

CHAdeMO Europe Annual Member Meeting 2014

IEC / EN standardization

by Takeshi Haida,
CHAdeMO Technical WG



Topics



1. IEC standard for DC EV charging station

- IEC 61851-23 ed.1 (published)
- IEC 61851-24 ed.1 (published)
- IEC 62196-3 ed.1 (published)
- IEC 61851-21-2 (EMC under discussion)

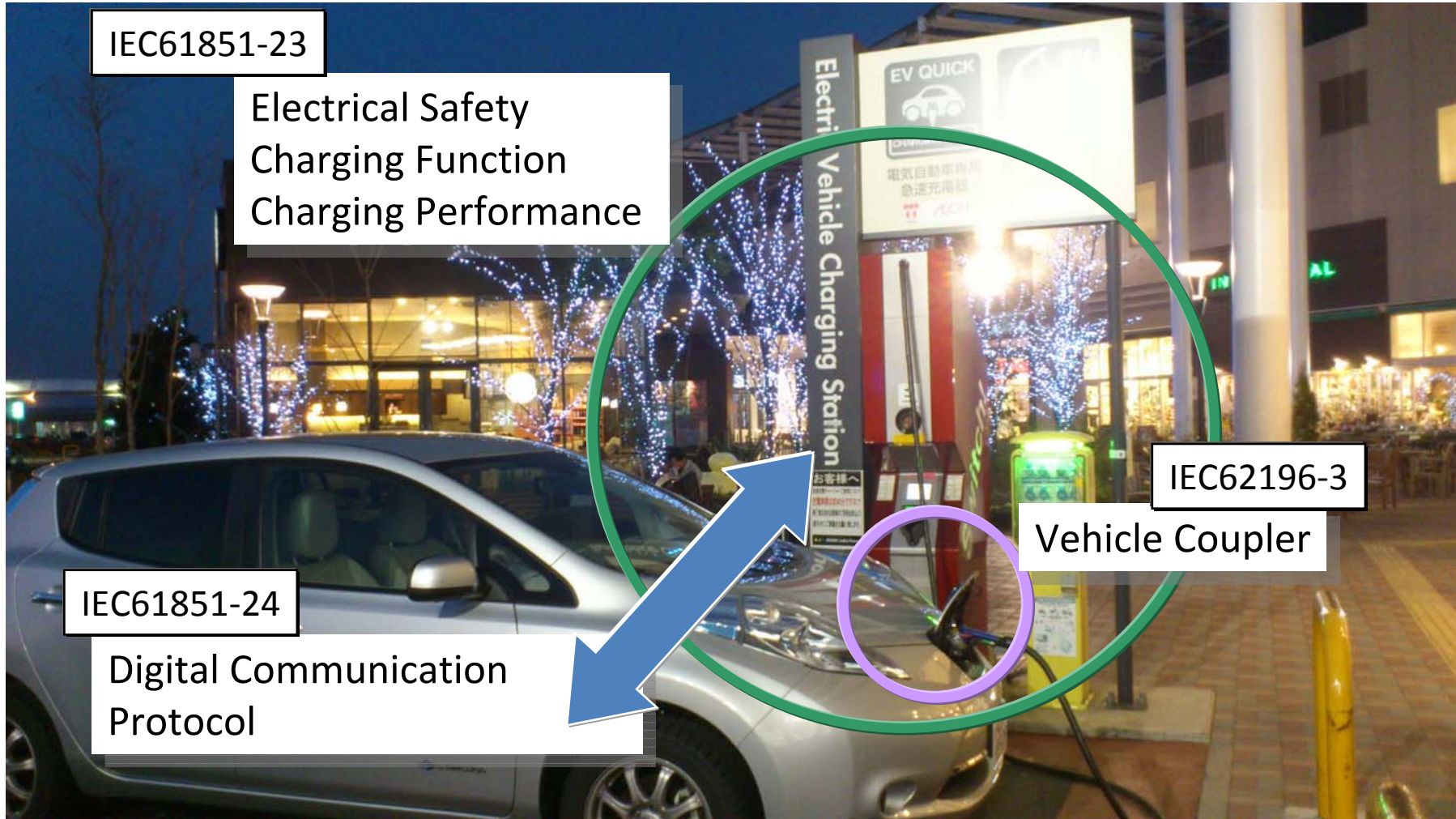
2. to the Europe and Japan Standard

- EN, JIS

3. NEW work in IEC

- MT5 (maintenance project on the IEC61851-23 ed.1 and IEC61851-24 ed.1)

