

# Code of Statutes of the Swedish Board for Accreditation and Conformity Assessment

ISSN 1400-4682

Published by: Anette Arveståhl

## The Swedish Board for Accreditation and Conformity Assessment's Regulations and General Advice on Accessory Devices for Taximeters

**STAFS 2022:2**

Published
on 14 June 2022

Adopted on 8 June 2022

The Swedish Board for Accreditation and Conformity Assessment (SWEDAC) hereby lays down[[1]](#footnote-1) the following by virtue of Chapter 8, Section 1 of the Taxi Traffic Ordinance (2012:238) and Section 3 of the Accreditation and Conformity Assessment Ordinance (2011:811) and adopts the following general recommendations.

**Scope**

**Section 1** These regulations contain provisions on requirements for and assessment of an accessory device coupled to a taximeter.

**Definitions**

**Section 2** For the purposes of these regulations, words and terms are used within the meaning of Section 2 of STAFS 2022:1[[2]](#footnote-2) on taximeters. In addition, for the purposes of these regulations:

1. *method of payment*: the form of payment, whether made electronically, in physical form, by granting credit or by any other means;

2. *driving assignment*: ordered transport in taxi traffic starting when the taximeter moves from 'For Hire' to 'Hired' and ending when the taximeter moves from 'Stopped' to 'For Hire', and

3.*type examination*: a conformity assessment procedure whereby an accredited body examines the technical design of an accessory device and ensures and declares that it meets the requirements of these regulations.

**Accessory device requirements**

**Section 3** An accessory device shall comply with the requirements of the Appendix to these regulations.

**Requirements for manufacturers of accessory devices**

**Section 4** A manufacturer of accessory devices shall ensure that the devices are designed and manufactured in accordance with the requirements set out in the Appendix to these regulations.

**Section 5** The manufacturer shall have a documented management system with procedures and instructions to ensure that series-produced accessory devices comply with the requirements of these regulations.

*General Advice*

The manufacturer's management system should meet the requirements of SS-EN ISO 9001 (Quality Management System — Requirements) in the parts related to series production of accessory devices.

**Section 6** In order to ensure that an accessory device complies with the requirements of these regulations, the manufacturer shall submit the accessory device for conformity assessment by:

1. type examination; and

2. assessment of management systems for the series production of accessory devices.

**Section 7** If the conformity assessment procedure has shown that an accessory device meets the requirements of these regulations, the manufacturer shall mark its housing with:

1. the name of the manufacturer;

2. the serial number of the accessory device or its various units;

3. certificate number, and

4. the designation 'STAFS 2022:2'.

The markings shall be affixed in a place suitable for inspection by the authorities and shall be clear, indelible and unambiguous.

**Section 8** The manufacturer shall keep a copy of the certificate for the accessory device and its annexes, together with the technical documentation, for at least 10 years after the last accessory device has been manufactured.

**Section 9** The manufacturer shall ensure that the accessory device is accompanied by instructions for use. The instructions for use shall be easy to understand and shall contain at the minimum a description of how all prescribed productions on paper or electronic form are obtained in accordance with these regulations as well as the temperature range and voltage range in which the accessory device operates.

**Conformity assessment**

***Certification body***

**Section 10** Conformity assessment shall be carried out by a certification body for products accredited for the task under Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and repealing Regulation (EEC) No 339/93.

***Application for type examination and assessment of management system***

**Section 11** Application for type examination and assessment of management systems for the series production of accessory devices shall be made to a certification body as referred to in Section 10. The application shall contain the relevant technical documentation. It shall be possible to assess, on the basis of the documentation, whether the accessory device meets the requirements of these regulations. The technical documentation shall contain:

1. a general description of the device that includes the climatic, mechanical, and electromagnetic environments in which the accessory device is intended to be used, the power supply, and other factors that are required for the accessory device to function in the manner prescribed;

2. overall design and manufacturing drawings and schemes of components, subassemblies and circuits;

3. a description of the electronic parts of the accessory device with drawings, diagrams, flow diagrams of logical circuits and the general information explaining the characteristics and operation of the parts, including a description of the seals and characteristics required by point 6 of the Appendix to these regulations;

4. descriptions and explanations necessary for the understanding of the documentation referred to in points 2, 3 and 12, including the operation of the device;

5. results of design calculations and examinations;

6. appropriate test results, where necessary, to demonstrate that the device complies with the requirements of these regulations under nominal operating conditions and under specified environmental disturbances;

7. An EU type examination certificate or an EU design examination certificate for taximeters containing parts identical to those contained in the design;

8. conditions for the compatibility between the accessory device and the taximeter;

9. instructions for use in accordance with Section 9;

10. installation instructions;

11. an indication of the place of manufacture; and

12. documentation of the management system with a description of the manufacturing procedures and self-monitoring of the manufacturer.

