



SUMMARY



1. CUNA delegated by UNI (Italian Body for Standardisation: Automotive – Agriculture – Heart moving machinery - Gardening machinery) presentation
 - a. Industry Members
 - b. List of technical commissions
 - c. National contribution and National representatives

2. Standard related to electric vehicles especially for:
 - a. Safety and Interoperability
 - b. Standardization target

INDUSTRY MEMBERS



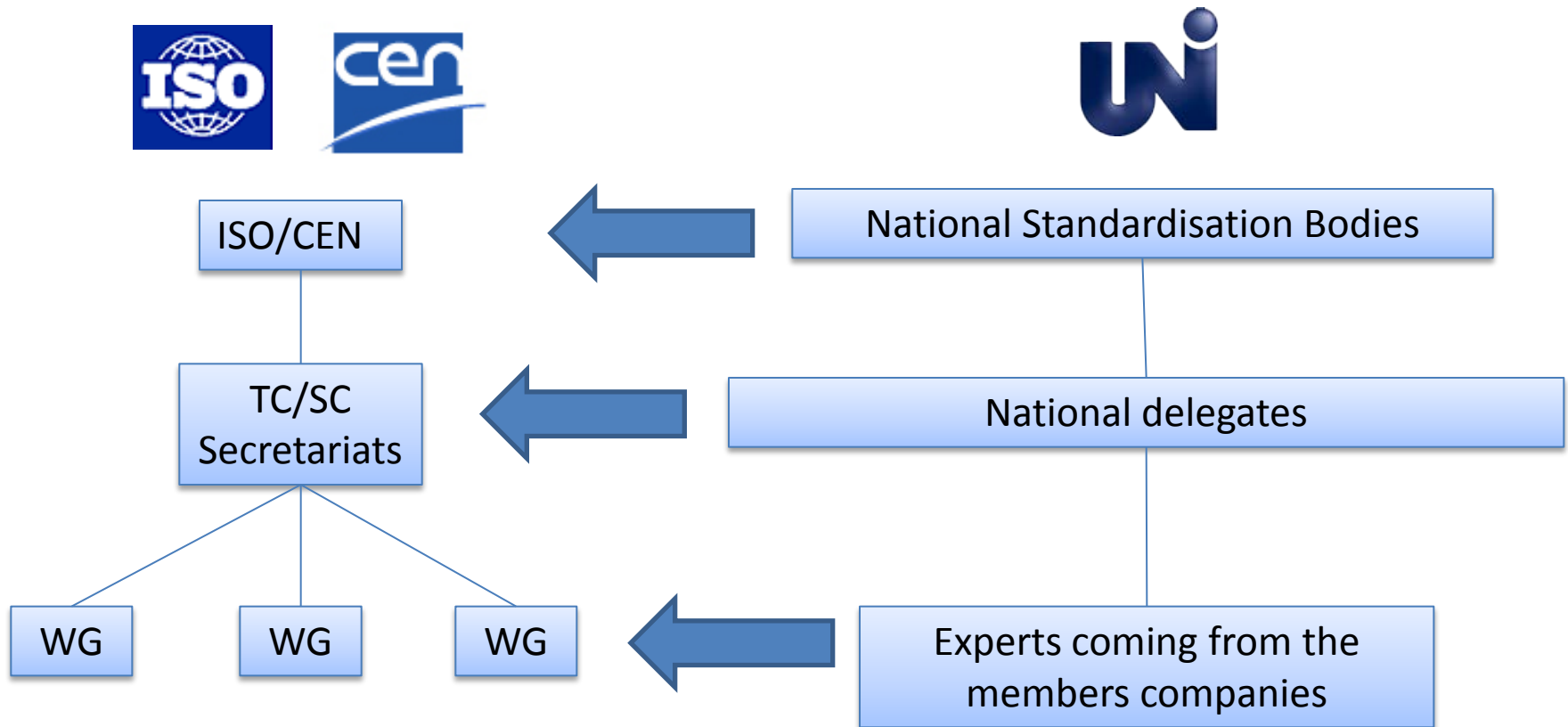
- ✚ FGA: passenger cars, powertrain and transmission (FCA)
- ✚ IVECO: Commercial vehicles & FPT Industrial (CNH Industrial)
- ✚ ANCMA: motorcycles and mopeds
- ✚ ANFIA: other road vehicles and components
- ✚ UNACOMA: agricultural machinery and tractors, Earth Moving Machinery
- ✚ UNACEA: Earth Moving Machinery
- ✚ UP: Fuels and lubricants
- ✚ Tyre manufacturers
- ✚ Component manufacturers

