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

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

GTR: → worldwide harmonized →

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

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



- **HFCV- GTR (Hydrogen / Fuel Cell Vehicles)**
 - **Safety aspects (SGS)**
(H₂, high pressure, high voltage)
 - **Environmental aspects (SGE)**

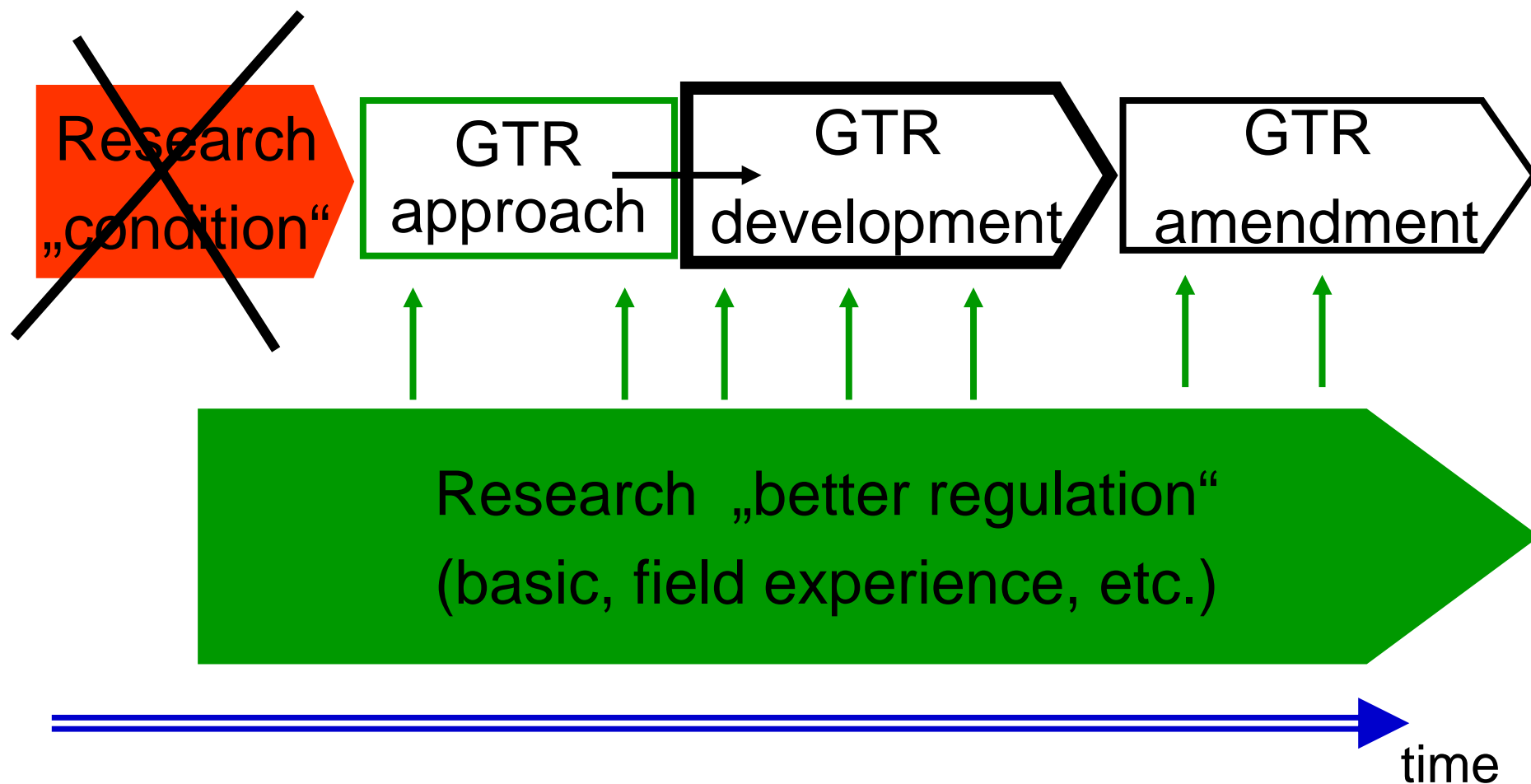
- **Three main questions**
 - **Differences to conventional vehicles ?**
 - **What should be regulated ?**
 - **What can be harmonized (ww) ?**

From component to system testing

- **justification (safety analysis / risk assessment)**
- **validation (test procedure)**



Role of (pre) normative research





- **Schedule / next steps (HFCV- GTR)**
 - **Roadmap proposal to WP.29 – AC.3**
 - **by the three co-sponsors**
 - **hopefully November 2006**
 - **Start / Continuation of the work of the two sub groups (SGS, SGE)**



Bundesministerium
für Verkehr, Bau
und Stadtentwicklung

UN-ECE / WP.29-AC3 / HFCV Global - Technical - Regulation

thank you

HarmonHy – final conference

Brussels - 4th October 2006