

IAEA

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Prioritization of Activities and Work Plan to support nuclear and radiation safety in Africa and recommendations

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INTRODUCTION

1. FNRBA Coordination meeting – Objectives

The objectives of the CS meeting:

- To **evaluate the current situation**
- To **improve the governance;**
- To **assess the needs regularly;**
- To **raise awareness** of the policy makers;
- To **prepare the annual activity plan** of FNRBA.

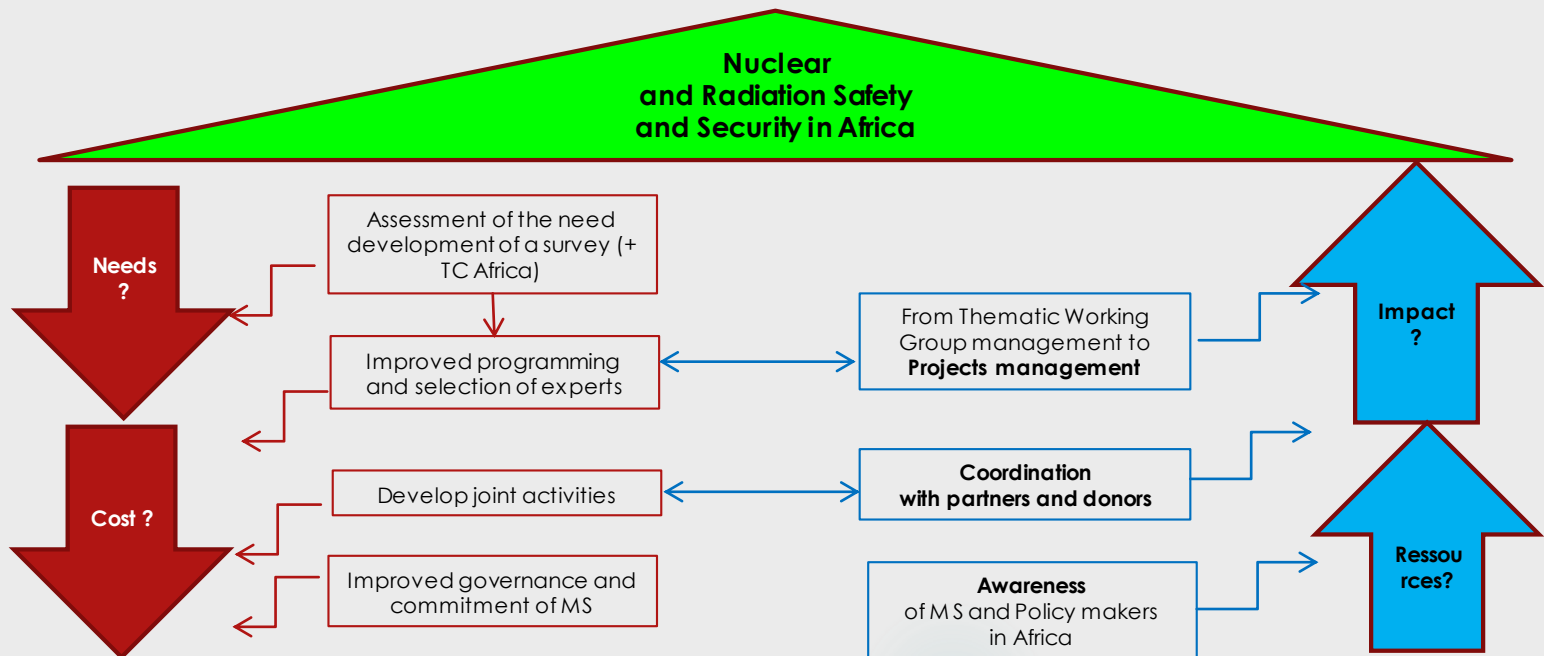
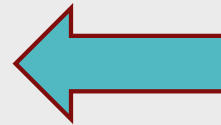
Governance level

- Steering Committee members
- IAEA Secretariat

Technical level

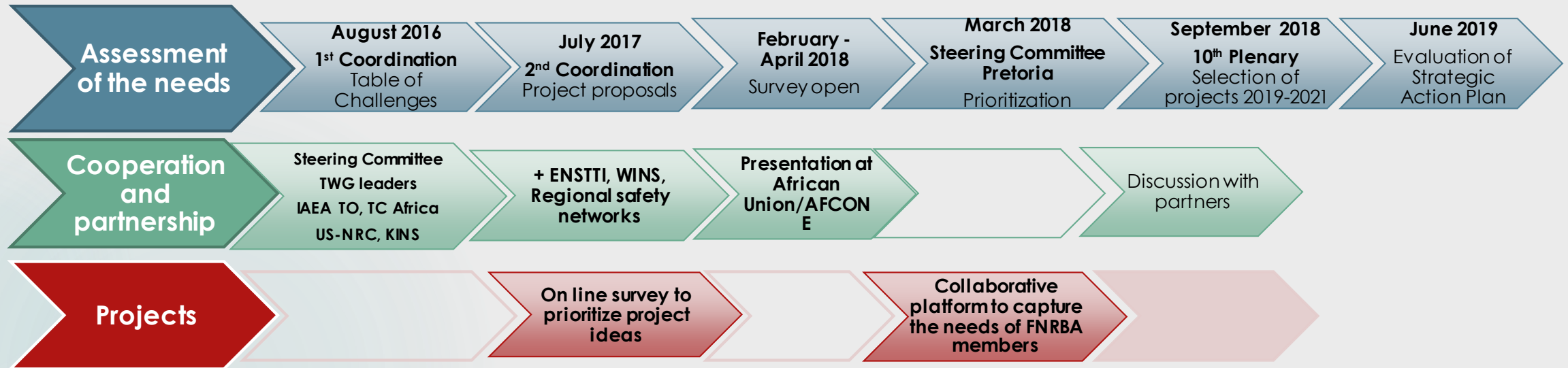
- 10 thematic working groups
- Local African experts
- TC Africa, Technical Officers of the IAEA,

