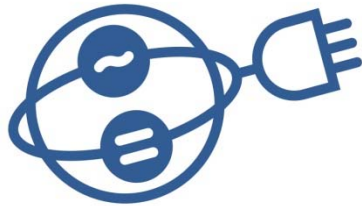




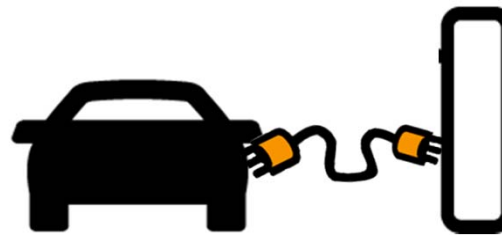
DAIMLER



Combined Charging the universal charging system

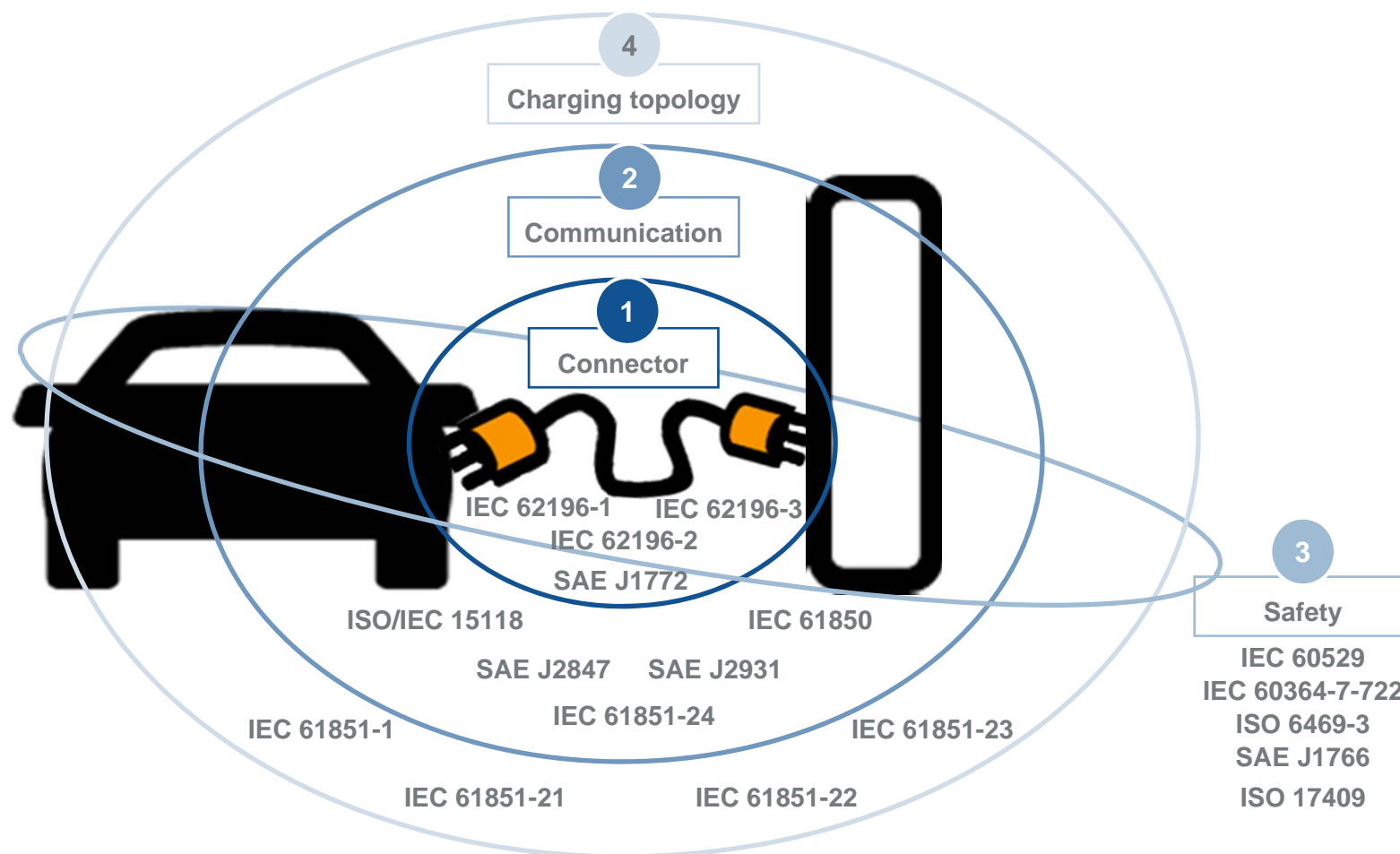
Global Standardization Efforts

Joachim Goethel, BMW Group



Relevant International Standards for the Charging Interface

The charging system is comprised by a set of related standards.



Geschäftsstelle Ladeschnittstelle
c/o Carmeq GmbH



DAIMLER



Standardization Europe

Standards for DC charging are ready.



Scope

- DC systems according to Combined Charging Systems will be created according to existing standards:
 - Connector: IEC 62196-3 CDV
 - Topology: IEC 61851-23 CDV
 - Communication: DIN Spec 70121
- DIN SPEC 70121 refers to ISO / IEC 15118-1 DIS, -2 DIS and 15118-3

Benefits

- Series production of DC-Charging ongoing, Transparent requirements for all products on the market
- Common agreement by all stakeholders
- Standards aligned with SAE

Schedule

- Balloting on draft
- Publication June 2012
- Series products available End of 2012
- Vehicles on the market in 2013

Geschäftsstelle Ladeschnittstelle
c/o Carmeq GmbH



DAIMLER



International Standardization

Global alignment of international experts established during voting procedures.



Full specification

- The Combined Charging System standards cover AC and DC charging
- International Standards are as follows
 - IEC 62196-1/-2/-3
 - IEC 61851-1/-21/-22/-23
 - ISO / IEC 15118-1/-2/-3
 - ISO 17409

Completion

- Voting on committee drafts ongoing
- IEC is aligned with German and SAE standards
- Publication of international standards expected to be completed in time

Geschäftsstelle Ladeschnittstelle
c/o Carmeq GmbH



DAIMLER