***Procedure for type examination and assessment of management systems***

**Section 12** During type examination, a certification body shall, upon application from a manufacturer, assess whether an accessory device, representative of an expected production, meets the requirements of the Appendix to these regulations.

The certification body shall also carry out an assessment of the management system regarding production procedures and self-monitoring of the manufacturer, as well as an on-site audit at the manufacturer's premises to ensure that the manufacturer is able to produce products that comply with the requirements set out in the Appendix to these regulations.

***Certificates***

**Section 13** If the type examination and the assessment of the management system have shown that an accessory device meets the requirements, the certification body may issue a certificate.

**Section 14** The certificate, and any annexes thereto, shall contain the information necessary to assess the conformity of the manufactured products with the examined accessory device and to carry out installation and control of the device in use. In every case, the information shall include:

1. the conditions for compatibility between the taximeter and the accessory device;

2. the measures necessary to ensure the integrity of the device with regard to sealing and software;

3. the particulars necessary to identify the device or its constituent units and information necessary to verify that the device(s) demonstrates compliance with the accessory device(s);

4. where necessary, the specific information necessary to verify the characteristics of the manufactured appliances;

5. the name and address of the manufacturer and, where applicable, the name and address of its authorised representative;

6. conclusions of the examination; and

7. any conditions for the validity of the certificate.

**Section 15** A certificate shall be valid for ten years from the date of issue and may be renewed for an additional ten years at a time.

Before a certificate is renewed, the certification body shall take into consideration the results of the random checks under Section 17, as well as other information received by the certification body, and decide on any necessary testing or examination.

**Section 16** A certificate pursuant to these regulations shall not form part of an EU type examination certificate referred to in STAFS 2016:1[[3]](#footnote-3) on measuring instruments.

***Requirements for the certification body after the issue of a certificate***

**Section 17** The certification body shall annually monitor the manufacturer's self-monitoring and perform relevant random sampling of the production.

**Section 18** If a manufacturer notifies changes to the accessory device that may affect its compliance with the requirements of these regulations, the certification body shall reconsider the issue of approval. If, after the assessment, the accessory device still meets the requirements, the certification body shall issue a new certificate.

**Section 19** The certification body shall revoke a certificate, if it becomes aware that an accessory device certified by it does not comply with the requirements of these regulations in use.

**Section 20** The certification body shall immediately submit to SWEDAC issued certificates and annexes thereto. The certification body shall also notify SWEDAC if a certificate is revoked.

**Section 21** The certification body shall retain the technical documentation, including the documentation submitted by the manufacturer, until the end of the certificate's validity.

**Other**

**Section 22** SWEDAC may, in individual cases and if there are specific reasons for doing so, grant exemptions from the application of these regulations.

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1. This statute enters into force on 1 October 2022.
2. The statute repeals the Board's regulations and general recommendations (STAFS 2012:5) on accessory devices for taximeters.
3. Certification bodies accredited to carry out conformity assessment according to STAFS 2012:5 on accessory devices for taximeters, shall be deemed to be accredited to carry out conformity assessment under the new statute.
4. The old statute may continue to apply, if the application for type examination has been received by the certification body before 1 October 2023. However, certificates issued following such an application shall not be renewed.

On behalf of SWEDAC

Ulf Hammarström

 Mikael Schmidt

*Appendix*

**Accessory device requirements**

1. The accessory device shall be designed for the temperature and humidity conditions in which it is intended to be used. As minimum requirements, it shall be designed for condensing air humidity and withstand an upper temperature of 55°C and a lower temperature of -25°C.

2. The accessory device shall comply with mechanical environment class M3 in accordance with point 1.3.2. of Appendix 1 to STAFS 2016:1 on measuring instruments.

3. The accessory device shall not have characteristics likely to facilitate fraudulent use.

4. The accessory device shall be robust and its constituent materials shall be suitable for the operating conditions and environment in which it is intended to be used. It shall be designed so as not to unnecessarily increase the risk of personal injury in a collision.

5. The prescribed characteristics of the accessory device shall not be affected in an unacceptable manner by the connection of any other device to the accessory device, by any characteristic of the connected device itself or by any remote device which communicates with the accessory device.

6. It shall be possible to physically and electronically seal the accessory device in such a way as to ensure the prescribed characteristics when the taximeter is in use. Components in the accessory device that are critical to the prescribed characteristics shall be protected from external and internal influence. Any action on the accessory device and seals shall be easily visible.

