates of urban and non-urban areas, as well as for main expressways and motorways.

([2]) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

(13) Member States are encouraged to facilitate the better performance of ISA systems in real-world driving by ensuring the correct placement of explicit numerical speed limit signs on streets and roads and the clear identification with start and end signs of all speed zones, expressways and motorways. In certain cases, intersections and merging streets or roads are not clearly recognisable to drivers and thus challenging to interpret for ISA technologies. For this reason, placement of explicit numerical, implicit numerical or implicit non-numerical speed limit signs at such locations is necessary to ensure consistent performance of ISA systems installed in motor vehicles circulating in the Union.

(14) It is however clear that systems employing a combination of a camera system, Global Navigation Satellite System (GNSS) and up-to-date digital maps are considered the state of the art systems with the greatest real-world performance and reliability.

(15) The table in Annex II to Regulation (EU) 2019/2144 containing the list of requirements referred to in Article 4(5) and Article 5(3) of that Regulation does not contain any reference to regulatory acts as regards intelligent speed assistance systems. It is therefore necessary to add a reference to this Regulation in that Annex.

(16) Regulation (EU) 2019/2144 should therefore be amended accordingly.

(17) As Regulation (EU) 2019/2144 is to apply from 6 July 2022, this Regulation should apply from the same date.

(18) The provisions of this Regulation are closely linked, as they deal with rules concerning the specific test procedures and technical requirements for the type-approval of motor vehicles with regard to their intelligent speed assistance systems and for the type-approval of those systems as separate technical units. As a result of the rules laid down in this Regulation, it is necessary to add a reference to this Regulation in Annex II to Regulation (EU) 2019/2144. It is therefore appropriate to lay down those provisions in a single Delegated Regulation,

HAS ADOPTED THIS REGULATION:

Article 1

Test procedures and technical requirements for the type-approval of a vehicle with regard to the intelligent speed assistance systems

The type-approval of a vehicle with regard to the intelligent speed assistance systems shall be subject to the vehicle complying with the test procedures and technical requirements set out in Annex I.

Article 2

Test procedures and technical requirements for the type-approval of an intelligent speed assistance system as a separate technical unit

The type-approval of an intelligent speed assistance system as a separate technical unit shall be subject to the system complying with the test procedures and technical requirements set out in Annex I.

Article 3

Catalogue of road signs

The list of road speed limit signs used in each Member State, based upon which the type-approval authorities and technical services shall assess the performance of the intelligent speed assistance systems in accordance with this Regulation, is set out in Annex II.

Article 4

Information on the use of intelligent speed assistance systems

1. Vehicle manufacturers shall provide the approval authorities granting type-approvals pursuant to this Regulation with the following information:

(a) ratios of the time driven or the distances that are travelled with the intelligent speed assistance systems switched on and switched off;

(b) ratios of the time driven or the distances that are travelled with the perceived speed limits being observed and being overridden, respectively;

(c) the average time elapsed between the switch-on and the switch-off of the intelligent speed assistance system by the driver, when applicable;

The information referred to in subparagraph (a), shall be provided separately for the cascaded acoustic warning function, the cascaded vibrating warning function, the haptic feedback function and the speed control function.

2. The approval authorities shall aggregate the information received in accordance with paragraph 1 and provide it to the Commission on 7 July 2024 and at least every 6 months thereafter for a period of two years.

Article 5

Amendment to Regulation (EU) 2019/2144

Annex II to Regulation (EU) 2019/2144 is amended in accordance with Annex III to this Regulation.

Article 6

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 6 July 2022.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 23 June 2021.

For the Commission
The President
Ursula VON DER LEYEN

ANNEX I

Technical requirements and test procedures

1. Definitions

For the purposes of this Annex, the following definitions shall apply:

1.1. 'vehicle type with regard to the intelligent speed assistance system' means vehicles which do not differ in such essential respects as the characteristics and functionality of the speed limit determination system and its performance when operated on a public road located within the territory of the European Union as well as the feedback system used to aid the driver in maintaining the appropriate speed for the road environment;

1.2. 'type of intelligent speed assistance system' means a combination of specific hardware and overall software architecture which does not differ in such essential respects as the characteristics and functionality of the speed limit determination system and its performance when operated in up-to-date condition on a public road located within the territory of the European Union;

1.3. 'speed limit information function' means a function that is comprised of the speed limit determination system that determines the perceived speed limit, and a human machine interface that communicates the perceived speed limit to the driver;

1.4. 'speed limit warning function' means a function that alerts the driver that the speedometer speed is exceeding the perceived speed limit;

1.5. 'speed control function' means a function that attempts to limit the speedometer speed to a stable speed at or below the perceived speed limit;

1.6. 'perceived speed limit' means the applicable speed limit as obtained by the speed limit determination system;

1.7. 'speedometer speed' means the driving speed of the vehicle as displayed by its on-board speedometer;

1.8. 'applicable speed limit' means the maximum permitted legal driving speed for the road travelled, as applicable for the category of vehicle that the intelligent speed assistance system is fitted to;

1.9. 'catalogue of road signs' means the list of national and regional variants of road sign types and variable message sign types based upon which the intelligent speed assistance system obtains the perceived speed limit;

1.10. 'applicable road sign' means a sign contained in the catalogue of road signs for the category of vehicle to be approved and which is applicable to at least one lane of the vehicle's carriageway, including both non-electronic, conventional signs and variable message signs, but not including speed limit markings on road pavement;

1.11. 'explicit numerical speed limit sign' means an applicable road sign which shows a temporary or permanent numerical value;

1.12. 'speed limit determination system' means the specific hardware required to obtain the speed limit through the observation of road signs and signals, based on infrastructure signals or electronic map data, or both;

1.13. 'implicit speed limit sign' means an applicable road sign which does not show a numerical value (implicit non-numerical speed limit sign) or shows a strikethrough numerical value (implicit numerical speed limit sign);

1.14. 'national speed limit' means the default maximum permitted legal driving speed for the road type travelled in a given Member State, unless indicated otherwise, as applicable for the category of vehicle that the intelligent speed assistance system is fitted to.

2. General technical requirements

2.1. An intelligent speed assistance (ISA) system shall comprise a speed limit information function (SLIF) and either a speed limit warning function (SLWF) or a speed control function (SCF).

2.1.1. The ISA system of a vehicle shall comply with:

(a) ISA system requirements laid down in points 3.1., 3.2. and 3.3.;

(b) SLIF requirements laid down in point 3.4.; and

(c) either of the following requirements:

(i) SLWF requirements laid down in point 3.5.; or

(ii) SCF requirements laid down in point 3.6.

2.1.2. Where the motor vehicle is fitted with an ISA system type-approved as a separate technical unit (STU), the vehicle and its system shall comply with:

(a) ISA system requirements laid down in points 3.1., 3.2. and 3.3.;

(b) SLIF requirements laid down in point 3.4.1. and points 3.4.2.1.1. to 3.4.2.1.4.; and

(c) either of the following requirements:

(i) SLWF requirements laid down in point 3.5.; or

(ii) SCF requirements laid down in point 3.6.

2.1.3. Type-approval of an ISA system as STU shall be subject to the STU complying with the SLIF requirements laid down in point 3.4.2.

2.2. Subject to point 2.3., the ISA system shall be designed to avoid or minimise the error rate under real driving conditions.

2.3. ISA systems shall comply with the requirements when the vehicle is operated on a public road or street located within the territory of the European Union, as defined at the time of type-approval.

2.4. Privacy and data protection.

2.4.1. The ISA system shall comply with the requirements in the normal operation mode without the use of biometric information, including facial recognition, of any vehicle occupants.

2.4.2. Without prejudice to the provisions in Article 4 of this Regulation, the ISA system shall not continuously record nor retain or transmit any data related to specific incidents of exceeding the speed limit other than what is necessary for performance of the required ISA functionality or to comply with other Union acts regarding vehicle type-approval (e.g. event data recorder).

2.5. Where the ISA system is enabled with positioning capabilities, it shall be compatible at least with the positioning services provided by the Galileo and EGNOS systems. In addition, the ISA system may also be compatible with other satellite navigation systems.

3. Specific technical requirements

3.1. ISA failure warning.

3.1.1. A constant optical signal shall be provided when there is a failure in the ISA system that prevents the performance requirements of this Regulation of being met.

3.1.1.1. There shall not be an appreciable time interval between each ISA self-check, and subsequently there shall not be a delay in displaying the warning signal, in the case of an electrically detectable failure.

3.1.1.2. Upon detection of any non-electrical failure condition (e.g. sensor obscuration excluding temporary obscuration such as sun glare) a failure warning signal referred to in point 3.1.1 shall be activated.

3.1.1.3. The status of a failure that must activate the warning signal referred to in point 3.1.1, but which is not detected under static conditions, shall be retained upon detection of such a failure and continue to be displayed after each activation of the vehicle master control switch, as long as the failure or defect persists.

3.2. ISA control

3.2.1. It shall be possible for the driver to manually deactivate the ISA system, either fully (i.e. the SLIF and SLWF, or SLIF and SCF), or partially (i.e. the SLWF or SCF).

The manufacturer may provide the possibility for the driver to manually and partially deactivate the SLWF to do either of the following:

(a) provide an active visual warning function, but without audible or haptic warning; or

(b) terminate a single instance of the SLWF audible or haptic warning (e.g. mute button).

The conditions set out in points 3.2.1.1., 3.2.1.2. and 3.2.1.3. shall apply as appropriate.

3.2.1.1. The ISA system shall be automatically reinstated in normal operation mode upon each activation of the vehicle master control switch. Automatic reactivation of ISA system may be conditional upon the driver's door having been opened.

3.2.1.2. A constant optical signal shall inform the driver that the ISA system has been fully deactivated. An optical signal lasting at least 10 seconds or until manually cancelled shall inform the driver that the ISA system has been partially deactivated. The failure warning signal specified in point 3.1.1 may be used for this purpose.

3.2.1.3. Following manual deactivation of the ISA system, it shall be possible for the driver to re-activate the system with no more than the number of actions required to deactivate it.

3.2.2. Automatic deactivation of the ISA system is permitted in situations when automated systems control the speed of the vehicle, that is, those systems which perform the object and event detection and response dynamic driving subtask (e.g. automated lane keeping system (ALKS)). Such deactivation does not need to be signalled to the driver.

3.2.3. The vehicle manufacturer may provide for an automatic or manual vehicle speedometer calibration function to minimise the discrepancy between the speedometer speed and the true speed of the vehicle e.g. after tyre replacement, as long as it is ensured that the requirements of UN Regulation No 39 [1] are always complied with. In addition, the vehicle manufacturer may take into account a tolerance of up to 3,0 % as regards the perceived speed limits used to activate information and warnings.

[1] Regulation No 39 of the United Nations Economic Commission for Europe (UNECE) – Uniform provisions concerning the approval of vehicles with regard to the speedometer and odometer equipment including its installation.

3.2.4. The speedometer speed is considered equal to the perceived speed limit if the speedometer speed indication is within 1,0 km/h over the perceived speed limit.

3.2.5. In the case where the tolerances of the speedometer's measuring mechanism are minimal, the provisions in points 3.2.3. and 3.2.4. mean that the information referred to in point 3.4.1.2. and the warning referred to in point 3.5.1. may be triggered at an indicated speedometer speed and true speed of the vehicle that is slightly above the perceived speed limit.

3.3. Periodic roadworthiness test procedure

3.3.1. For the purpose of periodic roadworthiness tests, it shall be possible to verify the following features of the ISA system:

(a) Its correct operational status, by visible observation of the failure warning signal status following the activation of the vehicle master control switch and any bulb check. Where the failure warning signal is displayed in a common space (the area on which two or more information functions/symbols may be displayed, but not simultaneously), it must be checked first that the common space is functional prior to the failure warning signal status check;

(b) Its correct functionality and the software integrity, by the use of an electronic vehicle interface, such as the one laid down in point I.(14) of Annex III to Directive 2014/45/EU ([2]), where the technical characteristics of the vehicle allow for it and the necessary data is available. Manufacturers shall ensure to make available the technical information for the use of the electronic vehicle interface in accordance with Article 6 of Regulation (EU) 2019/621 ([3]).

3.3.2. At the time of type-approval, the means to protect against simple unauthorised modification of the operation of the ISA system and failure warning signal chosen by the manufacturer shall be confidentially outlined and this information shall be provided to the technical service. Alternatively, this protection requirement is fulfilled when a secondary means of checking the correct operational status of the ISA system is available.

3.3.3. If electronic data (e.g. map data) with relevance to its performance is used by the ISA system, it shall be possible to easily verify the version of the data.

3.4. SLIF technical requirements

3.4.1. SLIF display

3.4.1.1. The SLIF display shall be located in the direct field of view of the driver and be clearly identifiable and legible both day and night. Additional displays of similar information at other locations in the vehicle (e.g. on navigation screen, as projected information, etc.) are permitted and they shall not be subject to the requirements in this point.

3.4.1.2. In the absence of conditions leading to the deactivation of the system in accordance with points 3.2.1. and 3.2.2., the SLIF display shall display the perceived speed limit to the driver at least when the speedometer speed is more than the perceived speed limit, for speeds from 5 km/h or less.

3.4.1.2.1. The perceived speed limit shall be displayed in any of the following ways:

(a) on the speedometer in a manner that is clearly noticeable and distinguishable and which does not reduce the speedometer's legibility (e.g. optical mark);

([2]) Directive 2014/45/EU of the European Parliament and of the Council of 3 April 2014 on periodic roadworthiness tests for motor vehicles and their trailers and repealing Directive 2009/40/EC (OJ L 127, 29.4.2014, p. 51).

([3]) Commission Implementing Regulation (EU) 2019/621 of 17 April 2019 on the technical information necessary for roadworthiness testing of the items to be tested, on the use of the recommended test methods, and establishing detailed rules concerning the data format and the procedures for accessing the relevant technical information (OJ L 108, 23.4.2019, p. 5).

(b) as a numerical value, using a symbol resembling a model of speed limit road sign referred to in the Convention on Road Signs and Signals, of 8 November 1968; or

(c) text consisting of the value and the unit of measurement.

Display of additional sub-sign information is permitted in all cases.

3.4.1.3. When no perceived speed limit is available to the ISA system, due to one or more circumstances referred to in points 5.3.1., 5.3.2 and 5.3.3., a dedicated optical signal, making clear this particular situation, shall be provided to the driver with or without an assumed speed limit indication on the SLIF. The failure warning signal specified in point 3.1.1. shall not be used for the purpose. In case of an assumed speed limit indication on the SLIF, a question mark "?" shall be displayed prominently adjacent to the numerical value.

3.4.1.4. When the SLIF display displays the perceived speed limit, even when the speedometer speed is lower than the perceived speed limit (e.g. always on or on demand with activated ISA), the system shall also provide a subtle and not-annoying audible notification each time when the perceived speed limit changes. This feature may be user configurable (e.g. sound, volume, permanently switched off).

3.4.1.5. When the ISA system is deactivated, display of the perceived speed limit is permitted. No audible notifications as referred to in point 3.4.1.4. are required in such case.

3.4.2. Speed limit determination

3.4.2.1. Country of operation setting

3.4.2.1.1. If knowledge of the country of operation is a prerequisite for correct speed limit determination, the ISA system shall comply with either of the following conditions:

(a) the system is able to automatically detect the country-code and set it with or without user confirmation; or

(b) the system allows the driver to manually select the country-code.

If knowledge of the region of operation is a prerequisite for correct speed limit determination, the system may adopt the more common applicable speed limit throughout the various regions of that country, to the discretion of the manufacturer.

3.4.2.1.2. The ISA system shall retain the manually set or user confirmed country of operation, even after re-activation of the vehicle master control switch.

3.4.2.1.3. The manual setting procedure for the country of operation shall be intuitive and through a non-complex interface. In particular, it shall be easy to toggle between current and previous country of operation choices.

3.4.2.1.4. In case of the need for manual setting or user confirmation, the motor vehicle's user instructions (e.g. owner's manual, vehicle handbook) shall clearly specify that this procedure is required for correct operation of the ISA system.

3.4.2.1.5. Motor vehicles intended for local or regional operation (e.g. buses of Classes I and A) may have limited ISA system operational capabilities as regards knowledge of the country or region of operation. The user instructions of the motor vehicle shall clearly specify the limitations of the ISA system and provide information on how to obtain alternative country or regional parameters from the manufacturer if the place of operation of the motor vehicle changes. Until the introduction of a dedicated entry in the Certificate of Conformity, the text "ISA functionality is limited to country or region of operation" shall be added to the "remarks" in the Certificate of Conformity as to allow inclusion of this information in on-board vehicle registration papers.

