21GRD05 - Metrology for the hydrogen supply chain

M36 Stakeholder meeting
18th September, 2025. 9:00-17:00 CEST

Venue: Virtual
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Workshop Agenda

09:00	**Opening and welcome** *Adriaan van der Veen (VSL), project coordinator*
09:10	**Overview of the project** *Adriaan van der Veen (VSL), project coordinator*
09:30	**Assessment and comparison of different methods to establish traceability for the measurement of hydrogen leak rates flowing to atmosphere in the range 10^{-9} mol/s to 10^{-6} mol/s** *Frédéric Boineau (CNAM)*
10:00	**Metrological guidelines for the validation, calibration and verification of hydrogen sensors used within the hydrogen supply chain for quality control** *Karine Arrhenius (RISE)*
10:30	**Coffee break**

11:00	**Performance of flow meters and calibration facilities for blends of hydrogen and natural gas and pure hydrogen with 98 % purity** *Hamidou Soumare (Cesame-Exadebit)*
11:30	**Traceability chains for hydrogen flow metering with flow rates above 0.2 kg/min and three options for ensuring traceability from established primary standards for the 2030 European Industry and Hydrogen Community** *Marc de Huu (METAS)*
12:30	**Lunch break**
13:30	**Inter-comparison on trace water in hydrogen standards over the nominal range from 0.5 µmol/mol to 50 µmol/mol with conclusions and the recommendations for future improvements** *Paul Carroll (NPL)*
14:00	**Good practice on metrologically traceable quality monitoring in the hydrogen supply chain and recommendations for future improvements of ISO 19880-8 and ISO 21087** *Vito Fernicola (INRiM)*
14:30	**Coffee break**
15:00	**Best practices in the evaluation of the measurement uncertainty for fiscal measurements along the hydrogen supply chain** *Federica Gugole (VSL)*
15:30	**Metering for custody transfer of hydrogen for transport, heat, and storage** *Kjetil Folgerø (NORCE)*
16:00	**Discussion** *Adriaan van der Veen (VSL), project coordinator*
16:30	**Conclusions and close** *Adriaan van der Veen (VSL), project coordinator*