



AFRIMETS
Intra-Africa Metrology System
Système Intra-Africain de Métrologie

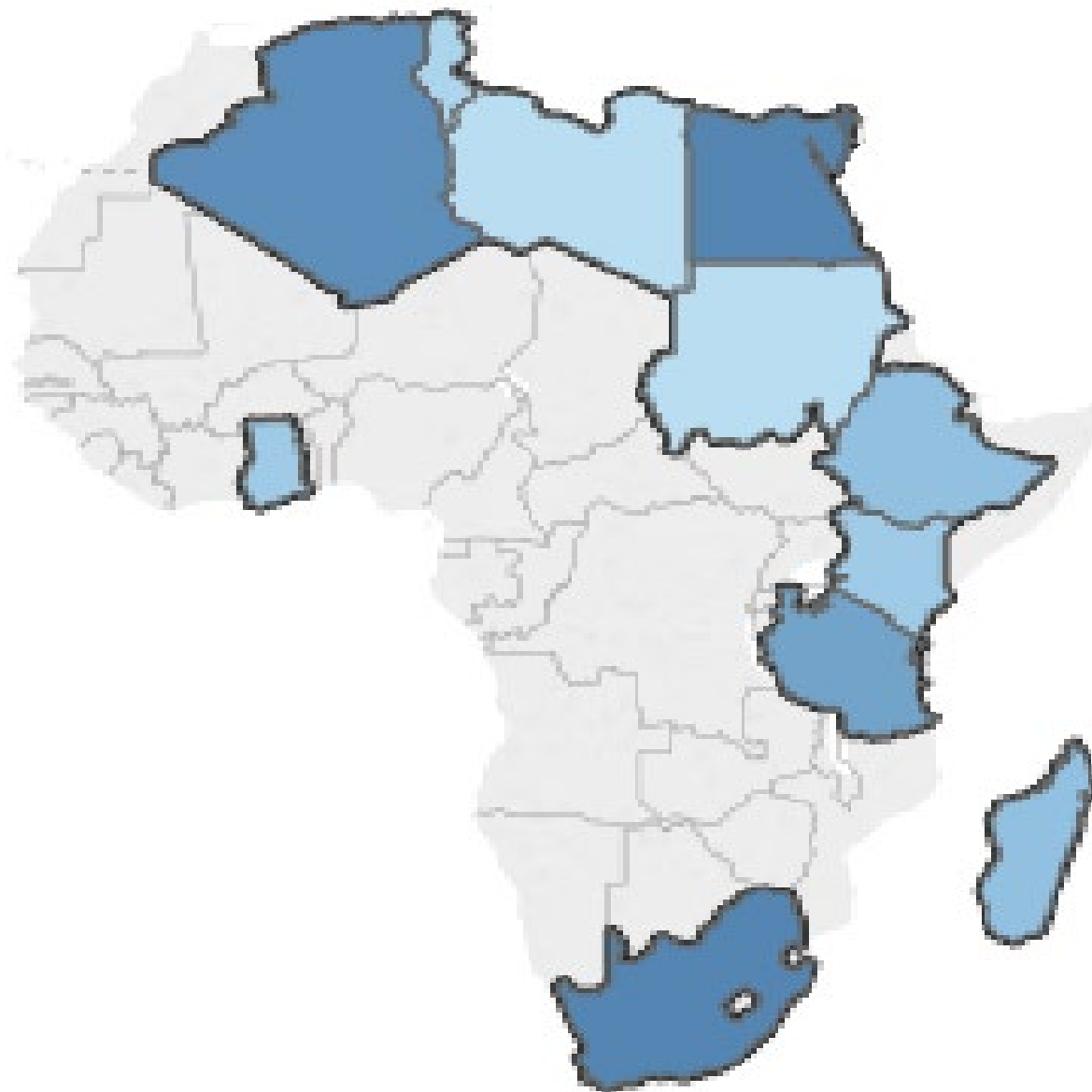


AFRIMETS TCRI Report

**Presented by:
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Afrimets meetings 8 – 12 July 2019

Dosimetry labs in the region in SSDL network



MEETINGS

- Met with some of the SSDLS on the IAEA/WHO network in December 2018 at the IAEA, Vienna during a workshop on the establishment of SSDL and QMS.
- 14 countries from Africa were represented.
- Three (3) of those SSDLs' are within a NMI and connected to Afrimets.