3.4.2.2. Perceived speed limit determination through observation of explicit speed limit signs.

3.4.2.2.1. In the absence of conditions leading to the deactivation of the system in accordance with points 3.2.1. and 3.2.2., the SLIF shall be able, through direct visual observation of road signs or other effective methods, to recognise all explicit numerical speed limit signs where the associated applicable speed limit for the category of vehicle to be approved matches the numerical value shown on the sign, and determine the applicable speed limit at the latest 2,0 seconds after the manufacturer's declared reference point on the motor vehicle (also to be specified for STUs) passes the road sign. This requirement shall be met at least when the following conditions are satisfied:

(a) the signs meet conditions set out in point 3.4.2.2.2.; and

(b) the signs are encountered in the operational and environmental conditions referred to in point 3.4.2.2.3.

Compliance with the first paragraph shall be demonstrated in accordance with the relevant test procedures and documentation specified in point 4.1.

For vehicle driving speeds below 20 km/h, the applicable speed limit may be determined at the latest 10 m rearward of the manufacturer's declared reference point referred to in the first paragraph.

3.4.2.2.2. Road sign conditions at time of the assessment:

(a) of a design and size conforming to the applicable standards in the Member State concerned;

(b) positioned in a way conforming to the applicable standards in the Member State concerned;

(c) showing no significant damage (e.g. fading, reduced retro-reflectivity, bending, cracking, vandalism) that materially affects their visual properties; and

(d) not partially or fully covered (e.g. foliage, snow or dirt obscuring the sign, or deliberate invalidation during roadworks).

3.4.2.2.3. Operational and environmental conditions at time of the assessment:

(a) full operating speed range of the vehicle;

(b) with unobstructed view of the road sign for a continuous period of at least 1.0 seconds;

(c) in all illumination conditions without direct blinding sunlight and with passing beam head lamps illumination if appropriate, day or night; and

(d) in the absence of weather conditions affecting the visibility of road signs (e.g. fog, heavy rain, snow).

3.4.2.3. Perceived speed limit determination through observation of road signs and signals.

3.4.2.3.1. In the absence of conditions leading to the deactivation of the system in accordance with points 3.2.1. and 3.2.2., the SLIF shall be able, through observation of road signs and signals using all relevant ISA system inputs (e.g. camera, electronic map data), to determine the road speed limits associated with all applicable road signs included in the catalogue of road signs in Annex II, for the category of vehicle to be approved, at the latest 2,0 seconds after the reference point referred to in point 3.4.2.2.1. passes the road sign. This requirement shall be met at least when the following conditions are satisfied:

(a) signs meet the conditions set out in point 3.4.2.2.2.; and

(b) signs are encountered in the operational and environmental conditions referred to in point 3.4.2.2.3.

Compliance with the first paragraph shall be demonstrated in accordance with the relevant tests procedures referred to in point 4.2.

For vehicle driving speeds below 20 km/h, the applicable speed limit may be determined at the latest 10 m rearward of the reference point referred to in point 3.4.2.2.1.

3.4.2.3.2. The SLIF is not required to take into account special variable conditions influencing the national speed limit (i. e. conditions which require information going beyond the current country of operation and the current road type, e.g. trailer status, prevailing environmental conditions, time of day, time of year, driver age or experience, standing passengers, dangerous goods, oversized load) In the case that special variable conditions may be present and the system is not capable of taking them into account, the speed limit determination shall default to the assumed most common condition in typical normal operation.

3.4.2.4. It shall be clearly explained in the motor vehicle's user instructions that any ISA system indications and warnings are without prejudice to the actual speed limit applicable in a particular situation, the observation of which and compliance with remain ultimate responsibility of the driver.

3.4.2.5. Speed limit determination real-world driving reliability.

3.4.2.5.1. In the absence of conditions leading to the deactivation of the system according to points 3.2.1. and 3.2.2., the SLIF shall be able, through observation of road signs and signals, using all relevant system inputs, for example, camera input and electronic map data, where provided in-vehicle for this purpose, to reliably determine the applicability of the national speed limit and speed limits associated with all applicable road signs included in the catalogue of road signs in Annex II, for the category of vehicle to be approved. This requirement shall be met at least when the following conditions are satisfied:

(a) signs meet the conditions set out in point 3.4.2.2.2.; and

(b) signs are encountered in the operational and environmental conditions specified in point 3.4.2.2.3.

3.4.2.5.2. The requirement for reliable determination of the applicable speed limit is fulfilled if the distance-based performance requirement is met in real-world driving.

True positive distance ('TP_D'): the correct speed limit shall be determined for at least 90 % of the total distance and for at least 80 % of the distance driven on each of the three road types (urban roads and streets, non-urban roads, and motorways/expressways/dual carriageways) at least for applicable speed limits referred to in point 3.4.2.5.1. and where no special variable conditions referred to in point 3.4.2.3.2 apply.

Compliance shall be demonstrated in accordance with a real-world driving test as specified in point 4.3.

3.4.2.5.3. Before conducting the real-world driving test, the technical service, the type-approval authority and the vehicle or STU manufacturer shall agree on a route outline. The route outline shall comply with the following conditions:

(a) it is located on public roads within the territory of the European Union, excluding the outermost regions in accordance with Article 349 of the Treaty of the Functioning of the European Union (TFEU); and

(b) it is chosen with the intention to generate a passed or failed test by virtue of the technical performance of the ISA system and not by virtue of an extreme route choice.

3.4.2.5.4. To demonstrate system performance at Union level, the vehicle or STU manufacturer shall provide technical documentation that contains the following information:

(a) information on the basic design of the ISA system and a description of the speed limit determination system, including the sensors and, if applicable, electronic map data sources used; and

(b) description of due diligence activities performed to provide evidence that the requirements in point 3.4.2.5.1. are met for operation in all Member States, excluding the outermost regions in accordance with Article 349 of the Treaty of the Functioning of the European Union (TFEU).

The manufacturer shall carry out the following due diligence activities:

(a) identify challenging situations in Member State(s) for the relevant vehicle category and applicable speed limits, and perform the relevant analysis to demonstrate how requirements are met; and

(b) for a system that uses electronic map data, assess the acceptability level of the integrity and reliability of the electronic map data throughout the Union, ensuring that requirements are met.

The technical service shall assess the technical documentation provided to assess whether reasonable and adequate steps have been taken to ensure that the requirements in point 3.4.2.5.1. are met for correct operation of the ISA system in all Member States.

3.4.2.5.5. Life cycle performance

3.4.2.5.5.1. The vehicle manufacturer shall ensure that the reliability of speed limit determination as required in point 3.4.2.5.2. is maintained for at least 14 years after the date of manufacture of the vehicle. The same applies when an STU is fitted by the vehicle manufacturer.

3.4.2.5.5.2. If electronic data is used to achieve the required performance, it shall be easy to verify the version level information. The vehicle manufacturer shall provide frequent data updates to vehicle owners including, where necessary, changes required to respond to an update of the catalogue of road signs in Annex II. These data updates shall be made available to vehicle owners, at least on annual basis in case of map-based data, free of charge (except for the possible cost associated to e.g. common storage media, use of personal computer, operating system, private or mobile internet charges, travel costs to authorised dealer, repairer, distributor or independent repairer) until 7 years after the date of manufacture of the vehicle. Subsequent updates may be subject to the payment of a reasonable fee. The user instructions of the motor vehicle shall clearly specify that periodical updates are required to maintain performance and explain the available procedures to obtain and, if applicable, to perform these updates. Updates may be provided automatically, for instance over-the-air.

3.5. SLWF technical requirements

3.5.1. In the absence of conditions leading to the deactivation of the ISA system in accordance with points 3.2.1. and 3.2.2., if the perceived speed limit is known and the speedometer speed exceeds it, the SLWF shall warn the driver as specified in point 3.5.2., for speeds from 20 km/h or less.

3.5.2. The warning indication shall be provided by any of the following:

(a) a visual warning and a cascaded acoustic warning;

(b) a visual warning and a cascaded haptic warning; or

(c) a haptic warning alone.

At times when the driving speed of the vehicle, not fitted with SCF and without SCF-like characteristics, is actively controlled by a vehicle system where the driver is not expected to be touching the accelerator control (e.g. cruise control) the use of a haptic warning is not permitted. In this case the system shall attempt to reduce the driving speed to or below the perceived speed limit automatically, e.g. by disengaging or reducing engine power, or a visual warning and a cascaded acoustic warning shall be provided.

3.5.2.1. Visual warning and cascaded acoustic or visual warning and cascaded haptic warning.

3.5.2.1.1. The visual warning shall be noticeable and easily recognisable by the driver and be provided by flashing of the SLIF display or flashing of an additional optical signal adjacent to the SLIF display. It shall be provided within 1.5 seconds from when the speedometer speed exceeds the perceived speed limit and last until at least 5.0 seconds after the timeout of the cascaded acoustic or cascaded haptic warning or until the speedometer speed is less than or equal to the perceived speed limit when this occurs earlier.

3.5.2.1.2. The cascaded acoustic warning shall be noticeable by the driver, unique and easily recognisable and be provided by a continuous or intermittent sound signal or by vocal information. Where vocal information is employed, the vehicle manufacturer shall ensure that it is easily configurable by the driver to use any of the EU official languages. The acoustic warning may be varied to indicate the magnitude or time that the perceived speed limit has been exceeded for.

3.5.2.1.3. The cascaded haptic warning shall be noticeable by the driver and be provided directly or indirectly through the accelerator control when the driver maintains an application force as well as a driving speed that exceeds the perceived speed limit. This shall be achieved by any of the following:

(a) increasing the restoring force of the accelerator control; or

(b) vibrating the accelerator control.

3.5.2.1.4. The cascaded acoustic warning and cascaded haptic warning shall be provided, when any of the following conditions are met, for constant vehicle speeds:

(a) Speedometer speed ≥ 130 % perceived speed limit, for 3,0 seconds and longer;

(b) Speedometer speed ≥ 120 % perceived speed limit, for 4,0 seconds and longer;

(c) Speedometer speed ≥ 110 % perceived speed limit, for 5,0 seconds and longer;

(d) Speedometer speed > 100 % perceived speed limit, for 6,0 seconds and longer.

The system may be designed in such a way that it employs a linearly interpolated time between the respective speed and time values for points (a) and (d).

3.5.2.1.4.1. When the vehicle is accelerating, the manufacturer shall select the appropriate time for the conditions referred to in point 3.5.2.1.4., points (b), (c) or (d), or 3.0 seconds as well as any duration between these two values.

3.5.2.1.4.2. When the vehicle is decelerating and none of the conditions laid down in point 3.5.3. are met, the manufacturer shall select the appropriate time for the conditions referred to in point 3.5.2.1.4., points (a), (b) or (c), or 6.0 seconds as well as any duration between those two values.

3.5.2.1.5. The cascaded acoustic warning shall be provided until the speedometer speed is less than or equal to the perceived speed limit or for at least 3.0 seconds after initial activation of the cascaded acoustic warning. However, in no case shall the acoustic warning last more than 5.0 seconds, also in case of successive speed limit changes, in order to minimise driver annoyance.

3.5.2.1.6. The cascaded haptic warning shall be provided until the speedometer speed is less than or equal to the perceived speed limit or for at least 10 seconds after initial activation of the cascaded haptic warning. However, in no case shall the haptic warning last more than 12 seconds, also in case of successive speed limit changes, in order to minimise driver annoyance.

3.5.2.1.7. The cascaded acoustic or cascaded haptic warning shall be terminated immediately upon its acknowledgement by deliberate driver action (e.g. button press) if the manufacturer chooses to implement such functionality.

3.5.2.1.8. When the vehicle is decelerating due to one or more of the following events, the cascaded acoustic or cascaded haptic warning shall either not be provided or shall be terminated immediately:

(a) full release of the accelerator control, except in the case when the driving speed of the vehicle is actively controlled by a vehicle system and except in the case of brief deceleration as a result of gear selection;

(b) manual disengagement of vehicle system controlling the driving speed;

(c) activation of the service braking system; or

(d) activation of an endurance braking system.

3.5.2.2. Haptic warning alone

3.5.2.2.1. The haptic warning shall be noticeable by the driver and be provided directly or indirectly through the accelerator control when the driver maintains an application force as well as a driving speed that exceeds the perceived speed limit. This shall be achieved by increasing the restoring force of the accelerator control.

3.5.2.2.2. The haptic warning alone shall be provided within 1.5 seconds from when the speedometer speed exceeds the perceived speed limit and until the speedometer speed is less than or equal to the perceived speed limit or for at least 15 seconds after its initial activation. However, in no case shall the haptic warning last more than 20 seconds, also in case of successive speed limit changes, in order to minimise driver annoyance.

3.5.2.2.3. The haptic warning alone shall be terminated immediately upon its acknowledgement by driver deliberate action (e.g. button press) if the manufacturer chooses to implement such functionality.

3.5.3. After a warning has been terminated, the SLWF shall be prepared to provide a new warning in accordance with point 3.5.1. after one or more of the following conditions applied:

(a) the speedometer speed dropped below the perceived speed limit;

(b) reapplication of the accelerator control after the condition in point 3.5.2.1.8.(a) leading to the termination of warning;

(c) reengagement of vehicle system controlling driving speed after the condition in point 3.5.2.1.8.(b) leading to the termination of warning; or

(d) the perceived speed limit has changed to a lower value.

3.5.4. It is not permitted that a haptic warning system is combined with an acoustic warning function, even if provided on a voluntary basis, unless all requirements for cascaded acoustic warning are also met.

3.5.5. The vehicle may be equipped with a means to suspend the SLWF to allow for the presentation of more critical warnings (e.g. forward collision warning, lane-keeping assistance). The manufacturer shall demonstrate that all applicable warnings are presented to the driver appropriately.

3.5.6. The SLWF of vehicles of categories M_2, M_3, N_2 and N_3 that are equipped with a speed limitation device and tachograph, in accordance with Regulation (EU) No 165/2014 ([4]), shall be suspended from 9 km/h below the applicable speed limitation setting, and faster vehicle driving speeds, when the relevant perceived speed limit is not provided by means of an explicit speed limit sign, or electronic map data based on the presence of an explicit speed limit sign, that is appropriate for the vehicle category in question. The SLWF shall operate normally within that range in case of the presence of an explicit speed limit sign that is appropriate for the vehicle category in question. The SLWF shall also operate normally within that range when the expected system feedback in the catalogue of road signs in Annex II is to revert back to the previously applicable implicit speed limit and when this is lower than the previous one (e.g. end of motorway). The SLWF shall operate normally at speeds of 10 km/h below the applicable speed limitation setting, and slower vehicle driving speeds.

3.5.7. The SLWF warning function shall be demonstrated in accordance with the relevant test procedure specified in point 4.4.

([4]) Regulation (EU) No 165/2014 of the European Parliament and of the Council of 4 February 2014 on tachographs in road transport, repealing Council Regulation (EEC) No 3821/85 on recording equipment in road transport and amending Regulation (EC) No 561/2006 of the European Parliament and of the Council on the harmonisation of certain social legislation relating to road transport (OJ L 60, 28.2.2014, p. 1).

3.6. SCF technical requirements

3.6.1. In the absence of conditions leading to the manual or automatic deactivation of the ISA system as referred to in points 3.2.1. and 3.2.2., the SCF shall attempt to limit the speedometer speed to the perceived speed limit, for speeds from 20 km/h or less.

3.6.1.1. The SCF shall attempt to limit the speedometer speed to a stabilised speed by reducing the vehicle's propulsion power and driveline torque. The SCF shall not actuate the vehicle's service braking system except for vehicles of categories M_1 and N_1, where the vehicle's service braking system may be actuated. An endurance brake (e.g. retarder) may be incorporated only if it operates after the SCF has restricted the propulsion power to a minimum. The deceleration rate of the vehicle shall be ≤ 3,0 $m.s^{-2}$.

3.6.1.2. The SCF intervention shall start at the latest 1,5 seconds from when the speedometer speed exceeds the perceived speed limit.

3.6.1.3. When stable speed control has been achieved, the speedometer speed shall not vary by more than 4 % or 2 km/h, whichever is greater, in relation to the stabilised speed, and the rate of change of speedometer speed shall be ≤ 0,2 $m.s^{-2}$ when measured on a period of at least 0.1 seconds. The stabilised speed shall fall within the following range: (perceived speed limit − 5 km/h) ≤ stabilised speed ≤ perceived speed limit.

The manufacturer shall endeavour to stay as close to the perceived speed limit as possible, in order to minimise driver annoyance.

3.6.1.4. It shall be possible for the driver to override the SCF intervention by performing a positive action, for example by pressing the accelerator control harder or deeper. However, it shall not be permitted that this can be achieved only through accelerator control kick-down (i.e. full depression of accelerator control). When the driver has overridden the SCF, it shall be temporarily suspended and shall be re-initiated after any of the following events:

(a) the speedometer speed becomes equal to or lower than the perceived speed limit;

(b) full release of the accelerator control for more than 6.0 seconds;

(c) activation of an endurance braking system; or

(d) the perceived speed limit has changed to a lower value.

In case of re-initiation of the SCF following events referred to in first paragraph, points (b) and (c), the vehicle shall not slow down abruptly, but it shall be at a rate similar to the deceleration rate of the vehicle just before the re-initiation.

