

## SAFETY, SECURITY AND SAFEGUARDS BILL, 2019

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# A BILL

## FOR

AN ACT TO REPEAL THE NUCLEAR SAFETY AND RADIATION PROTECTION ACT NO. 19 OF 1995, ENACT THE NUCLEAR SAFETY, SECURITY AND SAFEGUARDS ACT AND RE-ESTABLISH THE NIGERIAN NUCLEAR REGULATORY AUTHORITY; AND FOR RELATED MATTERS

*Sponsored by Senator Boroffice, Robert Ajayi*

[ ] Commencement

BE IT ENACTED by the National Assembly of the Federal Republic of Nigeria as follows-

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### PART I - OBJECTIVES OF THE BILL

1.-(1) The objectives of this Bill are to;

Objectives of the Bill

(a) allow for the beneficial and peaceful uses of nuclear energy and its applications;

(b) provide an effective legal and regulatory framework for nuclear safety, nuclear security, safeguards of nuclear materials and radiation protection;

(c) ensure adequate protection of people and the environment from harmful effects of ionising radiation and other radiation risks, and the safety and security of radiation sources;

(d) establish the Nigerian Nuclear Regulatory Authority with the functions and responsibilities set forth in this Bill for the purpose of exercising regulatory control over the peaceful uses of ionising radiation and to guarantee its independence;

(e) authorise the provision of a regulatory framework for civil liability for nuclear incidents or damage, and

(f) enable Nigeria to fulfill its obligations under relevant international instruments.

## 1 PART II - ESTABLISHMENT OF THE NIGERIAN NUCLEAR REGULATORY

## 2 AUTHORITY AND ITS GOVERNING BOARD

3 Establishment  
of the Nigerian  
Nuclear Regulatory  
Authority4 2.-(1) There is hereby established a body which shall be known as the  
5 Nigerian Nuclear Regulatory Authority (in this Bill referred to as "the  
6 Authority").

7 (2) The Authority-

8 (a) shall be a body corporate with perpetual succession and, a  
9 common seal;

10 (b) shall have financial autonomy;

11 (c) may sue and be sued in its corporate name; and

12 (d) may acquire, hold or dispose of any property, movable or  
13 immovable for the purpose of carrying out any of its functions under this Bill.

14 (3) The Authority shall be-

15 (a) effectively independent in its safety-related decision-making

16 (b) able to make independent regulatory judgements and decisions at  
17 all stages in the lifetime of facilities and the duration of activities until release  
18 from regulatory control, under operational states and in accidents;19 (c) free from any pressure associated with political circumstances or  
20 economic conditions, or pressure from government ministries, departments  
21 and agencies, authorised parties or other organisations;22 (d) able to give independent advice and provide reports to  
23 government ministries, departments and agencies, and governmental bodies  
24 on matters relating to the safety of facilities and activities.25 (4) The staff of the Authority shall have no direct or indirect interest in  
26 facilities and activities or authorised party beyond the interest necessary for  
27 regulatory purposes.28 Establishment  
and Membership  
of the Governing  
Board29 3.-(1) There is hereby established for the Authority a Governing  
30 Board (in this Bill referred to as "the Board").

31 (2) The Board shall consist of-

1 (a) the President as the Chairman (in the Bill referred to as the "the  
2 Chairman";

3 (b) the Director-General of the Authority, who shall be appointed  
4 by the President; and

5 (c) the Ministers charged with responsibility for the following  
6 matters, that is-

7 (i) Defence;

8 (ii) Interior;

9 (iii) Mines and Steel development;

10 (iv) Petroleum resources;

11 (v) Energy;

12 (vi) Environment;

13 (vii) Finance;

14 (viii) Justice; and

15 (ix) Health.

16 (d) National Security Adviser;

17 (e) three (3) eminent Nigerians with practical experience in the  
18 Nuclear field who shall be appointed by the President.

19 (3) The appointment of the members of the Board specified in  
20 subsection 2 (e) of this section shall be subject to confirmation by the Senate.

21 (4) The Board shall have a Secretary, who shall be a Legal  
22 Practitioner with not less than ten (10) years experience, to be appointed by  
23 the Director-General from the staff of the Authority.

