

Amendments to the Legal Inspection Requirements for Plugs and Socket-Outlets for Fixed Wiring and 7 Other Power Distribution Products

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs (MOEA)

Introduction:

Plugs and socket outlets for fixed wiring are having more and more diversified functions, e.g., wireless control, timing control, and induction control. Household switches for fixed wiring are gradually being replaced by electronic switches. As a result of risk assessment, BSMI added 8 products for fixed wiring with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation functions into the scope of legal inspection.

Date of implementation: 1 January 2025

Scope of covered products:

Item	Description of Goods	Inspection Standards	C.C.C. Code (the first 6 digits are the same as HS Code) (For reference)	Conformity Assessment Procedures
1	Plugs and socket-outlets for fixed wiring (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690)	CNS 690 (2016), CNS 15767-1 (2014), CNS 15663 (2013) Section 5 “Marking of Presence”	8536.69.90.00.6A	RPC Scheme (Module II+III) or TABI Scheme
2	Adapters (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation)(inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690, except for those with the type of plug-end illustrated in figure 16)	CNS 690 (2016), CNS 15767-1 (2014), CNS 15767-2-5 (2014) CNS 15663 (2013) Section 5 “Marking of Presence”	8536.69.90.00.6C	RPC Scheme (Module II+III) or TABI Scheme
3	Cord extension sets (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690)	CNS 690 (2016), CNS 15767-1 (2014), CNS 15767-2-7 (2016) CNS 15663 (2013) Section 5 “Marking of Presence”	8544.42.90.90.9A	RPC Scheme (Module II+III) or TABI Scheme

4	Non-detachable cord sets (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690)	CNS 690 (2016), CNS 15767-1 (2014), CNS 15663 (2013) Section 5 “Marking of Presence”	8544.42.90.90.9B	RPC Scheme (Module II+III) or TABI Scheme
5	Detachable cord sets (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with the national standard CNS 690)	CNS 690 (2016), CNS 15872 (2016), CNS 6797 (1991), CNS 15663 (2013) Section 5 “Marking of Presence”	8544.42.90.90.9C	RPC Scheme (Module II+III) or TABI Scheme
6	Cord sets (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690)	CNS 690 (2016), CNS 60799 (2016), IEC 60320-1 (2001), CNS 15663 (2013) Section 5 “Marking of Presence”	8544.42.90.90.9D	RPC Scheme (Module II+III) or TABI Scheme
7	Cable reels (including those with wireless control, wired network control, timing control, voice control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 250 Vac with types and dimensions the same as or consistent with those specified in CNS 690)	CNS 690 (2016), CNS 61242 (2016), CNS 15663 (2013) Section 5 “Marking of Presence”	8544.42.90.90.9E	RPC Scheme (Module II+III) or TABI Scheme
8	Household switch for fixed wiring (including those with touch control, shaking head (toggle) structure control, wireless control, wired network control, timing control, sound control, motion sensing, light sensing, and electricity calculation) (inspection scope: voltage not exceeding 300 Vac)	General household switch for fixed Wiring: CNS 695 (1987) or CNS 60669-1 (2020), CNS 15663 (2013) Section 5 “Marking of Presence” Electronic household switch for fixed Wiring: CNS 60669-1 (2020), IEC 60669-2-1 (2021), CNS 15663 (2013) Section 5 “Marking of Presence”	8536.50.90.00.7A 8536.50.70.00.1	RPC Scheme (Module II+III) or TABI Scheme

Remarks :

1. CNS 15767-1 makes reference to IEC 60884-1 (2006) “Plugs and socket-outlets for household and similar purposes-Part 1: General requirements”.
2. CNS 15767-2-5 makes reference to IEC 60884-2-5 (1995) “Plugs and socket-outlets for household and similar purposes-Part 2-5: Particular requirements for adaptors”.
3. CNS 15767-2-7 makes reference to IEC 60884-2-7 (2011) “Plugs and socket-outlets for household and similar purposes-Part 2-7: Particular requirements for cord extension sets”.
4. CNS 60799 makes reference to IEC 60799(1998) “Electrical accessories cord sets and interconnection cord sets”.