3.6.1.5. It is permitted that the driver can select a positive action setting that is more restrictive (e.g. kick-down necessary to override) on a voluntary basis.

3.6.1.6. It is permitted that the driver can engage a manual speed limitation function, provided that it does not automatically switch off the ISA system at the same time.

3.6.1.7. The SCF shall permit a normal use of the accelerator control for gear selection.

3.6.2. At times when the driving speed of the vehicle, fitted with SCF or with SCF-like characteristics, is actively controlled by a vehicle system where the driver is not expected to be touching the accelerator control (e.g. cruise control), and in the absence of conditions leading to the deactivation of the ISA system in accordance with points 3.2.1. and 3.2.2., the requirements of point 3.6.1. shall apply unless a SLWF consisting of a visual warning and a cascaded acoustic warning is activated instead.

3.6.3. The SCF of vehicles of categories M_2, M_3, N_2 and N_3 that are equipped with a speed limitation device and tachograph shall be suspended from 9 km/h below the applicable speed limitation setting, and faster vehicle driving speeds, when the relevant perceived speed limit is not provided by means of an explicit speed limit sign, or electronic map data based on the presence of an explicit speed limit sign, that is appropriate for the vehicle category in question. The SCF shall operate normally within that range in case of the presence of an explicit speed limit sign that is appropriate for the vehicle category in question. The SCF shall also operate normally within that range when the expected system feedback in the catalogue of road signs in Annex II is to revert back to the previously applicable implicit speed limit and when this is lower than the previous one (e.g. end of motorway). The SCF shall operate normally at speeds of 10 km/h below the applicable speed limitation setting, and slower vehicle driving speeds.

3.6.4. The SCF intervention shall be demonstrated in accordance with the relevant tests specified in point 4.5.

3.6.5. An ISA system comprising of SLIF and SLWF may additionally have SCF-like characteristics, as long as the override and positive action requirements laid down in point 3.6.1.4. are observed.

3.6.6. Where the SCF is combined with an acoustic warning function, all the requirements for cascaded acoustic warning provided in this Regulation shall be met.

4. Test procedures

4.1. SLIF test procedure: Perceived speed limit determination through observation of explicit speed limit signs test.

4.1.1. Subject vehicle conditions:

4.1.1.1. Test mass:

The vehicle mass shall be the mass in running order.

4.1.1.2. Tyres:

The tyres shall be bedded in and the tyre pressures shall be adjusted in accordance with the vehicle manufacturer's specifications.

4.1.1.3. Pre-test conditioning:

If requested by the manufacturer the subject vehicle may be driven a maximum of 100 km on a mixture of urban and rural roads with other traffic and roadside furniture to calibrate the sensor system, and the country or region of operation can be set (manually or automatically) to those of the test.

4.1.2. Road signs:

The objective of these tests is that for instance temporary signs placed at roadworks are duly recognised by the ISA system. This may be achieved by the use of an observation sensor, but also on the basis of real-time information shared by other vehicles.

The road signs used for the tests shall be explicit speed limit signs where the associated applicable speed limit for the category of vehicle to be approved matches the numerical value shown on the sign. These signs shall meet all conditions specified in point 3.4.2.2.2. The signs shall be positioned in a way to avoid multiple signs being in the system's field of view simultaneously.

A minimum of three different explicit speed limit signs, including non-electronic road signs and those displayed on a variable message sign, as used in the Member State(s) where testing takes place, shall be selected by the technical service for testing. The signs used for the tests shall be recorded in the test report. To test the perceived speed limit determination through direct or indirect visible observation, the position of the explicit speed limit signs used for testing shall not be included in the electronic map data of the vehicle at the

start of the test. The manufacturer shall demonstrate, through the use of documentation, compliance with all other explicit speed limit signs as included in the catalogue of road signs in Annex II, for the category of vehicle to be approved, where the associated applicable speed limit for the category of vehicle to be approved matches the numerical value shown on the sign. Any such documentation shall be appended to the test report dossier.

4.1.3. Testing conditions:

The tests shall be carried out as follows:

(a) on a flat surface which is free from uneven patches, standing water, snow and ice, and provides the driver an unobstructed view of the road sign for a continuous period of at least 1.0 seconds;

(b) in all illumination conditions without direct blinding sunlight and with passing beam head lamps switched on if appropriate; and

(c) in the absence of weather conditions affecting the visibility of signs.

At the manufacturer's discretion and with the agreement of the technical service the tests may be performed under conditions deviating from the conditions referred to in the first paragraph.

4.1.3.1. With agreement between the manufacturer and the technical service, the tests can be performed in either of the following locations:

(a) on a public road; or

(b) on a test track, provided the SLIF does not require electronic map data to function correctly, unless it is included in the electronic map data.

In both cases the environment may be such that other vehicles are being driven on the same test route as the subject vehicle, for instance to facilitate the availability of real-time data that can be used by other vehicles without a camera-based observation system. The relevant necessary conditions shall be specified in detail by the manufacturer and agreed by the technical service and type-approval authority prior to the tests taking place. This agreement shall be based on a positive assessment of the reasonability, practicability and authenticity of real-world application.

In both cases the different explicit speed limit signs shall be selected and placed by the technical service. All signs used for the tests on public roads shall differ from the ones that are normally present, or be temporarily modified ones, in order to assess the observational capacity, or equivalent, of the system. This test obligation is not waived in case of dispute with local authorities and the test shall then be carried out elsewhere.

4.1.4. Test procedure:

The subject vehicle shall be driven in a smooth manner so that its attitude is stable past the road sign selected for testing in the following conditions:

(a) a speedometer speed exceeding the speed indicated on explicit speed limit sign; and

(b) in the centre of the test lane.

By agreement between the manufacturer and the technical service the test track-based procedure described above can be replaced with a laboratory-based procedure that has been shown to be equivalent.

4.1.4.1. The technical requirements are fulfilled if the SLIF displays the perceived speed limit value that is equal to the speed limit shown on all explicit speed limit signs tested at the latest 2.0 seconds after the vehicle's reference point passes the relevant signs. For vehicle speeds slower than 20 km/h this shall be at the latest 10 m rearward of the vehicle's reference point.

4.1.4.2. This test shall not be combined with the real-world driving reliability test in point 4.3.

4.2. SLIF test procedure: Perceived speed limit determination through observation of implicit road signs and signals test procedure.

4.2.1. The subject vehicle conditions are those as specified in points 4.1.1. to 4.1.1.3.

4.2.2. Road signs:

The road signs used for the tests shall be implicit speed limit signs. These signs shall meet the conditions specified in point 3.4.2.2.2. The signs shall be positioned in a way to avoid multiple signs being in the system's field of vision simultaneously.

A minimum of three different implicit speed limit signs, including non-electronic road signs and those displayed on a variable message sign, as used in the Member State(s) where testing takes place, shall be selected by the technical service for testing. The signs used for the tests shall be recorded in the test report.

The manufacturer shall demonstrate, through the use of documentation, compliance with all other applicable implicit speed limit signs as included in the catalogue of road signs in Annex II, for the category of vehicle to be approved. Any such documentation shall be attached to the test report dossier.

4.2.3. Testing conditions:

The testing conditions set out in point 4.1.3. shall apply.

4.2.3.1. With agreement between the manufacturer and the technical service, the tests can be performed in either of the following locations:

(a) on a public road; or

(b) on a test track resembling a realistic road environment to allow the SLIF to determine the road type, provided the SLIF does not require electronic map data to function correctly, unless it is included in the data.

In both cases the environment may be such that other vehicles are being driven on the same test route as the subject vehicle, for instance to facilitate the availability of real-time data that can be used by other vehicles without a camera-based observation system. The relevant necessary conditions shall be specified in detail by the manufacturer and agreed by the technical service and type-approval authority prior to the tests taking place. This agreement shall be based on a positive assessment of the reasonability, practicability and authenticity of real-world application.

In both cases the different signs may be selected and placed by the technical service or may be existing signs, as requested by the manufacturer. Existing signs only shall be used where compliance is demonstrated by means of the real-world driving reliability test in accordance with points 4.2.4.2. and 4.3.

4.2.4. Test procedure:

Drive the subject vehicle in a smooth manner so that its attitude is stable past the road sign selected for testing in the following conditions:

(a) a speedometer speed:

(i) ≤ 20 % lower than the sign indicates for tests on a public road; and

(ii) ≥ 10 % greater than the sign indicates for tests on test track;

(b) in the centre of the test lane.

By agreement between the manufacturer and the technical service the test track or road-based procedure described above can be replaced with a laboratory-based procedure that has been shown to be equivalent.

4.2.4.1. The technical requirements are fulfilled if the SLIF determines the perceived speed limit value that is equal to the expected system feedback indicated in the catalogue of road signs in Annex II, or the applicable national speed limit associated with the implicit speed limit signs as tested, for the category of vehicle to be approved, and if the SLIF displays the perceived speed limit when the speedometer speed exceeds the perceived speed limit associated with those signs at the latest 2.0 seconds after the vehicle's reference point passes the relevant signs. For vehicle speeds below 20 km/h this shall be at the latest 10 m rearward of the vehicle's reference point.

4.2.4.2. This test may be combined with the real-world driving reliability test in point 4.3. In such case, the technical requirements are deemed to be fulfilled if the appropriate results from the real-world driving reliability test demonstrate that the implicit speed limit signs are acknowledged by the ISA system in conformity with point 3.4.2.5.2.

4.3. SLIF test procedure: Speed limit determination real-world driving reliability test.

4.3.1. The test drive shall comply with the conditions set out in points 4.3.1.1. to 4.3.1.5. The technical service may agree to accept in house test data for certain portions of the type-approval test.

4.3.1.1. The test drive shall be appropriate to measure the system's performance at correctly determining the applicable speed limit using the performance criteria specified in point 3.4.2.5.2.

4.3.1.2. The test drive shall involve driving on public roads and streets within the territory of the European Union, as agreed between the manufacturer, the technical service and the type-approval authority.

4.3.1.3. The test drive shall involve driving on urban roads and streets, non-urban roads, and motorways/expressways/dual carriageways, where each of the three road types shall represent at least 25 % of the total distance of the route. The route shall be one consecutive route with the same start and end point, where any repeated parts of the route in the same direction shall not count towards the test distance.

4.3.1.4. The test drive shall involve driving in daylight and darkness conditions, where darkness shall represent at least 15 % of the total distance.

4.3.1.5. The test drive shall consist of a test distance of 400 km. In agreement between the technical service and the manufacturer, the test may be terminated earlier if the test distance exceeds 300 km and the performance 'TP_D' varied between ± 5,0 % within the final 50 km of the route when calculated on a continuous basis.

4.3.2. Performance metric calculation:

The performance metric shall be calculated as:

TP_D = (d_correct/d_total) * 100 %

where:

d_total – total distance driven for test drive where the applicable speed limit was indicated by a road sign or signal as specified in point 3.4.2.5.1. or where the national speed limit applied;

d_correct – distance driven for test drive where the applicable speed limit was indicated by a road sign or signal as specified in point 3.4.2.5.1., and during which any of the following conditions (a), (b) or (c) were fulfilled:

(a) the perceived speed limit matched the expected system feedback indicated in the catalogue of road signs in Annex II;

(b) the perceived speed limit matched the applicable speed limit; or

(c) where special variable conditions in accordance with point 3.4.2.3.2. applied, the perceived speed limit matched the expected system feedback or the assumed most common condition; or where the national speed limit applied, and during which either (d) or (e) were fulfilled:

(d) the perceived speed limit matched the applicable national speed limit; or

(e) where special variable conditions in accordance with point 3.4.2.3.2. applied, the perceived speed limit matched the national speed limit for the assumed most common condition.

For the real-world driving assessment, it shall be checked that the SLIF adopts the relevant perceived speed limits at a reasonable distance before or after the point where such relevant applicable or national speed limit applies.

4.4. SLWF: Speed limit warning function test procedure.

4.4.1. The subject vehicle conditions are those as referred to in points 4.1.1. to 4.1.1.3.

4.4.2. The technical service shall select road signs for the test as referred to in point 4.1.2.

4.4.3. The testing conditions are those as specified in point 4.1.3.

4.4.4. Test procedures for ISA system options, as referred to in point 3.5.2.(a), (b) and (c).

4.4.4.1. For ISA systems with visual warning and a cascaded acoustic warning indication as referred to in point 3.5.2. (a) or with visual warning and a cascaded haptic warning indication as referred to in point 3.5.2.(b), the following tests shall be performed:

Test 1 (warnings test):

The technical service shall select a test speed limit. The initial speed limit shall be at least 38 % higher than the test speed limit. The perceived speed limit shall be set at the initial speed limit.

The subject vehicle shall be driven at a distance from the road edge such that the position of the sign meets applicable standards in the Member State concerned and with an activated SLWF using the accelerator control in a smooth manner so that its attitude is stable past a road sign indicating the test speed limit as follows:

(i) 1 % ≤ speedometer speed ≤ 8 % higher than the test speed limit;

(ii) 11 % ≤ speedometer speed ≤ 18 % higher than the test speed limit;

(iii) 21 % ≤ speedometer speed ≤ 28 % higher than the test speed limit; and

(iv) 31 % ≤ speedometer speed ≤ 38 % higher than the test speed limit.

The subject vehicle shall continue at a constant speed until the cascaded acoustic or cascaded haptic warning is observed and after which:

— the subject vehicle shall continue at the constant speed for at least a further 5.0 seconds and then slow down within 3.0 seconds to a speedometer speed ≤ test speed limit before 8.0 seconds have passed, for the visual warning and cascaded acoustic warning check; or

— the subject vehicle shall continue at the constant speed for at least a further 12 seconds and then slow down within 3.0 seconds to a speedometer speed ≤ test speed limit before 15 seconds have passed, for the visual warning and cascaded haptic warning check.

The subject vehicle shall repeat the test at the constant speed until the visual warning ends or for a maximum of 60 seconds. The relevant times shall be recorded in the test report.

Test 2 (deactivation (no warnings) test):

The ISA system shall be deactivated and Test 1 shall be repeated at a speedometer speed selected by the technical service. The perceived speed limit shall be set, or attempted to be set, at the test speed limit.

Test 3 (SLWF with driver aid control test):

In the case that the vehicle type may be equipped with a driver aid where the driver is not expected to be touching the accelerator control (e.g. cruise control), a test shall be performed with an activated SLWF and the driver aid controlling the speed of the vehicle for least one speedometer speed selected by the technical service.

4.4.4.2. For ISA systems with haptic warning alone as referred to in point 3.5.2.(c), the following tests shall be performed:

Test 1 (warnings test):

The technical service shall select a test speed limit. The initial speed limit shall be at least 38 % higher than the test speed limit. The perceived speed limit shall be set at the initial speed limit.

The subject vehicle shall be driven at a distance from the road edge such that the position of the sign meets applicable standards in the Member State concerned and with an activated SLWF using the accelerator control in a smooth manner so that its attitude is stable past a road sign indicating the test speed limit at a speedometer speed at least 1 % higher than the test speed limit as follows:

The subject vehicle shall continue at a constant speed until the haptic warning is observed and after which:

— the subject vehicle shall continue at the constant speed for a further 11 seconds and then slow down within 4 seconds to a speedometer speed ≤ test speed limit before 15 seconds have passed, for the haptic warning only check.

The subject vehicle shall repeat the test at the constant speed until the haptic warning ends or for a maximum of 60 seconds. The relevant times shall be recorded in the test report.

Test 2 (deactivation (no warnings) test):

The ISA system shall be deactivated and Test 1 shall be repeated at a speedometer speed selected by the technical service. The perceived speed limit shall be set, or attempted to be set, at the test speed limit.

Test 3 (SLWF with driver aid control test):

In the case that the vehicle type may be equipped with a driver aid where the driver is not expected to be touching the accelerator control (e.g. cruise control), the Test 1 procedure referred to in point 4.4.4.1. shall be performed with an activated SLWF and the driver aid controlling the test speeds of the vehicle.

4.4.4.3. For all tests under ISA system options referred to in point 3.5.2.(a), (b) and (c), by agreement between the manufacturer and the technical service, the test track-based procedures under points 4.4.4.1. and 4.4.4.2. can be replaced with laboratory-based procedures that have been shown to be equivalent.

4.4.4.4. The technical requirements for the ISA system are fulfilled if the following conditions are met:

4.4.4.4.1. For ISA systems referred to in points 3.5.2.(a), (b) and 4.4.4.1. (visual warning and cascaded acoustic or cascaded haptic warning):

Test 1: Warnings test assessment

A visual warning compliant with the requirements set out in point 3.5.2.1.1. is provided within 1.5 seconds plus the time or distance allowed for the perceived speed limit determination after passing the sign, and a cascaded acoustic or cascaded haptic warning compliant with the technical requirements set out in points 3.5.2.1.2. to 3.5.2.1.8. is present and noticeable as follows:

(i) for 1 % ≤ speedometer speed ≤ 8 % higher than the test speed limit: from not more than 6,0 seconds after passing the sign;

(ii) for 11 % ≤ speedometer speed ≤ 18 % higher than the test speed limit: from not more than 5,0 seconds after passing the sign;

(iii) For 21 % ≤ speedometer speed ≤ 28 % higher than the test speed limit: from not more than 4,0 seconds after passing the sign; and

(iv) For 31 % ≤ speedometer speed ≤ 38 % higher than the test speed limit: from not more than 3,0 seconds after passing the sign;

plus the time or distance allowed for the perceived speed limit determination after passing the relevant signs.

