

# **FORUM OF NUCLEAR REGULATORY BODIES IN AFRICA (FNRBA)**

**Draft minutes of the 8<sup>th</sup> FNRBA Extraordinary Plenary Meeting held on 26<sup>th</sup> September  
2016 in Vienna, Austria.**

**IAEA Conference Room M4, M Building**

## **1. ATTENDANCE**

The 8<sup>th</sup> Plenary Meeting of the Forum of Nuclear Regulatory Bodies in Africa (FNRBA) took place on 26<sup>th</sup> September 2016 in Vienna, Austria and was attended by 54 representatives of member states from Africa, the United States of America, the Republic of Korea, the European Union, France, Turkey and the IAEA (see annex 1).

The following African Member States were present at this meeting: Angola, Benin, Botswana, Cameroon, Côte d'Ivoire, Democratic Republic of Congo, Egypt, Ethiopia, Ghana, Kenya, Malawi, Mali, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, South Africa, Sudan, Tunisia, Uganda, Zambia and Zimbabwe.

## **2. OPENING REMARKS**

Dr. SIMO Augustin, DG of NRPA, Chairman of FNRBA opened the meeting. The participants were invited to introduce themselves. Mr Lingquan Guo (IAEA, Section Head of the Networks Management and Partnership Section) highlighted the efforts of FNRBA to increase its maturity. The agenda was approved.

## **2. Annual report including resolutions of the last Plenary**

The chairperson presented the main achievements of FNRBA in 2016. The new website of FNRBA now contains all meeting minutes, announcements of events and promotes scientific publications produced by FNRBA. This year, significant work has been carried out within FNRBA with the support of the IAEA Secretariat to increase its efficiency and effectiveness and its contribution in nuclear and radiation safety and security, in particular, during the coordination meeting organized by the IAEA in August 2016 with an evaluation of the needs and the proposal of related activities.

Non-Restricted

The chairperson acknowledged the donor countries coming from the United States of America, the Republic of Korea, the European Union and France for their supports in 2016.

In particular, 6 workshops were implemented by the Korea Institute of Nuclear Safety (KINS), jointly organized with other regional networks or exclusively for FNRBA like the 2 ones hosted by the Radiation Protection Board (RPB) in Mombasa. 2 workshops, one on Emergency Preparedness and Response and one on the safety of Uranium mining and milling, were implemented by the European Nuclear Safety Training and Tutoring Institute (ENSTTI) with the support of the European Commission and hosted by the National Nuclear Regulator (NNR) in Pretoria. About 40 African participants could take benefit of the knowledge and experience shared by the experts of ENSTTI. 1 workshop was organized by the IAEA with the support of US-NRC on the safety of Small and Modular Reactor.

### **3. Structuring the activities to support nuclear and radiation safety in Africa**

Mr Karim Ben Ouaghrem, (IAEA, Project Manager Officer for FNRBA) presented the methodology of the assessment of needs at technical and governance level conducted during the Coordination meeting in August 2016. This meeting — the first of its kind for the FNRBA — gathered all stakeholder groups: members of the FNRBA Steering Committee, leaders of the 10 thematic working groups (TWGs), local experts from 17 African Member States, 9 Technical Officers from the IAEA, and 3 delegates from the United States of America and the Republic of Korea as donor countries. In total, about 40 representatives and experts from Botswana, Cameroon, the Democratic Republic of the Congo, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Mali, Mauritius, Nigeria, Senegal, South Africa, the Sudan, Tunisia, Uganda and Zimbabwe attended the meeting. Together they assessed the current status of the FNRBA and proposed innovative ideas to improve the governance of the Forum through the issuance of procedures and other internal rules to be incorporated into the Forum's current charter. Furthermore, they proposed activities and services that will support nuclear and radiation safety in Africa.

Mr Bismark Tyobeka, Vice Chair of FNRBA and Director General of the National Nuclear Regulator (South Africa) presented the resulting necessary action plan in particular the recommendations related to the charter and to the awareness of policymakers in Africa. In

Non-Restricted

total, about 50 activities have been identified: half of them are related to the development of skills and knowledge, 10% are dedicated to the development of regulatory support documentation such as model regulations and guides, and the rest are related to experience sharing and development of a regional database.

Sameer Kunjeer (IAEA, IT officer) presented the new website and the specific request addressed by the TWG leaders of FNRBA to foster the information sharing.

The Chairperson reminded the Plenary members to update the list of experts for each of the Thematic Working Group.

