

12.	<p>Protocol Duties:</p> <ol style="list-style-type: none"> 1. Protocol Attaché Duties 2. Advance Parties Duties 3. NNRA events anchoring and compeering 4. Toastmaster duties 5. Visa Processing 6. Visa On Arrival 7. Note Verbal 8. Facilitate diplomatic engagements and ensure proper Protocol 	<p>Most Senior Protocol Officer is attached to Director General/CEO office. He /She is assisted by other subordinates to perform protocol duties like;</p> <p>Protocol Duties:</p> <ol style="list-style-type: none"> i. Work with the DG/CEO to collate, arrange and print out proposed relevant meetings and workshops from the current IAEA schedule list ii. Develop Travel itineraries iii. Raise travel memos and seek DG/CEO's approval to process iv. Raise Estacode memo and submit to the DG/CEO for approval and onward processing v. While considering best available routing and timing, source for and negotiate airline ticketing and bookings fees for domestic and international travels vi. Book hotel accommodations by considering cost, proximity, season, timing, best view and deals. <p>Advanced Party Duties and In-House Programs:</p> <ol style="list-style-type: none"> i. Visit the venue or office prior to the arrival of the executive(s) and confirm the program schedule, guest lists, gifts, dress codes and all other clearances ii. Confirm commencement proceedings, investitures, adherence to changes in status and proper sitting arrangements. iii. Escort DG and other Executive members of staff to NNRA functions and other programs iv. Announce the presence of and introduce the DG/CEO and or other executive(s) v. Ensures that all customs and regulations dealing with diplomatic formality, precedence and etiquette are organized in advance seamlessly <p>NNRA Events Anchoring and Compeering:</p> <ol style="list-style-type: none"> i. Schedule and book accommodation ii. Ensure the use of banners, emblems such as flags and anthems are accurate and the correct forms of address are used and ceremonial guidelines are followed. iii. In an effort to minimize or eliminate potential opportunities of embarrassment or offense during NNRA events, the Protocol Officer researches the traditions and customs, likes, dislikes and preferences of participants and visitors iv. Protocol during program opening; <ol style="list-style-type: none"> a. Opening Prayer b. National Anthem c. Opening Prayer (Prayer Anthem), d. Introductions as follows v. Arrange photo opportunities <p>Toastmaster Duties:</p> <ol style="list-style-type: none"> i. Receives prior notice of meeting or event ii. Research about the event and theme iii. Introduce yourself and welcome everyone iv. National Anthem v. Lead the opening prayer (Second stanza of National Anthem) vi. Urge everyone to settle down vii. Introduce participants (executives and dignitaries first) or allow them introduce themselves viii. State the name and theme of the event <p>Visa Processing:</p> <ol style="list-style-type: none"> i. Receive official travel approval letter ii. Write official letter of introduction to the proposed embassy, high commission or consulate office iii. Research the country's visa requirement
-----	---	--

		<ul style="list-style-type: none"> iv. Request that the traveler submits all official documents as specified by the country v. Fill out visa forms online and book appointment for interview vi. Prep the traveler on protocol for visa interview based on the country guidelines <p>Visa On Arrival:</p> <ul style="list-style-type: none"> i. Write official introduction and invitation letter to the participant(s) ii. Send official email to foreign visitor(s) asking them to log on to the Nigerian Immigration Service portal (portal.immigration.gov.ng) and apply for Visa on Arrival iii. Inform the visitors that approval will be sent to their email to be printed and brought with them to Nigeria. <p>Note Verbal:</p> <ul style="list-style-type: none"> i. The document is strictly for foreign assignment travels, approval is required ii. Edit the standard NNRA introduction letter in favour of the recipient iii. Pass to the DG/CEO for approval and signature iv. Forward same to the Ministry of Foreign Affairs for issuance of Note Verbal v. Protocol Officer liaises with officials of the Ministry to arrange for the submission of the issued document to the embassy or High Commission <p>Facilitate diplomatic engagements and ensure proper Protocol</p> <ul style="list-style-type: none"> i. Receive details of foreign visitor from program committee ii. Ensure hotel accommodation is ready iii. Promptly pick-up the visitors from the airport and take them to the hotel iv. Arrange for visitor's transportation during the event v. Collaborate with the NNRA Security personnel to ensure safety of visitors
	<p>NNRA In-House Seminar Coordination</p>	<ul style="list-style-type: none"> i. Request for names of Staff who attended trainings within and outside of Nigeria from Administration office, Heads of Departments, and Units ii. Give notification letters with proposed dates two weeks prior to candidate's presentations iii. Schedule seminars iv. Write seminar notice to all the Departments and paste same on the NNRA notice boards v. Coordinate ICT, Maintenance and Cleaning crews to ensure seminar venue is arranged and ready vi. Check microphones and sound system vii. At about 10minutes to time, ensure that the DG/CEO and Directors are present or call their offices to remind them

		<ul style="list-style-type: none"> viii. Anchor seminar by welcoming DG/CEO, Directors, Staff/Colleagues and Visitors ix. Introduce seminar Presenter(s) and announce their topics x. Lead the recitation of the NNRA Vision and Mission statements xi. Before presentation commences , introduce and lead the recitation of NNRA Vision and Mission statements xii. Five minutes after commencement, distribute Seminar Attendance Sheets (In) xiii. Five minutes before seminar ends, distribute Seminar Attendance Sheets (Out) make announcements xiv. After Seminar presentation, announce questions , contributions, suggestions and answers session xv. Lastly , make announcements and close the seminar
--	--	--

EMERGENCY PREPAREDNESS AND RESPONSE UNIT

EMERGENCY PREPAREDNESS AND RESPONSE UNIT

The Emergency Preparedness and Response (EPR) is one of the Divisions in the Nigerian Nuclear Regulatory Authority (NNRA) created under the Office of the Director General/CEO. The Division is saddled with the responsibility of ensuring compliance with Section 26 (1-2) of the Nuclear Safety and Radiation Protection Act No. 19 of 1995 in mitigating all Nuclear and Radiological Emergencies and providing adequate standards of safety for the protection of life and environment against harmful effects of ionizing radiation in the country in coordination with other relevant Agency.

The Department is responsible for:

The Division is responsible for:

- i. Responding to nuclear or radiological incidents and emergencies in Nigeria.
- ii. Ensure that all arrangements for emergency preparedness and response in line with regulations be in place for the on-site area for any facility prior to licensing.
- iii. Promoting improvement in national emergency preparedness and response.
- iv. Reporting and management of nuclear/radiological incidents in the Nigeria.
- v. Development of a response plan to mitigate incidents relating to both nuclear/radiological emergencies.
- vi. Ensure collaboration with other response organizations as appropriate in compliance with regulations before commencement of emergency response operations.
- vii. Maintaining and improving intergovernmental arrangements and fulfill international obligations for emergency preparedness and response
- viii. Strengthening NNRA and Nigeria's Preparedness to and response Nuclear and Radiological incidents/accidents,
- ix. Identification and prioritization of issues related to the programme of work on Incident and Emergency Management.
- x. Receiving notifications and alerts related to Nuclear and radiological incident and emergencies in Nigeria

Structure of the Division

The EPR Division is made up of two (2) units namely Emergency Preparedness Unit and Emergency Response Unit. The division is also expected to have a contact person who doubles as the country's liaison officer to both the IAEA IEC and USIE whose responsibility is to report and update all emergency cases within the country in-line with Convention on Early Notification of Nuclear Accident and Convention on International Assistance in Case of Nuclear and Radiological Emergency.

The Division's mandates and activities are as follows:

A. Emergency Preparedness Unit

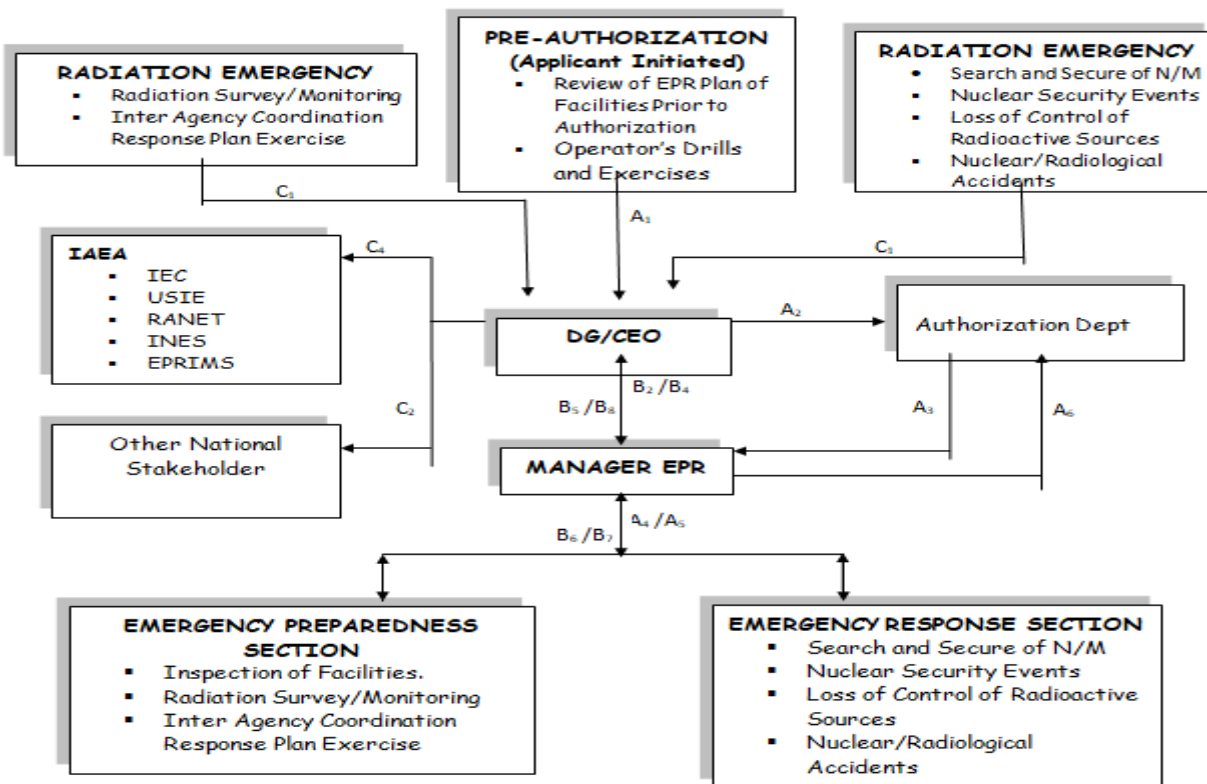
- i. The Emergency Preparedness Unit is established to ensure that all facility arrangements are in place for a timely, managed, controlled, coordinated and effective response to any nuclear or radiological emergency at the scene, and at the local and regional national level. It includes ensuring that the capability of maintaining adequate protection and safety by managing accidents; mitigating their consequences if these do occur exist in nuclear or radiological facilities in the country thereby protecting the health of site personnel, the public and the environment.
- ii. The Emergency Preparedness Unit is responsible for:

- a. Inspection of Facilities to ensure that preparations are made in advance of any nuclear or radiological emergency in order to ensure that there is a capability to meet the response requirement.
- b. Review the Emergency and Response Plan of all Facilities and ensure all non-compliant issues are resolved before granting license.
- c. Development and review of regulations and guides relevant to emergency and response for facility operators.
- d. Inspect all emergency Drills and exercises carried out by facilities and ensure all non-compliant issues are reviewed and all lessons learnt to be incorporated into the next yearly exercise.
- e. Ensure all emergency preparedness and response communication equipment are functional and capable of receiving all nuclear or radiological emergency reports at any point in time.
- f. Carry out national emergency drill in collaboration with other stakeholders to ensure that the National Nuclear and Radiological Emergency Response Plan (NNREP) on ground are practicable in the event of any nuclear and radiological emergency.
- g. Ensure allocation of responsibilities, authorities and arrangements for co-ordination amongst all response organizations in case of any national nuclear or radiological emergency event.
- h. Any other assigned role by the Director General/CEO and the Heads of Department and Division

B. Emergency Response Unit

- i. Emergency response Unit ensures the performance of actions to mitigate the consequences of an emergency for human health and safety, quality of life, property and the environment in any nuclear or radiological facility in the country.
- ii. The Response unit is responsible for:
 - a. Receive all nuclear or radiological emergency report from all facilities across the country and act accordingly.
 - b. Update the country's emergency report with the IEC, USIE and RANET domicile with the IAEA in line with the Conventions.
 - c. Advise the government via the Authority on any nuclear and radiological emergency event.
 - d. Any other assigned role by the Director General/CEO and the Heads of Department and Division.

FLOW CHART OF EMERGENCY PREPAREDNESS AND RESPONSE DIVISION OVERSIGHT FUNCTION



(A) Review of Applicant's Emergency Preparedness and Response Plan for Authorization

- The applicant forwards application form with other relevant supporting documents including that of EPR to the office of the DG/CEO.
- The application form is filed and directed to GM (A&E) for review.
- The GM (A&E) directs the applicant's supporting document on Emergency Preparedness and Response plan to the Head of EPR Division for proper review.
- On receipt of the file, the Head (EPR) assigns the file to two technical personnel for review.
- The applicant supporting documents are assessed by the reviewers noting all corrective actions and considering all relevant requirements in line with GSR Part 7 and make recommendations.
- The Head EPR endorses on the recommendations and reverts back to GM (A&E) noting all corrective actions to be communicated to the applicant.
- The Authorization Unit writes the applicant requesting for all additional documents if any, as recommended by EPR Unit after which authorization is recommended.

(B) Inspection of Nuclear or Radiological Facilities

- The Head (EPR) initiates the need for routine inspection to Facilities in line with the Nuclear Safety and Radiation Protection Act No. 19 of 1995 (Act) Section 26 (1-2).
- The Head (EPR) writes to DG/CEO for approval and nomination of Inspectors.
- A team of Inspectors are sent for inspection of Emergency Response Plan of Facilities.
- On completion of the exercise, the inspection report, concordance statement and other relevant document received from Operators during inspection are filed appropriately and submit to the DG/CEO office
- The DG/CEO directs filed report to the Head (EPR) for further actions

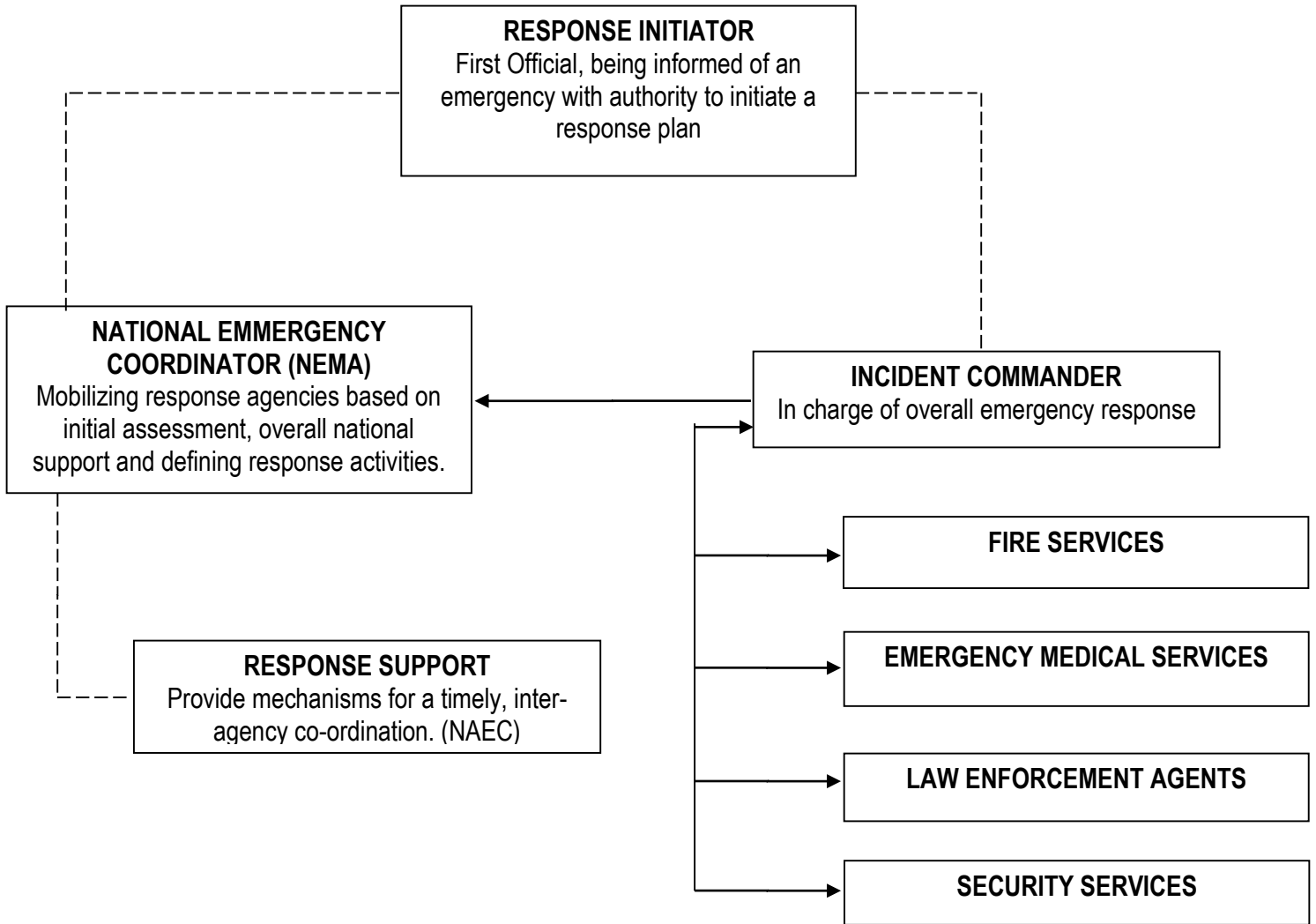
- vi. The Head (EPR) directs an independent review of the inspection report by one (1) or two (2) technical personnel (Reviewer) under the unit
- vii. The Reviewer reviews the inspection report in consideration of required elements relevant to Emergency Preparedness and in conformity to specified review formats. Recommendations consisting of corrective actions if any are specified in reviewed report and returned to the Head (EPR)
- viii. The Head (EPR), on approval of the reviewed report with its recommendations, sends it to the DG/CEO for further actions.

(C) National Nuclear and Radiological Emergency Response

- i. The NNRA being the Response Initiator; receives initial notification of a potential nuclear/radiological emergency through the office of the DG/CEO, getting basic information about the emergency and providing initial advice to the notifier. This function is operational 24 hours per day and 7 days per week. Also carry out initial radiological assessment.
- ii. Other stakeholders to the National Nuclear and Radiological Emergency Plan (NNREP) such as NEMA, NAEC, and Fire Service, Emergency medical Services, Law Enforcement and Security Services are contacted for their specific roles and responsibilities.
- iii. The NNRA activates the National Emergency Response while NEMA and NAEC coordinate and support the national response respectively.
- iv. In the event if a nuclear or radiological emergency is such that can't be controlled within the country and requires the activation of the National Nuclear and Radiological Emergency Plan (NNREP), The NNRA being the Point of Contact for IAEA Assistance Convention initiates this international assistance request from IAEA and other international agencies. Arrangements already exist for making such requests, particularly with the IAEA. Nigeria is using the Unified System for exchange of Information in incidents and Emergencies (USIE) to exchange urgent information, request for and provide assistance during Nuclear and Radiological incidents and emergencies. This is done by submitting form on USIE and Fax or telephone to IEC. The Ministry of Foreign Affairs is fully informed of all requests for foreign assistance.
- v. The Emergency event is coordinated and timely responded to until its mitigated and completely recovered.

Note: The level of the response to a specific emergency will be based on [graded approach] the type or amount of radioactive material involved; the location of the emergency; the potential for impact on public and the size of the affected area. The emergency could arise from Search and Secure of Nuclear Sources, Any Nuclear security event, Loss of Control of Radioactive Sources or Nuclear/Radiological Accidents.