Donors and Partners



INTRODUCTION

2. Timeline of action of FNRBA



Activities and Work Plan 2019 - 2021

PRIORITY	CHALLENGES	PROPOSED ACTIVITIES	LINKED ACTIVITIES	LEAD TWG(s)	HOST COUNTRY	POTENTIAL SPONSOR/PARTNER	TIMELINES
1	Lack of regulatory standards in many Member States	<ul style="list-style-type: none"> Develop Model Regulations: <ul style="list-style-type: none"> ✓ Siting ✓ Transport ✓ Waste Management ✓ Radiotherapy ✓ Nuclear Security 	Training Courses IAEA School of Drafting Regional Workshops	TWG 3, TWG 5 TWG 8 TWG 7 TWG 2 TWG 10	Ghana South Africa Kenya Cameroun Morocco	IAEA EC	2-3 years for each
2	<ul style="list-style-type: none"> Limited number of Radiation Protection Officers in Member States Lack of certification process 	<ul style="list-style-type: none"> Qualification and Certification System for Radiation Protection Officers and Experts 	Training Courses Regional Workshops	TWG 6 TWG 1	TBD	Proposed by EC Based on ENSTTI assessment	2019 - 2021
3	<ul style="list-style-type: none"> Increased use of new radiation technologies in medical diagnostics and treatment Inadequate regulatory oversight 	<ul style="list-style-type: none"> Provide guidance and build capacity on authorization and inspection of radiotherapy facilities, and new technologies Awareness creation 	Training Courses Regional Workshops Fellowships	TWG 2 TWG 1	TBD	IAEA EC	2020-2021

Activities and Work Plan 2019 - 2021

PRIORITY	CHALLENGES	PROPOSED ACTIVITIES	LINKED ACTIVITIES	LEAD TWG(s)	HOST COUNTRY	POTENTIAL SPONSOR/PARTNER	TIMELINE S
4	<ul style="list-style-type: none"> - Ongoing interest in deploying nuclear facilities in Africa - Limited training opportunities in Member States 	<ul style="list-style-type: none"> • Training ✓ Design Assessment of Nuclear Reactors (Including Safety Doc review) ✓ Uranium Mining and Milling ✓ Waste Management ✓ Integrated Management System ✓ Ageing Management of Nuclear Reactors ✓ Transport ➤ Project – Developing Regional Expert Group on Transport Safety Assessment ❖ Step 1: Identify potential Experts from each of the 5 Regions ❖ Step 2: Prepare/Procure Training Material ❖ Step 3: Identify a venue for Train the Trainers/Experts ❖ Step 4: Deploy Regional Experts to Identified Regional Centres. ❖ Step 5: Mentoring Phase for Regional Experts. ❖ Step 6: Accreditation and Activation of Regional Experts ✓ Inspection Procedures 	Training Courses Regional Workshops Fellowships	TWG3, TWG5 TWG4 TWG7 TWG1, 2,3,5 TWG5, TWG3 TWG8 TWG1,2,3,5	TBD	IAEA EC IRD/US-NRC	2019-2021

Activities and Work Plan 2019 - 2021

PRIORITY	CHALLENGES	PROPOSED ACTIVITIES	LINKED ACTIVITIES	LEAD TWG(s)	HOST COUNTRY	POTENTIAL SPONSOR / PARTNER	TIMELINES
5	<ul style="list-style-type: none"> - Difficulty in convening workshops and meetings - Inadequate internal training programmes for Member States 	<ul style="list-style-type: none"> • Development of e-learning tools within the existing web site in complementary with the IAEA e-learning tools 	<p>IAEA Transport Safety e-Learning platform</p> <p>GNSSN platform</p> <p>IAEA e-Learning Modules for Nuclear Professionals</p> <p>WINS Certification Programmes</p>	<p>TWG6</p> <p>TWG3</p> <p>TWG5</p> <p>TWG2</p> <p>TWG9</p>	TBD	<p>WINS</p> <p>IAEA</p> <p>NRC/IRDP</p> <p>EC</p>	2018-2021
6	<ul style="list-style-type: none"> - Lack of promotion of use of Model Regulations and standards - Unfamiliarity with developed Model Regulation 	<ul style="list-style-type: none"> • Workshop on Implementing Model Regulations on Emergency Preparedness and Response 	<p>Regional Workshops (English, French)</p>	TWG9	<p>UAE/ANNUR (English)</p> <p>Morocco (French)</p>	<p>IAEA</p> <p>KINS</p>	<p>Q4 2018</p> <p>Q1 2019</p>

