FIMCAR
Project Description
Proposal for Cooperation with GRSP IG FI

FIMCAR
frontal impact and compatibility assessment research

SEVENTH FRAMEWORK PROGRAMME

FIMCAR Project

general

- 2nd Call FP7 (grant agreement no.: 234216)
- Coordinator: TU Berlin (Heiko Johannsen)
- 18 Beneficiaries
- Budget: 6 Mio Euro / Funding: 3.8 Mio Euro
- Main aim: Proposal for frontal impact compatibility assessment approach
  - Frontal Impact Compatibility Assessment is expected to consist of an off-set and a full frontal test (of which one could be an MDB test)

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consortium

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What is compatibility?

- Compatibility consists of self and partner protection.
- Improved compatibility will decrease the injury risks for occupants in single and multiple vehicle accidents.
- Compatible vehicles will deform in a stable manner allowing the deformation zones to be exploited even when different vehicle sizes and masses are involved

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What compatibility needs to address

- Structural interaction (self and partner protection)
- Compartment strength (self protection)
- Front end force / deformation characteristics
  - force level (partner protection)
  - deceleration pulse and restraint system (self protection)

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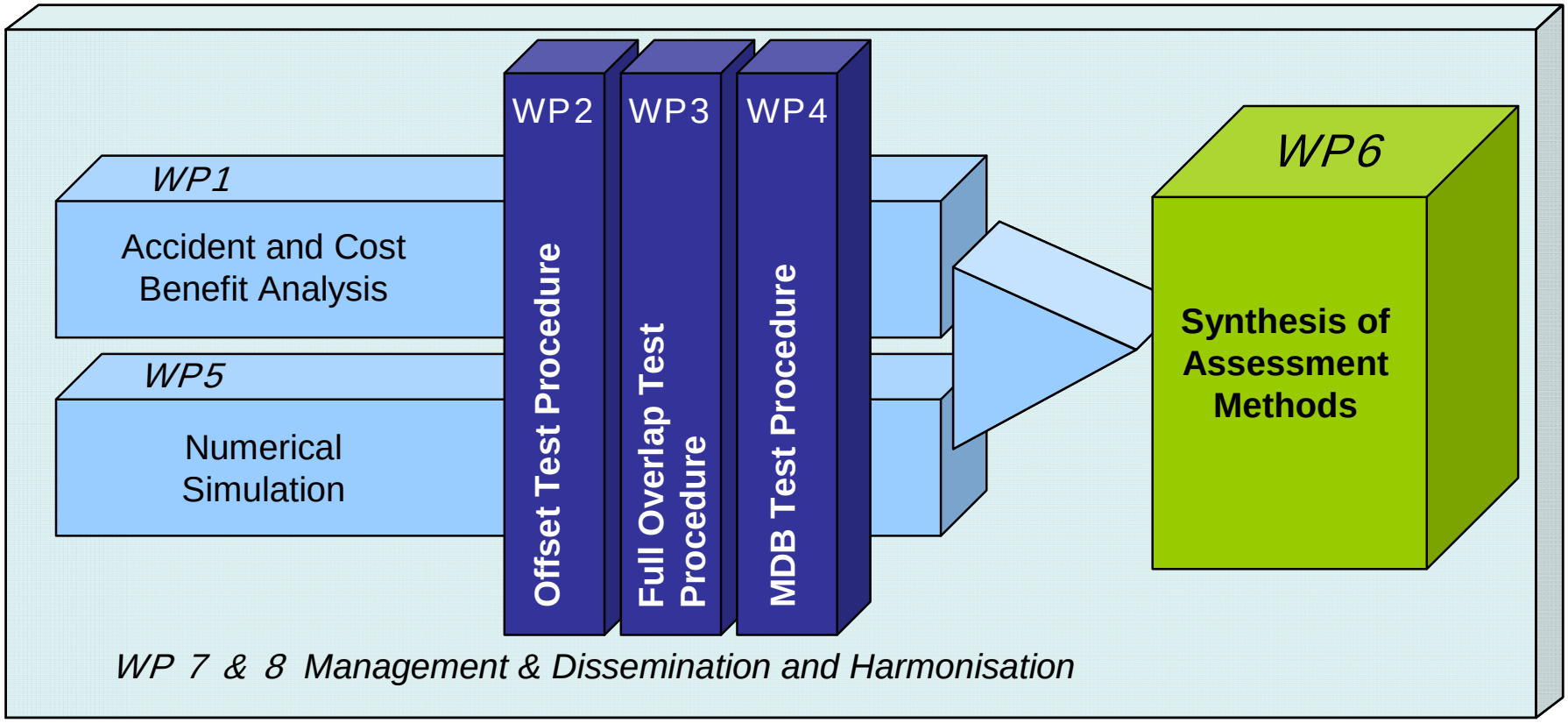
Structure