Response Organization in an Event of a Radiological Emergency



(D) Emergency Notification for Stuck in Hole

- i. Notification for stuck in hole incident is sent to the Emergency email, the DG/CEO , authorization and NNRA official email is been copied
- ii. The Emergency Division prints and review the notification its sent to the DG/CEO for approval before the operators notification is acknowledged
- iii. IF the fishing operation is successful the emergency unit acknowledges the mail and notification is terminated
- iv. IF fishing operation is not successful the licensee applies for abandonment
- v. The abandonment application is received by the office of the DG and then sent to the Emergency division , the emergency division reviews the submission and make recommendations to the DG/CEO for approval
- vi. If approval is given Inspectors are nominated for the DG/CEO approval before the Inspectors proceed for inspection.
- vii. Upon completion of the inspection, the Inspectors write their reports.
- viii. The Head of unit directs an independent review of the inspection report by nominating two technical officers as reviewers.
- ix. The recommendation from the reviewers is then forwarded to the DG/CEO for approval
- x. DG/CEO forwards his approval to GM authorization and enforcement for issuance of license

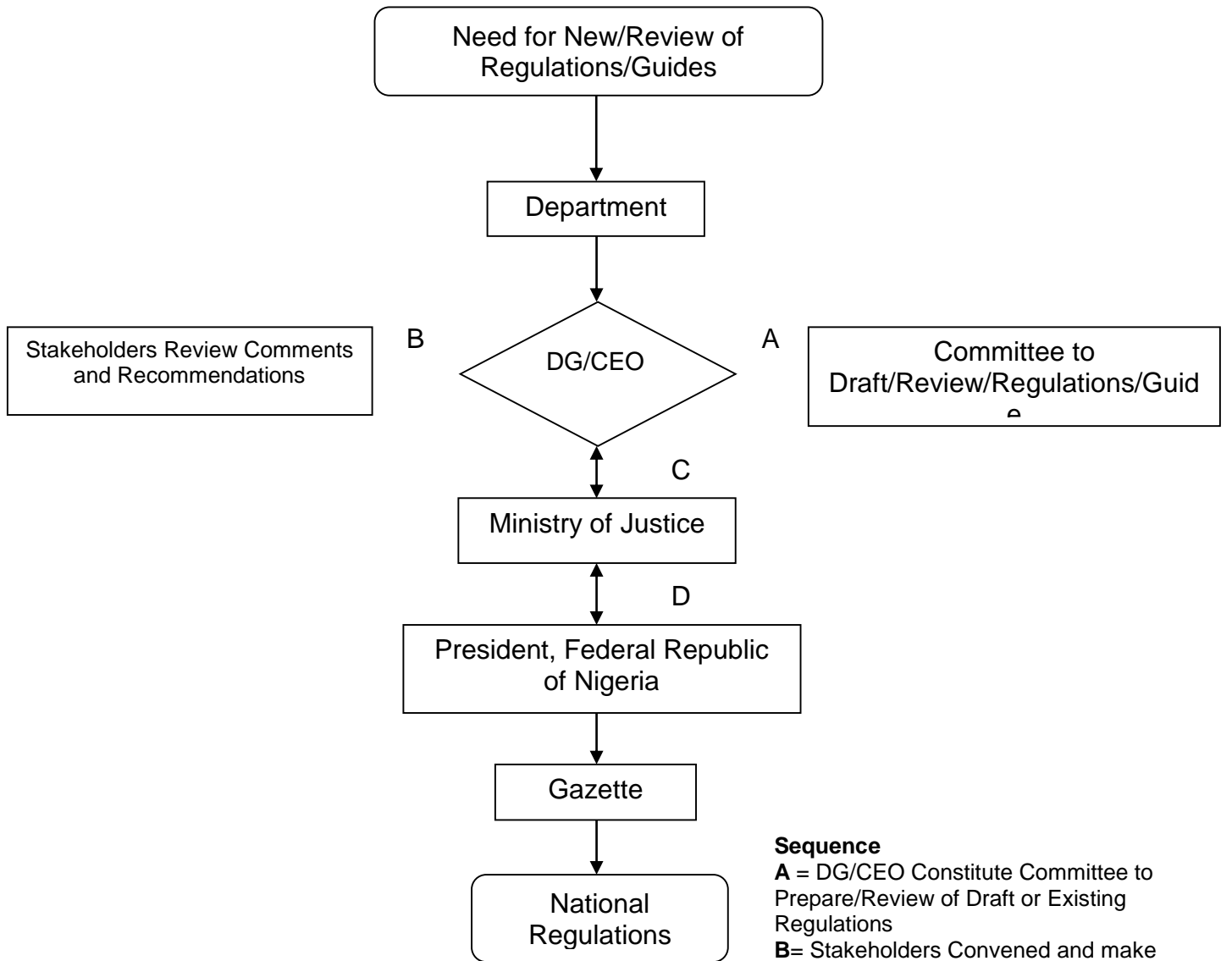
(E) Operator's Drills and Exercises

- i. Operator notifies NNRA of their intention to carry out drill to test the Facilities Emergency Response Program as documented.
- ii. With DG's approval, a team of NNRA Inspectors will be dispatched to observe and evaluate the exercise.
- iii. Upon completion, the Operator forwards the report of the drill to the NNRA.
- iv. The NNRA reviews the report and ensure that all lessons learnt in the exercise are incorporated into their Emergency Response Plan.
- v. All non-compliance issues observed during the drill are also communicated to the Facility Management for corrective actions upon DG's approval.

(F) Development of Regulations

- i. The Division initiates the needs to develop EPR Regulation and recommends to the DG
- ii. The DG/CEO constitutes the Committee to develop new draft/ review of existing Regulation
- iii. Stakeholders convened by DG/CEO to review, comment and make recommendations on the Draft or Existing Regulation.
- iv. The DG/CEO sends the Draft to IAEA for further review and recommendations.
- v. The DG/CEO transmits the final Draft copy to Ministry of Justice for comments and onward communication to the President.
- vi. The President comments, approves or rejects and send back to Ministry of Justice.
- vii. If rejected, it's sent back for further review.
- viii. If approved, its then gazette and becomes National Regulation

Regulation process

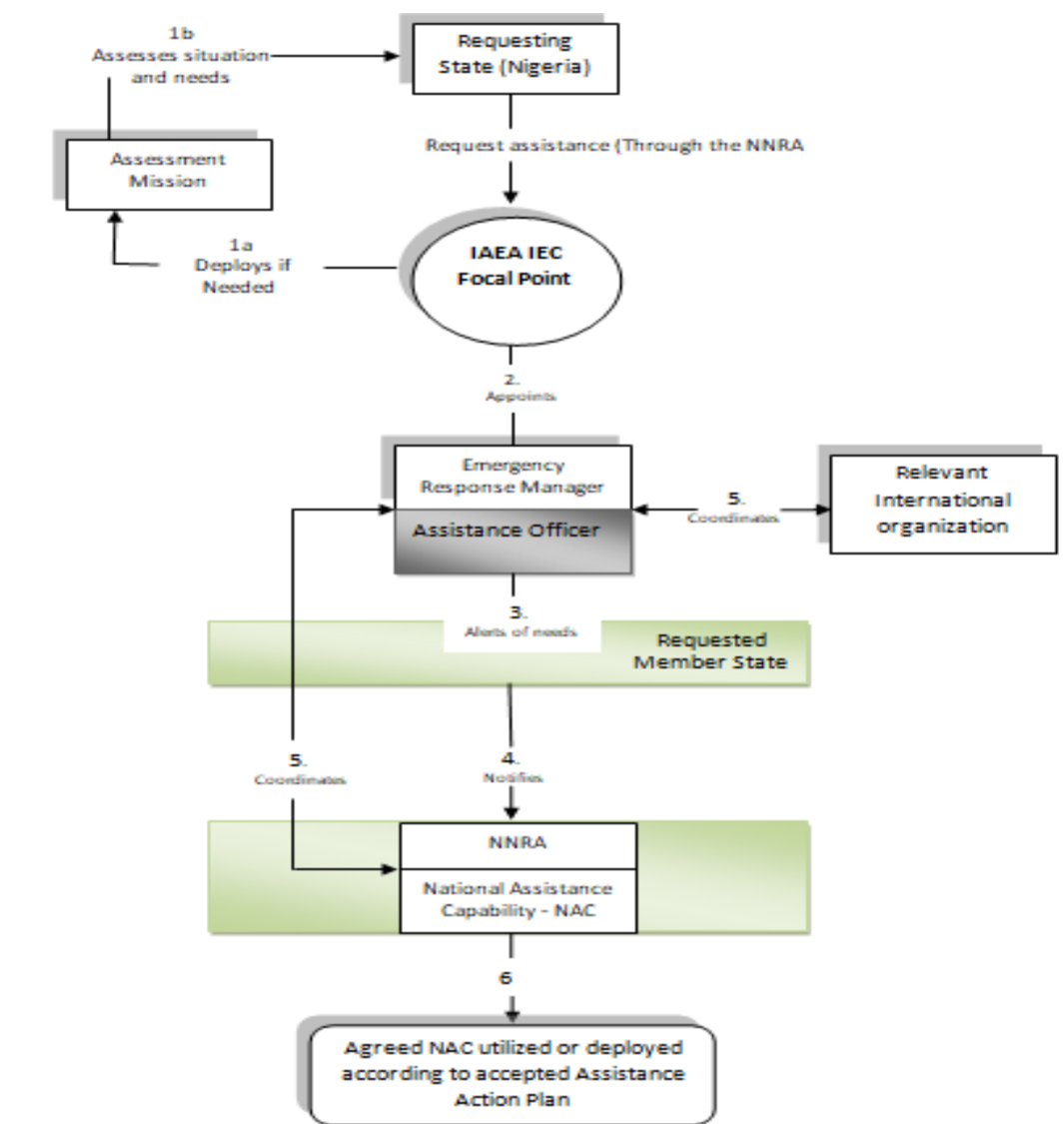


Sequence
A = DG/CEO Constitute Committee to Prepare/Review of Draft or Existing Regulations
B= Stakeholders Convened and make recommendations on the Draft or Existing Regulations
C= DG/CEO sends Final Draft to Ministry of Justice for comments and onward communication to the President
D= Presidents Comments, Approval for Gazette or rejection sent back to Ministry of Justice

(G) Response and Assistance Network (RANET) – outline of Concept

- i. Nigerian through the NNRA sends request for assistance to the IAEA's IEC (focal Point) in accordance with the IAEA Conventions on Assistance and Early Notification. If needed, an IAEA Assessment Mission (1a) is deployed to assess assistance needs (1b)
- ii. The Emergency Response Manager (ERM) from IAEA determines the type of assistance required. And appoints Assistance Officers (or team) accordingly.
- iii. If activation of RANET assets is deemed necessary, Assistance Officer alerts National Warning Point (NNRA).
- iv. Assistance Officer notifies appropriate Competent Authority (NNRA).
- v. The NNRA/NAC coordinator(s) then coordinates provision of assistance with Assistance Officer.
- vi. If appropriate, Assistance Officer also coordinates provision of assistance with relevant international organizations(s). Agreed assistance capabilities are utilized as deployed according to the accepted Assistance Action Plan.

