

## Christoph Albus

Federal Ministry of Transport, Building and Urban Affairs

- **Germany - Contracting Party of 1998 agreement  
(GTR's under UN-ECE / WP.29 – AC.3)**
- **Responsible for legal requirements (approval of vehicles)**
- **Technical Sponsor (co) of the HFCV-GTR-development,  
together with co-sponsors Japan and US**
- **Project Management of HFCV project**

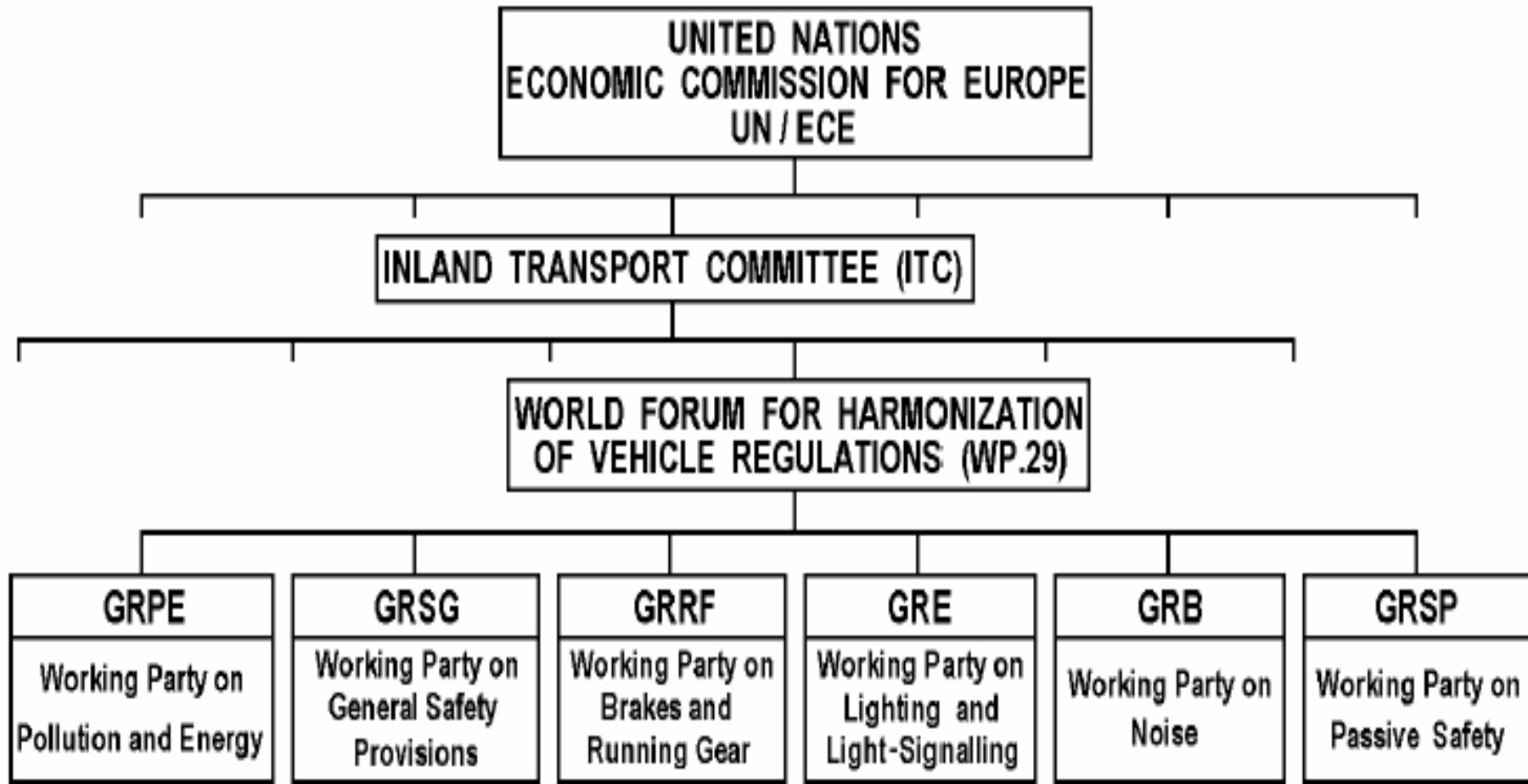
### Legislation

- **Rules approval of vehicle types, a condition for registration (marketing) of new vehicles**
- **Type approval or self certification based on technical regulations (ECE-R, EU-Directive, FMVSS, TRIAS, ...)**
- **International harmonization ensures serial production under economical conditions**



