ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

ADMIT
AC & DC
High
Frequency
Instrument
Transformers

WP4

01/25 – Month 20(36)

The project 22NRM06 ADMIT has received funding from the European Partnership on Metrology, co-financed by the European Union's Horizon Europe Research and Innovation Programme and from by the Participating States

Alessandro Mingotti

DEPARTMENT OF ELECTRICAL, ELECTRONIC, AND INFORMATION ENGINEERING "GUGLIELMO MARCONI" - DEI

WP4: Creating Impact

Goal: given that it is a pre-normative project, the ADMIT main outputs are aimed at developing standards for uptake by standardisation bodies.

Task 4.1: Dissemination and communication

- A4.1.1: Creation of a stakeholder committee (on going)
  - 12 members from 12 organizations (DSOs, TSOs, manufacturers, academics, etc.) from 8 different countries.

#	Name	Surname	Email	Telephone	Country	Company	Type
1	Volker	Leitloff	volker.leitloff@rte-france.com	+33 1 79 24 83 67	France	IEC TC38 / RTE	Standardization
2	Tuan	Vu	tuan.vu@powerlink.com.au	0407 372 483	Australia	Powerlink Queensland	TSO
3	Laurent	Roux	laurent-didier.roux@rte-france.com	331 7924 8347	France	RTE	TSO
4	Abbas	Ghaderi	abbas.ghaderi@gwelec.com	+39 0532 225 731	Italy	G&W Altea S.r.l.	Manufacturer
5	Michael	Moser	michael.moser@bfe.admin.ch	+41 58 465 36 23	Switzerland	Swiss Federal Office of Energy SFOE	Federal Bureau
6	Iñaki	Orue	ios@ormazabal.com		Spain	Ormazabal	Manufacturer
7	Jordi	Sust	j.sust@rsisolsec.com		France	RS isolsec	Manufacturer
8	Stefan	Kuhn	Stefan.Kuhn@ritz-international.com		Germany	RITZ	Manufacturer
9	Antonio	Gonzalez	antonio.gonzalez@viesgo.es		Spain	EDP Redes España	DSO
10	Jose Luis	Vallejo	jlvallejo@ufd.es		Spain	UFD - Naturgy Energy Group	DSO
11	Bernard	Paya	bernard.paya@edf.fr		France	EDF	DSO
12	Thierry	Micand	thierry.micand@vettiner.com		France	Vettiner	Manufacturer
13	M. Josué	Delville	jdelville@sadtem.com		France	SADTEM	Manufacturer
14	Aldo	Capone	aldo.capone@tndel.com		Italy	TND Elettronica S.r.l.	Manufacturer

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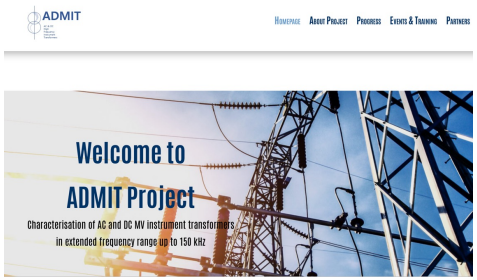
Task 4.1: Dissemination and communication

- A4.1.2: Project webpage (completed)
  - https://www.admit-project.eu

- Shared folder (completed)
  - It contains everything you need for the project
    ADMIT – EURAMET



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Task 4.1: Dissemination and communication

- A4.1.3: 12 papers presented at International Conferences (on going)
  1. G. Crotti et al., "Inductive Voltage Transformer Behaviour in the Frequency Range from 9 kHz Up to 150 kHz," 2024 IEEE 14th International Workshop on Applied Measurements for Power Systems (AMPS), Caserta, Italy, 2024, pp. 1-6, doi: 10.1109/AMPS62611.2024.10706667.
  2. G. Crotti et al., "Flexible Generation Architecture for Current Transformers Testing up to 150 kHz," 2024 IEEE 14th International Workshop on Applied Measurements for Power Systems (AMPS), Caserta, Italy, 2024, pp. 1-6, doi: 10.1109/AMPS62611.2024.10706696.
  3. D. Giordano et al., "Characterizing Voltage Transformers up to 150 kHz: A New Approach to Generate MV Distorted Test Waveforms," 2024 Conference on Precision Electromagnetic Measurements (CPEM), Denver, CO, USA, 2024, pp. 1-2, doi: 10.1109/CPEM61406.2024.10646007.
  4. G. Crotti et al., "Characterization of Voltage Transformers for MV Applications Up to 150 kHz - A Preliminary Study," 2023 IEEE 13th International Workshop on Applied Measurements for Power Systems (AMPS), Bern, Switzerland, 2023, pp. 01-05, doi: 10.1109/AMPS59207.2023.10297174.
  5. C. Betti, A. Mingotti, R. Tinarelli and L. Peretto, "A Low-Cost Measurement Setup to Test Low-Power Voltage Transformers in the 9 kHz - 150 kHz Frequency Range," 2024 IEEE 14th International Workshop on Applied Measurements for Power Systems (AMPS), Caserta, Italy, 2024, pp. 1-5, doi: 10.1109/AMPS62611.2024.10706688.
  6. C. Betti, A. Mingotti, R. Tinarelli and L. Peretto, submitted to I2MTC 2025.

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Task 4.1: Dissemination and communication

- A4.1.4: 6 papers published on open access journal (on going)
  1. Mariscotti, A.; Mingotti, A. The Effects of Supraharmonic Distortion in MV and LV AC Grids. Sensors 2024, 24, 2465. https://doi.org/10.3390/s24082465.
  2. Agazar, M.; D'Avanzo, G.; Frigo, G.; Giordano, D.; Iodice, C.; Letizia, P.S.; Luiso, M.; Mariscotti, A.; Mingotti, A.; Munoz, F.; et al. Power Grids and Instrument Transformers up to 150 kHz: A Review of Literature and Standards. *Sensors* **2024**, *24*, 4148. https://doi.org/10.3390/s24134148.
  3. G. Crotti et al., "A Novel Generation and Measurement Setup for the Characterization of MV Voltage Transformers From 9 kHz up to 150 kHz," in IEEE Transactions on Instrumentation and Measurement, vol. 73, pp. 1-11, 2024, Art no. 9004711, doi: 10.1109/TIM.2024.3427768.
  4. G. Crotti et al., "Fast Frequency Characterization of Inductive Voltage Transformers Using Damped Oscillatory Waves," in IEEE Transactions on Instrumentation and Measurement, vol. 73, pp. 1-14, 2024, Art no. 9001714, doi: 10.1109/TIM.2023.3343773.
  5. C. Betti, A. Mingotti, R. Tinarelli and L. Peretto, submitted to TIM

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Task 4.1: Dissemination and communication

- A4.1.5: at least 1 workshop (on going/completed)
  1. 06/2023 - CIRED - Poster – UNIBO
  2. 09/2023 – AMPS – Poster – UNIBO/SUN
  3. CPEM (to be planned)

- A4.1.6: at least 3 papers to the popular press (on going)
  1. Tutto Misure – SUN – writing stage
  2. IEEE TIM magazine – SUN/UNIBO

- A4.1.7: flyer and newsletter(on going/completed)
  1. Flyer available inside the shared folder
  2. First Newsletter 01/2025

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Task 4.1: Dissemination and communication

- A4.1.13: 3 workshops for stakeholders (on going)
  1) Turin 06/23
  2) Online 01/25
  3) ?

- A4.1.14: At least 1 course for PhD students (on going/completed)
  - Italian “Italo Gorini” summer school – 2025 – SUN

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