Key items of DC EV charging station for International standardization



IEC61851-23

Electrical Safety
Charging Function
Charging Performance

IEC61851-24

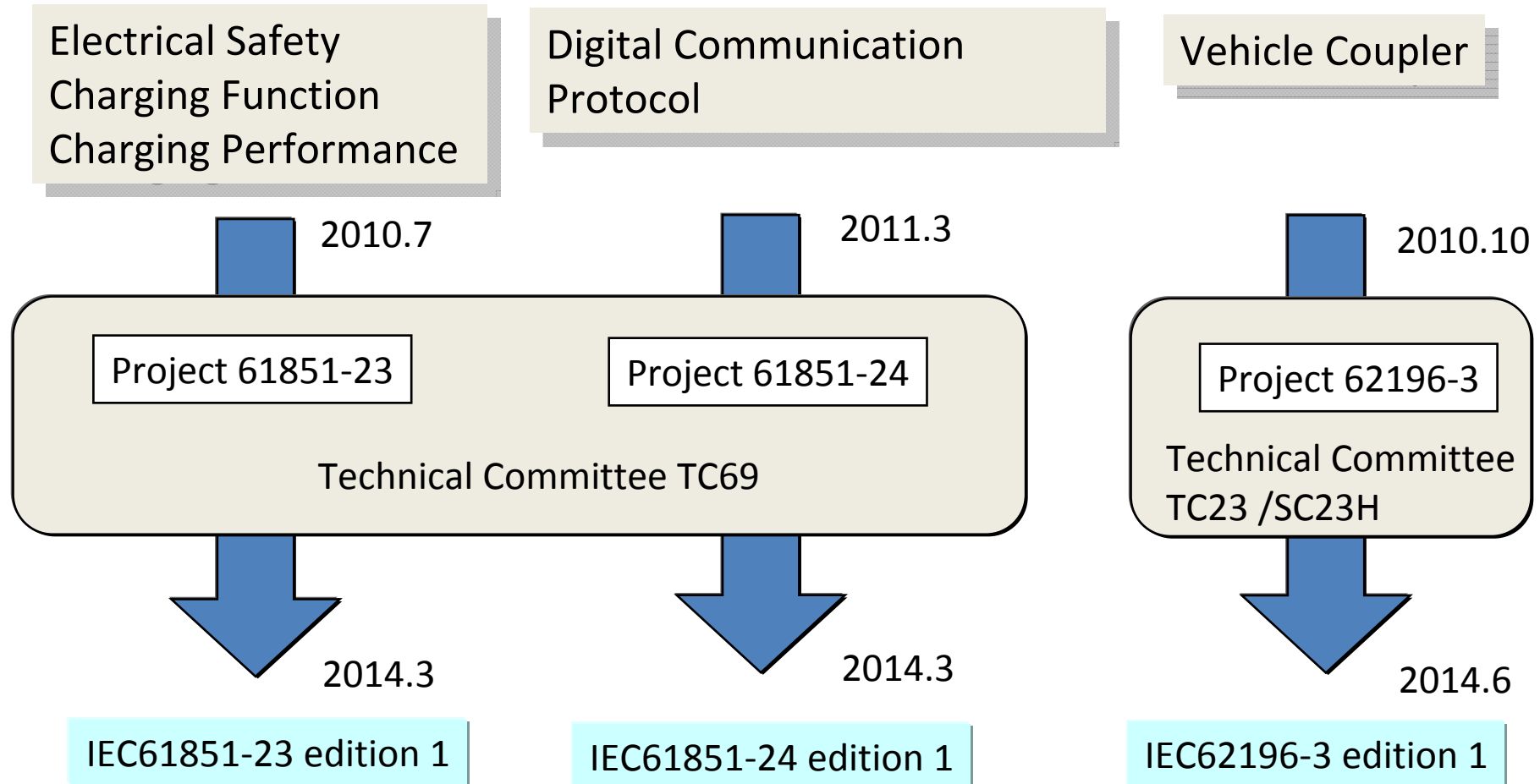
Digital Communication
Protocol

IEC62196-3

Vehicle Coupler