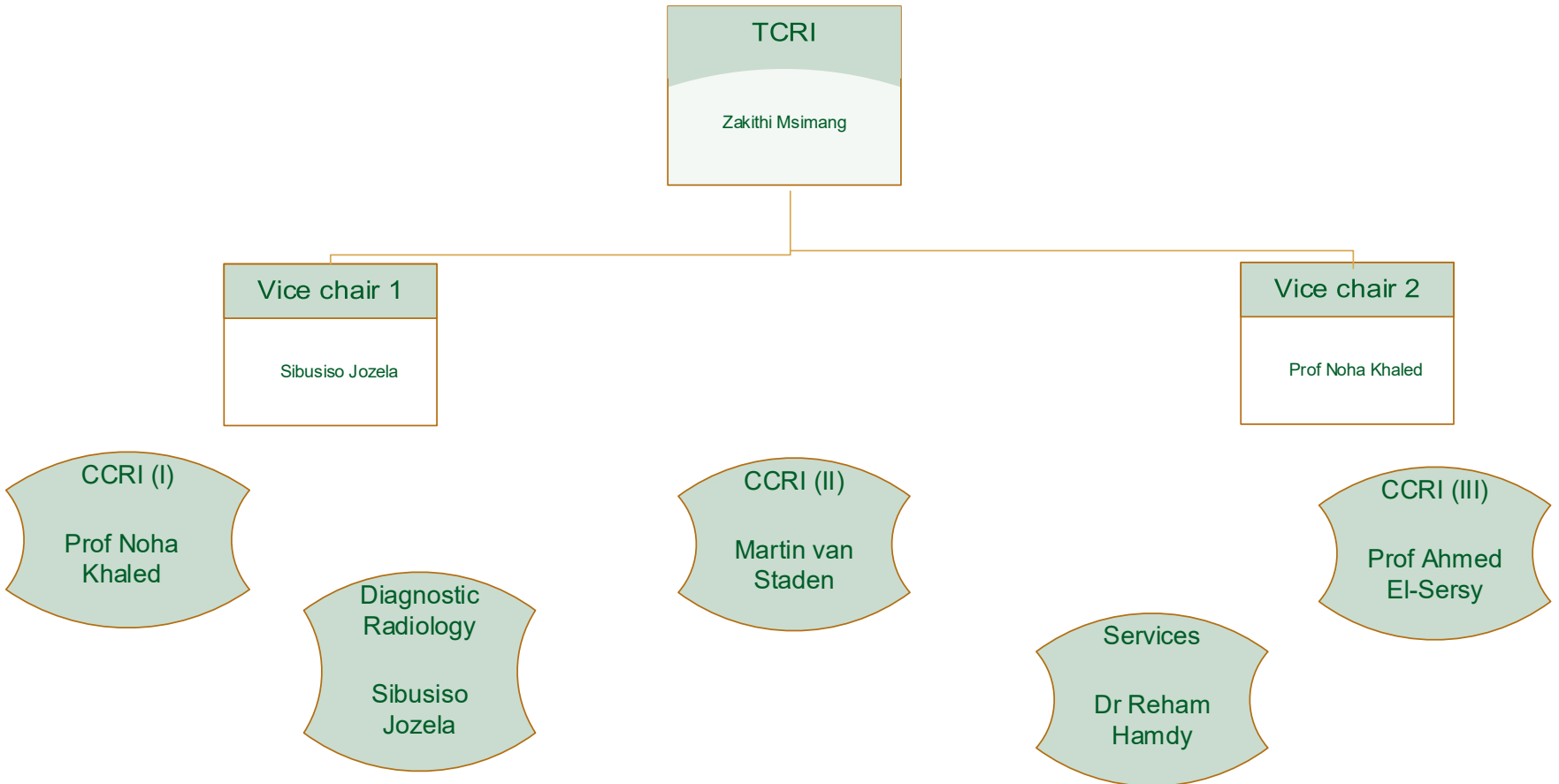
Discussions

- What capabilities are available in the region for IR
- How to connect to their metrology institutes
- With the assistance of the IAEA a report by each country was to be submitted to KEBS for collation.
- A paper will be written on the results showing the spread of capabilities.

TCRI Meeting

- Met on 8 July 2019
- Discussed CCRI RMO WG and decisions for CMC submission and review
- Looked at the structure and the functionality of TCRI
- Comparison plans
- Challenges
- Areas of priority especially for the protection of our people

Structure



Comparisons

Section	Parameter	Pilot lab	Year planned
Dosimetry (AFRIMETS.RI(I)- K1 and AFRIMETS.RI(I)- K4) NIS, NMISA, IAEA	Absorbed dose to water and air kerma	NIS, Egypt	November 2019
Dosimetry (Supplementary) NIS, NMISA, KEBS, NMIE, IAEA	Radiation protection (Air kerma)	KEBS, Kenya	2020/21
Neutron (Supplementary)	Ambient dose equivalent	NIS/NMISA	2020
Dosimetry (PT Scheme/Supplementary)	TLD irradiation for Personnel monitoring	NMIE, Ethiopia	2020/21
Dosimetry (PT Scheme/ Supplementary)	Contamination and survey monitors	TBC	2022/2023

Comparisons

Section	Parameter	Pilot lab	Year planned
Neutron (Supplementary)	Ambient dose equivalent	NIS/NMISA	2020
Dosimetry (PT Scheme/ Supplementary)	Contamination and survey monitors	TBC	2022/2023
Dosimetry (AFRIMETS.RI(I)- K8)	Brachytherapy	TBC	TBC, might participate in other RMO's or IAEA
