Overview of assessment rationale for e-Road deployment

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Society-level deployment

1. Dynamic Wireless Power Transfer (DWPT) as an enabler of:
   – Full electrification of transport systems;
   – Modernisation of transport concepts.

2. Feasibility assessment:
   – Will DWPT deliver positive results for CO2 and €?
   – Include all effects over life cycle of vehicle plus infra;
   – Incentives for societal actors? Business case;
   – Alternative technologies.

3. Integration aspects as blockers:
   – Technical: Security, electric grids, supply chains;
   – Social: travel patterns.
Feasibility Assessment Methodology

1. **Initial assessment of major uncertainties:** Societal Feasibility Studies (WP52)
   - To steer the assessment work in:
     - (WP53) road infrastructure & impacts,
     - (WP54) integration of EVs to ICT and energy infrastructure and
     - with regards to (WP55) Business and Societal Consequences

2. **Integrated Life Cycle Analysis (CO2) and Life Cycle Costs (€):**
   - Alignment on deployment scenarios;
   - From road infrastructure (WP53) to vehicles (WP54) to system (WP55).

3. **Business case development:**
   - Including LCC, societal costs (CO2), etc.;
   - From perspective of infrastructure owner, vehicle owner, public administration;
   - Social costs benefit analysis for affecting factors.

4. **Relations with other technical systems:**
   - Road engineering: structural integrity, changes in maintenance;
   - Electrical grid and cyber-physical transporation systems.
Thank you!

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