Standardization project and Publication



Standardization project and Publication



Electrical Safety
Charging Function
Charging P

Digital Communication
Protocol

Vehicle Coupler



Project

2010.10

t 62196-3

Committee
23H

2014.3

2014.3

2014.6

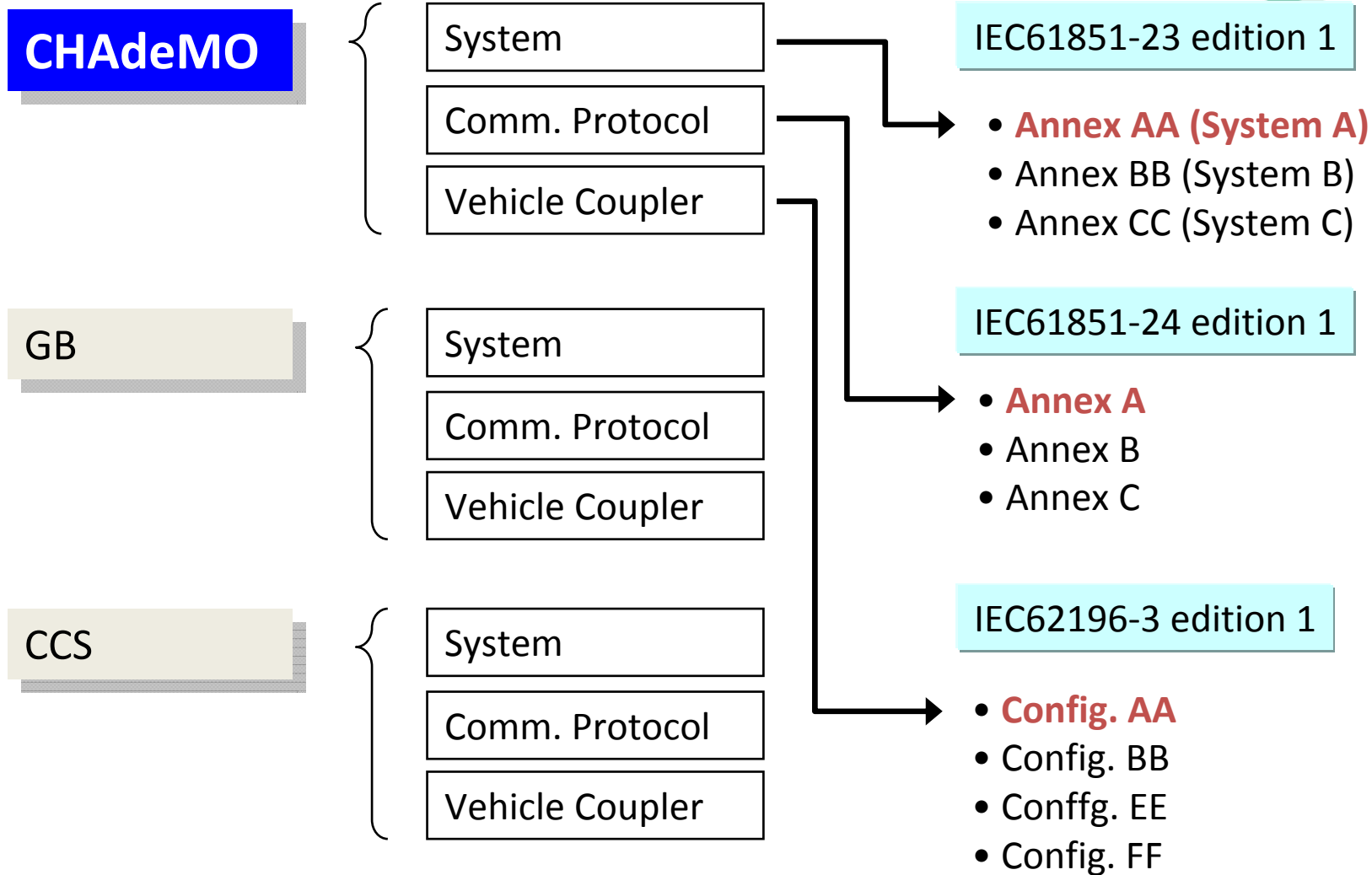
IEC61851-23 edition 1

IEC61851-24 edition 1

IEC62196-3 edition 1



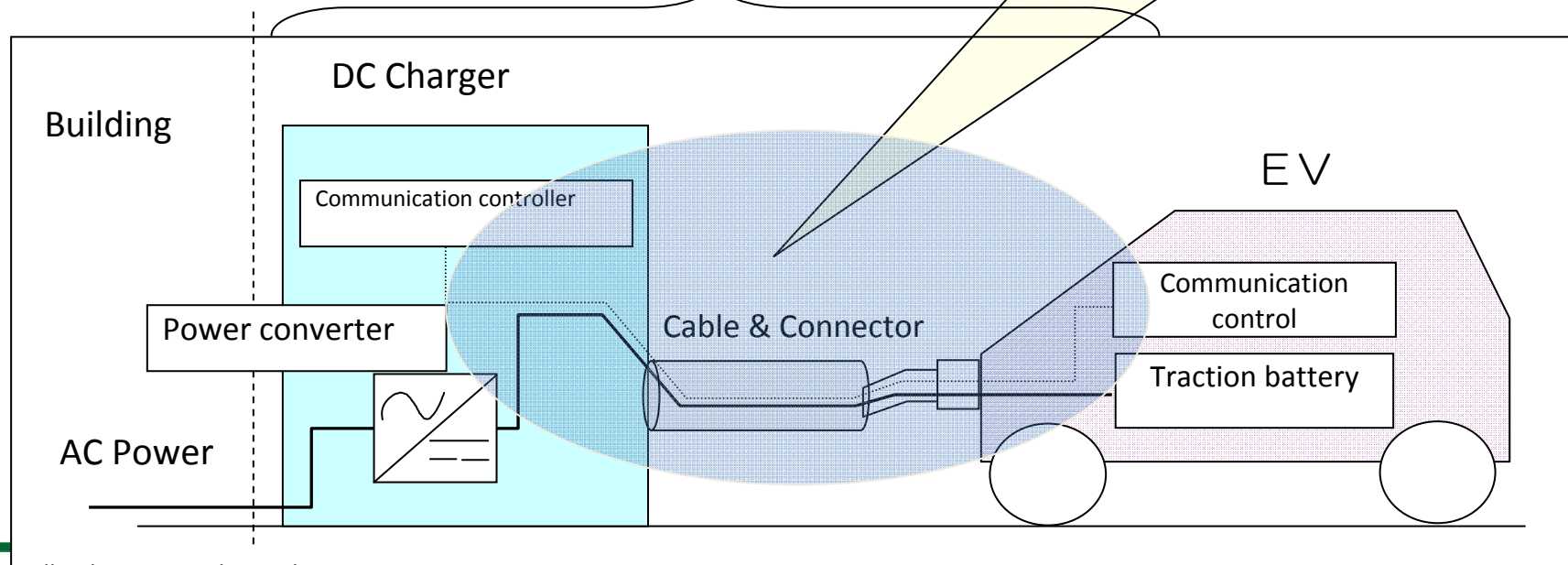
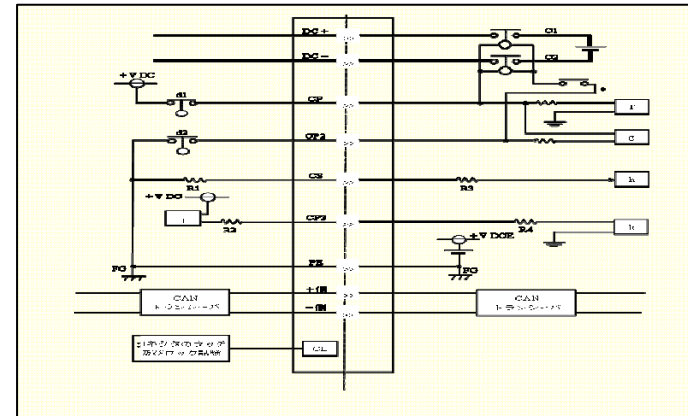
Integration of CHAdeMO, GB, CCS into IEC standards