Activities and Work Plan 2019 - 2021

PRIORITY	CHALLENGES	PROPOSED ACTIVITIES	LINKED ACTIVITIES	LEAD TWG(s)	HOST COUNTRY	POTENTIAL SPONSOR / PARTNER	TIMELINE S
7	<ul style="list-style-type: none"> - Lack of Technical Support to Regulatory Bodies - Dispersed Expertise in Africa - Availability of Transport Experts in Africa 	<ul style="list-style-type: none"> • Network of Regional Experts and Regional Training Centres • Establishment of Regional Transport Experts • Activation of Regional Transport Experts 	<p>Conduct Survey Develop database Selection of potential regional experts</p> <p>Identification of Regional Centres Train the Trainers (Regional Experts-in-training)</p> <p>Deployment of Regional Experts</p> <p>Mentoring of Regional Experts</p> <p>Accreditation of Experts</p>	TWG8	<p>N/a (online) Regional</p> <p>Ethiopia</p> <p>Regional Training Centres Online or by Region</p> <p>Regional</p>	N/a	<p>February 2019</p> <p>August 2019</p> <p>Period of 1 year</p> <p>August 2020</p>

Activities and Work Plan 2019 - 2021

PRIORITY	CHALLENGES	PROPOSED ACTIVITIES	LINKED ACTIVITIES	LEAD TWG	HOST COUNTRY	POTENTIAL SPONSOR/PARTNER	TIMELINES
8	<ul style="list-style-type: none"> - Inadequate coordination of nuclear security activities - Inadequate expertise in nuclear security 	<ul style="list-style-type: none"> - Nuclear Security - Transport - Detection Architecture - Physical Protection - Cyber security - Insider Threat - Design Basis Threat - Sources - INSSP - NUSIMS - Emergency - Support Centres collaboration 	<ul style="list-style-type: none"> - Conduct Survey - Workshops - Training Courses - Fellowships 	TWG10	Online Morocco, Ghana South Africa	N/A INS/US- DOE IAEA	2019-2021

PROJECT IDEA

Development of Model Regulations for Siting on NPP's

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- **The Terms of Reference of the TWG3-NPP calls for the convergence on regulatory standards and practices of participating countries.**
- **This could be achieved through comparison of regulatory standards and practices of the participating countries, comparing with other international standards and practices and also providing a framework for the development of respective safety standards in embarking countries.**
- **A survey conducted in 2012 amongst TWG3 member countries identified gaps in the area of siting NPPs in the respondent countries.**
- **From the survey it is apparent that South Africa, Nigeria and Egypt have relevant standards either in place or it is in an advance stage of development.**

PROJECT IDEA

Purpose and Participation

- The purpose of this document is to motivate for the establishment of a working group within TWG3-NPP to develop a set of model regulations for the siting of NPP's that can be adopted by embarking countries in the region

Participation

- From various surveys conducted it is apparent that the countries are at different stages in the development of their legal and regulatory infrastructure for embarking on new nuclear programmes. This includes the status and development of regulatory standards.
- The recent survey on Safety Standards indicated that Egypt, Ghana, Nigeria, South Africa and Tunisia have relevant standards either in place or it is in an advance stage of development. It is therefore proposed that these countries participate in the working group

PROJECT IDEA

Work Breakdown

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- The process of developing the model regulations will require the participants to routinely meet to share information, benchmark safety standards on siting, develop a framework for the model regulations and to develop the actual regulations.

#	Purpose	Venue	Timeline
1	Presentation on development of regulations (IAEA) Presentation on siting standards in various countries (Participants) Presentation of IAEA Safety Standards on Siting (IAEA) Discussion and agreement on framework for model regulations Development of plan of action	Vienna	4 th quarter of 2018
2	Literature review Benchmarking of participant countries siting standards	South Africa	2 nd quarter of 2019
3	Development of 1 st draft of regulations Circulate for review and comments	TBD	4 th quarter of 2019
4	Update and finalise draft regulations Submit to Steering Committee	TBD	2 nd quarter of 2020

PROJECT IDEA

Funding

- **It is requested that the FNRBA international partners support and fund the Working Group members participation in the meetings.**
- **The funding will be for participation of 6 Working Group members comprising of the TWG3 Coordinator plus nominees from Egypt, Ghana, Nigeria, South Africa and Tunisia.**
- **A working group meeting should typically last about 4 days. Funding could cover flights, accommodation and subsistence as well as resource persons where required.**
- **Cost Estimate: \$86400**

Conclusion

- **The implementation of the projects outlined above will enhance the nuclear and radiation safety and security in Africa**
- **A resolution is required on the arrangement of priorities presented**
- **Support is solicited from Partners for each of the projects presented**

Thank you for your attention....

