IEA Transport Coordination Group Meeting 2022

6th September 2022

Hydrogen TCP - General update
Paul Lucchese, Chair
Task portfolio status

Sustainable aviation fuels
E-fuels
Hydrogen in Islands
Marine Applications + Ports
Hydrogen in Industry
LCA, societal and environmental impact

Preliminary Idea → Project Definition Phase → Kick-off → Active → Closing Steps → End

Hydrogen Certification
Natural Hydrogen
Hydrogen Export Value Chains
Hydrogen in the Mining, Mineral Processing, and Resource Sectors
Off-shore Hydrogen Production
Hydrogen from Nuclear Energy
Renewable Hydrogen

Task 40 - Energy Storage and Conversion
Task 41 - Analysis and Modelling of Hydrogen Technologies
Task 42 - Underground H2 Storage
Task 43 - Safety and RCS of Large-Scale Hydrogen Energy Applications

Task 37 - Hydrogen Safety
Task 38 - PtH & HtX
Task 39 - Hydrogen in the Maritime

September 2022
Transport-related Tasks

**Task 43 - Safety and RCS of Large-Scale Hydrogen Energy Applications**

Led by Andrei Tchouvelev

Already made:

- PDP phase completed (110+ experts: 48 organizations, 12 countries, 2 sponsor members)
- Workplan submitted and approved in 89th ExCo Meeting 16th May
- Kick-off meeting – 27th June, online

Next steps:

- In-person meetings (2-3 days): every 6 months, Spring and Fall, 1st meeting: 3rd week of Oct, Buxton, UK
- Collect Participation Letters (ongoing).

**TiD - Hydrogen Certification**

Led by Daria Nochevnik

Provide a platform for knowledge sharing and good practice exchange on establishing robust certification systems for hydrogen enabling global, cross-border trade

Next steps:

- Call for EoIs (early Sep)
- Definition meetings (Sep – Oct)
- Work Plan presented for ExCo approval at 91st ExCo Meeting (Dec)

Subtask A: Review of the findings from the Hydrogen Council’s certification study
- Identify different types of H₂ certification systems across jurisdictions, relevant public policies and international standards

Subtask B: Deep-dives into and review existing/emerging certification systems for hydrogen
- Roadmap implementation through case studies, analysis of emerging H₂ certification systems and pilot projects and identification of key challenges/concerns faced by project developers as well as compatibility with systems from other jurisdictions. May develop practical recommendations.

Subtask C: Dissemination
- Develop and implement a dissemination plan to support the key deliverables of the Task.

**Sustainable aviation fuels**

Preliminary conversations had with AMF TCP

**Marine Applications + Ports**

**Successor Task for T39**

Looking for Task Organizer

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**Sub-Task A: Social (Comprehensive) Risk**
- Key Objective: Estimate the effect of large-scale hydrogen energy applications on society

**Sub-Task B: Safety Culture and Management System**
- Key Objective: Formulate and explain (via case studies) key attributes of safety culture

**Sub-Task C: Safety Distance Methodologies**
- Key Objective: Review available methodologies and develop recommendations

**Sub-Task D: Hazardous Areas Methodologies**
- Key Objective: Review available methodologies and develop recommendations

**Sub-Task E: Safety of Operation in Confined Environment**
- Key Objective: Review available practices and develop recommendations

**Sub-Task F: Dissemination**
- Key Objective: Develop a dissemination plan of Task recommendations

**Hydrogen Council**

**Australia**

**Canada**

**Denmark**

**EU: EC JRC, EIGA**

**France**

**Germany**

**Italy**

**Japan**

**Netherlands**

**Norway**

**Shell**

**Sweden**

**UK**

**USA**
IEA is updating its Clean Energy Technology Guide (CETG). TRL Assessment is critical, and they want to contrast estimated TRL values, description of technologies and current projects, with experts worldwide to be able to achieve the most accurate result. They have asked the Hydrogen TCP for advice/help regarding their TRL assessment activities in new emerging H₂ technologies. Hydrogen TCP has proposed to transform this IEA-TCP’s collaboration into a strategic activity.

- Strengthen our collaboration with IEA
- Strengthen our collaboration with synergic TCPs
- Position the Hydrogen TCP as a reference for technical knowledge

Hydrogen TCP Technical Secretariat has analyzed IEA’s CETG hydrogen-related technologies (94): 30 TRL GROUPS have been identified.

- TRL GROUPS constituted by worldwide high-profile experts.
- Technology consensus meetings on each TRL GROUP will be held to discuss current projects, technology description and TRL levels.
- Publication of one-pagers/technology briefings on specific hydrogen technologies updates each year.
Thank You!