It shall be checked that the cascaded warnings start on time and do not exceed their maximum times as laid down in points 3.5.2.1.5 and 3.5.2.1.6. and it shall be checked that the visual warning is provided until the speedometer speed is less than or equal to the perceived speed limit as laid down in point 3.5.2.1.1.

When the tests are repeated at the constant speeds, it shall be checked that the visual warning lasts at least as long as specified in point 3.5.2.1.1.

Test 2: Deactivation (no warnings) test assessment):

No warnings (visual, haptic or acoustic) are presented.

Test 3: SLWF with driver aid control test assessment:

Visual and acoustic warnings are presented as for Test 1 or the system disengages or attempts to reduce the driving speed to the perceived speed limit automatically.

4.4.4.4.2. For ISA systems referred to in points 3.5.2.(c) and 4.4.4.2. (haptic warning alone):

Test 1: Warnings test assessment:

A haptic warning compliant with the requirements set out in point 3.5.2.2. is provided within 1.5 seconds plus the time or distance allowed for the perceived speed limit determination after passing the relevant sign.

Test 2: Deactivation (no warnings) test assessment:

No visual, haptic or acoustic warnings are presented.

Test 3: SLWF with driver aid control test assessment:

Visual and acoustic warnings are presented as for ISA system option referred to in point 3.5.2.(a) Test 1 warnings test assessment in point 4.4.4.4.1., or the system disengages or attempts to reduce the driving speed to the perceived speed limit automatically.

4.5. SCF tests

4.5.1. Subject vehicle conditions

4.5.1.1 The subject vehicle conditions are those as specified in points 4.1.1. to 4.1.1.3.

4.5.1.2 The gearbox type, tyre size and gear selection for the tests shall be based on a worst-case selection for the type to be approved, in agreement with the technical service.

4.5.1.3 The settings of the drivetrain of the test vehicle shall conform to the specifications of the manufacturer.

4.5.2 The tests shall be performed on a test track or on a chassis dynamometer.

4.5.2.1 Test track conditions

4.5.2.1.1 The test track surface shall be suitable to enable a stabilised speed to be maintained and shall be free from uneven patches, standing water, snow and ice. Gradients shall be ≤ 2 % and shall not vary by more than ± 1 % excluding camber effects.

4.5.2.1.2 The mean wind speed measured at a height at least 1 m above the ground shall be less than 6 m/s with gusts not exceeding 10 m/s.

4.5.2.1.3 At the manufacturer's discretion and with the agreement of the technical service the tests may be performed under conditions deviating from what is described above, provided that they are worst-case.

4.5.2.2 Chassis dynamometer specifications

4.5.2.2.1 The equivalent inertia of the vehicle mass shall be reproduced on the chassis dynamometer with an accuracy of ± 10 %. The time shall be measured with an accuracy of ≤ 0.1 seconds.

4.4.2.2.2 The power absorbed by the dynamometer brake during the test shall be set to correspond with the vehicle's resistance to progress at the tested speeds. This power may be established by calculation and shall be set to an accuracy of ± 10 %.

4.5.3 SCF test procedures

4.5.3.1 SCF acceleration test procedure

4.5.3.1.1. The test procedure specified in point 4.5.3.1.2. shall be repeated for the following speed limits:

(a) urban speed limit: Initial speedometer speed ≤ 20 km/h; test speed limit = 50 km/h;

(b) inter urban speed limit: Initial speedometer speed ≤ 50 km/h; test speed limit = 80 km/h;

(c) motorway speed limit: Initial speedometer speed ≤ 100 km/h; test speed limit = 130 km/h.

Only those tests where the test speed limit is lower than the vehicle's maximum design speed have to be performed.

4.5.3.1.2. The subject vehicle shall be driven with an activated SCF within the initial speedometer speed range. The perceived speed limit shall be set to the test speed limit. The vehicle shall then be accelerated, without applying a positive override action, until an SCF intervention is initiated. While the intervention remains active, the vehicle shall be driven long enough to allow an assessment of the stabilised speed.

During the test, the speedometer speed shall be continuously recorded. The stabilised speed shall be calculated by averaging the speedometer speed over a time interval of 20 seconds beginning 10 seconds after the speedometer speed first reached the perceived speed limit minus 10 km/h.

4.5.3.1.3. The technical requirements are fulfilled if the stabilised speeds lie within the following boundaries:

(a) urban speed limit: 45 km/h ≤ stabilised speed ≤ 50 km/h;

(b) inter urban speed limit: 75 km/h ≤ stabilised speed ≤ 80 km/h; and

(c) motorway speed limit: 125 km/h ≤ stabilised speed ≤ 130 km/h.

4.5.3.2. SCF response test procedure

4.5.3.2.1 The test procedure specified in point 4.5.3.2.2 shall be performed at the urban test speed limit of 50 km/h, with an initial speedometer speed between 70 km/h and 79 km/h and an initial speed limit of 80 km/h.

4.5.3.2.2. The subject vehicle shall be driven with an activated SCF at a constant speed within the initial speedometer speed range and the perceived speed limit shall be set to the initial speed limit so that no SCF intervention is active. The perceived speed limit shall then be set to the test speed limit and the vehicle shall continue to be driven at a constant speed within the initial speedometer speed range long enough to initiate an SCF intervention.

4.5.3.2.3. The technical requirements are fulfilled if an SCF intervention is initiated no later than 1.5 seconds after the vehicle's perceived speed limit was set to the test speed limit, taking into account the time or distance allowed for the perceived speed limit determination after passing the relevant road sign.

4.5.3.3. SCF deactivation test procedure

4.5.3.3.1. The test procedure specified in point 4.5.3.3.2. shall be performed at the urban speed limit with an initial speedometer speed ≤ 35 km/h and a test speed limit of 50 km/h.

4.5.3.3.2. The subject vehicle shall be driven with a deactivated SCF within the initial speedometer speed range. The perceived speed limit shall be set, or attempted to be set, to the test speed limit. The vehicle shall then be accelerated, without applying a positive override action, for well in excess of 1.5 seconds and subsequently kept at a relatively stable speed once the test speed limit has been exceeded by a significant margin.

4.5.3.3.3. The technical requirements are fulfilled if no SCF intervention is initiated and no visual, acoustic or haptic speed limit warning is issued.

4.5.3.4. SCF override test procedure

4.5.3.4.1. The test procedure specified in point 4.5.3.4.2. shall be performed at the urban test speed limit of 50 km/h, with an initial speedometer speed ≤ 35 km/h and the final speedometer speed ≥ 65 km/h.

4.5.3.4.2. The subject vehicle shall be driven with an activated SCF within the initial speedometer speed range. The perceived speed limit shall be set to the test speed limit. The vehicle shall then be accelerated, without applying a positive override action, until an SCF intervention is initiated. While the intervention is active, a positive override action as specified by the vehicle manufacturer shall be applied to accelerate the vehicle to the final speedometer speed range. The vehicle shall then be decelerated to a speedometer speed below the test speed limit and accelerated again, without applying a positive override action, until an SCF intervention is initiated.

4.5.3.4.3. The technical requirements are fulfilled if the following conditions are complied with:

(a) the SCF intervention is temporarily suspended when the positive override action is applied, so that the vehicle can be accelerated smoothly and not abruptly to the final speedometer speed; and

(b) an SCF intervention is initiated during the subsequent acceleration.

4.6. The test procedures of points 4.1., 4.2., 4.4. and 4.5 may be combined to demonstrate compliance with the requirements in a more efficient manner, with the agreement of the technical service.

5. Driving scenarios, provisions for limitations and ISA system performance

5.1. The observation sensor of the speed limit determination system that is used to assess real-world road signs (e.g. camera) shall not be required to observe more than the forward field of vision of the driver through the motor vehicle's front windscreen (or a reasonable alternative field as agreed between the vehicle manufacturer, technical service and type-approval authority when the vehicle is not fitted with a front windscreen), as determined using ambinocular vision, the eyes being at the driver's ocular points as defined in UN Regulation No 46 ([5]). Any visibility obstruction due to structure below the observation sensor (e.g.

([5]) Regulation No 46 of the United Nations Economic Commission for Europe (UNECE) – Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices.

bonnet) may be disregarded if this is located below a plane declining forward 4° below the horizontal, starting from the ocular points of the driver. The vehicle manufacturer may demonstrate compliance on the basis of documentation.

5.2. In order to improve the ISA system performance, the observation field of view may shift as a function of e.g. steering input, vehicle trajectory, use of direction indicators and/or anticipation by predictive systems.

5.3. For the purpose of calculating the true positive distance 'TP_D', the following applies to parts of the test route where the applicable speed limit is determined from passing events of road signs as included in the catalogue of road signs in Annex II, for the category of vehicle to be approved.

5.3.1. A sign passing event shall not be taken into account when the related sign is partly obstructed (e.g. tree leaves, parked vehicles) or clearly not positioned perpendicularly in relation to both the ground level and the road side or otherwise in an incorrect orientation (e.g. rotated), unless requested by the manufacturer.

5.3.2. Where the related sign is missing or positioned ambiguously in terms of location to an extent that a normal driver travelling on the relevant road section for the first time would be uncertain to whether or not it applies to that driver, as checked and agreed by the technical service for each instance, the sign passing event shall not be taken into account, unless requested by the manufacturer.

5.3.3. Where a sign or multiple signs are conveying ambiguous, additional, complementary or diverging information in terms of applicability to vehicle categories, technically permissible maximum laden mass, vehicle dimensions, time of day, weather conditions, adjacent lanes or direction of travel, as checked and agreed by the technical service for each instance, the sign passing event shall not be taken into account, unless requested by the manufacturer.

5.3.4. A particular false positive detection event may be omitted from the calculations, subject to the agreement by the technical service for each individual case, where a stationary non-applicable road sign was displayed in a very realistic or life-like manner.

5.3.5. When, within 12 months before the type-approval test, a change occurred in a Member State as regards the applicable speed limit or traffic rule linked to an implicit speed limit sign, or a new sign is introduced, as included in the catalogue of signs in Annex II at time of the type-approval test of the vehicle or STU, the sign passing event shall not be taken into account, unless requested by the manufacturer.

5.3.6. The distances, where any condition referred to in points 5.3.1. to 5.3.5. applies, shall not be taken into account for the performance metric calculation driven distances d_total and d_correct, as specified in point 4.3.2. However, although the above sign passing events shall not be taken into account, any correct perceived speed limit determination events and associated distance driven may be taken into account on the request of the manufacturer, on case-by-case basis, when the system outperforms these provisions, especially in the case where manufacturers employ a combination of an optical observation sensor + GNSS based location determination system + digital maps, being the preferred option with the greatest reliability.

5.4. The system shall retain the perceived speed limit or information in accordance with point 3.4.1.3., even after re-activation of the vehicle master control switch, unless the system can normally determine the perceived speed limit using relevant system inputs (e.g. electronic map data) when the motor vehicle enters or starts driving on a public road.

5.5. System logic and strategies

5.5.1. The manufacturer may design the intelligent speed assistance system to incorporate a logic or strategy anticipating a change of speed limit, taking into account other vehicles' movements, merging traffic lanes, crossing of road markings, traffic lights, intersections, speed bumps and pedestrian crossings.

5.5.2. In the case that the system relies on machine learning, or similar, this shall be duly taken into account when assessing the real-world driving reliability. The technical service shall in such case permit a pre-conditioning of the vehicle in accordance with the manufacturer's specifications that may be in excess of 100 km as laid down in point 4.1.1.3., as long as it is deemed reasonable. It shall however be prohibited that the preconditioning takes place on any part of the test drive route as determined and agreed in accordance with points 3.4.2.5.3. and 4.3.1.

5.6. For the purpose of conformity of production and market surveillance testing, the manufacturer, technical service and national authorities shall consider the most recent available system updates at the time of testing, when made available in accordance with point 3.4.2.5.5.2.

5.6.1. When, within 12 months before the test, an update of the catalogue of signs in Annex II reflected a change that occurred in a Member State as regards the applicable speed limit linked to a specific implicit speed limit sign that was included in the catalogue at time of the type-approval of the vehicle or STU, the sign passing event shall not be taken into account unless requested by the manufacturer.

5.6.2. Any expansion of the catalogue of signs in Annex II in terms of additional implicit signs that were not included at time of the type-approval of the vehicle or STU, shall not be taken into account for the purpose of conformity of production and market surveillance testing unless when requested by the manufacturer.

ANNEX II

Catalogue of road signs – Part 1

EXPLANATORY NOTES

n/a not applicable

N National speed limit for appropriate road class (e.g. urban, non-urban, expressway, motorway)

V Variable message signs may display any of the explicit numerical speed limit signs, implicit numerical speed limit signs and implicit non-numerical speed limit signs included in the table of the respective country. However, the refresh rate of the signs shall be at least 1 000 Hz to ensure the image is captured correctly for the purpose of adequate ISA system processing.

S suspended as per points 3.5.6. or 3.6.3. in Annex I

All signs indicating the entry and exit of city limits in each country share common and easily recognisable key identification characteristics, but may vary in shape and size, and may feature city and town names indicated across those signs. The ISA system shall be capable of dealing with those elements.

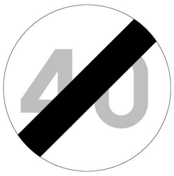
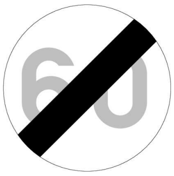
The ISA system, fitted in motor vehicles of category M2<3,5t, shall adopt the expected feedback for vehicle category M1, unless otherwise noted in the table.

1. **BELGIUM**

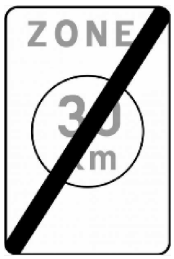
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C43	30	30	30	30	30	30
	C43	30	30	30	30	30	30
	C43	40	40	40	40	40	40
	C43	50	50	50	50	50	50
	C43	50	50	50	50	50	50

	C43	60	60	60	60	60	60
	C43	70	70	70	70	70 ≤ 7,5t	70
						70 > 7,5t	
	Note: the formal speed limit of 70 km/h shall be used on motorways as the perceived speed limit for N2>7,5t and N3.					70 > 7,5t	70
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for N2>7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.					60 > 7,5t	60
	C43	80	80	80	80	80 ≤ 7,5t	80
						80 > 7,5t	
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2, M3, N2 and N3.		80	80		80	80
	Note: the formal speed limit of 70 km/h may be used as the perceived speed limit for category N2≤7,5t if the ISA system is capable of determining the region of operation and the type of road.					70 ≤ 7,5t	
	Note: the formal speed limits of 60, 70 and 75 km/h may be used as the perceived speed limit for categories N2>7,5t, N3 and M2, M3 if the ISA system is capable of determining the region of operation and the type of road.		70 or 75	70 or 75		60 or 70 > 7,5t	60 or 70

	C43	90	90	90	90	S ≤ 7,5t	S
						S > 7,5t	
	Note: the formal speed limit of 90 km/h shall be used on motorways as the perceived speed limit for M2 and M3, as well as N2 and N3 (i.e. letter S).		90	90		S	S
	Note: the formal speed limit of 70 km/h may be used as the perceived speed limit for category N2≤7,5t if the ISA system is capable of determining the region of operation and the type of road.					70 ≤ 7,5t	
	Note: the formal speed limits of 60, 70 and 75 km/h may be used as the perceived speed limit for categories N2>7,5t, N3 and M2, M3 respectively if the ISA system is capable of determining the region of operation and the type of road.		70 or 75	70 or 75		60 or 70 > 7,5t	60 or 70
	C43	100	S	S	100	S	S
	Note: the formal speed limit of 90 km/h may be used for categories M2 and M3 as the perceived speed limit if the ISA system is capable of determining the type of road (with two lanes or more in each direction with a barrier).		90	90			
	C43	110	S	S	110	S	S
	C43	120	S	S	120	S	S

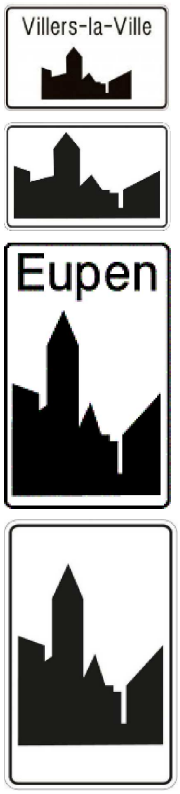
Implicit numerical speed limit signs							
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N