Nigerian's Request for Assistance with Relevant National Assistance Capabilities (NAC) Coordinator(s) Process



PROJECT MANAGEMENT OFFICE/PUBLIC PRIVATE PARTNERSHIP UNIT/INTERGARTED MANAGEMENT SYSTEM

The Project Management Office (PMO) Division comprises of, Private Public Partnership Unit (PPP) and Integrated Management System (IMS) Unit.

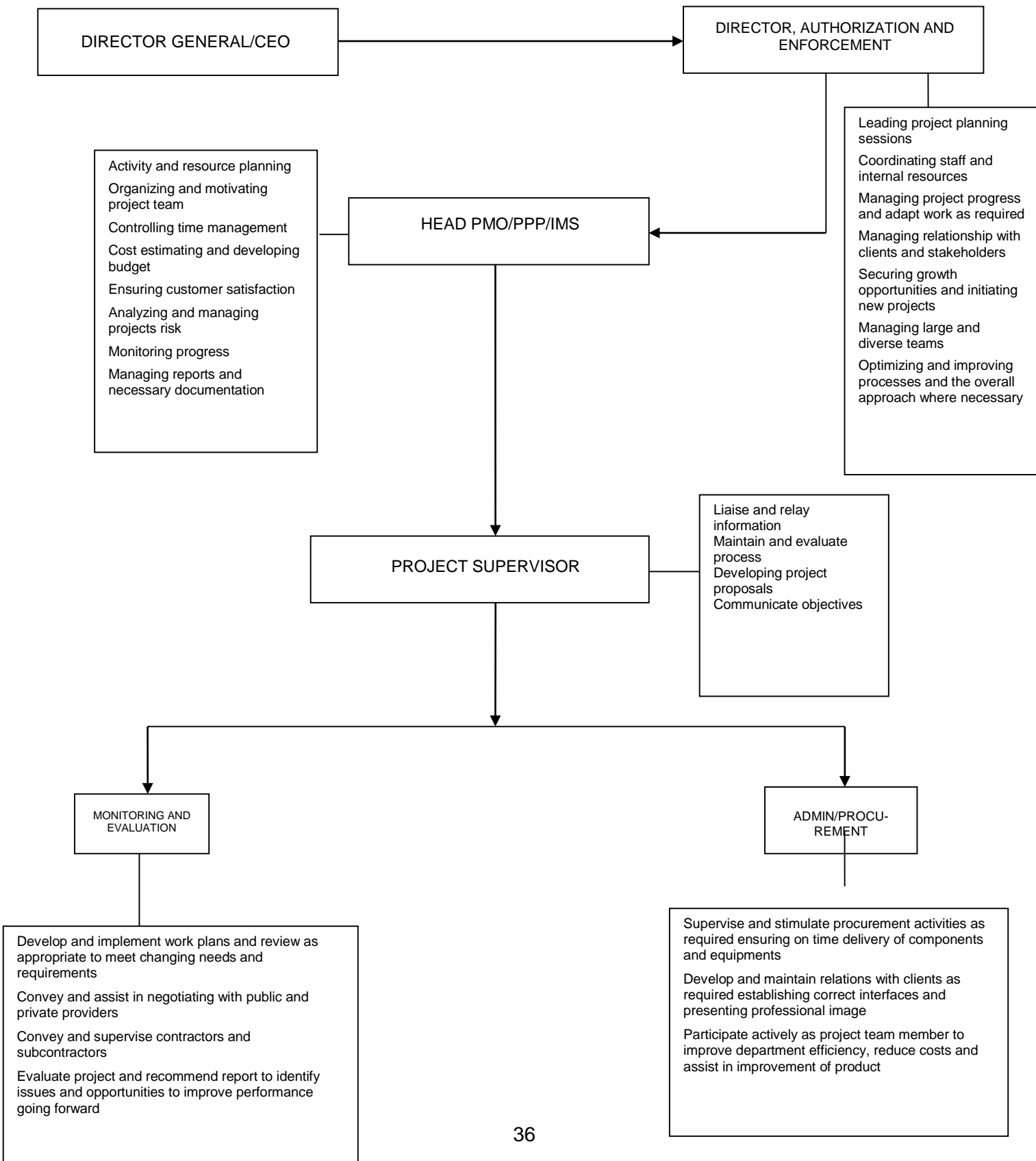
Project Management Office: The PMO is a division that defines and maintains project management standards within the Authority. The division improves project management by standardizing processes and improving efficiency. The PMO team manages projects, maintains processes, and offers support and training.

The project management office provides guidance and structure on the execution of projects including;

- i. Strategic Planning and Governance: one of the sole responsibilities of the PMO is achieved by scoring projects using predefined criteria. The strategic selection of potential project proposals can be done according to the business goals of the organization. The PMO then advises senior /top management to select candidate projects that best align with the strategic goals of the organization. By providing a sound business case and a clear cost/benefit ratio with regards to project governance, the PMO set policies, regulations, functions, processes and procedures that define the establishment, management and control of projects, program or portfolio.
- ii. Best practices and process: The PMO implements and consolidates best practices and processes within the organization. Where possible, the PMO standardizes the process across all department and services. The office also provides consistent project management guidance, methods, systems, tools and metrics for consistent project outcomes throughout the organization.
- iii. Resource management: PMO also manages and allocates resources effectively across all projects, by managing priorities based on timelines, budgets, resource loads and what-if analysis information and accordingly providing the right resource at the right time. It also defines roles and responsibilities needed on any given project.
- iv. Creating and maintaining project artifacts, archives and toolsets, PMO provides templates, tools and software to manage project efforts. They invest in tools for managing projects which pay-offs in ensuring reliable data which enables early clarity into project performance for better decision making. The PMO plays an important role in organizational memory. Once the project proposal is completed or canceled the office archives all the projects into document repository. This is very essential for future reference.

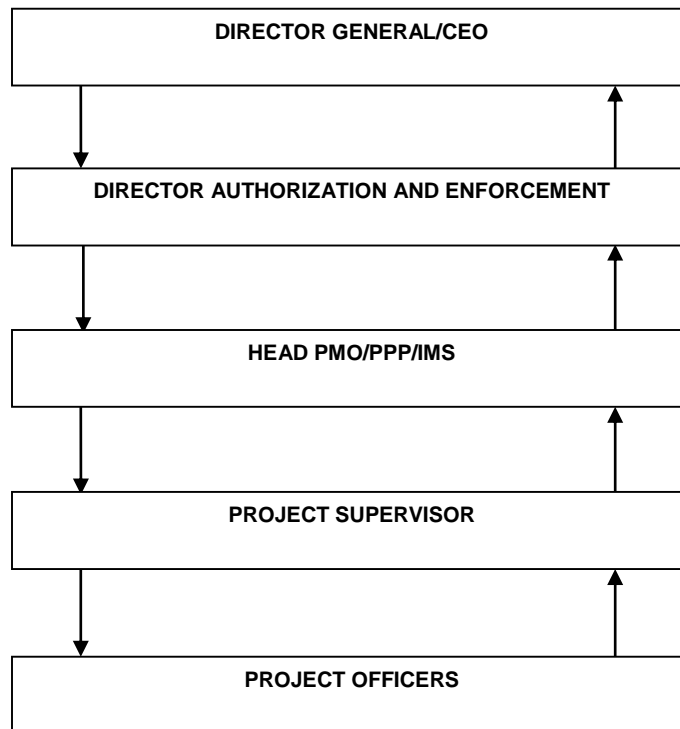
The Project Management Division is also responsible for handling Private Public Partnership which is essentially an arrangement between a government/statutory entity and a private sector entity, for the provision of public asset and/or public service, through investment and/or management by the private sector for a specified period of time. The PPP unit plays a role in defining the allocation of risk between the private sector and public entity thus receiving performance linked payment that conforms (or are benchmarked) to specified and pre-determined performance standards, measured by the public entity or its representative.

The division structure detailed the work flow process and different responsibilities assigned to each member of PMO.



PMO MANAGEMENT SYSTEM

Line of Communication



Project Office

The project office improves the project planning and delivery process by collecting and monitoring data, it has the sole responsibility of;

- i. Coordinating the project
- ii. Managing the quality review process
- iii. Supporting the creation and maintenance of the project plans
- iv. Applying template and guideline to collect and maintain data consistently
- v. Establish a process for progress tracking of the project
- vi. Create a mode of communication for project success

Integrated Management System

An integrated management system combines all aspects of an organization system processes and standards into one organizational system.

ADVANTAGES

1. Save implementation cost and time.
2. Decision making that considers broader perspective.
3. Reduced duplication of efforts
4. Sharing expertise
5. Personal and technical development
6. Able to deal with disparate risk and multiple uncertainties
7. Easier to add other management system disciplines elements
8. Enhanced organizational culture.

WORKS AND SERVICES UNIT

The works and services unit is under the office DG/CEO's, the unit is responsible for the general maintenance and services of facilities belong to the Authority to ensure that the needs of the Authority and its staff are met. The Unit also supervises all contracts and capital projects of the Authority.