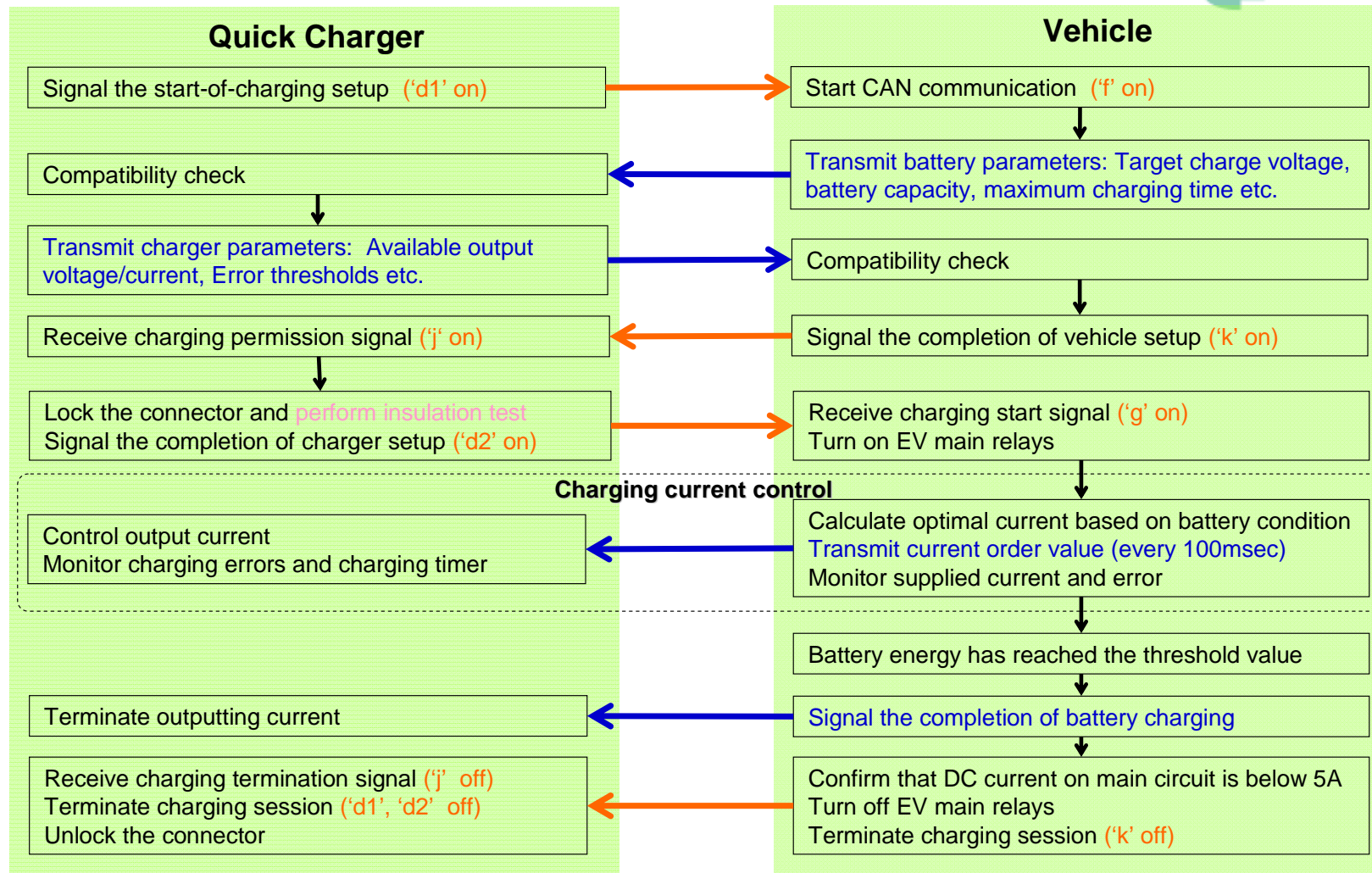
IEC61851-23 (Charging System, Safety, etc.)