Dosimetry (AFRIMETS.RI(I)- K2; AFRIMETS.RI(I)- K3, AFRIMETS.RI(I)- 7)	Air kerma, x-ray	TBC	TBC, might participate in other RMO's

QUALITY SYSTEMS

Institution	Capabilities	Status	Comments
NMIE	Dosimetry	In progress	Laboratory in progress with setting up their Quality System. Changes in staff and training is scheduled for new personnel.
KEBS	Dosimetry	In progress	Laboratory in progress with setting up their Quality System. Review of their progress done and further training provided
NIS	Dosimetry, Limited Radioactivity and Neutron	Peer reviewed	

QUALITY SYSTEMS

Institution	Capabilities	Status	Comments
Nigeria	Dosimetry	In progress	Laboratory in progress with setting up their Quality System
NMISA	Dosimetry, Radioactivity, Neutron	Third party accredited	Neutron measurements still to go through accreditation process.
ITHEMBA LABS (DI in SA)	Neutron	In progress	Establishing metrology beam line and working with assistance of other NMI's on the project
IAEA	Dosimetry	Peer reviewed	

CMC

Laboratory	Dosimetry	Radioactivity	Neutrons
NIS	2	-	-
NMISA	1	36	-
IAEA	26	-	-

Strategic planning

- Staying relevant to user community needs
- SSDL's in region to connect with their NMI's
- Establishment of QMS in laboratories that do not have
- Transition to ISO/IEC 17025: 2017
- Comparisons to have at least two loops
- Areas of focus for Dosimetry:
 - Diagnostic radiology
 - How to establish capabilities to calibrate equipment used for QC in diagnostic radiology
 - Training of end users and regulators



THANK YOU