# UN-ECE / WP.29-AC3 HFCV

## ORGANIZATION OF WP.29



## **Agreements administered by WP.29**

- **1958 Agreement (UN-ECE Regulations)**
- **1998 Global Agreement  
( Global Technical Regulations – GTR)**
- **(1997 Agreement on Periodical Technical Inspections)**

## **Global Technical Regulations – GTR** **(1998 agreement)**

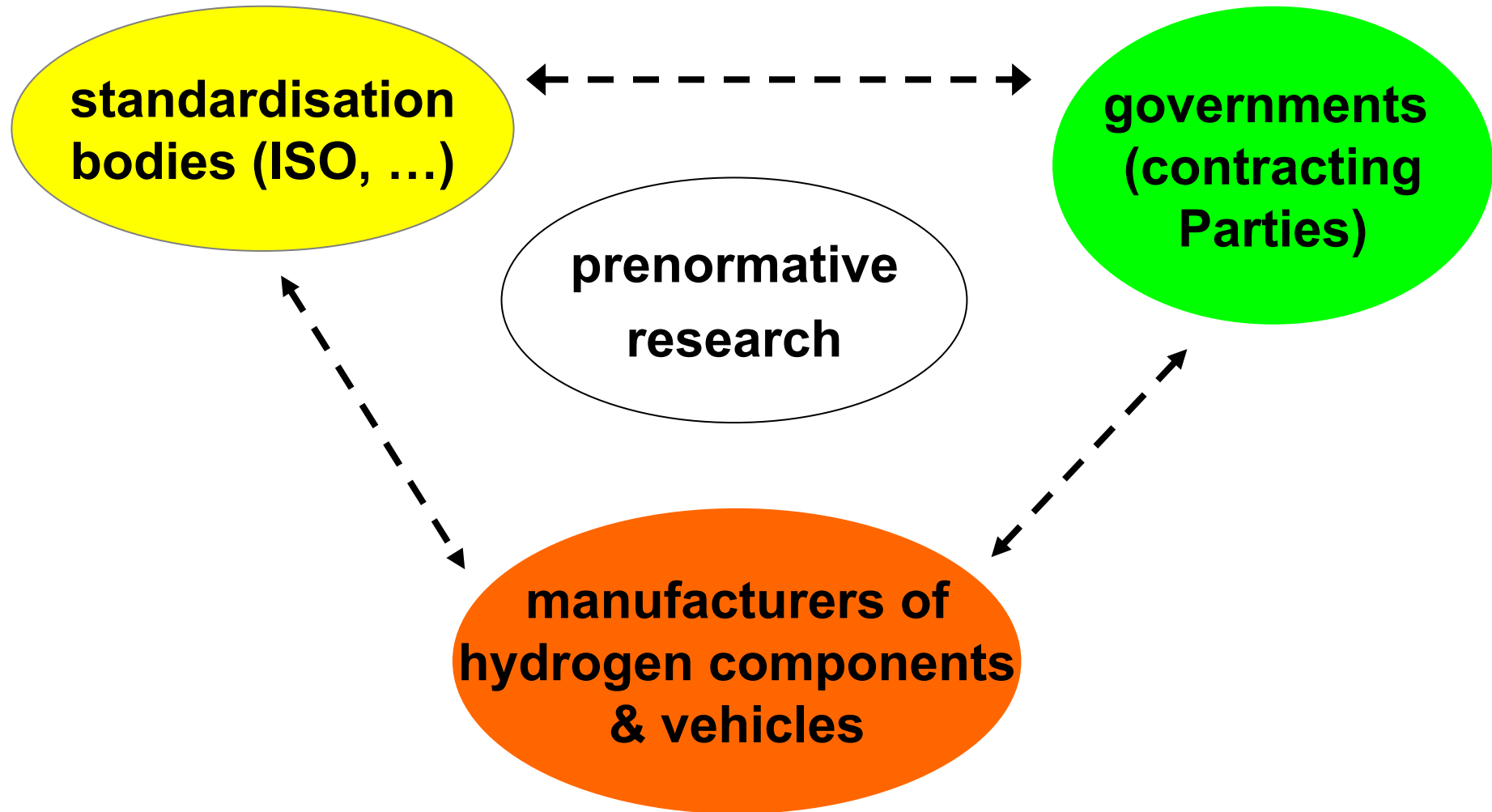
**GTR: → worldwide harmonized →**

- 1) Test procedure**
- 2) Performance requirements**

**GTR's should work:**      **→ Type approval**  
   **→ Self certification**

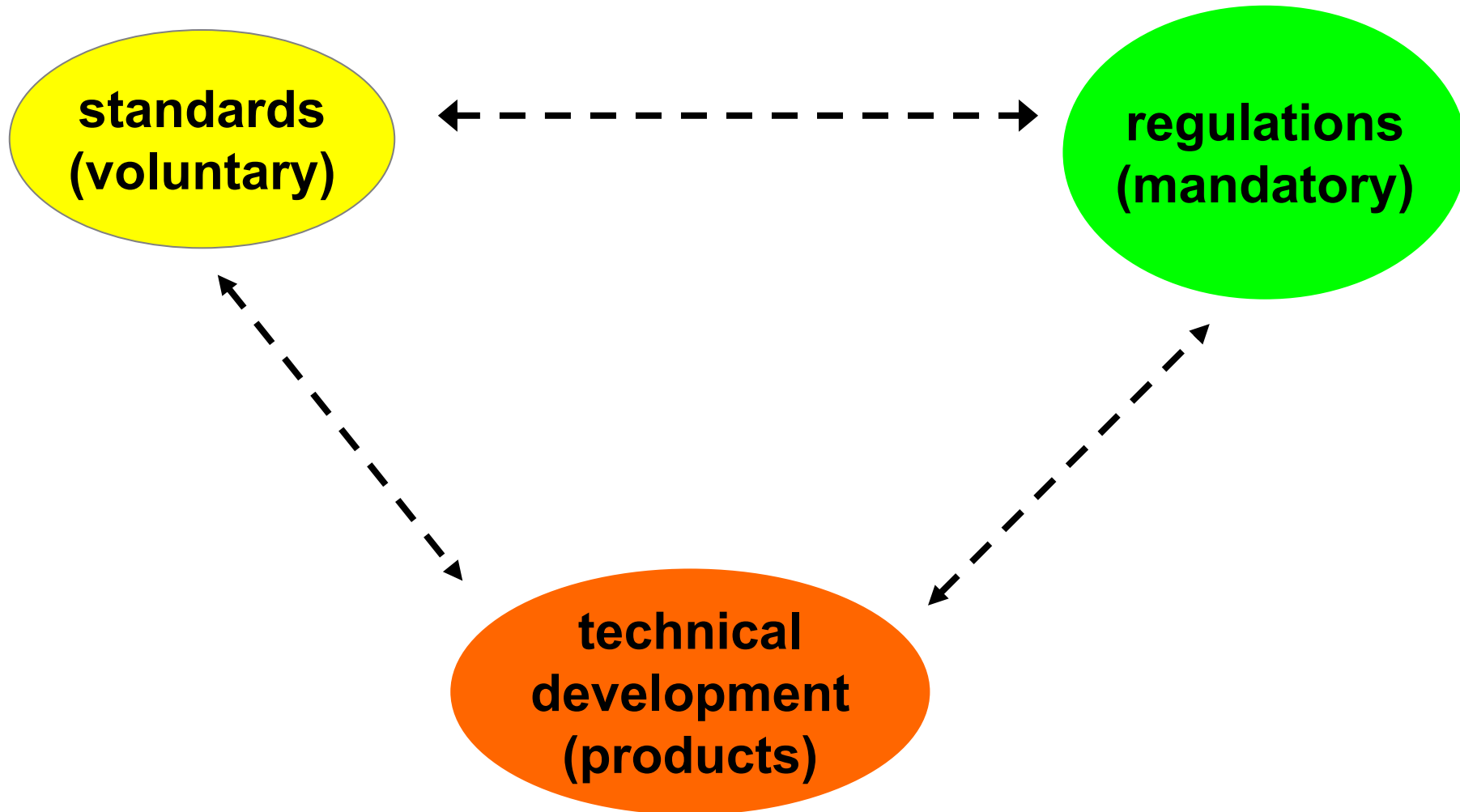


# UN-ECE / WP.29-AC3 HFCV





# UN-ECE / WP.29-AC3 HFCV



At 131st session of WP.29 it was stated:

„WP.29 accepted the recommendation of WP.29/AC.2 to use only references to international standards in the Regulations instead of reproducing them in extenso.“



## UN-ECE / WP.29-AC3 HFCV

- Reference to a specific dated int. standard
- Advantage: Lean regulations – focussing on legal requirements)
- Concern: Amendments of regulations might be more complicated
- Disadvantage: Difficult work with references and several documents for Contracting parties, TAA's, Technical Service and manufacturers