5. CNS 60669 makes reference to IEC 60669-1 (2017) “Switches for household and similar fixed electrical installations-Part 1: General requirements”.
6. The CNS standards are accessible at CNS online service website: www.cnsonline.com.tw. You can preview the content of these standards for free. If you want to download and print, please contact our service counter of Information Center at BSMI.
Tel: +886-2-2341-4772 or +886-2-2343-1994
Fax: +886-2-8192-6746
E-mail: infocenter@bsmi.gov.tw

The two kinds of conformity assessment schemes for the commodities are as follows:

1. Registration of Product Certification (RPC) Scheme (Module II + III)

Under this procedure, domestic manufacturers or importers must have their products type-tested by BSMI designated testing laboratories in advance (Module II) before applying for registration of their products. Manufacturers or importers will also be required to ensure by declaration that all products made at their manufacturing facilities or imported are in conformity with the prototypes submitted for type test at Module II stage, and the declaration procedure is called Module III (conformity-to-type declaration). The conformity-to-type declaration shall be drawn up by the manufacturer or the authorized local representative, declaring that the mass-produced products comply with the prototype as described in the type-test report.

Products will be allowed to use the Commodity Inspection Mark with the letter ‘R’ and the identification number given by the BSMI, after they are certified and registered with the BSMI. These products can then clear customs directly without any further inspection if not being sampled by RPC border check procedure. The application fee and annual fee for RPC are both NT\$5,000 (about US\$170) for each certification, and the RPC certificates are valid for three years. If there are any serial products, an extra NT\$3,000 (about US\$102) is charged for each application in each certificate.

The fees for type-testing vary by products and depend on the fee schedule of the testing laboratories.

2. Type-approved Batch Inspection (TABI) Scheme

Under this scheme, manufacturers or importers shall have their products type-tested by the BSMI or BSMI designated testing laboratories, and then file an application for type-approval with the BSMI or its branches.

After manufacturers or importers have obtained a type-approval certificate, they are still required to file an application for batch inspection with the BSMI each time before their products arrive at the port of entry. The BSMI will then perform inspection with simplified procedures. Additional samples may be required for further testing if it is deemed necessary. The application fee for a type-approval is NT\$3,500, and a type-approval certificate is generally valid for three years.

The fees for type-testing vary by products and depend on the fee schedule of the testing laboratories.

*Further information about the two schemes is also available on the BSMI web site at

<https://www.bsmi.gov.tw/wSite/lp?ctNode=9768&CtUnit=4132&BaseDSD=7&mp=2>

Locations to apply for Type Testing:

The BSMI designated testing laboratories.

Locations to apply for Registration of Product Certification:

The BSMI or its branch offices.

Time required for Registration of Product Certification:

Fourteen working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples; another seven working days may be required if additional tests are required.)

Related requirements:

1. The inspection standards in the version listed above will come into force from the date of announcement and the old version of inspection standards will be invalid beginning on 1 January 2025.
2. If the listed products are combined with circuit breakers (for electrical appliances), switches (for electrical appliances), relays, fuses, built-in leakage protection modules or circuits, those combined parts shall comply with relevant CNS or IEC standards. The certificates issued by certification bodies or test reports issued by testing laboratories accredited by Taiwan Accreditation Foundation shall be provided , or the combined parts shall be tested with the product. The requirements are as the followings:
 - (1) For products with circuit breakers:
 - (a) compliance with UL 1077 or IEC 60934 (2013 or later edition) is required.
 - (b) if the rated current of the circuit breaker is greater than the rated current of the product, the circuit breaker

shall be additionally tested according to the rated current of the product.

