

## BUREAU OF INDIAN STANDARDS

### Program of Work

#### ETD 51 : Electrotechnology in Mobility

Scope: To prepare Indian Standards for electrotechnical aspects of totally or partly electrically propelled road vehicles

Liaison: **IEC TC-69 (P):** *Electrical power/energy transfer systems for electrically propelled road vehicles and industrial trucks* **IEC TC-23 SC-H (P):** *Plugs, Socket-outlets and Couplers for industrial and similar applications, and for Electric Vehicles*

### Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS/ISO 15118-1 : 2013 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 ISO 15118-2 : 2014	Road vehicles - Vehicle - To - Grid communication interface: Part 2 network and application protocol requirements		-	
3	IS/ISO 15118-3 : 2015 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 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 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 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	Electric Vehicle Conductive		-	

	2) : 2020	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 IEC 61851-21-1 : 2017	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility ( EMC ) Requirements Section 1 On-board chargers		-	Identical under dual numbering
14	IS 17017 (Part 21/Sec 2) : 2019 IEC 61851-21-2 : 2018 IEC 61851-21-2 : 2018	Electric Vehicle Conductive Charging System Part 21 Electromagnetic Compatibility ( EMC ) Requirements Section 2 Off-board chargers		-	Identical under dual numbering
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 IEC TS 62840-1:2016	Electric vehicle battery swap system - Part 1: General and Guidance		-	Identical under dual numbering
21	IS 17896 (Part 2) : 2022 IEC 62840-2:2016 IEC 62840-2:2016	Electric vehicle battery swap system - Part 2: Safety requirements		-	Identical under dual numbering

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
1	ETD 51 (17180)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VE-HICLES SECTION 3 COMMUNICATION PROTOCOL
2	ETD 51 (19366)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VEHICLES SECTION 1 GUIDELINES AND PACK DIMENSIONS
3	ETD 51 (19367)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 4 LIGHT ELECTRIC VEHICLES SECTION 2 CONNECTION SYSTEMS
4	ETD 51 (20356)	ELECTRIC VEHICLE BATTERY SWAP SYSTEM PART 3 CENTRAL MANAGEMENT SYSTEM

## Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

## Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	ETD 51 (21658)	Electric Vehicle Conductive Charging Systems Part 30 Dual Gun dc Electric Vehicle Supply Equipment

**Total Published Standards:20 Total Standards Under development:5**

## Aspect Wise Report

Product : 5  
Code of Practices : 3  
Methods of Test : 1  
Terminology : 0  
Dimensions : 4  
System Standard : 0  
Safety Standard : 2  
Others : 6  
Service Specification : 0  
Process Specification : 0  
Unclassified : 0

## Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		

## Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 17017 (Part 1) : 2018	Electric Vehicle Conductive Charging System Part 1 General Requirements
2	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
3	IS 17017 (Part 22/Sec 1) : 2021 ISO 21084:2019	Electric Vehicle Conductive Charging Systems Part 22 AC Charging Configurations Section 1 - AC Charge Point for Light Electric Vehicle
4	IS 17017 (Part 23) : 2021 ISO/IEC 11160-1:1996	Electric Vehicle Conductive Charging Systems Part 23 dc Electric Vehicle Supply Equipment
5	IS 17017 (Part 25) : 2021 ISO 6658 : 2017	ELECTRIC VEHICLE CONDUCTIVE CHARGING SYSTEM Part 25 DC EV supply equipment where protection relies on electrical separation