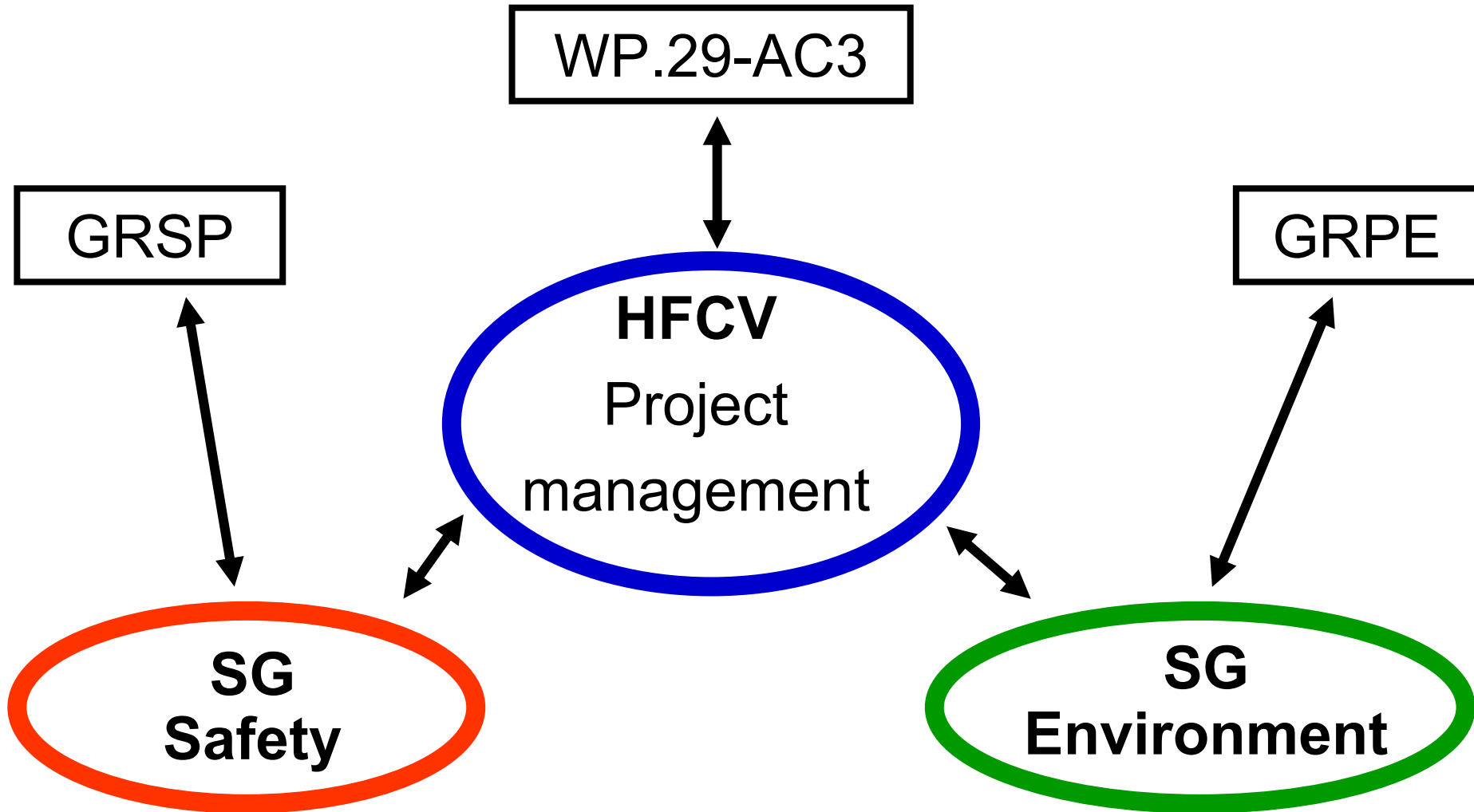


# UN-ECE / WP.29-AC3 HFCV

- **HFCV- GTR (Hydrogen / Fuel Cell Vehicles)**
  - **Safety aspects (SGS)**  
(H<sub>2</sub>, high pressure, high voltage)
  - **Environmental aspects (SGE)**
  
- **Three main questions**
  - **Differences to conventional vehicles ?**
  - **What should be regulated ?**
  - **What can be harmonized (ww) ?**



# UN-ECE / WP.29-AC3 HFCV





Bundesministerium  
für Verkehr, Bau  
und Stadtentwicklung

# UN-ECE / WP.29-AC3 HFCV

Thank you for your attention

ISO Round Table

Geneva - 10th January 2007