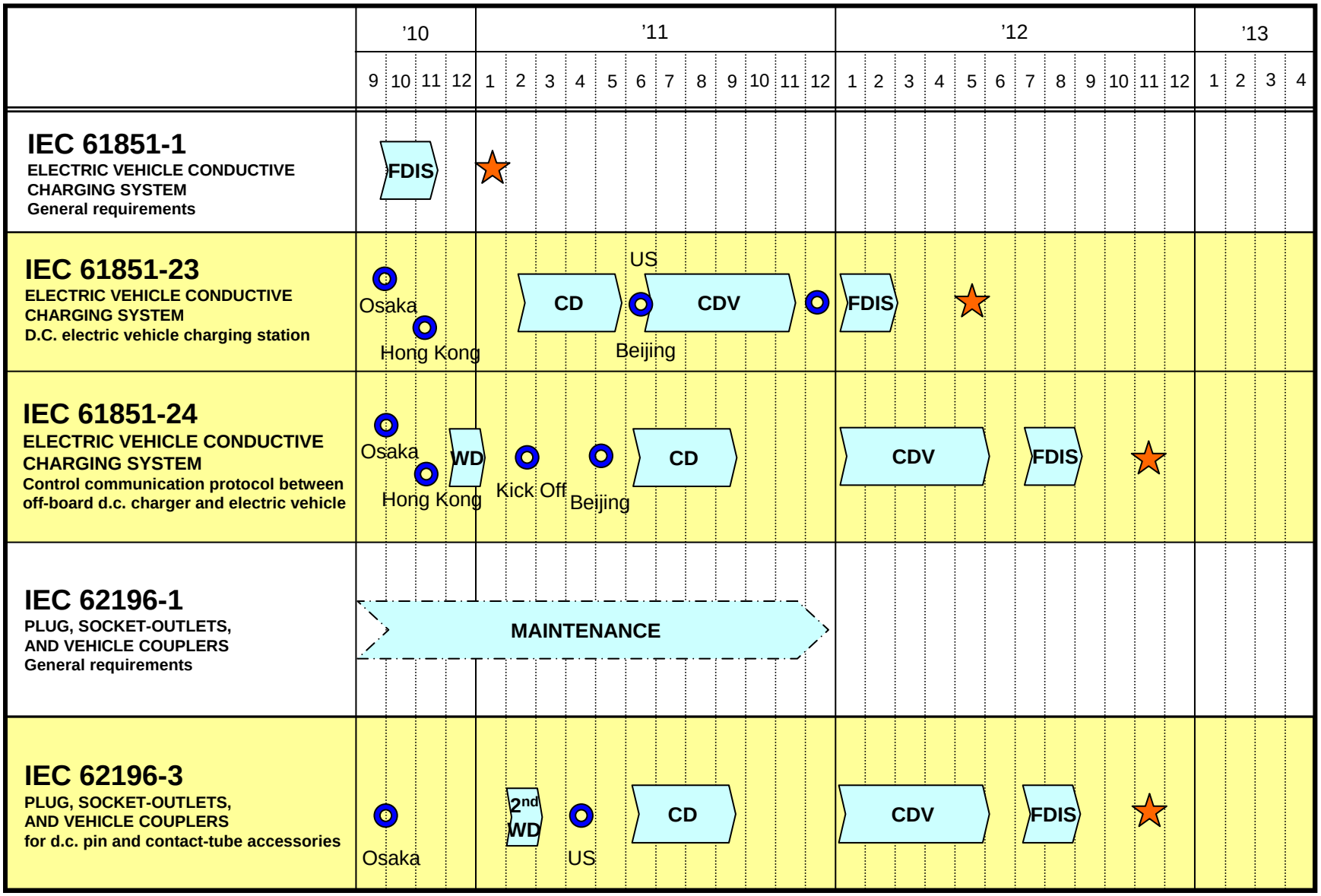
DC Charging System Standardization Schedule



FDIS: Final Draft International Standard, CD: Committee Draft, CDV: Committee Draft for Vote, WD: Working Draft

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The contents of IEC61851-23 (Under development)

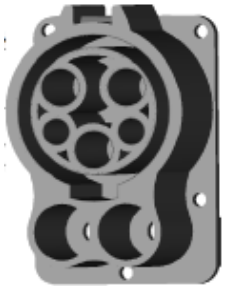
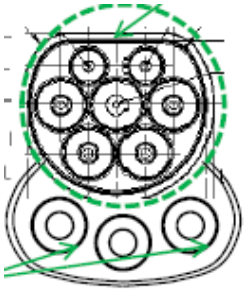
Section	Contents
Scope	Scope of this standard.
Normative reference	Reference of other standard
Terms and definitions	The explanation of the term
General requirements	This clause of part 1 is applicable.
Rating of the supply a.c. voltage	This clause of part 1 is applicable.
General system requirement and interface	The requirement of d.c. charging station (ex. Classification, Category, Function, etc.)
Protection against electric shock	Measuring ground fault on D.C. circuit of d.c. EV charging station and vehicle , etc.
Connection between the power supply and the EV	Overview of the vehicle interface options and suggested contact ratings
Specific requirements for vehicle inlet, connector, plug and socket-outlet	The requirement for an accessory if the d.c. interfaces. (ex. Service life of inlet and connector, Breaking capacity)
Charging cable assembly requirements	Usability of cable assembly
EVSE requirements	IP degrees, Protection against electric shock, Emission, etc.
Specific requirement for d.c. EV charging station	Stability, The explanation of D.C. output, etc.
Communication between EV and EV charging station	General requirement, etc.
Annex AA-DD	Charging system, Isolation monitoring, Lock function, Variation

Main topic of IEC 61851-23

1. **System Classification**
   - Pure DC charging system (CHAdeMO, China)
   - AC/DC combo system (Germany and U.S. Proposal)
   - DC-DC system
2. **Charging control and requirement**
   - Response, tracking performance
   - Measurement precision
   - Protection of battery over-voltage / over-current
3. **Dielectric withstand characteristic**
   - Dielectric withstand voltage, impulse dielectric withstand voltage
4. **Leakage current**
5. **Environments test**
   - Ambient Temperature, Humidity
   - Temperature-rise test
6. **EMC**
   - Emission (AC side, DC side, Conducted, Radiated)
   - Immunity (surge, FTB, voltage dip, RF)
7. **Communication protocol, hardware etc.**

Main topic of IEC62196-3 and IEC61851-24

Type of coupler (62196-3)

Japan	US	Germany	China
CHAdeMO	COMBO of AC type 1	COMBO of AC type 2	DC dedicated
			

Communication method and protocol (IEC 61851-24)

Japan	US/Europe		China
CAN	PLC	In-band	CAN

- There are four different proposals of connector shape.
- There are four different proposals of communication protocol, however the U.S. is also considering CAN.
- Only CHAdeMO is available in the market. Other proposals are just design/prototype, not existing.