	C45	N	N	N	N	N	N
	C45	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
		N	N	N	N	N	N
Numerical Zones							
	F4a	30	30	30	30	30	30
	F4b	N	N	N	N	N	N
		30	30	30	30	30	30
	F4b	N	N	N	N	N	N

	F4a	30	30	30	30	30	30
	F4b	N	N	N	N	N	N
	ZC43	50	50	50	50	50	50
	ZC45	N	N	N	N	N	N
	ZC43	50	50	50	50	50	50
	ZC45	N	N	N	N	N	N

	ZC43	70	70	70	70	70 ≤ 7,5t	70
						70 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for category N2 > 7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.					60 > 7,5t	60
	ZC45	N	N	N	N	N	N
	ZC43	70	70	70	70	70	70
						70 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for category N2 > 7,5t and N3 if the ISA system is capable of determining the region of operation and the type of the road.					60 > 7,5t	60
	ZC45	N	N	N	N	N	N

Traffic-reduced area							
	F12a	20	20	20	20	20	20
	F12b	N	N	N	N	N	N
	F113a	30	30	30	30	30	30
	F113b	N	N	N	N	N	N
		30	30	30	30	30	30
		N	N	N	N	N	N
Motorway							
	F5 (motorway)	120	S	S	120	S	S

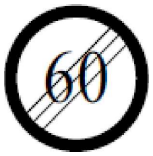
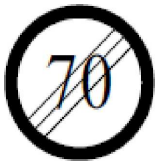
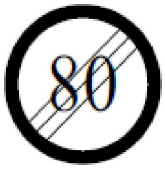
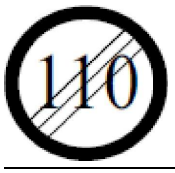
	F7 (motorway ends)	N	N	N	N	N	N
Expressway							
None							
City limits							
	F1 (urban area)	50	50	50	50	50	50
	Note: the formal speed limit of 30 km/h may be used as the perceived speed limit if the ISA system is capable of determining the region of operation.	30	30	30	30	30	30
	F3 (urban area ends) *Note:* this is an implicit speed limit sign and the national speed limit for the non-urban and expressway road classes	90	90	90	90	S (90)	S (90)

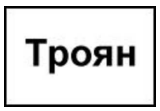
							
	Note: the formal speed limit of 70 and 75 km/h may be used as the perceived speed limit if the ISA system is capable of determining the region of operation.	70	70 or 75	70 or 75	70	70	70
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories N2>7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.					60 > 7,5t	60

2. **BULGARIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	Explicit limit 20 km/h start	20	20	20	20	20	20
	Explicit limit 30 km/h start	30	30	30	30	30	30
	Explicit limit 40 km/h start	40	40	40	40	40	40
	Explicit limit 50 km/h start	50	50	50	50	50	50

	Explicit limit 60 km/h start	60	60	60	60	60	60
	Explicit limit 70 km/h start	70	70	70	70	70	70
	Explicit limit 80 km/h start	80	80	80	80	80	80
	Explicit limit 90 km/h start	90	90	90	90	S	S
	Explicit limit 100 km/h start	100	S	S	100	S	S
	Explicit limit 110 km/h start	110	S	S	110	S	S
	Explicit limit 120 km/h start	120	S	S	120	S	S
	Explicit limit 130 km/h start	130	S	S	130	S	S
Implicit numerical speed limit signs							
	Explicit limit 20 km/h end	N	N	N	N	N	N
	Explicit limit 30 km/h end	N	N	N	N	N	N

	Explicit limit 40 km/h end	N	N	N	N	N	N
	Explicit limit 50 km/h end	N	N	N	N	N	N
	Explicit limit 60 km/h end	N	N	N	N	N	N
	Explicit limit 70 km/h end	N	N	N	N	N	N
	Explicit limit 80 km/h end	N	N	N	N	N	N
	Explicit limit 90 km/h end	N	N	N	N	N	N
	Explicit limit 100 km/h end	N	N	N	N	N	N
	Explicit limit 110 km/h end	N	N	N	N	N	N
	Explicit limit 120 km/h end	N	N	N	N	N	N
	Explicit limit 130 km/h end	N	N	N	N	N	N

Implicit non-numerical speed limit signs							
	End of all restrictions	N	N	N	N	N	N
Numerical Zones							
None							
Traffic-reduced area							
	Residential zone start	20	20	20	20	20	20
	Residential zone end	N	N	N	N	N	N
Motorway							
	Motorway start	140	S	S	140	S	S
	Motorway end	N	N	N	N	N	N
Expressway							
	Expressway start	120	S	S	120	S	S
	Expressway end	N	N	N	N	N	N
City limits							
	City entry	50	50	50	50	50	50

	City exit	90	80	80	90	80	80

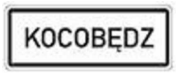
3. **CZECHIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	default	20	20	20	20	20	20
	default	30	30	30	30	30	30
	default	40	40	40	40	40	40
	default	50	50	50	50	50	50
	default	60	60	60	60	60	60
	default	70	70	70	70	70	70
	B20a	80	80	80	80	80	80
	default	90	90	90	90	80	80

	default	100	S	S	100	80	80
	default	110	S	S	110	80	80
	default	120	S	S	120	80	80
	default	130	S	S	130	80	80
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N

	B20b	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	B26	N	N	N	N	N	N
Numerical Zones							
	IZ 8a	30	30	30	30	30	30
	IZ 8b	N	N	N	N	N	N
Traffic-reduced area							
	IZ 5a	20	20	20	20	20	20

	IZ 5b	N	N	N	N	N	N
Motorway							
	IZ 1a	130	S	S	130	80	80
	IZ 1b	N	N	N	N	N	N
	IP 14a (valid until 31st Dec. 2025)	130	S	S	130	80	80
	IP 14b (valid until 31st Dec. 2025)	N	N	N	N	N	N
Expressway							
	IZ 2a	110	S	S	110	80	80
	IZ 2b	N	N	N	N	N	N
	IP 15a (valid until 31st Dec. 2025)	110	S	S	110	80	80

	IP 15b (valid until 31st Dec. 2025)	N	N	N	N	N	N
City limits							
	IS 12a	50	50	50	50	50	50
	IS 12b	90	90	90	90	80	80
	IS 12c Municipality in the language of a national minority	50	50	50	50	50	50
	IS 12d Municipality in the language of a national minority	90	90	90	90	80	80
	IS 12c Municipality in the language of a national minority	50	50	50	50	50	50
	IS 12d Municipality in the language of a national minority	90	90	90	90	80	80

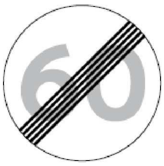
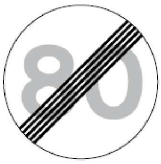
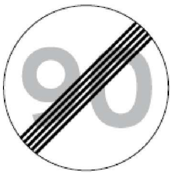
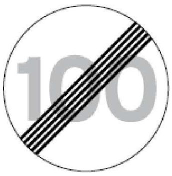
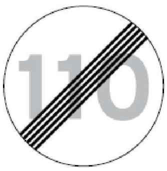
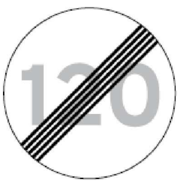
4. **DENMARK**

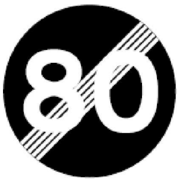
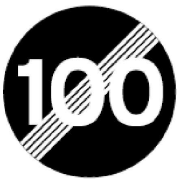
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C 55 Local speed limit Explicit	30	30	30	30	30	30
	C 55 Local speed limit Explicit	40	40	40	40	40	40
	C 55 Local speed limit Explicit	50	50	50	50	50	50

	C 55 Local speed limit Explicit	60	60	60	60	60	60
	C 55 Local speed limit Explicit	70	70	70	70	70	70
	C 55 Local speed limit Explicit	80	80	80	80	80	80
	C 55 Local speed limit Explicit	90	80	80	90	80	80
	C 55 Local speed limit Explicit	100	80	80	100	80	80
	C 55 Local speed limit Explicit	110	80	80	110	80	80
	C 55 Local speed limit Explicit	120	80	80	120	80	80
	UA 41 Speed indication Explicit	40	40	40	40	40	40
	UA 41 Speed indication Explicit	50	50	50	50	50	50

	UA 41 Speed indication Explicit	60	60	60	60	60	60
	E 41 Explicit speed indication for exit	40	40	40	40	40	40
	E 41 Explicit speed indication for exit	50	50	50	50	50	50
	E 41 Explicit speed indication for exit	60	60	60	60	60	60
	E 41 Explicit speed indication for exit	70	70	70	70	70	70
	E 41 Explicit speed indication for exit	80	80	80	80	80	80
	E 41 Explicit speed indication for exit	90	80	80	90	80	80
	C 55 Variable local speed limit Explicit	30	30	30	30	30	30
	C 55 Variable local speed limit Explicit	40	40	40	40	40	40
	C 55 Variable local speed limit Explicit	50	50	50	50	50	50

	C 55 Variable local speed limit Explicit	60	60	60	60	60	60
	C 55 Variable local speed limit Explicit	70	70	70	70	70	70
	C 55 Variable local speed limit Explicit	80	80	80	80	80	80
	C 55 Variable local speed limit Explicit	90	80	80	90	80	80
	C 55 Variable local speed limit Explicit	100	80	80	100	80	80
	C 55 Variable local speed limit Explicit	110	80	80	110	80	80
	C 55 Variable local speed limit Explicit	120	80	80	120	120	120
Implicit numerical speed limit signs							
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N

	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N

	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
	C 56 End of Variable Local speed limit Explicit	N	N	N	N	N	N
	C 56 End of variable local speed limit Explicit	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	C 59 End of prohibitions	N	N	N	N	N	N

Numerical Zones							
	E 53 Area with speed reduction zone Explicit	20	20	20	20	20	20
	E 54 End of area with speed reduction zone Explicit	N	N	N	N	N	N
	E 53 Area with speed reduction zone Explicit	30	30	30	30	30	30
	E 54 End of area with speed reduction zone Explicit	N	N	N	N	N	N
	E 53 Area with speed reduction zone Explicit	40	40	40	40	40	40
	E 54 End of area with speed reduction zone Explicit	N	N	N	N	N	N
	E 53 Area with speed reduction zone Explicit	45	45	45	45	45	45
	E 54 End of area with speed reduction zone Explicit	N	N	N	N	N	N

	E 68.4 Zone with local speed limit Explicit	30	30	30	30	30	30
	E 69.4 End of a zone with local speed limit Explicit	N	N	N	N	N	N
	E 68.4 Zone with local speed limit Explicit	40	40	40	40	40	40
	E 69.4 End of a zone with local speed limit Explicit	N	N	N	N	N	N
	E 68.4 Zone with local speed limit Explicit	50	50	50	50	50	50
	E 69.4 End of a zone with local speed limit Explicit	N	N	N	N	N	N
Traffic-reduced area							
	E 51 Residential area (living and play area) zone Implicit	15	15	15	15	15	15
	E 52 End of a residential area (living and play area) zone Implicit	N	N	N	N	N	N

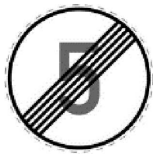
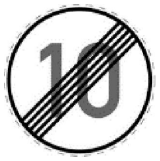
	E 49 Pedestrian street zone Implicit	15	15	15	15	15	15
	E 50 End of Pedestrian street zone Implicit	N	N	N	N	N	N
	E 47 Bicycle street zone Implicit	30	30	30	30	30	30
	E 48 End of bicycle street zone Implicit	N	N	N	N	N	N
Motorway							
	E 42 Motorway Implicit *Note:* This is an implicit speed limit sign indicating the applicability of the national speed limit valid for the motorway road class	130	80	80	130	80	80
	E 44 End of motorway Implicit	N	N	N	N	N	N
Expressway							
	E 43 Road for motor vehicles Implicit *Note:* This is an implicit speed limit sign indicating the applicability of the national speed limit valid for the expressway road class	80	80	80	80	80	80
	E 45 End of road for motor vehicles Implicit	N	N	N	N	N	N

City limits							
	E 55 Built-up area Implicit *Note:* This is an implicit speed limit sign indicating the applicability of the national speed limit valid for the urban road class	50	50	50	50	50	50
	E 56 End of a built-up area *Note:* This is an implicit speed limit sign indicating the applicability of the national speed limit valid for the non-urban road class	80	80	80	80	80	80

5. **GERMANY**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	274-5	5	5	5	5	5	5
	274-10	10	10	10	10	10	10
	274-20	20	20	20	20	20	20
	274-30	30	30	30	30	30	30
	274-40	40	40	40	40	40	40
	274-50	50	50	50	50	50	50

	274-60	60	60	60	60	60	60
	274-70	70	70	70	70	70 ≤ 7,5t	70
						70 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2, M3, N2>7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.		60	60		60 > 7,5t	60
	274-80	80	80	80	80	80 ≤ 7,5t	80
						80 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2, M3, N2>7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.		60	60		60 > 7,5t	60
	274-90	90	90	90	90	80 ≤ 7,5t	80
						80 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2, M3, N2>7,5t and N3 if the ISA system is capable of determining the region of operation and the type of road.		60	60		60 > 7,5t	60

	274-100	100	S	S	100	80 ≤ 7,5t	80
						80 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2, M3, N2>7,5t and N3 if the ISA system is capable of determining the region of operation.		60	60		60 > 7,5t	60
	274-110 *Note:* this sign only available on motorway	110	S	S	110	80	80
	274-120 *Note:* this sign only available on motorway	120	S	S	120	80	80
	274-130 *Note:* this sign only available on motorway	130	S	S	130	80	80
Implicit numerical speed limit signs							
	278-5	N	N	N	N	N	N
	278-10	N	N	N	N	N	N
	278-20	N	N	N	N	N	N
	278-30	N	N	N	N	N	N

	278-40	N	N	N	N	N	N
	278-50	N	N	N	N	N	N
	278-60	N	N	N	N	N	N
	278-70	N	N	N	N	N	N
	278-80	N	N	N	N	N	N
	278-90	N	N	N	N	N	N
	278-100	N	N	N	N	N	N
	278-110	N	N	N	N	N	N
	278-120	N	N	N	N	N	N
	278-130	N	N	N	N	N	N

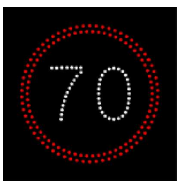
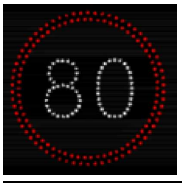
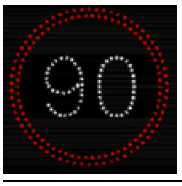
Implicit non-numerical speed limit signs							
	282	N	N	N	N	N	N
Numerical Zones							
	274.1-20	20	20	20	20	20	20
	274.2-20	N	N	N	N	N	N
	274.1	30	30	30	30	30	30
	274.2	N	N	N	N	N	N
Traffic-reduced area							
	325.1 *Note:* the formal speed limit 'walking speed' is not quantified	5	5	5	5	5	5
	325.2	N	N	N	N	N	N
	244.1	30	30	30	30	30	30
	244.2	N	N	N	N	N	N
	244.3	30	30	30	30	30	30

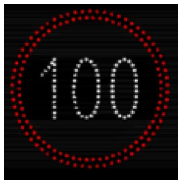
	244.4	N	N	N	N	N	N
Motorway							
	330.1	n/a	S	S	n/a	80	80
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2 and M3 if the ISA system is capable of determining that there are standing passengers in the bus		60	60			
	330.2	N	N	N	N	N	N
Expressway							
	331.1 *Note:* This is not an implicit speed limit sign						
	331.2 *Note:* This is not an implicit speed limit sign						
City limits							
	310	50	50	50	50	50	50
	311	100	80	80	100	80 ≤ 7,5t	60
						60 > 7,5t	
	Note: the formal speed limit of 60 km/h may be used as the perceived speed limit for categories M2 and M3 if the ISA system is capable of determining that there are standing passengers in the bus		60	60			

Catalogue of road signs – Part 2

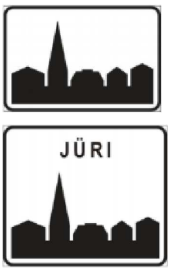
6. **ESTONIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	351	20	20	20	20	20	20
	351	30	30	30	30	30	30
	351	40	40	40	40	40	40
	351	50	50	50	50	50	50
	351	60	60	60	60	60	60
	351	70	70	70	70	70	70
	351	80	80	80	80	80	80
	351	90	90	90	90	S	S
	351	100	S	S	100	S	S

	351	110	S	S	110	S	S
	351	120	S	S	120	S	S
	351m	30	30	30	30	30	30
	351m	40	40	40	40	40	40
	351m	50	50	50	50	50	50
	351m	60	60	60	60	60	60
	351m	70	70	70	70	70	70
	351m	80	80	80	80	80	80
	351m	90	90	90	90	S	S