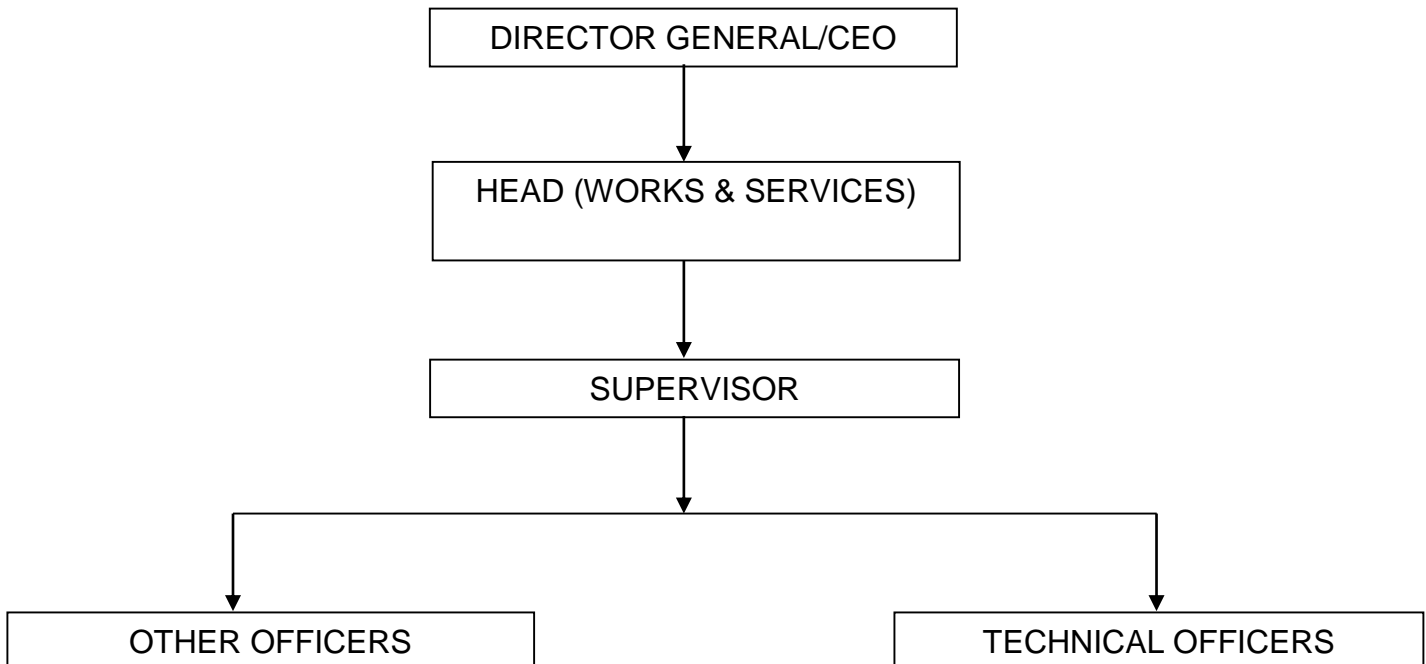
Workflow of the Unit:

Maintenance works can be initiated in two different ways:

- i. Request for maintenance by staff or
- ii. Routine maintenance carried out by W/S unit.
- iii. Carry out an assessment for the required needs; after assessment the maintenance details are provided and works will be executed if required works can be handled by in-house technicians, alternatively if required work cannot be handled by in-house technicians the W/S unit employs the services of an external technician or professional and the units pays out of pocket for minor works. In an eventuality that all means are exhausted and request cannot be resolved, next steps follows.
- iv. Draft a memo to DG/CEO; informing him on the state of the required needs (i.e. the need for a cash advance to execute the required job, employing the services of an expertise technician or an approval for replacement etc)
- v. Execute requested or required maintenance work after an approval has been given by the DG. In situations where the DG does not approve the request on issues raised in the memo, the required work remains pending till whenever an approval can be given.

Framework of the Unit:

The chart below depicts the work flow of the unit:



NUCLEAR SECURITY CENTRE

WORKFLOW OF THE NSC

Introduction

The Nuclear Security Centre (NSC) was established in 2013 with the primary role of facilitating the development of human resources and the provision of technical and scientific support on several levels to ensure the long-term sustainability and effectiveness of nuclear security in a State.

Mission

To provide sustainable, effective and efficient human resource, technical and scientific support services to Nigeria.

Vision

To be the best nuclear security support Centre in Africa by providing world-class nuclear security services.

Key National Stakeholders of the NSC

- i. Office of the National Security Adviser
- ii. Nigeria Atomic Energy Commission
- iii. Armed Forces of Nigeria
- iv. Nigeria Police Force
- v. Nigeria Customs Service
- vi. National Assembly
- vii. Department of State Services
- viii. Nigerian Security and Civil Defence Corps
- ix. Users of Ionizing Radiation
- x. Academic Institutions
- xi. NGOs
- xii. Members of the Public

The Coordinating Council

The Centre is domiciled at the NNRA and headed by a Coordinator with a four-member Council with representatives from:

- i. Office of National Security Adviser (NSA);
- ii. Nigerian Nuclear Regulatory Authority (NNRA);
- iii. Nigeria Atomic Energy Commission (NAEC) and a
- iv. Representative of the academia.

Functions of the Coordinating Council

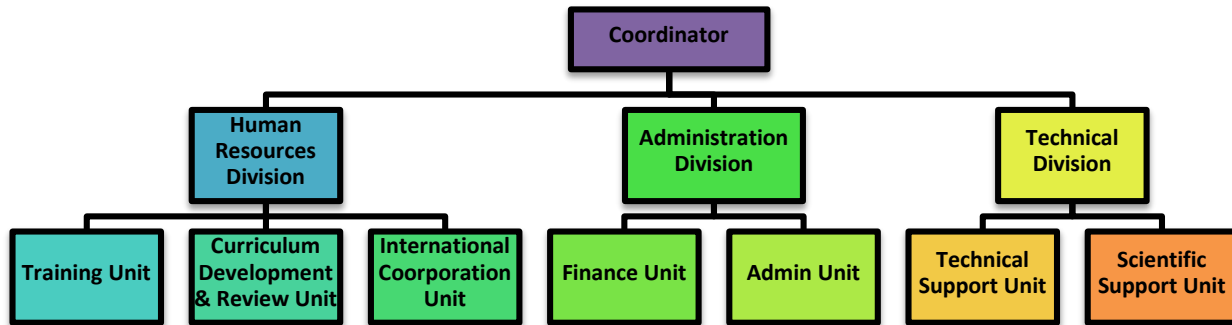
- i. Provision of policy direction of the Centre.
- ii. Support the Centre Management in the development of National training needs assessment and technical/scientific support needs.
- iii. Support the Centre management in the development of curriculum and National training plan for Nuclear Security.
- iv. Advise the NNRA CEO through the Centre director on areas within the mandate of the Centre

- v. Carrying out such other activities connected with or incidental to the other functions of the Council.

Operational Mechanism of the Council

- i. The Council shall be chaired by ONSA
- ii. The Centre Director shall serve as member and secretary of the Council
- iii. The Centre Director should be a minimum of a Deputy Director
- iv. The Council shall Periodically review the Centre activities with a view to meet its establishment objectives
- v. The Council activities shall be funded by the NNRA or through any other local or international support as approved by the NNRA CEO
- vi. The Council reports to the NNRA DG/CEO

Organizational Structure of the NSC



Available Facilities

- i. Radiation Detection Laboratory
- ii. physical Protection System Laboratory
- iii. Human Reliability Program Laboratory
- iv. ICT/CBT/Data Laboratory
- v. Training room

Schedule of Duty:

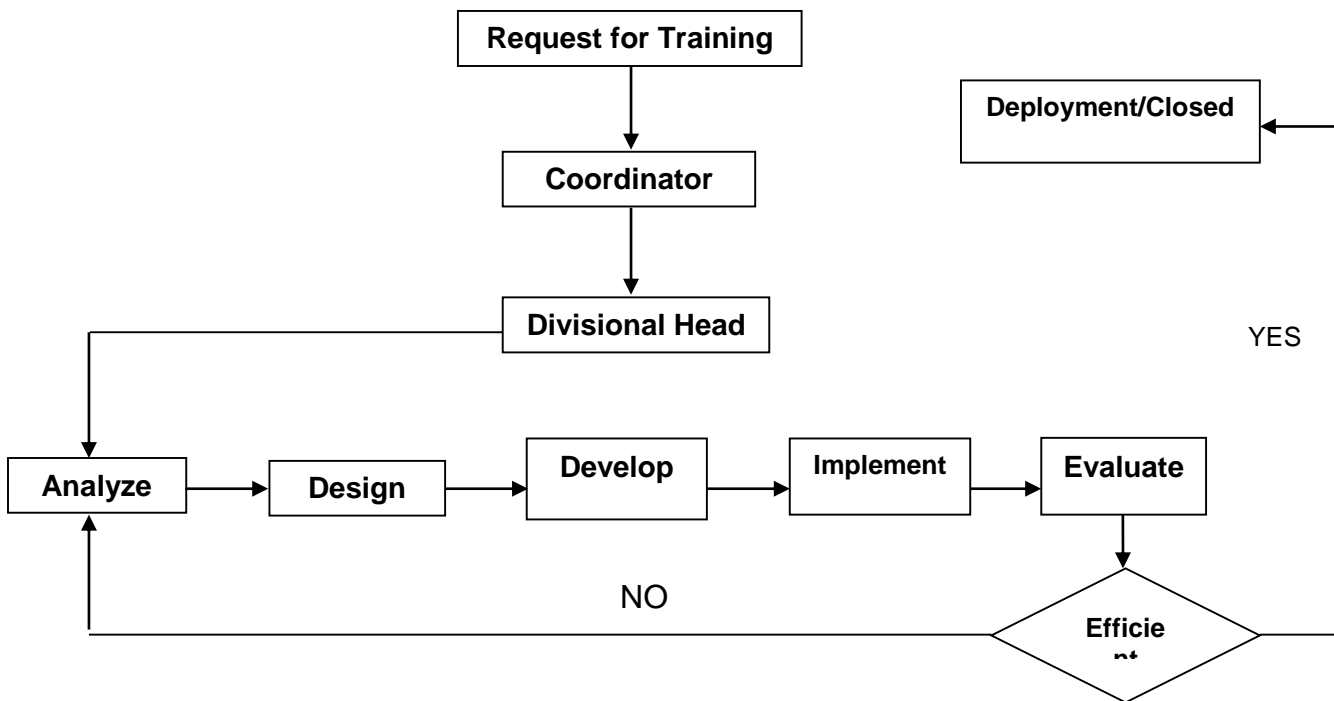
Director

- i. Responsible for the day to day running of the Centre;
- ii. Serves as Secretary to the Coordinating Council and reports to the NNRA DG CEO;
- iii. Forwards Coordination Council inputs to the NNRA DG CEO;
- iv. With the approval of the NNRA DG CEO liaise and cooperate with the IAEA Office of Nuclear Security and other international organizations on nuclear security matters;
- v. Regularly review the Centre's effectiveness;
- vi. Establish procedures for communication with and the provision of information to other governmental bodies, international organizations and the public;
- vii. Prepare policies and procedures for effective management of the Centre;
- viii. Propose, implement and supervise NSC policy execution;
- ix. Establish procedures to verify the qualifications, training and experience of personnel;
- x. Ensure that essential technical equipment and services are available to execute the mandate of the NSC;
- xi. Assign responsibilities to the NSC Divisions.

Human Resources Development Division

- i. Conduct national training needs assessment for both technical competences and soft skills;
- ii. Develop training objectives that are clear, measurable and based on job requirements;
- iii. Identify training settings, methods and training tools, suitable for achieving training objectives;
- iv. Design systematic national training programmes;
- v. Design and review organizational based training programmes;
- vi. Develop training programmes with suitable training materials and tools;
- vii. Regularly evaluate and review the training programmes;
- viii. Develop training management plan for implementation;
- ix. Conduct Training Courses, Seminars and Workshops.