24 (5) The members of the Board shall be paid such allowances as  
25 applicable to Federal Boards, commissions and agencies

26 (6) The provisions of the Schedule to this Bill shall have effect with  
27 respect to the proceedings of the Board and the other matters mentioned  
28 therein.

29 4.-(1) The Members of the Board shall serve for a term of four (4)  
30 years and may, subject to satisfactory performance, be re-appointed for a

Tenure of Board  
Members

1 further term of four (4) years and no more.

2 (2) The Members of the Board referred to in section 3(2)(e) shall serve  
3 on part-time basis.

Vacancy on the  
Board

4 5.-(1) The office of a Member of the Board shall become vacant  
5 where-

6 (a) he resigns his appointment by notice addressed to the Chairman or

7 (b) he becomes of unsound mind; or

8 (c) he becomes bankrupt or makes a compromise with his creditors; or

9 (d) he is convicted of a felony or of any other offence involving  
10 dishonesty or corruption; or

11 (e) he becomes incapable of carrying on the functions of his office  
12 either arising from an infirmity of mind or body; or

13 (f) he dies; or

14 (g) he completes his tenure of office; or

15 (h) he is removed by the Chairman, being satisfied that it is not in the  
16 interest of the Authority or in the interest of the public for the person to continue  
17 as a Member of the Board.

18 (2) Where a vacancy occurs in the Membership of the Board, it shall  
19 be filled by the appointment of a successor to hold office for the remainder of  
20 the term of office of his predecessor.

Functions of  
the Board

21 6.-(1) The Board shall have responsibility for:

22 (a) the supervision of policy formulation by the Authority;

23 (b) Considering and approving regulations proposed by the  
24 Authority;

25 (c) Considering and approving annual reports and statement of  
26 accounts of the Authority;

27 (d) appointing and approving fees for auditors;

28 (e) considering and approving the audited accounts and annual  
29 reports of the Authority; and

30 (f) performing other functions as provided under this Bill.

1                   7.-(a) A member of the Board shall disclose in writing any personal      Disclosure of  
2                   interest or otherwise that the member has in the activities or practices      interest  
3                   regulated by the Authority.

4                   (b) A member of the board who has an interest in a matter for  
5                   consideration shall:

6                   (i) disclose the nature of the interest and the disclosure shall form  
7                   part of the records of the consideration of the matter; and

8                   (ii) not participate in the deliberations of the board in respect of that  
9                   matter.

10                  (c) A member ceases to be a member of the Board if that member  
11                  has an interest in a matter before the Board and:

12                  (i) fails to disclose that interest; or

13                  (ii) participates in the deliberations of the Board in respect of that  
14                  matter.

### 15                  PART III - FUNCTIONS AND POWERS OF THE AUTHORITY

16                  8.-(1) Subject to the provisions of this Bill, the Authority shall be      Functions of  
17                  charged with the responsibility for the control of activities and practices      the Authority  
18                  identified in this Bill and, without prejudice to the foregoing, the Authority  
19                  shall:

20                  (a) provide advice or assistance to the Federal Government in the  
21                  development of national policies and measures for the regulatory control of  
22                  activities and practices under this Bill;

23                  (b) issue rules, regulations and guidelines as prescribed under this  
24                  Bill, which shall be binding on all users of radioactive sources, operators of  
25                  nuclear installations, operators of prescribed substances and other practices,  
26                  and operators of sources involving exposure to ionising radiation;

27                  (c) establish standards for the protection of life, property and the  
28                  environment from the potentially harmful effects of ionising radiation,  
29                  while allowing beneficial practices involving exposure to ionising  
30                  radiation;

- 1 (d) establish and maintain a system of authorisation of practices  
2 involving nuclear materials, radioactive sources and equipment generating  
3 ionising radiation;
- 4 (e) establish and implement, in cooperation with the relevant  
5 ministries, departments and agencies, a system of control over the import,  
6 export, transit and trans-shipment of nuclear materials, radioactive sources,  
7 ionising radiation generating machines, information and technology in order to  
8 prevent diversion from their authorised uses;
- 9 (f) define and grant exemptions and clearances;
- 10 (g) monitor the existence and use of ionising radiation anywhere in  
11 Nigeria;
- 12 (h) carry out inspections and any appropriate investigation and  
13 enforce compliance with this Bill by concern persons and bodies in line with  
14 the conditions of their authorisation;
- 15 (i) take enforcement measures where there has been a violation of this  
16 Bill, applicable regulations or the terms and conditions of authorisations;
- 17 (j) define the obligations, of persons or entities authorised to conduct  
18 activities or practices;
- 19 (k) prescribe fees payable for authorisations and other services  
20 rendered under this Bill;
- 21 (l) publish a list of exposures that are subject of exclusion, which list  
22 shall be available to the public;
- 23 (m) establish and maintain a system of records or registry for all  
24 authorised practices and for material accountability for safety and safeguard  
25 purposes;
- 26 (n) establish and maintain a national register for each category of  
27 sources or practices involving ionising radiation and of persons authorised to  
28 carry out an activity or practice, including records of all nuclear installations  
29 and radiological facilities such as maps, diagrams, photographs, showing the  
30 position and limits of these installations and facilities;