- Master standard of DC charging master standard
- Requirements and measures for Electrical safety
 - Necessary functions for charging
 - Charge performance
 - Specific system requirements
(61851-24 specifics digital communication.)



IEC61851-24 (Digital communication protocol)



IEC62196-3 (DC vehicle coupler)

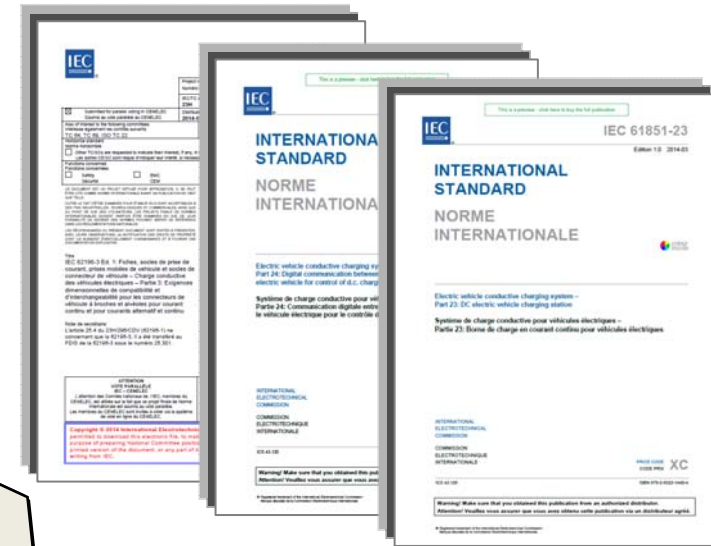


	Configuration AA CHAdeMO (Japan) (System A)	Configuration BB GB/T (PRC) (System B)	Configuration EE COMBO 1 (US) (System C)	Configuration FF COMBO 2 (DE)
Connector				
Dimensional requirements				
Communication Protocol	CAN		PLC	

Relationship of CHAdeMO spec. and IEC

CHAdeMO Specifications

- Including detail technical information for charger and vehicle manufacture.
- Timely reflecting market needs.