#### **4. Activities per Thematic Working Groups**

Mr Geoffrey Emi-Reynolds (Leader of Thematic Working on Research Reactor and representative from Ghana) presented the work conducted within each Thematic Working Group: current activities, assessment of needs and challenges, proposed related activities, proposals for publication.

#### **5. Main achievements of global workshop in transport safety and of SMR workshop –**

Ms Nancy Capadona (IAEA, NSRW) presented the results of the Global Workshop on Transport Safety and the proposal to establish a group of experts on transport safety at regional level.

Mr Stewart Magruder, (IAEA, NSNI) on behalf of Mr Peter Bester, South Africa presented the results of the workshop on Small and Modular Reactor (held in June 2016).

#### **6. Strengthening nuclear safety and security at regional level**

Mr Khammar Mrabit, Morocco presented some examples and proposals by a Member State (Morocco) to address the strengthening of nuclear safety and security.

#### **8. Remarks by partners**

The Chairperson invited the representatives of Donor countries and partners to express their remarks. It was requested to give a full access to the new website and to have a regular feedback of the achievements the needs of FNRBA. The partners will be invited to the next Coordination meeting in 2017.

## 9. Resolution

The Recommendations to start the amendment of the Charter (Resolution FNRBA2016-1) and the proposal of new leadership of the Thematic Working Groups (Resolution FNRBA2016-2) were approved by vote during the Plenary meeting (quorum reached with 21 representatives on 33).

TWG 1	Legislative and Regulatory Infrastructure	Faradally A. OLLITE (Mauritius)
TWG 2	Radiation Safety in Radiotherapy	Solomon Getachew (Ethiopia)
TWG 3	Regulatory Framework for the Licensing of Nuclear Power Plants	Peter Bester (South Africa)
TWG 4	Radiation Safety in Uranium mining and Milling	Joseph Eiman (Namibia)
TWG 5	Nuclear and Radiation Safety in Research Reactors	Dr. Rex Gyeabour Abrefah (Ghana)
TWG 6	Education, Training and Knowledge Management	Yau Idris (Nigeria)
TWG 7	Safety in Radioactive Waste Management Infrastructure	Proposal from Kenya, name to be confirmed
TWG 8	Transport Safety	Paul Hinrichsen (South Africa)
TWG 9	Emergency Planning and Response	Allan Muller (South Africa)
TWG 10	Nuclear Security Infrastructure	M Reda Ezz El Din (Egypt)

## 10. Closing remarks

The Chairperson expressed his gratitude to Member States for their confidence and to the IAEA and to the Donor countries for their supports. He invited all the members to work hand in hand in order to commit to the activities of FNRBA and to achieve the Action plan.

The Chairperson closed the meeting.

A side of the meeting, the Memorandum of Understanding between FNRBA and KINS was reviewed by the signature of Mr Jeongwon Yoo on behalf of Mr Kim, President of KINS and Mr Augustin Simo, Chairman of FNRBA.

*All presentations are available in the folder Plenary of FNRBA website <https://gnssn.iaea.org/main/FNRBA/Pages/default.aspx>*

