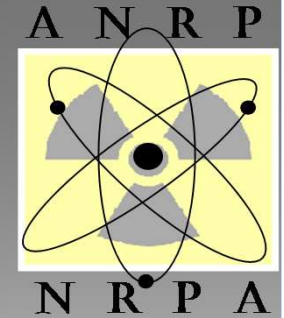


**GNSSN Plenary Meeting Knowledge Networking: Connect,
Communicate, Collaborate, Build Capacity
VIENNA, AUSTRIA, 28 SEPTEMBER 2016**



Cameroon experience with peer review services (IRRS)

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1. INTRODUCTION

1.1 Cameroon in brief

Geographical Situation: Central Africa;

- **Population:** 22 millions;
- **Surface Area:** 475 422 Km² ;
- **10 regions, 250 ethnic groups (Bantus, Semi-Bantus, Sudanese, etc.);**
- **2 official languages (French and English);**
- **2 main religions: Christian and Islam;**
- **IAEA Membership: July 1964.**



1. INTRODUCTION

1.2 Establishment of Nuclear and Radiation Regulatory Infrastructure in Cameroon

Law n° 95/08 of 30th January 1995 on radiation protection ;

Decree n° 2002/250 of 31st October 2002 on the creation, organization and functioning of the National Radiation Protection Agency (NRPA);

NRPA Mandate:

▪to regulate all ionizing radiation sources as well as the protection of people and environment against ionizing radiation hazards.

▪to establish or adopt standards of safety for protection of health and minimization of radiation hazards.

1. INTRODUCTION

1.3. REGULATION & GUIDELINES

Regulations initiated by NRPA, and signed in June 2013:

1. Arrêté N° 1150 /A/MINSANTE on Work Place Monitoring of 11 June 2013 laying:

Contains provisions related to supervised, controlled, especially restricted, and prohibited zones with regard to radiation exposure.

2. Arrêté N° 1151 /A/MINSANTE on Dosimetry Monitoring of 11 June 2013 :

Provides procedures for medical and occupational monitoring of workers and patients exposed to ionizing radiation.

3. Arrêté N° 1152 /A/MINSANTE on Licensing and Practices Modalities for X Ray Generators of 11 June 2013:

Provides requirements for possession, usage and handling of devices emitting X-rays in hospital.

1. INTRODUCTION

1.4 National Inventory

Existing radiation sources and practices include:

- 03 Co-60 category 1 radioactive sources used for radiotherapy ;
- 12 Ir-192 category 2 radioactive sources for Industrial radiography;
- 37 category 3 radioactive sources (Cs-137, Am-Be) for oil exploration;
- 57 category 4 radioactive sources for brachytherapy and industrial gauges use;
- 450 X-ray machines;

Initial Inventory Data were collected in 2009 and 2010 nation wide and registered in RAIS 3.0 .

The updated data are currently running on RAIS 3.3

1. INTRODUCTION

1.5 IRRS mission to Cameroon:

First IRRS mission to Cameroon

19 – 22 November 2007

Recommendations by IRRS Review Team :

- Completion of legislative and regulatory framework for better compliance with international standards, with the view to establish an effectively independent regulatory body with clearly assigned authority, responsibilities and resources;
- Effective implementation of regulatory activities of ANRP, based on the existing legislative and regulatory framework and with due consideration of the long time existing practices in the country;
- Formalisation of the NRPA organizational structure and recruitment of foreseen staff.

