

Government of India
Ministry of Consumer Affairs, Food and Public Distribution
Department of Consumer Affairs

LOK SABHA
UNSTARRED QUESTION NO. 2692
TO BE ANSWERED ON 11.12.2024

INDIAN STANDARDS ON EV CHARGING

2692. SHRI SURESH KUMAR SHETKAR:

Will the Minister of **CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION** उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण मंत्री be pleased to state:

- (a) whether the Bureau of Indian Standards organised a programme on Electric Vehicle (EV) standards and officials were sensitised to the Indian Standards on EV charging (IS 17017) series, which will help in the effective implementation of the States Electric Vehicles Policy in the States and if so, the details and present status thereof, State-wise; and
- (b) whether several initiatives were introduced to boost the purchase of EVs and standards play a major role in ensuring the safety, quality and compatibility of EV infrastructure in the States and if so, the details and the present status thereof?

ANSWER

उपभोक्ता मामले, खाद्य और सार्वजनिक वितरण राज्य मंत्री
(श्री बी.एल. वर्मा)

THE MINISTER OF STATE
CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION
(SHRI B.L.VERMA)

(a) BIS organized a sensitization programme on Indian Standards related to the EV sector at Chennai on 09 July 2024 for officials of Tamil Nadu State Transport.

(b) BIS has published Indian Standards related to EV Charging Infrastructure, which specifies the safety and quality parameters for connectors, communication protocols, Electric Vehicle Supply Equipment (EVSE), Battery Swapping Systems, etc. List is given at **Annexure-A**. BIS has published 9 Indian Standards related to Electric Vehicles and their components, which deal with battery, powertrain, traction motor, etc. List is given at **Annexure-B**.

ANNEXURE REFERRED TO IN REPLY TO PART (b) OF THE LOK SABHA UNSTARRED QUESTION NO. 2692 for 11.12.2024 REGARDING INDIAN STANDARDS ON EV CHARGING.

SI. No.	IS No.	Title
1.	IS/ISO 15118-1 : 2013	Road vehicles - Vehicle to grid communication interface: Part 1 general information and use - Case definition
2.	IS/ISO 15118-2 : 2014	Road vehicles - Vehicle - To - Grid communication interface: Part 2 network and application protocol requirements
3.	IS/ISO 15118-3 : 2015	Road vehicles - Vehicle to grid communication interface: Part 3 physical and data link layer requirements
4.	IS/ISO 15118-4 : 2018	Road vehicles - Vehicle to grid communication interface: Part 4 network and application protocol conformance test
5.	IS/ISO 15118-5 : 2018	Road vehicles - Vehicle to grid communication interface: Part 5 physical layer and data link layer conformance test
6.	IS/ISO 15118-8 : 2020	Road Vehicles - Vehicle to Grid Communication Interface Part 8: Physical Layer and Data Link Layer Requirements for Wireless Communication (First Revision)
7.	IS 17017 (Part 1) : 2018	Electric Vehicle Conductive Charging System Part 1 General Requirements
8.	IS 17017 (Part 2/Sec 1) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors, and Vehicle Inlets Section 1 General requirements
9.	IS 17017 (Part 2/Sec 2) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket - Outlets, Vehicle Connectors and Vehicle Inlets Section 2 Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories
10.	IS 17017 (Part 2/Sec 3) : 2020	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket - Outlets, Vehicle Connectors and Vehicle Inlets Section 3 Dimensional compatibility and interchangeability requirements for d.c. and a.c./d.c. pin and contact-tube vehicle couplers
11.	IS 17017 (Part 2/Sec 6) : 2021	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors and Vehicle Inlets Section 6 Dimensional compatibility requirements for DC pin and contact-tube vehicle couplers intended to be used for DC EV supply equipment where protection relies on electrical separation
12.	IS 17017 (Part 2/Sec 7) : 2023	Electric Vehicle Conductive Charging System Part 2 Plugs, Socket-Outlets, Vehicle Connectors and Vehicle Inlets Section 7 Dimensional Compatibility and Interchange Ability Requirements for a.c., d.c. and a.c./d.c. Pin and Contact-Tube Vehicle Couplers Intended to be used for a.c./d.c. EV Supply Equipment where Protection Relies on Electrical Separation
13.	IS 17017 (Part 21/Sec 1) : 2019/ IEC 61851-21-1 : 2017	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 1 On-board chargers
14.	IS 17017 (Part 21/Sec 2) : 2019/ IEC 61851-21-2 : 2018	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility (EMC) Requirements Section 2 Off-board chargers

15.	IS 17017 (Part 22/Sec 1) : 2021	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 - AC Charge Point for Light Electric Vehicle
16.	IS 17017 (Part 23) : 2021	Electric Vehicle Conductive Charging Systems Part 23 dc Electric Vehicle Supply Equipment
17.	IS 17017 (Part 24) : 2021	Electric Vehicle Conductive Charging System Part 24 : Digital Communication between a DC Electric Vehicle Supply Equipment and an Electric Vehicle for control of DC Charging
18.	IS 17017 (Part 25) : 2021	Electric Vehicle Conductive Charging System Part 25: DC EV supply equipment where protection relies on electrical separation
19.	IS 17017 (Part 31) : 2024	Electric Vehicle Conductive Charging System Part 31: ac or dc EV supply equipment for where protection relies on electrical separation
20.	IS 17896 (Part 1) : 2022/ IEC TS 62840-1:2016	Electric vehicle battery swap system - Part 1: General and Guidance
21.	IS 17896 (Part 2) : 2022/ IEC 62840-2:2016	Electric vehicle battery swap system - Part 2: Safety requirements

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IS 15886 : 2010	Road Vehicles - Battery Operated--Vehicles - Code Of Practice
IS 17191 (Part 1) : 2019	Electric Power Train Vehicles Part 1 Measurement of Electrical Energy Consumption
IS 17191 (Part 3) : 2019	Electric Power Train Vehicles Part 3 Measurement of Net Power and the Maximum 30 Minute Power
IS 17191 (Part 2) : 2019	Electric Power Train Vehicles Part 2 Method of Measuring the Range
IS 17855:2022	Electrically propelled road vehicles - Test specification for lithium-ion traction battery packs and systems - Part 4: Performance testing
IS 18073 : 2023	Electric Traction Motor - Performance and Functional Requirements
IS 18294 : 2023	Electric Rickshaw E-Kart Construction and Functional Safety Requirements Specification
IS 18606 : 2024	Electric Power Train of M and N Category Vehicles— Specific Requirements
IS 18590 : 2024	Electric Power Train of L Category Vehicles— Specific Requirements