

Directions Governing Type Approval of Taximeters

Enacted and promulgated by Order *Ching-Piao-Szu-Tzu* No. 09240008420 of the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs on 6 October 2003

Item 7 amended and promulgated by Order *Ching-Piao-Szu-Tzu* No. 09840004630 of the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs on 21 September 2009

Amended and promulgated by Order *Ching-Piao-Szu-Tzu* No. 10440006490 of the Bureau of Standards, Metrology and Inspection, Ministry of Economic Affairs on 23 June 2015

1. These Directions are established for the conduction of type approval/series type approval/approbation of taximeters and other relevant activities.
2. To apply for type approval, series type approval or approbation, applicants shall submit the following technical documents:
 - (1) Two copies of operating instructions and software file instructions, (this requirement will be exempted when applying for series type approval/approbation and without revision on operation function or software file)
 - (2) Two copies of the list of patterns of seals and stamps, (this requirement will be exempted when applying for series type approval/approbation and without revision on seal type)
 - (3) The original type approval certificate (not required for type approval applications); and
 - (4) Description of any differences resulted from changes intended to be made (not required for type approval applications).
3. To apply for type approval, series type approval or approbation, applicants shall submit the following appearance photographs (adhered to A4 paper and made it available in two binding copies; the photographs shall not be smaller than $12.7 \times 8.8 \text{ cm}^2$):
 - (1) A total of six photographs, illustrating the upper, lower, left, right, front and back of the instrument; and
 - (2) Close-up photographs of the marks, buttons (or touch screen) and sealing.
4. To apply for type approval, applicants shall submit the following technical documents to the designated laboratory recognized by the dedicated weights and measures authority for testing:
 - (1) Structural diagram, 3D breakdown drawing (exploded view), circuit block and circuit diagrams of the sample;
 - (2) Diagram of metrology parameter seal location and detailed instructions on the functions of buttons (or touch screen);
 - (3) Diagram of rear terminals and list of parts;
 - (4) Construction map and flow chart of the printing unit (if provided);
 - (5) Real-time clock specification;
 - (6) All necessary accessories or devices for type evaluation shall be provided, the concerned installations and instruction of the mentioned accessories and devices shall also be provided; and
 - (7) Other illustrations (briefly describing the rated current and voltage, usage, attention to usage, and performance and interface of the machine).
5. Where the changes of the fare rate parameter format and switching selection setting, printing format and content (including travel certificate, operation report), voice reminder, operation data download (including data storage and data transmission) and national highway tolls and other functions on type-approved taximeters, the applicant shall first obtain the function confirmation report or relevant certification documents reviewed by the traffic competent authority or concerned organizations designated by the traffic administrations, and then send to the designated laboratory approved by the metrological and special authority to review whether the changers affect the metering performance of the taximeter. Completed the mentioned procedures, the application for series type approval or approbation to the metrology authority may be proceeded.
6. Under any of the following circumstances, type-approved taximeters will be exempted from applying for series type approval or approbation:
 - (1) Where the color of the display is changed
 - (2) Where the set value of the distance or price is changed.
 - (3) The change belongs to the jurisdiction of the traffic administrations approved by the dedicated weights and measures authority or institutes designated by the dedicated weights and measures authority, i.e. the Type Approval

Committee and the designated laboratory; or

- (4) Other changes that approved by the dedicated weights and measures authority or institutes designated by the dedicated weights and measures authority, i.e. the Type Approval Committee and the designated laboratory.

7. Where the change of the dimensions of the frame or panel on type-approved taximeters with the change within the range of $\pm 10\text{mm}$, shall apply for series type approval or approbation with the exemption for testing.

8. Under any of the following circumstances, application for series type approval or approbation for type-approved taximeters may be filed after the conduction of relevant performance tests:
 - (1) Where the material of the frame is changed, tests of electrostatics discharge, electromagnetic wave radiating capability(EMS), temperature, vibration, impact, temperature and humidity and other relevant items shall be conducted;
 - (2) Where the switching unit is changed, tests of electrostatics discharge, vibration, impact and other relevant items shall be conducted;
 - (3) Where the number of display digits is increased, tests of power supply noise interference, electrostatics discharge, temperature, vibration, impact, temperature and humidity and other relevant items shall be conducted;
 - (4) Where the capacity of memory is increased or reduced, tests of temperature, vibration, impact, temperature and humidity, power supply noise interference and other relevant items shall be conducted;
 - (5) The change on the printer embedded in taximeters or related components/ modules unrelated to the metering function, the tests for electrostatics discharge, wave radiating capability (EMS), temperature, vibration, impact, temperature and humidity shall be conducted.

9. Under any of the following circumstances, application for type re-approval shall be re-filed for type-approved taximeters:
 - (1) Where the circuit design is changed and the metering function is affected, PCB layout change or metrology parameter module change; or
 - (2) Where any output interface such as receipt printer or data management system is added.

10. For type-approved taximeters, in the event of any changes made other than those listed in the preceding clause 7~9, the dedicated weights and measures authority or institutes designated by the dedicated weights and measures authority, i.e. the Type Approval Committee and the designated laboratory may examine the relevant technical documents to determine the items needed to be tested.

11. To apply for extension of the validity period of a type approval certificate, the original applicant for type approval or the successor shall submit the following documents:
 - (1) Appearance photos of the instruments in question as listed in clause 3;
 - (2) Declaration; and
 - (3) Technical documents as listed in clause 4.