- (2) For products with switches, including mechanical switches and electronic switches:
 - (a) compliance with IEC 61058-1 (2008 or later edition) or CNS 61058-1 (2022 or later edition) is required.
 - (b) in the case that the product does not have a certificate, additional items such as the electrical endurance test, the heating test and dielectric strength test (both after the electrical endurance test) are required.
- (3) For products with relays: compliance with IEC 61810-1 or UL 508 is required.
- (4) For products with fuses: compliance with UL 248 or CNS 14982-1 (IEC 60127-1) ; or IEC 60269-1 and IEC 60269-3 is required.
- (5) The plug with fuse shall comply with the requirements of IEC 60884-2-1 (2006 or later edition); the socket-outlets for fixed wiring with switch shall meet the requirements of IEC 60884-2-3 (2006 or later edition).
- (6) For products with built-in leakage protection modules or circuits, those parts shall be tested with the product according to the following conditions:
 - (i) Those without over-current protection function shall be tested in accordance with the test sequence I, II, IV, VI, VIII of CNS 5422 (2006 or later edition) along with the product (if the item in CNS 5422 is marked that RCBO is applicable, then the item shall be exempted from the test).
 - (ii) Those with over-current protection function shall be tested in accordance with the test sequence I, II, IV, VI, VIII, IX of CNS 5422 (2006 or later edition) along with the product (if the item in CNS 5422 is marked that RCCB is applicable, then the item shall be exempted from the test).
3. For products with circuit breakers, switches, fuses or other overload protection devices, the circuit breakers, switches, fuses and overload protection devices should be able to cut off all live wires. However, for the product's plug is 2P without polarity, it is only required to cut off one of the circuit when the relevant CNS or IEC standards have no specific requirement.
4. For products having a power supply polarity structure, the connection of the power supply polarity should maintain the correct polarity.
5. The type of cable stipulated in Section 5.2.5 of CNS 60799, the inspection standard for cord sets, can be tested in accordance with CNS 9827 "Safety current of flexible cords".
6. "Plugs and sockets-outlets for fixed wiring that are compatible with the type of plug-end stipulated in CNS 690" means:
 - (1) The types and poles of pins conform to CNS 690 and could fit in the corresponding sockets-outlets specified by CNS 690.
 - (2) For structures with sockets-outlets only, the types and base of pins conform to CNS 690 and could be connected to the corresponding plug-pins.
7. The connectors of the cord sets shall conform to IEC 60320-1 (2001-06) and clause 5.1 of CNS 60799 shall not be applicable.
8. To accommodate regional differences in the inspection standards, Type 2 Specifications listed in CNS 60669-1 can be used in the testing of IEC 60669-2-1.
9. The wireless control function of the above-listed products includes the use of wireless network, infrared, microwave control and other control methods used by wireless signals.
10. For products newly added to the legal inspection scope, they (both imported and domestically manufactured) will be subject to inspection beginning on 1 January 2025. The conformity assessment procedure is Type-Approved Batch Inspection (TABI) or Registration of Product Certification (RPC). Applications for TABI or RPC can be made upon the date of adoption of this measure.
11. Applications for TABI or RPC will be processed in accordance with the followings upon the date of adoption:
 - (1) Those who have been certified: The type-approval or RPC certificate based on the old version of inspection standards will be valid until the expiry date. Applications for adding series of types or other approvals will be accepted before the expiry date of the certificate if the main type is not changed.
 - (2) Extension of validity period of certificates: Applications for extending the validity period of TABI or RPC certificates based on the old version of inspection standards will be accepted on or prior to 31 December 2024 under the circumstances stated in the "Regulations Governing Type Approval of Commodities" or "Regulations Governing Registration of Product Certification" and another 3 years of validity will be granted. For applications submitted on or after 1 January 2025, a type-test report and technical documents based on the new versions of the inspection standards shall be submitted. The validity period of the certificate will be 3 years after the extension.
 - (3) New application: For type-approval certificates or RPC certificates issued based on the old version of inspection standards on or prior to 31 December 2024, the validity period of the certificate is 3 years, and will

be valid until the expiry date. For products newly added to the legal inspection scope or application submitted on or after 1 January 2025, applicants shall apply for certificate(s) based on the new version of inspection standards by preparing the required type-test reports, technical documents as well as documents indicating the location of the “Marking of Presence,” samples of the “Marking of Presence” (see Tables 1 and 2), and the “Declaration of the Presence Condition of the Restricted Substances Marking.” The validity period of the certificate is 3 years. For certificates issued on or prior to 31 December 2024, the beginning of the 3-year validity will be 1 January 2025.