	351m	100	S	S	100	S	S
	351m	110	S	S	110	S	S
	351m	120	S	S	120	S	S
Implicit numerical speed limit signs							
	371	N	N	N	N	N	N
	371	N	N	N	N	N	N
	371	N	N	N	N	N	N
	371	N	N	N	N	N	N
	371	N	N	N	N	N	N
	371	N	N	N	N	N	N

Implicit non-numerical speed limit signs							
	376	N	N	N	N	N	N
Numerical Zones							
	381	20	20	20	20	20	20
	391	N	N	N	N	N	N
	381	30	30	30	30	30	30
	391	N	N	N	N	N	N
	381	40	40	40	40	40	40

	391	N	N	N	N	N	N
Traffic-reduced area							
	573	20	20	20	20	20	20
	574	N	N	N	N	N	N
Motorway							
	511 *Note:* This is not an implicit speed limit sign						
	512 *Note:* This is not an implicit speed limit sign						
Expressway							
None							
City limits							
	571	50	50	50	50	50	50
	572	90	90	90	90	S (90)	S (90)

7. **IRELAND**

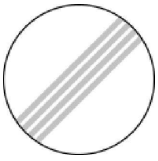
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	RUS 044	30	30	30	30	30	30
	RUS 064	40	40	40	40	40	40
	RUS 043	50	50	50	50	50	50
	RUS 042	60	60	60	60	60	60
	RUS 041	80	80 Class III, B	80 Class III, B	80	80	80
			65 Class I, II and A	65 Class I, II and A			
	RUS 040	100	80 Class III, B	80 Class III, B	100	80	80
			65 Class I, II and A	65 Class I, II and A			

	RUS 039	120	S Class III, B	S Class III, B	120	S	S
			65 Class I, II and A	65 Class I, II and A			
		V	V	V	V	V	V
		V	V	V	V	V	V
		V	V	V	V	V	V
Implicit numerical speed limit signs							
None							
Implicit non-numerical speed limit signs							
None							
Numerical Zones							
None							
Traffic-reduced area							
None							
Motorway							
	*Note:* This is not an implicit speed limit sign						

	*Note:* This is not an implicit speed limit sign						
Expressway							
None							
City limits							
 	RUS 041A *Note:* rural (regional/local) speed limit. Only to be used in conjunction with slow supplementary plate P080	80	80 Class III, B	80 Class III, B	80	80	80
			65 Class I, II and A	65 Class I, II and A			

8. **GREECE**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	P-32	40	40	40	40	40	40
	P-32 This speed value reflects the max city speed limit.	50	50	50	50	50	50
		60	60	60	60	60	60

	P-32 This speed value reflects the max speed limit of any other road network	90	80	80	80	S	S
	P-32 This speed value reflects the max speed limit on a highway (not motorway)	110	S	S	90	S	S
	P-32 This speed value reflects the max motorway speed limit.	130	S	S	100	S	S
		V	V	V	V	V	V
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	P-37	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	P-36	N	N	N	N	N	N

Numerical Zones							
	P-60	50	50	50	50	50	50
	P-61	N	N	N	N	N	N
Traffic-reduced area							
	Π-92	20	20	20	20	20	20
	Π-92α	N	N	N	N	N	N
Motorway							
	Π-27	130	S	S	100	S	S
	Π-27α	N	N	N	N	N	N
Expressway							
	Π-26	110	90	90	110	80	80
	Π-26α	N	N	N	N	N	N
City limits							
	Π-17	50	50	50	50	50	50
	Π-18	90	80	80	90	80	80

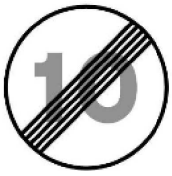
	П-58	50	50	50	50	50	50
	П-59	90	80	80	90	80	80

9. **SPAIN**

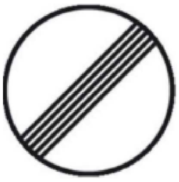
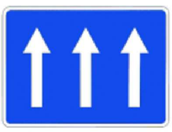
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	R-301-20	20	20	20	20	20	20
	R-301-30	30	30	30	30	30	30
	R-301-40	40	40	40	40	40	40
	R-301-50	50	50	50	50	50	50
	R-301-60	60	60	60	60	60	60
	R-301-70	70	70	70	70	70	70

	R-301-80	80	80	80	80	80	80
	R-301-90	90	90	80	80	80	80
	R-301-100	100	90	80	80	80	80
	R-301-110	110	S	90	90	S	S
	R-301-120	120	S	90	90	S	S
		V	V	V	V	V	V
		V	V	V	V	V	V
		V	V	V	V	V	V

Implicit numerical speed limit signs

	R-501-10	N	N	N	N	N	N

	R-501-20	N	N	N	N	N	N
	R-501-30	N	N	N	N	N	N
	R-501-40	N	N	N	N	N	N
	R-501-50	N	N	N	N	N	N
	R-501-60	N	N	N	N	N	N
	R-501-70	N	N	N	N	N	N
	R-501-80	N	N	N	N	N	N
	R-501-90	N	N	N	N	N	N
	R-501-100	N	N	N	N	N	N

	R-501-110	N	N	N	N	N	N
	R-501-120	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	R-500	N	N	N	N	N	N
		N	N	N	N	N	N
	Note: the formal speed limit of 30 km/h may be used in urban areas as the perceived speed limit if the ISA system is capable of determining the region of operation.	30	30	30	30	30	30
		N	N	N	N	N	N
	Note: the formal speed limit of 30 km/h may be used in urban areas as the perceived speed limit if the ISA system is capable of determining the region of operation.	30	30	30	30	30	30
		N	N	N	N	N	N
	Note: the formal speed limit of 30 km/h may be used in urban areas as the perceived speed limit if the ISA system is capable of determining the region of operation.	30	30	30	30	30	30

Numerical Zones							
	S-30	30	30	30	30	30	30
	S-31	N	N	N	N	N	N
Traffic-reduced area							
	S-28	20	20	20	20	20	20
	S-29	N	N	N	N	N	N
Motorway							
	S-1	120	S	S	90	S	S
	S-2	N	N	N	N	N	N
	S-1a	120	S	S	90	S	S

	S-2a	N	N	N	N	N	N
Expressway							
		120	S	S	90	S	S
		N	N	N	N	N	N
City limits							
	S-500	50	50	50	50	50	50
	S-501 *Note:* this is an implicit speed limit sign and the national speed limit for the non-urban and expressway road classes	90	90 Class III, B	90 Class III, B	80	80	80
			80 Class I, II and A	80 Class I, II and A			

10. **FRANCE**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	B14	30	30	30	30	30	30

	B14	50	50	50	50	50	50
	B14	70	70	70	70	70	70
	B14	80	80	80	80	80	80
	Note: the formal speed limit for category N3 of 60 km/h may be used as the perceived speed limit if the ISA system is capable of determining that a trailer is coupled.						60
	B14	90	90	90	90	S	80
	Note: the formal speed limit for category N2 of 80 km/h may be used as the perceived speed limit if the ISA system is capable of determining the region of operation. *Note:* the formal speed limit for category N3 of 60 km/h may be used as the perceived speed limit if the ISA system is capable of determining that a trailer is coupled.					80	60
	B14	110	S	S	110	S	S
	B14	130	S	S	130	S	S
	XB 14 Variable numerical signs	V	V	V	V	V	V

Implicit numerical speed limit signs							
	B33 End of speed limit	N	N	N	N	N	N
	B33	N	N	N	N	N	N
	B33	N	N	N	N	N	N
	B33	N	N	N	N	N	N
	B33	N	N	N	N	N	N
	XB 33 Variable numerical signs	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	B31 End of all previous speed limit restrictions on moving vehicles	N	N	N	N	N	N
Numerical Zones							
	B30	30	30	30	30	30	30
	B51 End of 30 Zone	N	N	N	N	N	N

Traffic-reduced area							
	B52	20	20	20	20	20	20
	B 53 End of zone	N	N	N	N	N	N
Motorway							
	C207	130	S	S	110	S	S
	C 208 End of motorway	N	N	N	N	N	N
Expressway							
	C 107	110	90	90	110	80	80
	C 108 End of expressway	N	N	N	N	N	N
City limits							
	EB 10 Entry urban area	50	50	50	50	50	50
	EB 20 Exit urban area	80	80	80	80	80 N2≤12t	80
						80 N2>12t	
	Note: the formal speed limit for categories N2>12t and N3 of 60 km/h may be used as the perceived speed limit if the ISA system is capable of determining that a trailer is coupled.					60 N2>12t	60

11. **CROATIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	B30 Speed limit	40	40	40	40	40	40
	B30 Speed limit	50	50	50	50	50	50
	B30 Speed limit	60	60	60	60	60	60
	B30 Speed limit	70	70	70	70	70	70
	B30 Speed limit	80	80	80	80	80	80
	B30 Speed limit	90	90	90	90	S	S
	B30 Speed limit	100	S >3,5t	S	100	S	S
			100 ≤3,5t				

	B30 Speed limit	110	S >3,5t	S	110	S	S
			110 ≤3,5t				
	B30 Speed limit	120	S >3,5t	S	120	S	S
			120 ≤3,5t				
	B30 Speed limit	130	S >3,5t	S	130	S	S
			130 ≤3,5t				

Implicit numerical speed limit signs

	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N

	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
	C11 End of speed limit	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	C11	N	N	N	N	N	N
Numerical Zones							
	C22	30	30	30	30	30	30
	C23	N	N	N	N	N	N

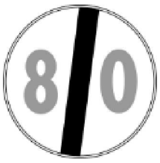
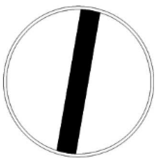
Traffic-reduced area							
	C28	20	20	20	20	20	20
	C29	N	N	N	N	N	N
Motorway							
	C64	130	S	S	130	S	S
	C65	N	N	N	N	N	N
Expressway							
	C66	110	80	80	110	S	S
	C67	N	N	N	N	N	N
City limits							
	C76	50	50	50	50	50	50
	C77	90	80	80	90	80	80

12. **ITALY**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	Figura II 50 Art. 116	20	20	20	20	20	20

	Figura II 50 Art. 116	30	30	30	30	30	30
	Figura II 50 Art. 116	40	40	40	40	40	40
	Figura II 50 Art. 116	50	50	50	50	50	50
	Figura II 50 Art. 116	60	60	60	60	60	60
	Figura II 50 Art. 116	70	70	70	70	70	70
	Figura II 50 Art. 116	80	80	80	80	80	70
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N3						80
	Figura II 50 Art. 116	90	90	90 ≤ 8t	90	80	70
				80 >8t			
	Note: the formal speed limit of 90 km/h shall be used on motorways as the perceived speed limit for N2 (i.e. letter S) *Note:* the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N3					S	80
	Figura II 50 Art. 116	100	S	100 ≤ 8t	100	80	70

				80 >8t			
	Note: the formal speed limit of 100 km/h shall be used on motorways as the perceived speed limit for M3 (i.e. letter S) *Note:* the formal speed limit of 90 km/h shall be used on motorways as the perceived speed limit for N2 (i.e. letter S) *Note:* the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N3			S		S	80
	Figura II 50 Art. 116	110	110	100 ≤ 8t	110	S	70
				80 >8t			
	Note: the formal speed limit of 100 km/h shall be used on motorways as the perceived speed limit for M3 (i.e. letter S) *Note:* the formal speed limit of 90 km/h shall be used on motorways as the perceived speed limit for N2 (i.e. letter S) *Note:* the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N3			S		S	80
	Figura II 50 Art. 116	120	S >3,5t	S	120	S	80
			100 ≤3,5t				
	Figura II 50 Art. 116	130	S >3,5t	S	130	S	80
			100 ≤3,5t				

Implicit numerical speed limit signs							
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
	Figura II 71 Art.119	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	Figura II 70 Art.119	N	N	N	N	N	N
Numerical Zones							
	Figura II 323/a Art.135	30	30	30	30	30	30
	Figura II 323/b Art.135	N	N	N	N	N	N

Traffic-reduced area							
	Figura II 318 Art. 135	30	30	30	30	30	30
	Figura II 319 Art. 135	N	N	N	N	N	N
 	Figura II 320 Art. 135	10	10	10	10	10	10
	Figura II 321 Art. 135	N	N	N	N	N	N
Motorway							
	Figura II 345 Art. 135	130	S >3,5t	S	130	S	80
			100 ≤3,5t				
	Figura II 346 Art. 135	N	N	N	N	N	N
	Figura II 345 Art. 135	110	S >3,5t	S ≤ 8t	100	80	70

			100 ≤3,5t	80 >8t			
	Figura II 346 Art. 135	N	N	N	N	N	N
Expressway							
None							
City limits							
	Figura II 273 Art. 131 *Note:* formal speed limit of 70 km/h may be used as the perceived speed limit if the ISA system is capable of determining the region of operation.	50	50	50	50	50	50
	Figura II 273f Art. 131	90	90	90 ≤ 8t	90	80	70
				80 >8t			
	Figura II 274 Art. 131	90	90	90 ≤ 8t	90	80	70
				80 >8t			

13. **CYPRUS**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
		30	30	30	30	30	30
		40	40	40	40	40	40

		50	50	50	50	50	50
		65	65	65	65	65	65
		80	80	80	80	80	80
	Variable message sign for speed limit in tunnel	80	80	80	80	80	80
Implicit numerical speed limit signs							
	End of speed limit posted	N	N	N	N	N	N
	End of speed limit posted	N	N	N	N	N	N
	End of speed limit posted	N	N	N	N	N	N
	End of speed limit posted	N	N	N	N	N	N
	End of speed limit posted	N	N	N	N	N	N

Implicit non-numerical speed limit signs							
	End of all speed restrictions	N	N	N	N	N	N
Numerical zone							
	Start of Zone 20	20	20	20	20	20	20
	End of Zone 20	N	N	N	N	N	N
	Zone 30	30	30	30	30	30	30
	End of Zone 30	N	N	N	N	N	N
Traffic-reduced area							
	Start of shared space	30	30	30	30	30	30
	End of shared space	N	N	N	N	N	N

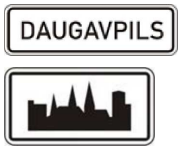
Motorway							
	Start of motorway	100	S	S	100	80	80
	End of motorway	N	N	N	N	N	N
Expressway							
	*Note:* this is not an implicit speed limit sign						
	*Note:* this is not an implicit speed limit sign						
City limits							
	Speed limit as posted (50 km/h)	50	50	50	50	50	50
	Speed limit as posted (65 km/h)	65	65	65	65	65	65
		80	80	80	80	64	64

14. **LATVIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	default	20	20	20	20	20	20
	default	30	30	30	30	30	30
	default	40	40	40	40	40	40
	Explicit limit 50 km/h start	50	50	50	50	50	50
	default	60	60	60	60	60	60
	default	70	70	70	70	70	70
	default	80	80	80	80	80	80
	default	90	90	90	90	S	S
	default	100	S	S	100	S	S

	Variable message signs	V	V	V	V	V	V
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	Explicit limit 50 km/h end	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N

Implicit non-numerical speed limit signs							
	End of all speed restrictions	N	N	N	N	N	N
Numerical Zones							
	Start of 30 km/h zone Explicit	30	30	30	30	30	30
	End of 30 km/h zone Explicit	N	N	N	N	N	N
	Start of 50 km/h zone Explicit	50	50	50	50	50	50
	End of 50 km/h zone Explicit	N	N	N	N	N	N
Traffic-reduced area							
	Start of residential zone	20	20	20	20	20	20
	End of residential zone	N	N	N	N	N	N
Motorway							
None							
Expressway							
	Expressway start From 1 March to 1 December	90	90	90	90	S	S

	Expressway start From 1 December to 1 March	110	S	S	110	S	S
	Expressway end	N	N	N	N	N	N
City limits							
	City entry	50	50	50	50	50	50
	City exit	90	90	90	90	80 >7,5t	80
						S (90) ≤7,5t	
	Note: the formal speed limit of 80 km/h may be used on unpaved or gravel roads as the perceived speed limit if the ISA system is capable of determining the region of operation. *Note:* the formal speed limit of 80 km/h may be used as the perceived speed limit if the ISA system is capable of determining that a trailer is coupled.	80	80	80	80	80 ≤7,5t	

15. **LITHUANIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	329	50	50	50	50	50	50

	329	70	70	70	70	70	70
	329	90	90	90	90	S	S
	329	120	S	S	120	S	S
	329	130	S	S	130	S	S
		V	V	V	V	V	V
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	330	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N

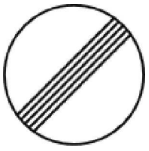
	336	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	336 End of all restrictions	N	N	N	N	N	N
Numerical Zones							
	542	40	40	40	40	40	40
	545	N	N	N	N	N	N
Traffic-reduced area							
	552	20	20	20	20	20	20
	553	N	N	N	N	N	N
Motorway							
	501 From 1 April to 1 November	130	S	S	130	S	S
	501 From 1 November to 1 April	110	S	S	110	S	S
	502	N	N	N	N	N	N