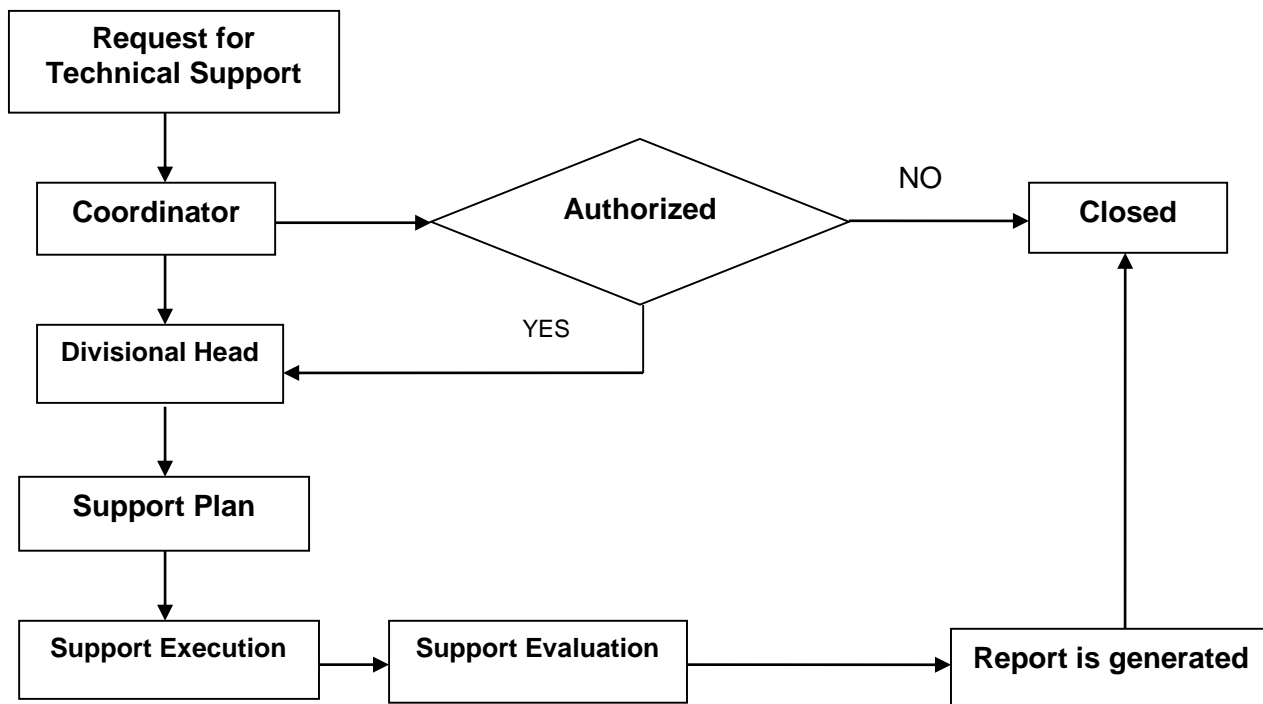
HRD Process



Technical Division

- i. Ensure equipment lifecycle management including equipment selection, testing, acceptance and maintenance;
- ii. Provide expert assistance during and after a nuclear security event and expert advice to competent authorities;
- iii. Identify appropriate physical protection equipment;
- iv. Oversee the sustainability and long-term use of installed systems by ensuring proper infrastructure for maintenance and timely supply of spare parts and regular upgrades of software/hardware to stay abreast of technological developments;
- v. Ensure calibration of equipment by approved authorities;
- vi. Assist in procurement (specifications, technical evaluation of offers, acceptance testing);
- vii. Establish equipment acceptance test procedures;
- viii. Establish procedures on appropriate use of equipment for alarms, trafficking incidents, radiological or nuclear security events;
- ix. Carry out remote/on-site analytical support on categorization and characterization of seized radioactive material;
- x. Provide cyber security support to NNRA and stakeholders;
- xi. Support Research & development in aspects of nuclear security.

Technical Support Process



ADMINISTRATION AND FINANCE DIVISION

- i. Advise on the formulation, implementation and review of administrative policies in the area of personnel management;
- ii. Administers and manages records and registry;
- iii. Provides general maintenance, staff and properties security;
- iv. Procure office equipment, facilities and other office requirements;
- v. Collect Centre revenues;
- vi. Prepare Centre budgets and rolling plan;
- vii. Document and updating of vote and all transactions;
- viii. Provide advice on proper financial management and control.

ADMIN & FINANCE PROCESS

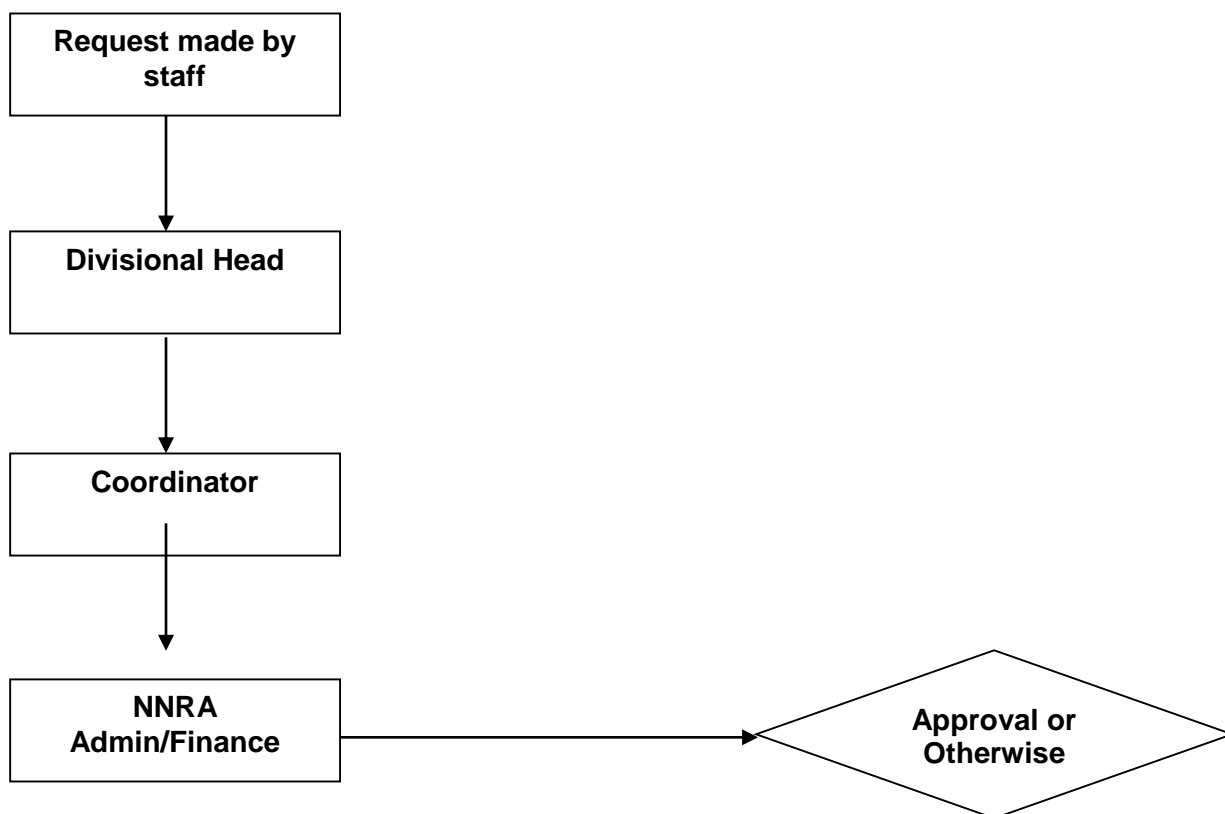


Figure 1: Admin/Finance Process Flow

Nuclear Security Detection Laboratory:

The nuclear security detection lab focuses on *measures to detect* nuclear and other radioactive materials by radiation detection *instruments*. We carry out the *evaluation* of detection technologies, including; *testing* of technologies that are available to *verify* performances and possible *operational enhancement*, also consider *compatibility* of newer and existing technologies.

Physical Protection System Laboratory at the Nuclear Security Centre:

The PPS Laboratory will focus on Physical Protection Equipment used by Nuclear Facilities with a view to enhance Technical Services, Human Resource and other capacity building support functions for nuclear security at the national levels. PPS Laboratory aims to become a more effective and important tool providing sustainability to the NSC, NNRA, and other stakeholder in supporting IAEA in implementing Nuclear Security Plans. Historically, the term 'physical protection' has been used to describe what is now known as the nuclear security of nuclear material and facilities.

The HRP Lab

The HRP Lab was established as part of the implementation of Human Reliability Program (HRP) for the Nigerian Nuclear Regulatory Authority (NNRA):

- i. To address factors that could adversely affect personnel's ability to competently and safely perform his or her duties such as mental stress, accident proneness, fatigue, illness, injury, alcohol and drug.
- ii. To provides reasonable assurance that personnel have the capacity, and are free of any impairment that could hinder their ability to competently and safely perform the duties of their position and as such do not pose a safety or security risk.
- iii. To conduct Occupational Fitness Assessment, Medical Fitness Assessment, Psychological Assessment and Alcohol and Drug Assessment for personnel holding sensitive positions.

The ICT Lab

The primary goal of the lab is to provide both theoretical and practical training to stakeholders and relevant agencies in the field cyber security, computer security and network security as it relates to nuclear security.