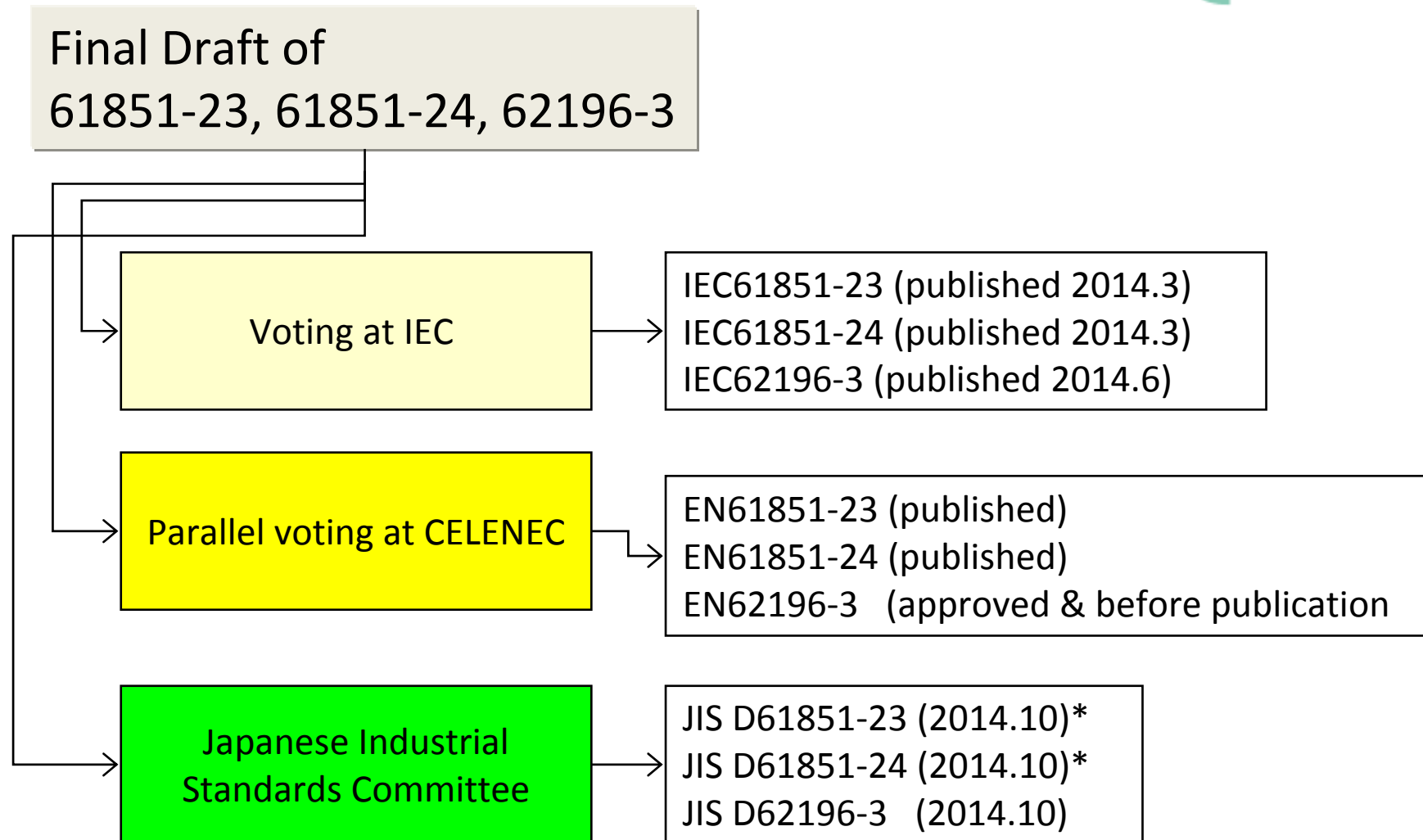


IEC standards

- Essences and principal for ensuring electrical safety, power quality, design consistency.
- Maintenance process through international consensus building



Europe and Japan Industrial Standard



*Including small localization

NEW Works



- IEC TC69 launch maintenance project for IEC61851-23 and 61851-24
- Several new topics includes, such as:
 - Multiple outlet or Multi-standards chargers
 - Pluggable or Movable charger
 - Bi-directional power
 - DC-DC
 - Test specification
 - Etc.
- Kick off meeting is held from Nov. 4 to Nov. 7 in Tokyo



Thank you