Expressway							
	555 From 1 April to 1 November	120	90	90	120	S	S
	555 From 1 November to 1 April	110	90	90	110	S	S
	556	N	N	N	N	N	N
City limits							
	550	50	50	50	50	50	50
	551	90	90	90	90	S (90)	S (90)
	Note: the formal speed limit of 70 km/h may be used on unpaved or gravel roads as the perceived speed limit if the ISA system is capable of determining the region of operation.	70	70	70	70	70	70

16. **LUXEMBOURG**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C,14	20	20	20	20	20	20

	C,14	50	50	50	50	50	50
	C,14	70	70	70	70	70	70
	C,14 maximum speed in tunnels	90	90	90	90	S	S
	C,14 (and maximum speed on motorways during rainfall, snow, etc.)	110	S ≤7,5t	S ≤7,5t	110	S	S
			90 >7,5t	90 >7,5t			
	C,14	130	S ≤7,5t	S ≤7,5t	130	S	S
			90 >7,5t	90 >7,5t			
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	C,17b Explicit speed limit end	N	N	N	N	N	N
	default	N	N	N	N	N	N

	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	C,17a End of all restrictions	N	N	N	N	N	N
Numerical Zones							
	H,1	30	30	30	30	30	30
	H,2	N	N	N	N	N	N
Traffic-reduced area							
	E,25a	20	20	20	20	20	20
	E,25b	N	N	N	N	N	N
	E,26a	20	20	20	20	20	20
	E,26b	N	N	N	N	N	N

	E,18a	30	30	30	30	30	30
	E,18b	N	N	N	N	N	N
Motorway							
	E,15	130	90	90	130	S	S
	E,16	N	N	N	N	N	N
Expressway							
	E,17	90	90 ≤7,5t	90 ≤7,5t	90	90 ≤7,5t	90 ≤7,5t
			75 >7,5t	75 >7,5t		75 >7,5t	75 >7,5t

		N	N	N	N	N	N
City limits							
	E,9a	50	50	50	50	50	50
	E,9b	90	75	75	90	75	75

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17. **HUNGARY**

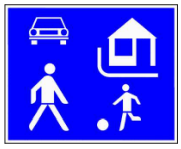
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	30. ábra	5	5	5	5	5	5
	30. ábra	10	10	10	10	10	10
	30. ábra	20	20	20	20	20	20
	30. ábra	30	30	30	30	30	30
	30. ábra	40	40	40	40	40	40
	30. ábra	50	50	50	50	50	50
	30. ábra	60	60	60	60	60	60
	30. ábra	70	70	70	70	70	70

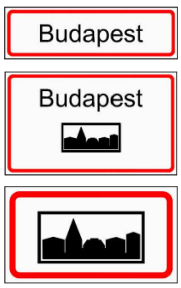
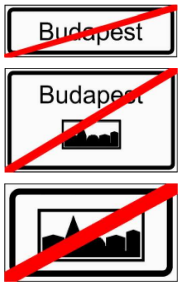
	30. ábra	80	80 ≤3,5t	70	80	70	70
			70 >3,5t				
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2>3,5t, M3, N2 and N3		80 >3,5t	80		80	80
	30. ábra	90	90 ≤ 3,5t	70	80	70	70
			70 >3,5t				
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2>3,5t, M3, N2 and N3		80 >3,5t	80		80	80
	30. ábra	100	100 ≤ 3,5t	70	100	70	70
			70 >3,5t				
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2>3,5t, M3, N2 and N3		80 >3,5t	80		80	80
	30. ábra	110	110 ≤ 3,5t	70	110	70	70
			70 >3,5t				
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2>3,5t, M3, N2 and N3		80 >3,5t	80		80	80

	30. ábra	120	120 ≤3,5t	80	120	80	80
			80 >3,5t				
	30. ábra	130	130 ≤3,5t	80	130	80	80
			80 >3,5t				
		V	V	V	V	V	V
Implicit numerical speed limit signs							
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N

	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
	56. ábra	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	59. ábra	N	N	N	N	N	N

	26. § (6) 84. ábra 97. ábra	N	N	N	N	N	N
	Note: the formal speed limit of 30 km/h may be used in urban areas as the perceived speed limit if the ISA system is capable of determining the region of operation.	30	30	30	30	30	30
Numerical Zones							
	53/a. ábra	20	20	20	20	20	20
	53/b. ábra	N	N	N	N	N	N
	53/a. ábra	30	30	30	30	30	30
	53/b. ábra	N	N	N	N	N	N
	53/a. ábra	40	40	40	40	40	40
	53/b. ábra	N	N	N	N	N	N
	53/a. ábra	50	50	50	50	50	50

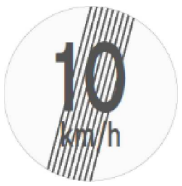
	53/b. ábra	N	N	N	N	N	N
	14. § (8) Speed limit on all road of the built-up area	40	40	40	40	40	40
Traffic-reduced area							
	122. ábra	20	20	20	20	20	20
	123. ábra	N	N	N	N	N	N
	26/j. ábra *Note:* the formal speed limit of 10 km/h may be used as the perceived speed limit if the ISA system is capable of processing speeds below 20 km/h	20	20	20	20	20	20
	26/k. ábra	N	N	N	N	N	N
	26/h. ábra *Note:* the formal speed limit of 10 km/h may be used as the perceived speed limit if the ISA system is capable of processing speeds below 20 km/h	20	20	20	20	20	20
	26/i. ábra	N	N	N	N	N	N
Motorway							
	1. ábra	130	80	80	130	80	80

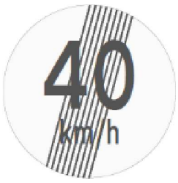
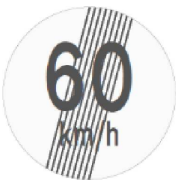
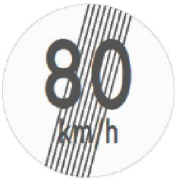
	2. ábra	N	N	N	N	N	N
Expressway							
	3. ábra	110	70	70	110	70	70
	4. ábra	N	N	N	N	N	N
City limits							
	131/a. ábra 131/b. ábra 131/c. ábra	50	50	50	50	50	50
	132/a. ábra 132/b. ábra 132/c. ábra	90	70	70	90	70	70

18. **MALTA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	Diagram No: 23.1a. Speed Limit	10	10	10	10	10	10

	Diagram No: 23.1b. Speed Limit	20	20	20	20	20	20
	Diagram No: 23.1c. Speed Limit	30	30	30	30	30	30
	Diagram No: 23.1d. Speed Limit	40	40	40	40	40	40
	Diagram No: 23.1e. Speed Limit	50	50	50	50	50	50
	Diagram No: 23.1f. Speed Limit	60	60	60	60	60	60
	Diagram No: 23.1g. Speed Limit	70	70	70	70	70	70
	Diagram No: 23.1h. Speed Limit	80	80	80	80	80	80
	Variable speed limit	10	10	10	10	10	10
	Variable speed limit	20	20	20	20	20	20

	Variable speed limit	30	30	30	30	30	30
	Variable speed limit	40	40	40	40	40	40
	Variable speed limit	50	50	50	50	50	50
	Variable speed limit	60	60	60	60	60	60
	Variable speed limit	70	70	70	70	70	70
	Variable speed limit	80	80	80	80	80	80
Implicit numerical speed limit signs							
	Diagram No: 23.2a. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2b. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2c. End of speed limit.	N	N	N	N	N	N

	Diagram No: 23.2d. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2e. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2f. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2f. End of speed limit.	N	N	N	N	N	N
	Diagram No: 23.2h. End of speed limit.	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	Diagram No: 23.3. National speed limit applies.	N	N	N	N	N	N
Numerical Zones							
None							
Traffic-reduced area							
None							
Motorway							
None							
Expressway							
None							
City limits							
None							

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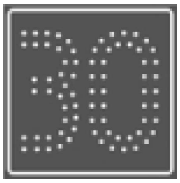
19. **NETHERLANDS**

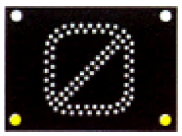
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	A01-015(new)	15	15	15	15	15	15
	A01-015(old)	15	15	15	15	15	15
	A01-020(new)	20	20	20	20	20	20
	A01-020(old)	20	20	20	20	20	20
	A01-030(new)	30	30	30	30	30	30
	A01-030(old)	30	30	30	30	30	30
	A01-050(new)	50	50	50	50	50	50
	A01-050(old)	50	50	50	50	50	50

	A01-060(new)	60	60	60	60	60	60
	A01-060(old)	60	60	60	60	60	60
	A01-70(new)	70	70	70	70	70	70
	A01-70(old)	70	70	70	70	70	70
	A01-080(new)	80	80	80	80	80	80
	A01-080(old)	80	80	80	80	80	80
	A01-090(new)	90	90	90	90	80	80
	A01-090(old)	90	90	90	90	80	80
	A01-100(new)	100	S	S	100	80	80

	A01-100(old)	100	S	S	100	80	80
	A01-100 with time restriction	130	S	S	130	80	80
	Note: the formal speed limit of 100 km/h may be used for M1 and N1 as the perceived speed limit if the ISA system is capable of determining the time of day and/or the region of operation.	100			100		
	A01-100/120 with time restriction	120	S	S	120	80	80
	Note: the formal speed limit of 100 km/h may be used for M1 and N1 as the perceived speed limit if the ISA system is capable of determining the time of day and/or the region of operation.	100			100		
	A01-120(new)	120	S	S	120	80	80
	A01-120(old)	120	S	S	120	80	80

	A01-120 with time restriction	130	S	S	130	80	80
	Note: the formal speed limit of 120 km/h may be used for M1 and N1 as the perceived speed limit if the ISA system is capable of determining the time of day and/or the region of operation.	120			120		
	A01-130(new)	130	S	S	130	80	80
	A01-130(old)	130	S	S	130	80	80
	A01-130 with time restriction	130	S	S	130	80	80
	A03-03	30	30	30	30	30	30
	A03-050	50	50	50	50	50	50
	A03-070	70	70	70	70	70	70
	A03-080	80	80	80	80	80	80

	A03-090	90	90	90	90	80	80
Implicit numerical speed limit signs							
	A02-015	N	N	N	N	N	N
	A02-030	N	N	N	N	N	N
	A02-050	N	N	N	N	N	N
	A02-060	N	N	N	N	N	N
	A02-070	N	N	N	N	N	N
	A02-080	N	N	N	N	N	N
	A02-090	N	N	N	N	N	N
	A02-100	N	N	N	N	N	N
	A02-120	N	N	N	N	N	N

Implicit non-numerical speed limit signs							
	F08	N	N	N	N	N	N
	ES03	N	N	N	N	N	N
Numerical Zones							
	A01-030zb	30	30	30	30	30	30
	A02-030ze Implicit sign, only used in urban area.	N	N	N	N	N	N
	A02-060zb	60	60	60	60	60	60
	A02-060ze Implicit speed limit sign depends on area.	N	N	N	N	N	N
Traffic-reduced area							
	G05	15	15	15	15	15	15
	G06 Implicit speed limit sign only in urban area	N	N	N	N	N	N
Motorway							
	G01	130	S	S	130	80	80

	G02 Implicit speed depends on area (urban = 50; extra urban = 80)	N	N	N	N	N	N
Expressway							
	G03	100	S	S	100	80	80
	G04 Implicit speed depends on area (urban = 50; extra urban = 80; motorway = 130)	N	N	N	N	N	N
City limits							
	H01a H01b H01c H01d Size depends on number of letters	50	50	50	50	50	50
	H02a H02b H02c H02d	80	80	80	80	80	80

20. **AUSTRIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	§52 10a	30	30	30	30	30	30
	§52 10a	40	40	40	40	40	40
	§52 10a	50	50	50	50	50	50
	§52 10a	60	60	60	60	60	60
	§52 10a	70	70	70	70	70	70
	§52 10a	80	80	80	80	70	70
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N2 and N3					80	80
	§52 10a	100	80	80	100	70	70

	Note: the formal speed limit of 100 km/h (letter S) shall be used on motorways as the perceived speed limit for M2 and M3 *Note:* the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N2 and N3		S	S		80	80
	§52 10a	110	S	S	110	80	80
	§52 10a	120	S	S	120	80	80
	§52 10a	130	S	S	130	80	80
Implicit numerical speed limit signs							
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N

	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
	§52 10b	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
		N	N	N	N	N	N
Numerical Zones							
	§52 11a	30	30	30	30	30	30
	§52 11b	N	N	N	N	N	N

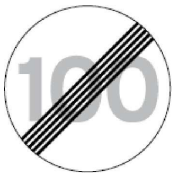
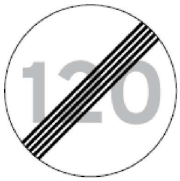
Traffic-reduced area							
	§52 9c	20	20	20	20	20	20
	§52 9d	N	N	N	N	N	N
	§ 53 Abs. 1 Z 9e	20	20	20	20	20	20
	§ 53 Abs. 1 Z 9f	N	N	N	N	N	N
	§ 53 Abs. 1 Z 9e	30	30	30	30	30	30
	§ 53 Abs. 1 Z 9f	N	N	N	N	N	N
	§ 53 Abs. 1 Z 26	30	30	30	30	30	30
	§ 53 Abs. 1 Z 29	N	N	N	N	N	N

Motorway							
	§53 8a	130	S	S	130	80	80
	§52 8b	N	N	N	N	N	N
Expressway							
	§53 8c	100	S	S	100	80	80
	§52 8d	N	N	N	N	N	N
City limits							
	§52 17a	50	50	50	50	50	50
	§52 17b	100	80	80	100	70	70
			70 Artic-ulated buses	70 Artic-ulated buses			

21. **POLAND**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	default	30	30	30	30	30	30
	default	40	40	40	40	40	40
	Explicit limit 50 km/h start	50	50	50	50	50	50
	default	60	60	60	60	60	60
	default	70	70	70	70	70	70
	default	80	70	70	80	70	70
	Note: the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for M2, M3, N2 and N3		80	80		80	80
	default	90	70	70	90	70	70
	Note: the formal speed limit of 90 km/h shall be used on motorways as the perceived speed limit for M2 and M3 *Note:* the formal speed limit of 80 km/h shall be used on motorways as the perceived speed limit for N2 and N3		90	90		80	80

	default	100	S	S	100	80	80
	default	110	S	S	110	80	80
	default	120	S	S	120	80	80
	default	130	S	S	130	80	80
Implicit numerical speed limit signs							
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	Explicit limit 50 km/h end	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N

	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
	default	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	End of all restrictions	N	N	N	N	N	N
Numerical Zones							
	Explicit zone 30 km/h start	30	30	30	30	30	30
	Explicit zone 30 km/h end	N	N	N	N	N	N
Traffic-reduced area							
	Residential zone start	20	20	20	20	20	20
	Residential zone end	N	N	N	N	N	N

Motorway							
	Motorway start	140	S	S	140	80	80
	Motorway end	N	N	N	N	N	N
Expressway							
	Expressway start	120	S	S	120	80	80
	Expressway end	N	N	N	N	N	N
City limits							
	City entry	50	50	50	50	50	50
	City exit	90	70	70	90	70	70

22. **PORTUGAL**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	default	30	30	30	30	30	30

	default	40	40	40	40	40	40
	default	50	50	50	50	50	50
	default	60	60	60	60	60	60
	default	70	70	70	70	70	70
	default	80	80	80	80	80	80
	R-301-100	100	90	80	80	80	80
	R-301-120	120	S	90	90	S	S
Implicit numerical speed limit signs							
	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N

	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N
	C20b	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	C20a	N	N	N	N	N	N
Numerical Zones							
	G4a Explicit zone 30 km/h start	30	30	30	30	30	30

	G10 Explicit zone 30 km/h end	N	N	N	N	N	N
	G4 Explicit zone 40 km/h start	40	40	40	40	40	40
	G8 Explicit zone 40 km/h end	N	N	N	N	N	N
Traffic-reduced area							
	Residential / co-existence zone start	20	20	20	20	20	20
	Residential / co-existence zone end	N	N	N	N	N	N
Motorway							
	H24	120	S	S	120	S	S
	H38	N	N	N	N	N	N

Expressway							
	H25	100	90	90	100	80	80
	H39	N	N	N	N	N	N
City limits							
	N1a N1b	50	50	50	50	50	50
	N2a N2b	90	80	80	90	80	80

23. **ROMANIA**

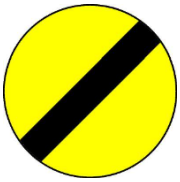
SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C29 Explicit limit 30 km/h start	30	30	30	30	30	30
	C29 Explicit limit 40 km/h start	40	40	40	40	40	40