DEPARTMENT OF NUCLEAR SAFETY, PHYSICAL SECURITY AND SAFEGUARDS (NSPSS)

Introduction:

The Department of Nuclear Safety, Physical Security and Safeguards headed by General Manager is one of the Departments in the Authority as provided in Section 9 (1) of the Nuclear Safety and Radiation Protection Act No. 19 of 1995. It comprises of the following Divisions:

- i. Reactor Safety (Research Reactor Safety and Power Reactor Safety)
- ii. Nuclear Security
- iii. Nuclear Safeguards
- iv. Emergency Preparedness and Response

The Department is responsible for;

- i. Regulatory oversight of Nuclear Reactors including inspection of both Power and Research Reactor facilities and critical assembly.
- ii. Development of Regulations and Guides on the safety of Nuclear Reactor Facilities and activities for use by both the Operator(s) and the Authority.
- iii. Review and Assessment of submissions and documents by Nuclear Reactor Operators including reports, applications for reactor operations and operator licenses.
- iv. Performing all necessary functions that enables Nigeria meets its International and national safeguards obligations in the application of nuclear energy and ionizing radiation
- v. Reporting and management of nuclear/radiological incidents in the country.
- vi. Implementation of the NNRA's mandate on issues relating to nuclear security, physical protection of nuclear and other radioactive materials and their associated facilities.
- vii. Review and development of Regulations and Guide on nuclear security and Safeguards;
- viii. Advising the Management on nuclear safety, nuclear security and safeguards matters.
- ix. Searching and securing of orphan and legacy sources.
- x. Carrying out enforcement in liaison with the Department of Authorization and Enforcement;
- xi. Reviewing of Environmental Radiological Impact Assessment for nuclear facilities.
- xii. Carrying out Safety analysis, risk analysis, threat assessment amongst others
- xiii. Development of response plan to mitigate the consequences relating to both nuclear/radiological emergencies.
- xiv. Maintaining and improving intergovernmental arrangements and fulfill international obligations for emergency preparedness and response.
- xv. Strengthening NNRA and Nigeria's Preparedness to nuclear/radiological emergencies.
- xvi. Identification and prioritization of issues related to the program of work on Incident and Emergency Management.
- xvii. Reviewing of plans for Incident and Emergency Management activities.
- xviii. Resolution of issues in the implementation of activities, particularly related to responsibilities, coordination, adequate resources and staff participation in specific tasks.
- xix. Reviewing and provision of feedback on evaluations of activities, relevant developments and trends and issues in Incident and Emergency Management matters, Provision of oversight of Response Operations,
- xx. Anticipation and resolution of issues that would otherwise prevent an effective, timely and coordinated response.
- xxi. Any other Role assigned by the Director General/CEO

Structure of the Department:

The Department of Nuclear Safety, Physical Security and Safeguards comprises four (3) Divisions with total staff strength of thirty-eight (38), including the Head of the Department. The Divisions/Units of the Department and their mandates and activities are as follows:

REACTOR SAFETY (RESEARCH REACTOR SAFETY AND POWER REACTOR SAFETY)

The Power Reactor Safety Unit

The Power Reactor Safety Unit is one of the Units under the division of Nuclear Safety of the Department. The Unit is responsible for Regulatory oversight of nuclear power plants and critical assemblies. It also carries out inspection, review and assessment of application submitted, initiates and draft safety regulations and any other role assigned by the General Manager; Nuclear Safety, Physical Security and Safeguards. The Unit also supports the Research Reactor Unit in providing regulatory oversight of NIRR-1.

The Research Reactor Safety Unit

This Unit is charged with the responsibility for regulatory oversight of research reactors. The Unit also carries out review and assessment of application submitted, initiates and draft research reactor safety regulations.

Responsibilities of Research Reactor Safety

The Unit is responsible for;

- i. Regulatory oversight of Research Reactors including inspection of Research Reactor Facilities.
- ii. Development of Regulations and Guides on the safety of Research Reactor Facilities and activities for use by both the Operator(s) and the Authority.
- iii. Review and Assessment of submissions and documents by Research Reactor Operators including reports, applications for research reactor operations and operator licensing.
- iv. Any other Role assigned by the Director, Nuclear Safety, Physical Security and Safeguards.

Inspection Process for Research Reactor

- i. An annual inspection plan is developed by the Unit and forwarded to the GM (NS) for approval.
- ii. The inspection plan including the budget is approved by the DG/CEO.
- iii. Nominations are made by the GM (NS) for a team of four inspectors.
- iv. The team Lead and Inspectors develop an inspection plan by reviewing previous inspection reports, correspondences and status of authorization
- v. Inspection team have a meeting with GM (NS) to discuss inspection plan.
- vi. Inspection plan is approved by GM (NS) and if not approved, team reviews the plan.
- vii. Inspection is conducted by the allocation of sufficient time for entrance briefing, tour of facility, interviews with key staff, concordance and exit briefing.
- viii. Inspection report is prepared by inspection team and submitted to the GM (NS).
- ix. GM (NS) minutes inspection report for internal review.
- x. Reviewed inspection report is approved by GM (NS) and forwarded to the DG/CEO for approval.
- xi. The DG/CEO approves inspection report.
- xii. Corrective actions and recommendations are forwarded to Facility for implementations and if no corrective actions, report is sent to archive.

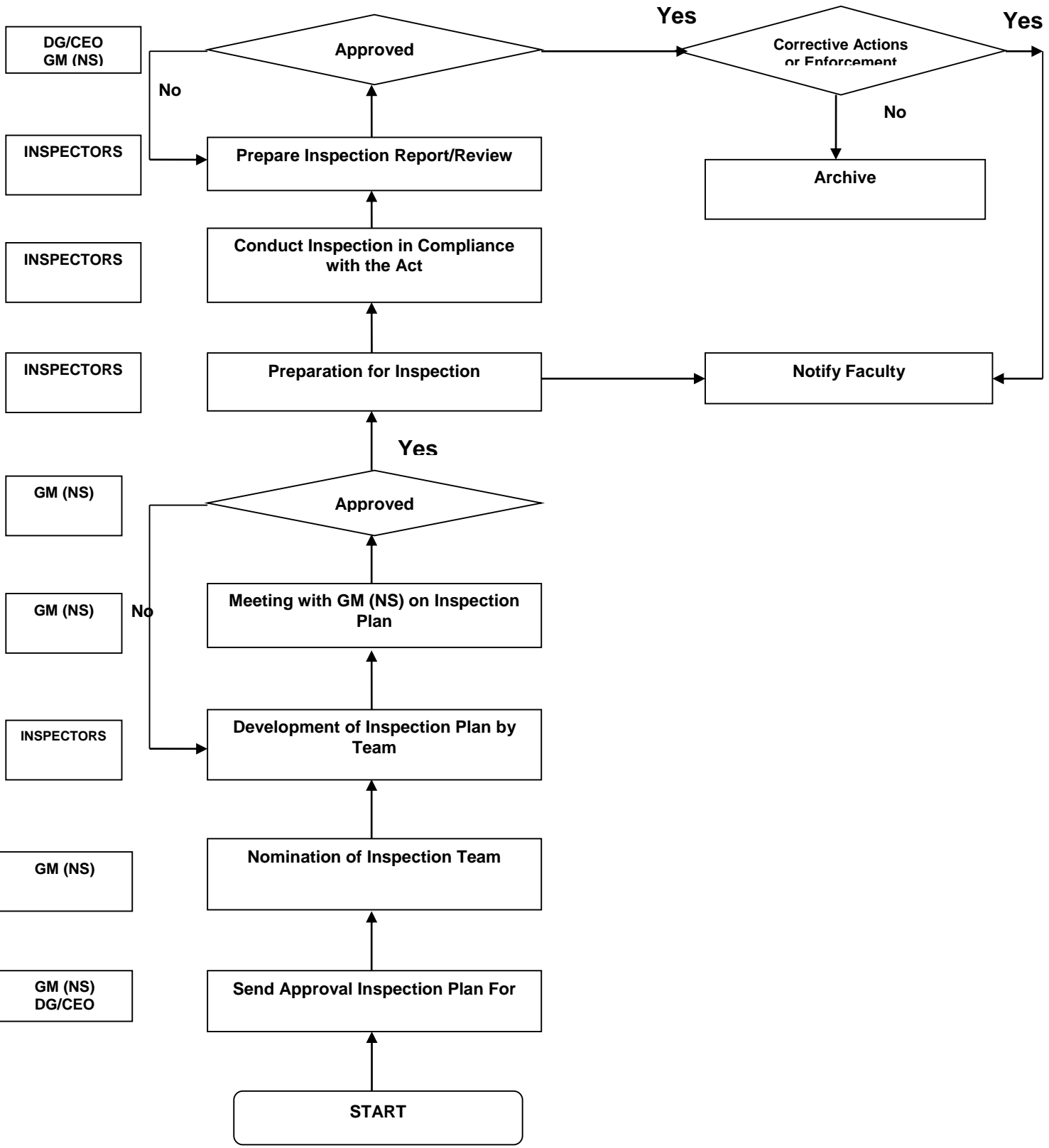
- xiii. Follow up on corrective actions to ensure implementation.

Process for Regulations and Guides

- i. A need for a specific Regulations or Guide is identified by the Unit
- ii. Request for approval for the development of Regulations/Guides is forwarded to the DG/CEO.
- iii. DG/CEO approves or rejects request for the development of Regulations/Guides.
- iv. If approved, a committee is constituted by the GM (NS) and approved by DG/CEO.
- v. Committee develops first draft of Regulations/Guides.
- vi. Draft Regulation is submitted to GM (NS) and forwarded for internal review.
- vii. Comments and observations of review are approved by GM (NS) for implementation.
- viii. Reviewed draft is forwarded to all technical departments of NNRA and relevant Stakeholders.
- ix. Comments received from Technical Departments and Stakeholders are approved or rejected.
- x. A Stakeholders Meeting is organized for final review of draft Regulations/Guides.
- xi. Comments from the Meeting are incorporated into the draft Regulations/Guides.
- xii. Draft is forwarded to the Legal Unit for final review and then forwarded to the DG/CEO.
- xiii. DG/CEO approves draft and forwards to Federal Ministry of Justice for Regulations and if its guide, forwarded to the NNRA Board for approval.
- xiv. Draft Regulations is reviewed and approved by the Federal Ministry of Justice and forwarded to the President Federal Republic of Nigeria for approval.
- xv. Draft Regulations is gazette and becomes a National Regulation.

Process for Review and Assessment for Research Reactor

- i. Application/documents including conformance reports are submitted by applicants and received by the DG/CEO.
- ii. DG/CEO minutes submissions to the GM (NS)
- iii. GM (NS) minutes submission to Research Reactor Unit for review and assessment.
- iv. Research Reactor Unit carries out review and assessment of submissions including going through past correspondences (if any) with Facility.
- v. The Unit submits report to GM (NS) for approval.
- vi. The DG/CEO approves or rejects report.
- vii. If report is rejected, another review is carried out.
- viii. If report is approved, recommendations and corrective actions are forwarded to Facility for implementation and if no recommendations, the report is sent to archive as conformance report.