Non-Restricted

Annex 1  
Participant list

FNRBA contacts							
Country	Plenary meeting Monday 26 Of September 2-4pm MM	16	17	Name of Regulatory Body	First-name, LAST-NAME	Email	Signature
Angola	Official Representative		OR	Autoridade Reguladora de Energia Atómica	pedro carlos dominigos lemos	pedrolemos@yaho.com	
Benin	J.DOSSOU, OR	Confirmed	OR	Agence Béninoise de Radioprotection (ARBS)	Julien DOSSOU	Julien.DOSSOU@yaho.com	
Botswana	Official Representative		OR	Radiation Protection Inspectorate	Ezikwila Thebe ODISE Tshoatsso	thobakile@yaho.com Ezikwilaodi@yaho.com	
Burkina Faso	Official Representative		OR	Autorité Nationale de Radioprotection et de Sécurité Nucléaire	Désiré N'KAYADO	n.desire@yaho.com	
Cameroon	A.Simo, Chairman, OR	Confirmed	OR	Agence Nationale de Radio Protection (ANRP)	Augustin Simo	asimo@yaho.fr	
Chad	Official Representative		OR	Agence Tchadienne de Radioprotection et de Sécurité Nucléaire (ATRSN)	Mbadou Djrab Aïfel	mbadou@yaho.fr	
Cote d'Ivoire	Akouassi Goffri, OR Akouassi Goffri	Confirmed	OR	Commission Nationale de l'Énergie Nucléaire	Epa Akouassi Goffri	mkgoffri@yaho.com	
Democratic Republic of Congo	E.ATIBU KAZINGUVU, OR	Confirmed	OR	Commission Nationale de Protection contre les Rayonnements Ionisants	Emmanuel ATIBU KAZINGUVU	emmanuel@yaho.fr	
Democratic Republic of Congo	G.MUTEBA KANDINDI	Confirmed		Commission Nationale de Protection contre les Rayonnements Ionisants	Gerard MUTEBA KANDINDI	gerard@yaho.fr	
Egypt	M.Rada Ezz El-Din, OR	Confirmed	OR	Nuclear & Radiological Regulatory Authority	Mohamed Rada Ezz El-Din	mreda17@yaho.com	
Ethiopia	Official Representative		OR	Ethiopian Radiation Protection Authority (ERPA)	Solomon Getachew Mekonnen	solomon.getachew@yaho.com @gmail.com	
Gabon	Official Representative		OR	Centre National de Prévention et de Protection contre les Rayonnements Ionisants (CNPRI)	Lily Esther NDOUNA DEPENALIO	lndouna@yaho.fr	
Ghana	G.Emi-Reynolds, OR	Confirmed	OR	Ghana Nuclear Regulatory Authority	Geoffrey Emi-Reynolds	gemi-reynolds@yaho.com	
IAEA, SSCO	K.BEN OUAGHREM, Secretariat	Confirmed		International Atomic Agency	Karin BEN OUAGHREM	k.ben-ouaghrem@iaea.org	
IAEA, SSCO	L.GUO, Section Head of NMPS	Confirmed		International Atomic Agency	Lingquan GUO	lingq@iaea.org	
Kenya	J.KARIGI KAMANDE, OR	Confirmed	OR	Radiation Protection Board	JDEL KARIGI KAMANDE	kenydel@yaho.com	
Libya	Official Representative		OR		Khamees M. THAYB	kthayb@yaho.com	
Madagascar	Official Representative		OR	Ministère National des Sciences et Technologies Nucléaires (INSTN)	Joseph Lucien R. ZAFIMANIATO	j.zafimanjato@yaho.fr	
Malawi	Official Representative		OR	THE DEPARTMENT OF Environmental Affairs, Ministry of Lands and Natural Resources	Kachimera Victoria Cathy	kachimera.7@yaho.com	
Mali	T.SAMAKE	Confirmed			Mr. Tahrou SAMAKE	tahrou.samake@gmail.com	
Mali	N.KONE, OR	Confirmed	OR	Agence Malienne de Radio Protection (AMARAP)	Naganté KONE	knagante@yaho.com	
Mauritania	A.BEZEID DEIDA	Confirmed			Ahmed BEZEID DEIDA	ahmedbezeid@gmail.com	
Mauritania	S.M.AHMED, OR	Confirmed	OR	National Authority of radioprotection, safety and Nuclear security	Salah Moulays AHMED	salahmoulays@gmail.com	
Mauritius	Official Representative		OR	Radiation Protection Authority (RPA)	Feresdely A. OLLITE	follite@yaho.com	
Morocco CNR	Official Representative	Confirmed	OR	Centre national de radioprotection	Mohamed Soussou Tazi	msoussou@yaho.com tazi@yaho.com	
Morocco MASSNUT	K.Mrabit, OR	Confirmed	OR	Moroccan Agency for Nuclear and Radiological Safety and Security (ARSSN)	Khammar Mrabit	khammar@yaho.com	
Morocco NSA	Official Representative		OR	Nuclear Safety Authority (Department of Energy and Mines)	Abdellatif HAJANI	ahajani@yaho.com	
Mozambique	Official Representative		OR	National Atomic Energy Agency (ANEA)	Miguel António Miguel António	miguel@yaho.com	
Namibia	Official Representative		OR	Atomic Energy and Radiation Protection Authority	Axel Tlonyane JEman	axel@yaho.com	
Namibia	J.Eiman	Confirmed			Joseph Eiman	jeyman@yaho.com	
Niger	Official Representative		OR	Centre national de Radio Protection (CNRP)	KANDO Hamadou	kando.hamadou@yaho.fr	
Nigeria	Official Representative		OR	Nigerian Nuclear Regulatory Authority (NNRA)	Yusuf Idris	y.idris@yaho.com	
Senegal	N.ARAMÉ BOYE FAYE, OR	Confirmed	OR	Autorité de Radioprotection et de Sécurité Nucléaire (ARSN)	NDEYE ARAME BOYE FAYE	aramb.boyefaye@yaho.com	