12. The certificate holders of the products shall clearly label “the presence condition of the restricted substances” on the body, packages, stickers, or user manuals of the products in accordance with the limit stipulated in Section 5 “Marking of presence” of CNS 15663. Those who use website as a means to announce “the presence condition of the restricted substances” shall also clearly label the website address on the body, packages, stickers or user manuals of the products. In that case, the requirements of Section 5.3 of CNS 15663 regarding the position of labeling are not applicable.

13. The Commodity Inspection Mark:

- (1) The Commodity Inspection Mark shall be printed by the certificate holders. The identification number of the Commodity Inspection Mark consists of “A Letter (R or T),” “Designated Code (5 digits)” and “the presence conditions of the restricted substance” (e.g., RoHS or RoHS(XX,XX)).
- (2) The identification number shall be placed below or right next to the graphic symbol and “the presence conditions of the restricted substance” shall be indicated in the second row. Where the size of connectors for wiring or cord sets is too small to label information about RoHS or RoHS (XX) below or to the right of the Commodity Inspection Mark, it can be labeled near the Commodity Inspection Mark.
- (3) The size of the Mark can be applied proportionally on a prominent location of the products. The Mark shall use materials that are not easily altered, and the content shall be in a clearly identifiable and indelible form affixed permanently to the product.
- (4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:



(5) For TABI scheme, the examples of the Commodity Inspection Mark are listed below:



- (6) “RoHS” indicates “the content of restricted substance(s), other than exemptions stated in CNS 15663, does not exceed the reference percentage value of presence condition.
 “RoHS(XX,XX)” indicates the content of restricted substance(s) (element XX, element XX, ...), other than exemptions stated in CNS 15663, exceeds the reference percentage value of presence condition.
 Restricted substances: Pb, Cd, Hg, Cr⁺⁶, PBB, and PBDE.

Examples:

- RoHS (Pb) indicates that the percentage content of Pb in certain parts of the commodity exceeds the reference percentage value specified in Annex A to CNS 15663.
- RoHS (Cd, Cr⁺⁶, PBB) indicates that the percentage content of Cd, Cr⁺⁶, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.

14. The C.C.C. Code listed in the table is used for reference only. The products listed in the table shall still complete the inspection procedures before entering into the market even though their C.C.C. Code is determined differently by the Customs Administration, Ministry of Finance, or Bureau of Foreign Trade, Ministry of Economic Affairs.

15. The import regulation code for the listed products is C02.

16. The inspection standards of the products listed in the table shall be the version published in this announcement. If any updated version is available, the BSMI shall publish the implementation date of the updated version in further announcement.

17. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and the applicable modules under the RPC scheme.

Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

Equipment name: Cord extension sets, Type designation : XXX						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr ⁺⁶)	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Plug Plastic Frame	Exceeding 0.1 wt %	○	○	○	○	○
Wire Material	○	○	○	○	○	○
Solder (ire and Copper Sheet)	—	Exceeding 0.1 wt %	○	○	○	○
Socket Housing	○	○	○	○	○	○
Copper Sheet	○	○	Exceeding 0.01 wt %	○	○	Exceeding 0.1 wt %
<p>Note 1: “Exceeding 0.1 wt %” and “exceeding 0.01 wt %” indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition.</p> <p>Note 2: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>Note 3: The “—” indicates that the restricted substance corresponds to the exemption.</p>						

Table 2. Example of markings for the content of the restricted substances other than exemption do not exceed the reference percentage value of presence condition

Equipment name: Cord extension sets, Model : YYY						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr ⁺⁶)	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Plug Plastic Frame	○	○	○	○	○	○
Wire Material	○	○	○	○	○	○
Solder(Wire and Copper Sheet)	-	○	○	○	○	○
Socket Housing	○	○	○	○	○	○
Copper Sheet	○	○	○	○	○	○
<p>Note 1: “○” indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence.</p> <p>Note 2: The “-” indicates that the restricted substance corresponds to the exemption.</p>						

Note *The 1st “name and model” row can be omitted if the position of “the markings for the presence conditions” shows clearly to specify the corresponding commodity.

*Multiple models could be shown together in the same field if “the markings for the presence conditions” can be applied to contemporarily.