



2017 TC-EM report

Presented by:

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Comparison plan review

Year	Identifier	Description	Participants	Pilot	Status
2015	AFRIMETS.EM-S1	DC resistance at 1 Ω , 10 Ω , 100 Ω , 1 k Ω and 10 k Ω	NMISA, LPEE/LNM, DEF-NAT, KEBS, NIS, UNBS, NMIE	NMISA	Ongoing
2017	AFRIMETS.EM.RF-S1	RF attenuation	NMISA, NIS, DEF-NAT	NMISA	Ongoing
2019	AFRIMETS.EM-S2	ACV: 200 mV, 200 V @ 40 Hz and 1 kHz. ACI: 100 mA, 1 A @ 40 Hz and 1 kHz. DCI: 10 mA and 1 A. DCV:100 V and 1000 V Artefact: 6 ½ DMM	NMISA, LPEE/LNM, DEF-NAT, KEBS, NIS, UNBS, NMIE	DEF-NAT / NIS	Planned
2020	AFRIMETS.EM-K?	AC Power and energy 50 V to 300 V 5 mA to 120 A 10 W to 36000 W, VAR PF 0 to 1 i/c 45 Hz to 65 Hz Artefact: Zera Com-303	NMISA, LPEE/LNM, DEF-NAT, KEBS, NIS	NIS	Planned
2021	AFRIMETS.EM-S?	AC-DC transfer in Voltage 1 to 4 V @ 10 Hz to 1 MHz 500 V to 1000 V @ 40 Hz to 100 kHz Artefact: To be identified	NMISA, DEF-NAT, NIS NMIE, KEBS	NMISA	Planned
2022	AFRIMETS.EM-S?	DC & AC High Voltage Artefact: To be identified	NMISA, DEF-NAT, NIS , LPEE/LNM	NIS	Planned
2023	AFRIMETS.EM-S?	RF Power Artefact: To be identified	NMISA, NIS, DEF-NAT	NMISA	Planned

Update on ongoing comparisons

- AFRIMETS.EM-S1:
- NMISA, LPEE/LNM, DEF-NAT, KEBS and NIS completed scheduled measurements.
- NMIE and UNBS still have to perform measurements
- AFRIMETS.EM.RF-S1:
- NMISA and DEF-NAT completed scheduled measurements.
- NIS requested to perform measurements during November 2017 after resolving measurement system problems.

2017-2018 TC-EM Strategy and executive committee members

- Strategy:
- Shorten measurement period by excluding NMIs that do not participate in TCEM activities from ongoing comparisons.
- Offer metrology training to enhance capacity in member NMIs.
- Elections for executive committee will be held in 2019. Current executive committee members:
- Chairperson: Alexander Matlejoane, NMISA, South Africa
- Vice chairperson: Mohammed Helmy Abd El-Raouf, NIS, Egypt
- Secretary: Abdellah ZITI, LPEE-LNM, Morocco
- Vice secretary: Gibson Aguko, KEBS, Kenya