Second IRRRS Mission

12-21 October 2014

2. IRRS Mission Preparation and Self-Assessment

2.1 Request and Planning of Preparatory Meeting

Task		Responsibility
Send Request to IAEA		
	Send request to IAEA	Sent on 11 June 2013
Receive request from a state		
	Acknowledge receive request from the State	24 June 2013 with Attestation of Mission scheduled in 2014
Preparatory Meeting		
	Purpose of the meeting: briefing on: <ul style="list-style-type: none"> • Structure of the IRRS • The IRRS Process • Preparation for IRRS • Conduct of the IRRS 	16-17 June 2014

2. IRRS Mission Preparation and Self-Assessment

2.2 Preparatory Meeting (16-17 June 2014)

General presentation on:

- **Current status of the NRPA management: organogram, responsibilities, current RB activities**
- **Self-assessment process used by NRPA and SA Modules implemented: preparation, answering, analysis of results, action plan, implementation**
- **IRRS Process: designation of Liaison Officer and deputy, nomination of module counterparts, visits of facilities, conduct of mission**
- **IRRS Mission Logistics: reviewers needs during the mission**

2. IRRS Mission Preparation and Self-Assessment

2.3 Providing additional ARMs

	Send completed self-assessment question-sets to IAEA at least two months before commencement of IRRS mission	Host country (9 August 2014)
	Request for additional self-assessment reports related to the Code of Conduct on the Safety and Security of Radioactive Sources and remediation Importance of having Counterparts in stand by to reply to any request from IAEA IRRS coordinator	IRRS Coordinator

New Requirements from IRRS Coordinator: to provide additional information as Advanced Reference Materials (ARM), including SA results for certain Modules.

Taking into account the SA exercises already implemented at NRPA, Authorised Modules counterparts were requested to compile the needed information.

3. CONDUCT IRRS MISSION

3.1 Basic data

Mission date:	12 to 21 October 2014
Regulatory body:	National Radiation Protection Agency (NRPA)
Location:	Yaounde, Cameroon
Regulated facilities and activities:	Radiation Sources in industrial and medical facilities, emergency preparedness and response, medical exposure, occupational exposure
Organized by:	International Atomic Energy Agency (IAEA)

3. CONDUCT IRRS MISSION

3.2 Entrance meeting

Monday 13 October 2014;

Participants: NRPA senior management (**Board of Administrators**) and staff, Representatives of the **Ministry of Defence, Security Agency and Custom.**

Opening remarks by the **Inspector General of the Ministry** of Scientific Research and Innovation on behalf of the Minister.

An occasion to invited stakeholders to learn more about the NRPA missions and responsibilities and to be aware of the role of the IAEA with regard to the global regime for nuclear and radiation safety and security.

3. CONDUCT IRRS MISSION

3.3 IRRS Modules covered

Facilities and activities of NRPA were reviewed according to the following IRRS modules:

Module 1: Responsibilities and functions of the government;

Module 2: Global nuclear safety regime;

Module 3: Responsibilities of the regulatory body;

Module 4: Management system of the regulatory body;

Module 5: Authorization;

Module 6: Review and assessment;

Module 7: Inspection;

Module 8: Enforcement;

Module 9: Development of regulations and guides;

Module 10: Emergency preparedness and response (regulatory aspects);

Module 11: Additional Areas (Control of Medical Exposure and Occupational Radiation Protection)

3. CONDUCT IRRS MISSION

3.4 Organization of the interviews

Breakout of IRRS team in groups of reviewers, each been responsible of one or several modules.

One counterpart and two deputy counterparts assigned by NRPA to each group for interview.

The following groups were constituted:

Modules 1,2,3, and 4: 2 reviewers;

Modules 5, 6, 7, 8 and 9: 2 reviewers;

Module 10: 1 reviewer;

Modules 11: 1 reviewer;

Interviews organized in separate rooms.

Meetings with stakeholders: **Ministry of Health, Ministry of Scientific Research and Innovation, Prime Ministry.**

3. CONDUCT IRRS MISSION

3.5 Facilities visited

Selected facilities under NRPA regulatory control programme:

- Nuclear Medicine - General Hospital Yaoundé;
- Diagnostic Radiology – Central Hospital Yaoundé;
- Industrial Radiography (NDT) facility, Douala; and
- Radiotherapy - General Hospital Douala

3. CONDUCT IRRS MISSION

3.6 Policy issue for discussions

Policy issue discussions were related to **independence** of the regulatory body, and **openness** and **transparency**.
Participants: NRPA's General Manager, NRPA Staff and IRRS team.