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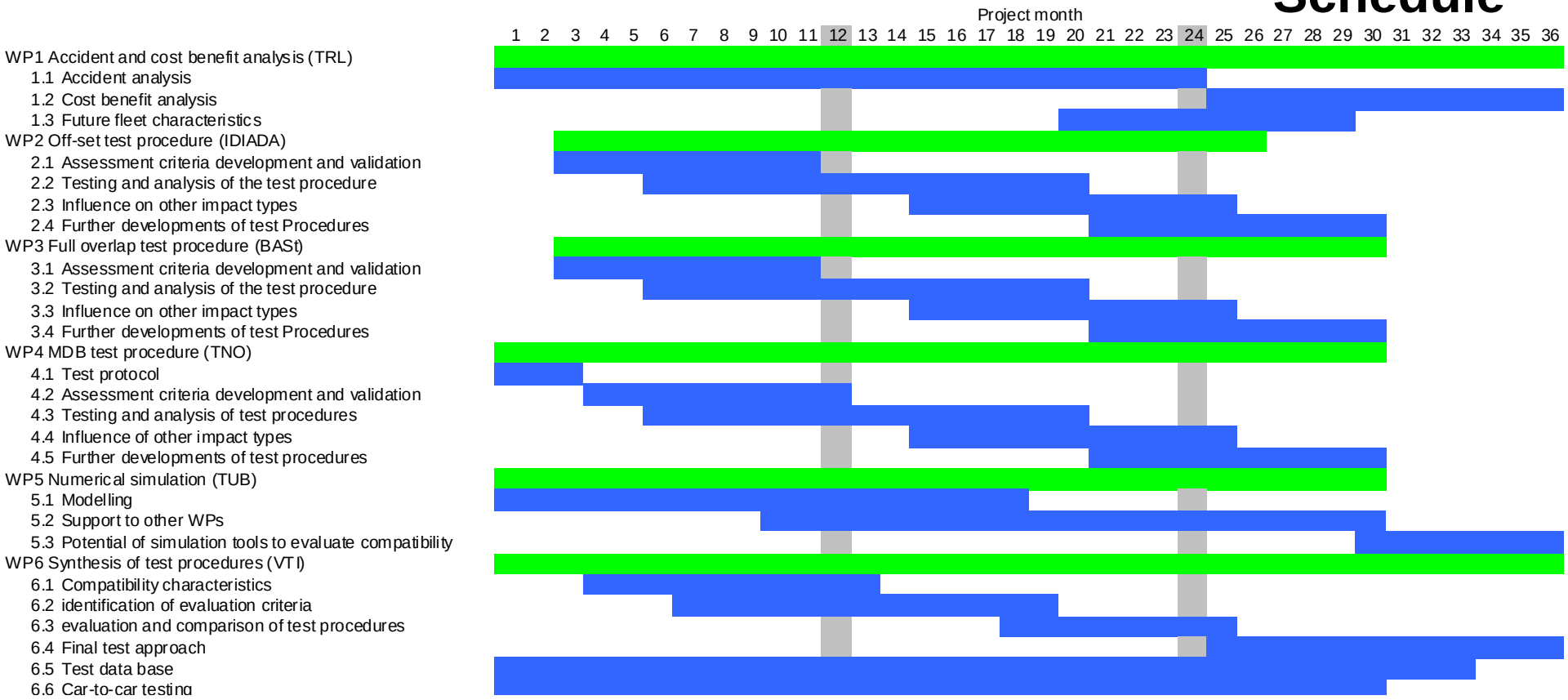
Schedule



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Most important Deliverables

- Report detailing the analysis of national accident databases (scheduled March 2011 but likely available earlier)
- Test and assessment protocols for off-set, full frontal and MDB (draft scheduled for September 2010, final March 2012)

Common Work Areas

as defined by IG FI

- Test severity off-set test procedure
  - Define and motivate test metric (implicit definition of test severity (delta-v, EES, test speed, …) **(FIMCAR (September 2010))**
  - Level of test severity in off-set tests **(FIMCAR (September 2010))**

Common Work Areas

as defined by IG FI

- Introduction of Full Width test in frontal impact
  - Frontal structure architecture assessment **(FIMCAR (September 2010))**
  - Define and motivate test metric (implicit definition of test severity (delta-v, EES, test speed, …) **(FIMCAR (September 2010))**
  - Level of test severity in full width tests **(FIMCAR (September 2010))**

Common Work Areas

as defined by IG FI

- Geometric requirements
  - Define interaction area **(FIMCAR information to make decisions but no final proposal (September 2010))**

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FIMCAR expectations from cooperation with GRSP IG FI

- Early input from external parties
  - Regulatory bodies
  - Other regions of the world
  - Etc.

Dissemination work shop plans

- Spring/Summer 2011
- Autumn 2012

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