	C29 Explicit limit 50 km/h start	50	50	50	50	50	50
	C29 Explicit limit 60 km/h start	60	60	60	60	60	60
	C29 Explicit limit 70 km/h start	70	70	70	70	70	70
	C29 Explicit limit 80 km/h start	80	80	80	80	80	80
	C29 Explicit limit 90 km/h start	90	90	90	90	S	S
	C29 Explicit limit 100 km/h start	100	S	S	100	S	S
	C29 Explicit limit 110 km/h start	110	S	S	110	S	S
	C29 Explicit limit 130 km/h start	130	S	S	130	S	S
	U16 Speed limit at 40 km/h in areas where work is carried out	40	40	40	40	40	40
	U16 Speed limit at 50 km/h in areas where work is carried out	50	50	50	50	50	50

	U16 Speed limit at 60 km/h in areas where work is carried out	60	60	60	60	60	60
	U16 Speed limit at 70 km/h in areas where work is carried out	70	70	70	70	70	70
	U16 Speed limit at 80 km/h in areas where work is carried out	80	80	80	80	80	80
	U16 Speed limit at 90 km/h in areas where work is carried out	90	90	90	90	S	S
	U16 Speed limit at 100 km/h in areas where work is carried out	100	S	S	100	S	S
	U16 Speed limit at 110 km/h in areas where work is carried out	110	S	S	110	S	S
	U16 Speed limit at 120 km/h in areas where work is carried out	120	S	S	120	S	S

Implicit numerical speed limit signs

	C36 Explicit limit 30 km/h end	N	N	N	N	N	N
	C36 Explicit limit 40 km/h end	N	N	N	N	N	N
	C36 Explicit limit 50 km/h end	N	N	N	N	N	N

	C36 Explicit limit 60 km/h end	N	N	N	N	N	N
	C36 Explicit limit 70 km/h end	N	N	N	N	N	N
	C36 Explicit limit 80 km/h end	N	N	N	N	N	N
	C36 Explicit limit 90 km/h end	N	N	N	N	N	N
	C36 Explicit limit 100 km/h end	N	N	N	N	N	N
	C36 Explicit limit 110 km/h end	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	C35 End of all restrictions	N	N	N	N	N	N
	U17 End of all restrictions in areas where work is carried out	N	N	N	N	N	N
Numerical Zones							
	Zone 30 km/h start	30	30	30	30	30	30

	Zone 30 km/h end	N	N	N	N	N	N
	G40 Explicit 30 km/h speed limit	30	30	30	30	30	30
	G41 Speed limit end	N	N	N	N	N	N
Traffic-reduced area							
	Residential / co-existence zone start	20	20	20	20	20	20
	Residential / co-existence zone end	N	N	N	N	N	N
Motorway							
		130	S	S	130	S	S
		N	N	N	N	N	N
Expressway							
None							

City limits							
		50	50	50	50	50	50
		100	90	90	100	S (90)	S (90)
	Note: the formal speed limits of 80 and 90 km/h may be used as the perceived speed limit if the ISA system is capable of determining the region of operation and the type of road.	90	80	80	90	80	80

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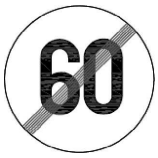
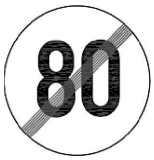
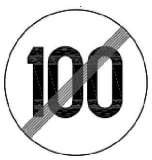
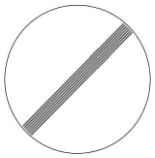
24. **SLOVENIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	2232-2	20	20	20	20	20	20
	2232-3	30	30	30	30	30	30
	2232-4	40	40	40	40	40	40
	2232-5	50	50	50	50	50	50
	2232-6	60	60	60	60	60	60
	2232-7	70	70	70	70	70	70
	2232-8	80	80	80	80	80	80
	2232-9	90	90	90	90	S	S
	2232-10	100	S	S	100	S	S

	2232-11	110	S	S	110	S	S
	2232	130	S	S	130	S	S
Implicit numerical speed limit signs							
	2233-2	N	N	N	N	N	N
	2233-3	N	N	N	N	N	N
	2233-4	N	N	N	N	N	N
	2233-5	N	N	N	N	N	N
	2233-6	N	N	N	N	N	N
	2233-7	N	N	N	N	N	N
	2233-8	N	N	N	N	N	N
	2233-9	N	N	N	N	N	N
	2233-10	N	N	N	N	N	N

	2233	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	2238	N	N	N	N	N	N
Numerical Zones							
	2421	30	30	30	30	30	30
	2422	N	N	N	N	N	N
Traffic-reduced area							
	2427	30	30	30	30	30	30
	2428	N	N	N	N	N	N
Motorway							
	2401	130	S	S	130	S	S
	2402	N	N	N	N	N	N
	2403	130	S	S	130	S	S

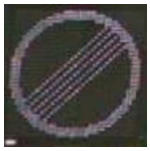
	2404	N	N	N	N	N	N
Expressway							
	2405	110	80	80	110	80	80
	2406	N	N	N	N	N	N
City limits							
	2434	50	50	50	50	50	50
	2435	90	80	80	90	80	80

25. **SLOVAKIA**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	253-20	20	20	20	20	20	20
	253-30	30	30	30	30	30	30
	253-40	40	40	40	40	40	40
	253-50	50	50	50	50	50	50

	253-60	60	60	60	60	60	60
	253-70	70	70	70	70	70	70
	253-80	80	80	80	80	80	80
	253-90	90	90	90	90	S	S
	253-100	100	S	S	100	S	S
	253-110	110	S	S	110	S	S
	253-120	120	S	S	120	S	S
	253-130	130	S	S	130	S	S
	253-140	140	S	S	140	S	S
	Variable traffic equipment for explicit limit start	V	V	V	V	V	V

	Variable traffic equipment for explicit limit start	V	V	V	V	V	V
Implicit numerical speed limit signs							
	253-20	N	N	N	N	N	N
	253-30	N	N	N	N	N	N
	263-40	N	N	N	N	N	N
	253-50	N	N	N	N	N	N
	253-60	N	N	N	N	N	N
	263-70	N	N	N	N	N	N
	253-80	N	N	N	N	N	N
	263-90	N	N	N	N	N	N
	263-100	N	N	N	N	N	N

	263-110	N	N	N	N	N	N
	263-120	N	N	N	N	N	N
	263-130	N	N	N	N	N	N
	263-140	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	267 End of all restrictions	N	N	N	N	N	N
	Variable traffic equipment for end of all restrictions	N	N	N	N	N	N
Numerical Zones							
	268-20 Explicit zone 20 km/h start	20	20	20	20	20	20
	269-20 Explicit zone 20 km/h end	N	N	N	N	N	N
	268-30 Explicit zone 30 km/h start	30	30	30	30	30	30
	Explicit zone 30 km/h start	30	30	30	30	30	30

	269-30 Explicit zone 30 km/h end	N	N	N	N	N	N
	Explicit zone 30 km/h end	N	N	N	N	N	N
Traffic-reduced area							
	315 Residential zone start	20	20	20	20	20	20
	316 Residential zone end	N	N	N	N	N	N
	Residential zone start	20	20	20	20	20	20
	Residential zone end	N	N	N	N	N	N
	319 School zone start	20	20	20	20	20	20
	320 School zone end	N	N	N	N	N	N
	School zone start	20	20	20	20	20	20
	School zone end	N	N	N	N	N	N

	317 Pedestrian zone start	20	20	20	20	20	20
	318 Pedestrian zone end	N	N	N	N	N	N
	Pedestrian zone start	20	20	20	20	20	20
	Pedestrian zone end	N	N	N	N	N	N
Motorway							
	309 Motorway start	130	S	S	130	S	S
	Motorway start	130	S	S	130	S	S
	310 Motorway end	N	N	N	N	N	N
	Motorway end	N	N	N	N	N	N

City limits							
	305 City entry	50	50	50	50	50	50
	306 City end	90	90	90	90	S (90)	S (90)

26. **FINLAND**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C32_2 (speed limit)	20	20	20	20	20	20
	C32_3 (speed limit)	30	30	30	30	30	30

	C32_4 (speed limit)	40	40	40	40	40	40
	C32_5 (speed limit)	50	50	50	50	50	50
	C32 (speed limit)	60	60	60	60	60	60
	C32_6 (speed limit)	70	70	70	70	70	70
	C32_7 (speed limit)	80	80	80	80	80	80
	C32_8 (speed limit)	100	S	S	100	S	S
	C32_9 (speed limit)	120	S	S	120	S	S
	variable speed limit (C 32_x) *Note:* The digits may be yellow or white.	V	V	V	V	V	V
Implicit numerical speed limit signs							
	C33_2 (speed limit ends)	N	N	N	N	N	N
	C33_3 (speed limit ends)	N	N	N	N	N	N

	C33 (speed limit ends)	N	N	N	N	N	N
	C33_4 (speed limit ends)	N	N	N	N	N	N
	C33_5 (speed limit ends)	N	N	N	N	N	N
	C33_6 (speed limit ends)	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
None							
Numerical Zones							
	C34_2 (speed limit zone)	30	30	30	30	30	30
	C35_2 (speed limit zone ends)	N	N	N	N	N	N
	C34 (speed limit zone)	40	40	40	40	40	40
	C35 (speed limit zone ends)	N	N	N	N	N	N
	C34_3 (speed limit zone)	50	50	50	50	50	50
	C35_3 (speed limit zone ends)	N	N	N	N	N	N

Traffic-reduced area							
	E24 (residential area start)	20	20	20	20	20	20
	E25 (residential area end)	N	N	N	N	N	N
	E26 (pedestrian street)	20	20	20	20	20	20
	E27 (pedestrian street ends)	N	N	N	N	N	N
Motorway							
	E15 (motorway) *Note:* This is not an implicit speed limit sign						
	E16 (motorway ends) *Note:* This is not an implicit speed limit sign						
Expressway							
	E17 (two-lane expressway) *Note:* This is not an implicit speed limit sign						
	E18 (two-lane expressway ends) *Note:* This is not an implicit speed limit sign						
City limits							
	E22 (urban area)	50	50	50	50	50	50
	E23 (urban area ends) *Note:* This is an implicit speed limit sign and the national speed limit for all other non-urban, expressway and motorway road classes	80	80	80	80	80	80

27. **SWEDEN**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	C31-3	30	30	30	30	30	30
	C31-4	40	40	40	40	40	40
	C31-5	50	50	50	50	50	50
	C31-6	60	60	60	60	60	60
	C31 (C31-7)	70	70	70	70	70	70
	C31-8	80	80	80	80	80	80
	C31-9	90	90	90	90	80	80
	C31-10	100	S	S Class III, B	100	80	80
				90 Class I, II, A			

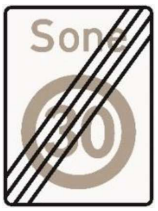
	C31-11	110	S	S Class III, B	110	80	80
				90 Class I, II, A			
	C31-12	120	S	S Class III, B	120	80	80
				90 Class I, II, A			
		V	V	V	V	V	V
Implicit numerical speed limit signs							
None							
Implicit non-numerical speed limit signs							
None							
Numerical Zones							
None							
Traffic-reduced area							
	E9 Residential zone start *Note:* the formal speed limit 'walking speed' is not quantified	5	5	5	5	5	5
	E10 Residential zone ends *Note:* the applicable speed limit outside the traffic-reduced area is always signposted with an explicit numerical speed limit sign						

Motorway							
	*Note:* This is not an implicit speed limit sign						
	*Note:* This is not an implicit speed limit sign						
Expressway							
	*Note:* This is not an implicit speed limit sign						
	*Note:* This is not an implicit speed limit sign						
City limits							
	*Note:* This is not an implicit speed limit sign						
	*Note:* This is not an implicit speed limit sign						

28. **NORWAY**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	§ 8 - 362	30	30	30	30	30	30
		40	40	40	40	40	40

		50	50	50	50	50	50
		60	60	60	60	60	60
		70	70	70	70	70	70
		80	80	80	80	80	80
		90	90 ≤ 3,5t	90 Class III, B	90	S	S
			80 > 3,5t	80 Class II			
				70 Class I, A			
		100	S ≤ 3,5t	S Class III, B	100	S	S
			80 > 3,5t	80 Class II			
				70 Class I, A			
		110	S ≤ 3,5t	S Class III, B	110	S	S
			80 > 3,5t	80 Class II			

				70 Class I, A			
	Variable speed limit signs	V	V	V	V	V	V
Implicit numerical speed limit signs							
	§ 8 - 364	N	N	N	N	N	N
		N	N	N	N	N	N
		N	N	N	N	N	N
		N	N	N	N	N	N
		N	N	N	N	N	N
Implicit non-numerical speed limit signs							
None							
Numerical Zones							
	§ 8 - 366	30	30	30	30	30	30
	§ 8 - 368	50	50	50	50	50	50

Traffic-reduced area							
	§ 12 – 540 *Note:* the formal speed limit 'walking speed' is not quantified	5	5	5	5	5	5
	§ 12 - 542	50	50	50	50	50	50
	§ 12 – 548 *Note:* the formal speed limit 'walking speed' is not quantified	5	5	5	5	5	5
	§ 12 - 550	50	50	50	50	50	50
Motorway							
	§ 12 – 502 *Note:* This is not an implicit speed limit sign						
	§ 12 – 504 *Note:* This is not an implicit speed limit sign						
Expressway							
	§ 12 – 503 *Note:* This is not an implicit speed limit sign						

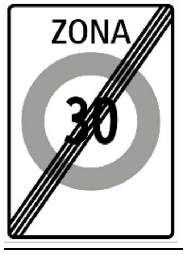
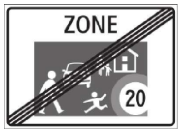
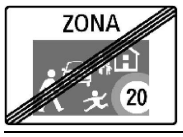
	§ 12 – 505 *Note:* This is not an implicit speed limit sign						
City limits							
None							

29. **SWITZERLAND**

SIGN	OTHER RELEVANT INFORMATION	EXPECTED SYSTEM FEEDBACK IN KM/H					
		M1	M2	M3	N1	N2	N3
Explicit numerical speed limit signs							
	2.30 SSV	10	10	10	10	10	10
	2.30 SSV	20	20	20	20	20	20
	2.30 SSV	30	30	30	30	30	30
	2.30 SSV	40	40	40	40	40	40
	2.30 SSV	50	50	50	50	50	50
	2.30 SSV	60	60	60	60	60	60

	2.30 SSV	70	70	70	70	70	70
	2.30 SSV	80	80	80	80	80	80
	2.30 SSV	90	90	90	90	S	S
	2.30 SSV	100	S	S	100	S	S
	2.30 SSV	110	S	S	110	S	S
Implicit numerical speed limit signs							
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N

	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
	2.53 SSV	N	N	N	N	N	N
Implicit non-numerical speed limit signs							
	2.58 SSV	N	N	N	N	N	N

Numerical Zones							
	2.59.1 SSV	30	30	30	30	30	30
	2.59.2 SSV	N	N	N	N	N	N
	2.59.1 SSV	30	30	30	30	30	30
	2.59.2 SSV	N	N	N	N	N	N
Traffic-reduced area							
	2.59.5	20	20	20	20	20	20
	2.59.6	N	N	N	N	N	N
	2.59.5	20	20	20	20	20	20
	2.59.6	N	N	N	N	N	N

Motorway							
	4.01 SSV	120	S	S	120	80	80
	4.02 SSV	N	N	N	N	N	N
Expressway							
	4.03 SSV	100	S	S	100	80	80
	4.04 SSV	N	N	N	N	N	N
City limits							
	4.27 SSV on main roads *Note:* This is not an implicit speed limit sign						
	4.28 SSV on main roads *Note:* This is not an implicit speed limit sign						
	4.29 SSV on secondary roads *Note:* This is not an implicit speed limit sign						
	4.30 SSV on secondary roads *Note:* This is not an implicit speed limit sign						

	2.30.1 SSV Speed limit in localities (built-up areas)	50	50	50	50	50	50
	2.53.1 SSV	80	80	80	80	80	80
	2.30.1 SSV Speed limit in localities (built-up areas)	50	50	50	50	50	50
	2.53.1 SSV	80	80	80	80	80	80
	2.30.1 SSV Speed limit in localities (built-up areas)	50	50	50	50	50	50
	2.53.1 SSV	80	80	80	80	80	80

ANNEX III

Amendment to Regulation (EU) 2019/2144

In Annex II to Regulation (EU) 2019/2144 the row for requirement D8 is replaced by the following:

'D8 Intelligent speed assistance	Commission Delegated Regulation (EU) 2021/1958 (*)		B	B	B	B	B	B					B	

(*) Commission Delegated Regulation (EU) 2021/1958 of 23 June 2021 supplementing Regulation (EU) 2019/2144 of the European Parliament and of the Council by laying down detailed rules concerning the specific test procedures and technical requirements for the type-approval of motor vehicles with regard to their intelligent speed assistance systems and for the type-approval of those systems as separate technical units and amending Annex II to that Regulation (OJ L 409, 17.11.2021, p. 1).'.