Each reviewer provided comments on each issue based on his experiences.

Other themes discussed in the course of exchanges include: **competencies of RB, financial resources of RB, relations between RB and licencies;**

Discussions highly appreciated by NRPA staff.

3. CONDUCT IRRS MISSION

3.7 Recommendations by Reviewers

Recommendations were discussed by IRRS team and NRPA staff on 20th October, the day before the exit meeting.

Occasion to clarify and to provide additional information on certain points recorded by the IRRS reviewers.

3. CONDUCT IRRS MISSION

Recommendations to the Government

To enhance the overall performance of the regulatory system:

- ❖ Revise the legal and regulatory framework so that the provisions of the international safety standards are addressed in the laws and statutes;
- ❖ **Revise the existing legislation in order to assign and authorize NRPA to carry out main regulatory functions of an independent safety authority;**
- ❖ **Establish policy and strategy for the safe management and disposal of radioactive waste and establish mechanisms to ensure the necessary financial provision for the management of radioactive waste, disused radioactive sources and radiation generators;**
- ❖ Analyse the competence needs and the existing available national and international arrangements for education and training. Based on the results of this analysis the government should ensure that mechanisms are put in place to ensure sufficient national competence in relation to safety.

3. CONDUCT IRRS MISSION

Recommendations to the Regulatory Body (NRPA)

- ❖ **Establish and implement an integrated management system;**
- ❖ **Apply a comprehensive approach to authorization, and ensure that the authorization system covers the entire lifetime of a facility and activity.**

3. CONDUCT IRRS MISSION

3.8 Exit meeting

Exit meeting held on Tuesday 21 October 2014:

Presentation of the results of the mission by the IRRS Team Leader;
Closing remarks by the representative of the Minister of Scientific
Research and Innovation.

A **press conference** followed the exit meeting: IRRS team leader and
RB's GM answered the journalists' questions.



4. Lessons Learned from hosting IRRS Mission

From IRRS Preparatory Meeting

1. Better understating, by the Regulatory Body staff and other stakeholders, of the mission objectives;
2. Scope of the mission based on **Existing radiation facilities, current activities of the RB;**
3. **Selection of policy issues** to be discussed during the conduct of the mission and agreement on them;
4. **Importance of Self-assessment report**, main component of ARM; RB staff should be familiar with SA exercise to be able to actively contribute to the success of IRRS mission;
5. The **list of ARMs requested by the reviewers** provides an indication on the volume of RB activities;
6. Logistics to support the mission: accommodation, communication (internet, telephone), meeting rooms, local transport, lunch, etc

4. Lessons Learned from hosting IRRS Mission

From the conduct of IRRS Mission

1. Regular exchanges between module counterparts and associated reviewers;
2. Importance of Reviewers daily meeting: findings per Module, draft report;
3. Recommendations following reviewers observations are based on **IAEA safety standards clearly quoted by reviewers;**
4. Knowledge of IRRS methodology and IAEA safety standards support effective review mission;
5. **Policy issues** discussions help the host RB to learn from other RB experiences;
6. Identification of good practices: **reward for RB staff performance;**
7. **Involvement of module counterparts into the IRRS mission** helps RB staff to clearly understand their responsibilities to improve the RB status.

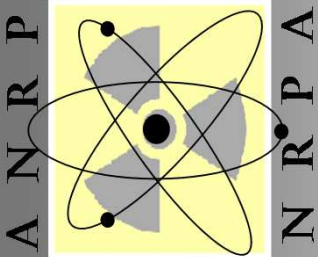
5. Conclusion

IRRS mission

- Helps to identify issues and to improve the quality and effectiveness of RB activities;
- Provides to the RB staff the assurance of their competencies;
- Contributes to the national approval of the regulatory body programme and activities;
- Increases knowledge of national stakeholders on the General Requirements of international nuclear and radiation safety and security standards;

Media involvement improves public awareness on the role and responsibilities of RB.





THANK YOU