Division of Nuclear Security

Nuclear Security Section

This is under the Division of Nuclear Security and it is saddled with the responsibility of ensuring that Nigeria meet her national and international obligations on nuclear security. In order to ensure effective nuclear security regime in the country, the Section performs all necessary function to ensure that nuclear and other radioactive materials are protected against unauthorized removal and sabotage; located and recovered if missing and that facilities put adequate security measures to mitigate or minimize effects of unauthorized removal and sabotage.

Mandates of the Nuclear Security Division

- i. Implementation of the NNRA's mandate on issues relating to nuclear security, physical protection of nuclear and other radioactive materials, and their associated facilities.
- ii. Development and review of Regulations and Guidance documents on nuclear security
- iii. Advice the Management on nuclear security matters.
- iv. Oversight functions for all high risk facilities and activities.
- v. Searching and securing of orphan and legacy sources
- vi. Conducting threat assessment for use in design basis threat
- vii. Conducting and reviewing vulnerability assessment and risk assessment
- viii. Ensuring material prevented from going Out of Regulatory Control (MORC) through the NSDA
- ix. Organizing trainings, meetings and workshops on nuclear security

Physical Security Inspection Process

The purpose of the physical security inspection is to check the functionality and operability of installed PPS and also to ascertain the level of regulatory compliance.

Inputs

- i. NNRA Act
- ii. NNRA Regulations
- iii. Corrective actions

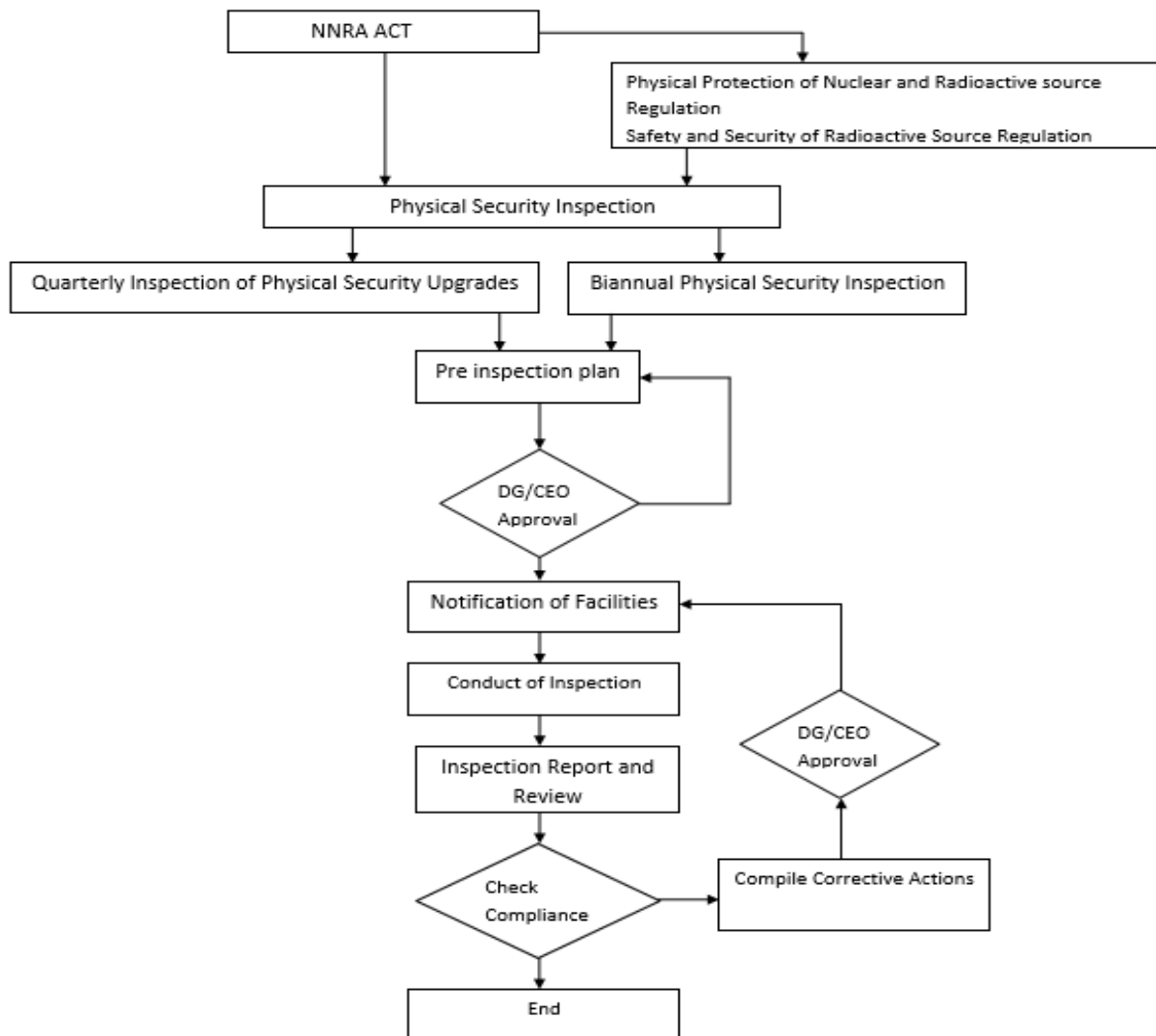
Sequence and stages

- i. Head nuclear security sends pre inspection plan to GM Nuclear Safety Physical Security and Safeguard for consideration. The GM forwards the plan to the DG/CEO for approval after consideration.
- ii. The DG/CEO minute back to the GM NSPSS
- iii. The GM NSPSS nominate inspectors and sends notification to the facilities and specify a date for the inspection. In some cases the inspection can be unannounced, meaning inspectors have the power to conduct inspection in any facility without notice.
- iv. Nuclear security unit nominated inspectors conduct inspection
- v. The inspectors send their report to the nuclear security unit head
- vi. The report is reviewed by security unit and check for PPS compliance and sent to the GM NSPSS
- vii. If compliance is made the process ends
- viii. If compliance is not made, corrective actions will be compiled and sent to the facilities for implementation.

Output

PSS inspection Report

Physical Security Inspection Process Flow Diagram



Review and Assessment of Physical Protection System Application/Documents/Design

The purpose is to review and assess the compliance of the document to the NNRA regulations requirement.

Inputs

- i. Application from prospective licensee
- ii. NNRA regulations

Sequence and Stages

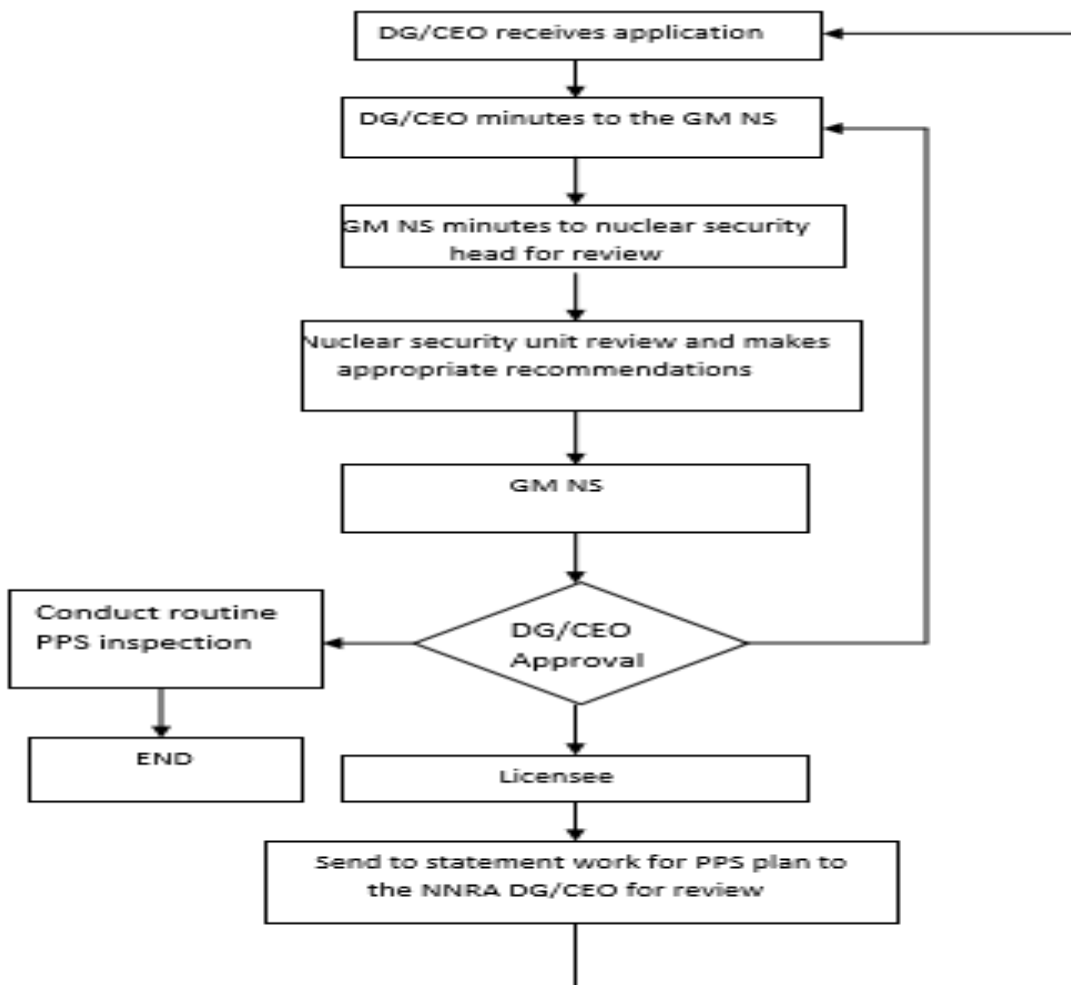
- i. Application made by prospective licensee to the NNRA DG/CEO
- ii. Application sent to the Nuclear security unit by GM NSPSS for review
- iii. The application is reviewed based on the regulations and sent to the DG/CEO for approval thru GM NSPSS
- iv. Outcome of review Sent to prospective licensee and request for the statement of work for the PPS plan for review

- v. Review statement of work base on NNRA requirement for compliance and submit for approval
- vi. Write report with recommendations for management approval.
- vii. Communicate the approval to the licensee
- viii. send inspectors to monitor the installation of the PPS
- ix. Conduct routine inspection to check PPS.

Output

Physical Protection System Plan

Review and Assessment of Physical Protection System Application/Documents/Design work process



Review and Assessment of Integrated Nuclear Security Support Plan (INSSP)

The purpose is to review Nigeria’s nuclear security regimes and identifying areas need to be strengthened.