7. Those parts of the accessory device functions that are regulated under these regulations, and are determined by software, shall be protected against intentional or unintentional modification according to the following:

1. The code shall be stored in a memory, the content of which cannot be affected by the user;

2. The content of the program code memory shall be checked automatically when the accessory device is connected to a voltage.

3. The accessory device shall not be capable of affecting the function or content of the totaliser.

8. Software that is critical for the prescribed characteristics shall have a unique software version indication and checksum and be secured from other influences than those prescribed. Signs of intervention shall be visible for a reasonably long period of time.

9. Data to be produced on paper or in electronic form, or as shown by the accessory device, and software essential for the prescribed characteristics that is stored or transmitted shall be adequately protected against accidental or intentional corruption.

10. The accessory device shall be designed in such a way that the taximeter equipment, in installed condition, can perform all prescribed functions without the installation's connections being broken or changed.

 The first paragraph shall not apply to functions intended solely for use during installation or when verification is carried out by an accredited assessment body.

11. When the accessory device has associated software, which also provides functions other than those prescribed, the software for the prescribed characteristics shall be identifiable and shall not be influenced in any unacceptable way by any of the other software.

12. An accessory device shall produce a receipt when the taximeter moves from operating position 'Stopped' to operating position 'For Hire'. It shall always be able to produce a receipt on paper and may also be able to produce a receipt solely in electronic form. The accessory device may be able to produce several receipts for partial payment of a driving assignment. Where the amount or amounts are to be invoiced, the same applies to delivery notes. Each receipt and delivery note produced shall contain, at the least, the following information:

1. whether the document is a receipt or delivery note, indicating 'electronic receipt' or 'electronic delivery note' respectively, if the document is produced in electronic form;

2. the serial number of the receipt or delivery note with at least six digits in the same unbroken and ascending series of sequential numbers, each serial number corresponding to a driving assignment and, if the accessory device is able to produce receipts for partial payment, the series number followed by a hyphen and the serial number for the current amount to be paid in part, the serial number of the first instalment of a driving assignment being '001';

3. the current date (yy.mm.dd),

4. the taxi company's name and personal identity number, coordination number or corporate identity number;

5. the postal address of the taxi company;

6. the driver code or distinguishing number of the taxi driver;

7. the registration number of the taxi vehicle;

8. the time the driving assignment started (tt.mm);

9. the time the partial payment is made (tt.mm);

10. the time the driving assignment is completed (tt.mm);

11. distance travelled during the driving assignment (0.00 km),

12. tariffs used during the driving assignment with separate presentation of tariff type and tariff values;

13. a full account of how and to what extent the tariffs and respective tariff values were used for the calculation of the price of the driving assignments, set out in such a way that the relationship between the price charged and the performance, including any charges, is clear and can be verified ex post; and

14. the amount to be paid with separate presentation of the method or methods of payment used, the amount paid with each method of payment as well as VAT and VAT rate included in the total amount;

The accessory device shall be designed in such a way that copies of the six most recent receipts or delivery notes may be produced on paper. A copy of the receipt or delivery note shall contain the word 'KOPIA' on the same line as the serial number.

13. The accessory device shall be designed in such a way that a driving period report containing the following contents and outline can be produced on paper at the end of a driving period:

1. "DRIVING PERIOD REPORT",

2. serial number with at least six digits,

3. the taxi company's name and personal identity number, coordination number or corporate identity number;

4. the registration number of the taxi vehicle;

5. the driver code or distinguishing number of the taxi driver;

6. the certificate number and serial number of the taximeter and the accessory device, as well as the serial number of each unit, if the accessory device consists of several units;

7. software version indications and checksums for software included in the taximeter and accessory device,

8. taximeter constant (Tk),

9. date of most recent seal (yy.mm.dd);

10. date and time when the driving period started (yy.mm.dd, tt.mm);

11. date and time the driving period ended (yyyy.mm.dd, hh.mm),

12. distance travelled during driving period (0.00 km),

13. distance travelled during the driving period in the operating settings 'Hired' and 'Stopped' (0.00 km);

14. number of driving assignments registered during the driving period, with separate presentation of the serial numbers of the first and last driving assignments;

15. the following totalised values at the end of the driving period, expressed in nine digits without intermediate characters, each digit initially being a zero and successively replaced by other digits as the totalisers are incremented:

a) the total distance travelled by the taxi;

b) the total distance travelled by the taxi in the operating position 'Hired';

c) the total number of driving assignments;

d) the total amount charged as additional charges; and

e) the total amount charged as fares;

16. the amount collected during the driving period for each payment method, as well as VAT and VAT rate included in the total amount;

17. space for specifying data regarding the driving period; and

18. presentation of all driving assignments recorded during the driving period in serial number order, with subsequent serial numbers for the relevant amount to be paid in part, where the accessory device is able to produce receipts for partial payment, and with separate presentation of the information referred to in points 12.1, 12.2, 12.8 to 12.12, and 12.14 of this Appendix;

The accessory device shall be designed in such a way that copies of driving period reports from the two most recent days of operation of the taximeter equipment and, in any case, the 10 most recent driving periods, can be produced on paper.