Senegal 11.50 Tall  
AMSSNUT  
ARSN  
\*) maphasso@yaho.com, yem.m2

Non-Restricted

Seychelles	Official Representative		OR	Registry Agency, Ministry of Employment and Human Resources	Keven Frankland Agloe		
Sierra Leone	Official Representative		OR	Nuclear Safety and Radiation Protection Authority	Mr. Josephus J Kongo	josiekongo@yahoo.com	
South Africa	B.Tyobeka, Vice-Chairman, OR	Confirmed	OR	National Nuclear Regulator (NRR)	Bismark MZUBANZI TYOBeka	BMZYobeka@nrr.co.za	W. Tyobeka
South Africa	G.Moonsamy	Confirmed		???	Gino Moonsamy		
Sudan	Official Representative		OR	Sudanes Nuclear & Radiological Regulatory Authority (SNRA)	Mustafa Mohamed Osman Ahmed	ismwaj@yahoo.com	V
Tanzania	Official Representative		OR	Tanzania Atomic Energy Commission (TAEC)	Ididi S.N. Mufaha	mkidid@taec.tz	
Tunisia	M.F. Ben Slimene, OR	Confirmed	OR	Centre national de radioprotection (CNRP)	Mohamed Fouzi BEN SLIMENE	mf.benlimene@cnrp.tn	Autogre
Uganda	A. Kisolo, OR	Confirmed	OR	Atomic Energy Regulatory Authority	Akisophel Kisolo	akisolo@era.or.ug	AKISOPHEL
Zambia	Official Representative		OR	Radiation Protection Board, Ministry of Health	Mushaukwu K. Mushaukwu	mushaukwukl@radiation.gov.zm	Mushaukwu
Zimbabwe	Official Representative	Confirmed	OR	Radiation Protection Authority of Zimbabwe	Reward Severa	rsevera@rap.co.zw	Reward Severa
Zimbabwe	Official Representative		OR	Radiation Protection Authority of Zimbabwe	Vengal MAVURAYI	vmavurayi@yahoo.co.uk	
IAEA					NANCY CAPADONA	ncapadona@iaea.org	
Turkey				TTSO	M. Salih ÇETİN	salih.cetin@tso.gov.tr	Salih
Turkey				TTSO	ARNAUD LEFEVRE	arnaud.lefevre@tso.gov.tr	Arnaut
Ghana	Emmanuel Ampomah-Amoako			Nuclear Regulatory Authority	Emmanuel Ampomah-Amoako	e.ampomah-am@nra.gov.gh	Emmanuel
IAEA	Debbie Gilley					dgilley@iaea.org	Debbie Gilley
IAEA	Peter Zumbiri			IEC	Peter Zumbiri	p.zumbiri@iec.org	Peter Zumbiri
ENSTTI	M. Gabriel BADINGA			Institute TRAINING			
FRANCE	A. Blardat			IRSN	Francoise BLARDAT	francoise.blardat@irsn.fr	Francoise
IAEA	Mamoru Maeoka			NSN			
IAEA	Kunijea Samen			NSOC/NMIS			
MOROCCO	Zouhair El Younet						
MOROCCO	Bouchra El Adilki						
MOROCCO	Si Ram Boufham						
MOROCCO	Mohammed El						
Sudan	M. Abu Zineen			SNRA	S. Genaid		
France	Sylvie SUREVIL			IRSN/CEI			
France	David Brown			IRSN/CEI			
Malawi	MALAN KHA			LNSP-CEI	MALAN KHA	malan.kha@lnsp.gov.mw	
Malawi	Tawonga Mwaale			Atomic Energy Council	Tawonga Mwaale	tawongam@yahoo.com	
Uganda	REC Member			Atomic Energy Council	KIRYAKABANDA	kiryakabanda@yahoo.com	
TUNISIA	FEKIH ALI Mustapha			NPP Project	TUNISA	mfekihal@npp.gov.tn	
Botswana	Richard Shammakani			Atomic Energy Commission	Richard Shammakani	rshammakani@gov.bw	
Nigeria	A. A. Dim			AP 1			
Botswana	Ge Mokoapeiso			AP 1	Ge Mokoapeiso	g.mokoapeiso@gov.bw	
Nigeria	G.O. Omeje			NORA			

Non-Restricted

Non-Restricted