

Thursday, 16.5.

Time CEST, UTC+2	Item
08h30	Arrival and registration
09:00	Reliable Measurements for LVDC grids and DC metering
09:00	Welcome – Helko van den Brom
09:10	<u>Introduction</u> <ul style="list-style-type: none"> The European Research Project DC Grids: Overview – Helko van den Brom, VSL, Netherlands The role of DC for modern utilities – Jorge Sánchez, ENDESA, Spain
09:50	<u>Project outcomes I</u> <ul style="list-style-type: none"> Trigger mechanisms to detect DCPQ events and distortions – CIRCE, Universidad Zaragoza, Spain On-site measurements in LVDC grids – VSL, Netherlands
10:30	Coffee break
11:00	<u>Project outcomes II</u> <ul style="list-style-type: none"> Test waveforms for DC PQ analysis tools – University of Strathclyde, Glasgow, UK Measurement of DC voltage ripple in laboratory environment – LNE, France AC ripple over DC: new solutions for measurements and calibration – INRIM, Italy
12:00	Lunch
13:00	<u>Project outcomes III</u> <ul style="list-style-type: none"> DC power and energy and DCPQ reference systems with distorted signals – METAS, Switzerland Superposing DC and AC signals for testing DC meters – PTB, Germany Power Quality Compatibility Levels in DC power networks – University of Campania, Italy JRP DC grids input to standardization activities on DC metering and DC grids – EDF, France
14:20	Coffee break
14:40	<u>External presentations</u> <ul style="list-style-type: none"> Advanced DC Electricity Meter Testing and Standards – Henri Schouten, NMi Certin, Netherlands DC/DC Converters for MVDC grids – Bruno Lefebvre, SuperGrid Institute, France Shift to Direct Current: overview of a HORIZON 2023 project – Hugo Morais, University of Lisbon, Portugal Transducers and energy meters in DC grid applications – Yihui Zuo, LEM, Switzerland*
16:00	VSL lab tour
17:00	End of day and drinks

* On-line presentation