A driving period report copy shall include the word "KOPIA" ("COPY") on line 2.

14. Information on all driving assignments in accordance with point 12 of this Appendix in serial number order and all driving periods in accordance with point 13 of this Appendix in serial number order shall be capable of being transferred digitally and wirelessly to a reporting centre as specified in the Act (2014:1020) on Reporting Centres and Booking Centres for Taxi Traffic.

15. The accessory device shall be designed in such a way that a taximeter inspection report can be produced on paper, regardless of the operating position of the taximeter. The content and structure of the report shall be as follows:

1. "TAXIMETER INSPECTION".

2. a serial number with at least four digits;

3. identification of the body or bodies that carried out the conformity assessment of the taximeter and the accessory device;

4. the certificate number and serial number of the taximeter and the accessory device, as well as the serial number of each unit, if the accessory device consists of several units;

5. software version indications and checksums for software included in the taximeter and accessory device,

6. the taxi company's name and personal identity number, coordination number or corporate identity number;

7. the postal address of the taxi company;

8. the registration number of the taxi vehicle;

9. the driver code or distinguishing number of the taxi driver;

10. the following totalised values, expressed in nine digits without intermediate characters, each digit initially being a zero and successively replaced by other digits as the totalisers are incremented:

a) the total distance travelled by the taxi;

b) the total distance travelled by the taxi in the operating position 'Hired';

c) the total number of driving assignments;

d) the total amount charged as additional charges; and

e) the total amount charged as fares;

11. taximeter constant (Tk),

12. date of most recent inspection and sealing (yy.mm.dd).

13. the name and postal address of the inspection body;

14. the corporate identity number of the inspection body;

15. the accreditation number of the inspection body,

16. serial number of inspection reports for the inspection of the taximeter equipment;

17. presentation of all tariffs used in the taximeter, indicating the type of tariff and the tariff values;

18. the date and time the driving period started (yy.mm.dd, tt.mm);

19. time the driving assignment started and distance travelled during the driving assignment (tt.mm, 0.00 km);

20. date and time of the production (yy.mm.dd, tt.mm);

21. space for the controlling authority's stamp and official signature; and

22. space for the signature of the taxi driver or other representative of the taxi company.

16. An accessory device shall be designed in such a way that inspection of the taximeter equipment's adaptation to the taxi vehicle can be performed as follows. The accessory device, during inspection on a measured distance, shall calculate the relationship between the set taximeter constant and the distance driven measured during the inspection, after which a report shall be produced on paper. The content and structure of the report shall be as follows:

1. "ADAPTATION INSPECTION".

2. a serial number with at least four digits;

3. an indication of the body or bodies that carried out the conformity assessment of the taximeter and the accessory device;

4. the certificate number and serial number of the taximeter and the accessory device, as well as the serial number of each unit, if the accessory device consists of several units;

5. software version indications and checksums for software included in the taximeter and accessory device,

6. the registration number of the taxi vehicle;

7. the driver code or distinguishing number of the taxi driver;

8. set taximeter constant (Tk),

9. measured distance driven (D).

10. Tk divided by Vt, expressed as a percentage.

11. date and time of the production (yy.mm.dd, tt.mm);

12. space for the controlling authority's stamp and official signature; and

13. space for the signature of the taxi driver or other representative of the taxi company.

17. For the production of data on paper or in electronic form, the following units of measurement shall be used for the distance travelled and the time elapsed:

1. distance travelled: kilometres; and

2. time elapsed: seconds, minutes or hours, as may be appropriate to take into consideration taking into account the resolution required and the need to avoid misunderstandings.

18. Data produced on paper or in electronic form shall be consistent, where applicable, with the taximeter's totalisers or with the values added to the taximeter's totalisers as well as otherwise stored in the taximeter.

19. If the power supply to an accessory device is disconnected, the data to be produced on paper or in electronic form shall be stored for at least two years.

1. See Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services. [↑](#footnote-ref-1)
2. Board of Accreditation and Conformity Assessment's Regulations (STAFS 2022:1) on taximeters. [↑](#footnote-ref-2)
3. The Swedish Board for Accreditation and Conformity Assessment's (SWEDAC) Regulations (STAFS 2016:1) on measuring instruments. [↑](#footnote-ref-3)