List of Technical Commissions

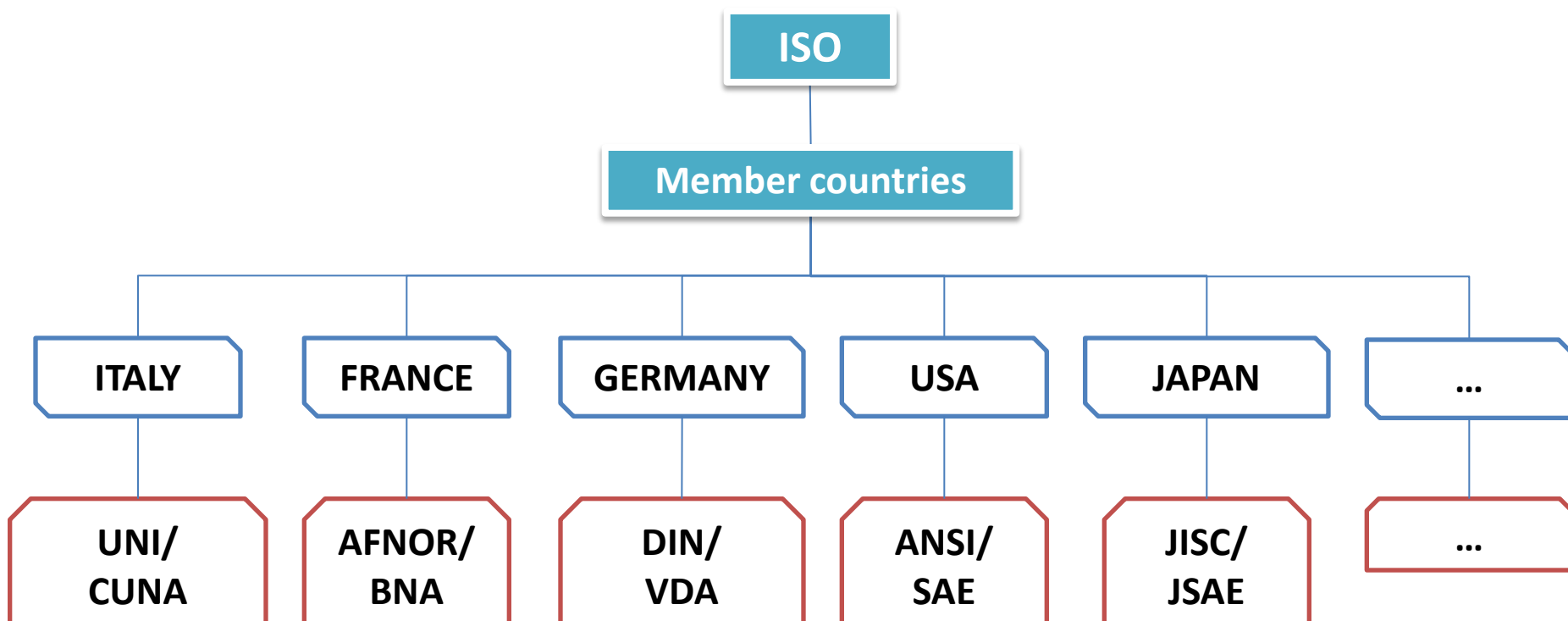


1. Vehicle ergonomics
2. Special outfitting and buses
3. Commercial vehicles outfitting and their trailers
4. Technical services
- 5. Motorcycles and mopeds**
6. Fuels and lubricants
7. Agricultural, Forestry and gardening machinery
8. Earth Moving Machinery
9. Powertrain
10. Tyres, Rims and Valves
11. Passive Safety
- 12. Electric, electronic and telematics on-board components**
13. Testing on vehicles and their components
- 14. Electric, hybrid and fuel cell vehicles**

ISO & CEN Structure and National Contribution



National Representative within ISO & CEN



ISO 19363 (scheduled for 10-2016) Electrically propelled road vehicles – Magnetic field Power Transfer – Interoperability and Safety requirements

- Giampiero Brusaglino (ATA) is the Italian Delegate in ISO/TC22/SC21/WG1 (responsible for the development of the item)
- The document is at Working draft stage (WD)
- Focus point having relation with FABRIC development:
 - Flux geometry / coil geometry
 - Core specification
 - Operating frequency
 - Alignment tolerance requirements
 - Location of secondary device
 - Control loop of power transfer and response time of the loop
 - Parameters needed to be exchanged for interoperability
 - Resonant circuit topology, coupling factor and impedance (informative)

ISO/IEC 15118 (scheduled for 10-2016) Road vehicle to grid communication interface

- Part 6: General information and use-case definition for wireless communication
- Part 7: Network and application protocol requirements for wireless communication
- Part 8: Physical layer and data link layer requirements for wireless communication

IEC 61980 Electric vehicle wireless power transfer (WPT) systems

- Part 1: General requirements
- Part 2: Specific requirements for communication EV and infrastructure
- Part 3: Specific requirements for the magnetic field power transfer systems

ISO 6469 Electrically propelled road vehicles -- Safety specifications

- Part 1 : On-board rechargeable energy storage system (RESS),
- Part 2 : Vehicle operational safety means and protection against failures
- Part 3 : Protection of persons against electric shock
- Part 4 : Post crash electrical safety (scheduled for 01-2016)

SAE J2954 Wireless Charging of Electric and Plug-in Hybrid Vehicles
(Guideline scheduled for 06/2014)

SAE J2836/6 J2847/6 J2931/6 Communication for inductive charging
(Guideline scheduled for 06/2014)

SAE J1773 Electric Vehicle Inductively Coupled Charging (published as recommended practice)

UL 2750 Wireless EV charging

- User need, concept and requirements for ICT solutions
- Review of existing ICT solutions and technical benchmarking
- Prototype of ICT modules for the on board information strategies
- Technical and user requirements
- Specification document
- Architecture definition
- Assessment of the technical feasibility of ICT and charging solutions
- FABRIC final use cases
- FABRIC test scenarios

Standardization target



Standardisation targets should be mainly focused on:

- Interoperability, at the general mobility system level, should concern the Wireless Power Transfer capability between vehicle and infrastructure with dynamic mode and with static wireless infrastructure facilities.
- Homogenize vehicle layout in order to improve every aspect related to safety and rescue activities in case of accident



For these reasons, it should be very useful to establish a **liaison between FABRIC and ISO/TC22/SC37** (formerly named SC21)

Back-up

Internal Structure