1 (o) cooperate with the International Atomic Energy Agency in the  
2 application of safeguards in accordance with the Safeguards Agreement,  
3 and any protocols thereto, between Nigeria and the International Atomic  
4 Energy Agency, including conducting inspections and visits, carrying out  
5 complementary access and providing any assistance or information required  
6 by designated International Atomic Energy Agency inspectors in the  
7 fulfillment of their responsibilities;

8 (p) establish regulatory measures for the security of nuclear and  
9 other radioactive material, and their associated facilities, including  
10 measures for the detection, prevention and response to unauthorised or  
11 malicious acts involving such material, or facilities;

12 (q) participate in the definition of the Design Basis Threat (DBT)  
13 for the implementation of security provisions;

14 (r) establish, in cooperation with other competent national  
15 authorities, plans and procedures which shall be periodically tested and  
16 assessed for coping with any radiation emergency and abnormal occurrence  
17 involving nuclear material and radiation sources;

18 (s) regulate the safe promotion of nuclear research and  
19 development, and radiation safety and security necessary to implement its  
20 functions;

21 (t) liaise and foster cooperation with relevant national and  
22 international bodies or institutions having similar objectives for the  
23 effective performance of its functions under this Bill;

24 (u) establish appropriate mechanism and procedures for informing  
25 the public and other stakeholders about the regulatory process, and the  
26 safety, health and environmental aspects of regulated activities and  
27 practices, including incidents, accidents and abnormal occurrences;

28 (v) regulate the possession and application of radioactive  
29 substances and devices emitting ionising radiation;

30 (w) regulate the introduction of radiation sources, associated

1 facilities and activities, exposure of workers and the general public to ionising  
2 radiation;

3 (x) perform all necessary functions to enable Nigeria meet its national  
4 and international safety, security and safeguards obligations in the application  
5 of nuclear energy and ionising radiation and in particular, establish and  
6 maintain a national system of accounting for and control of nuclear materials;

7 (y) provide training, information and guidance on nuclear safety,  
8 security, safeguards and radiation protection and approve radiation protection  
9 training programmes of all users and handlers of ionising radiation; and

10 (z) perform such other functions which are necessary for the full and  
11 efficient discharge of its functions under this Bill.

Powers of the  
Authority

12 9.-(1) The Authority shall have power to:

13 (a) categorise practices and activities involving exposure to ionising  
14 radiation;

15 (b) acquire offices and other premises and establish such number of  
16 zonal and other offices as it may deem necessary with the approval of the Board  
17 for the proper performance of its functions under this Bill;

18 (c) notwithstanding the provisions of the Nigerian Minerals and  
19 Mining Act or any other law, the Authority shall have power to regulate, as  
20 appropriate, the exploration, mining and milling of radioactive ores and other  
21 ores associated with the presence of radioactive substances;

22 (d) accredit radiation safety service providers and approve their  
23 radiation protection training and other programmes;

24 (e) impose and review fines;

25 (f) prescribe exposure limits and constraints for the purpose of  
26 limiting accidents and ensuring compliance;

27 (g) obtain information, documents and opinions from private and  
28 public organizations or persons as may be necessary and appropriate for the  
29 conduct of its functions;

30 (h) specify safety and security requirements for:

1 (i) short-term storage, for example by a user on its premises prior to  
2 further management option, including the time limit for such short-term  
3 storage;

4 (ii) safety and security requirements for reuse or recycling of  
5 disused sources; and

6 (iii) long-term storage and disposal of disused sources.

7 (2) The Authority shall, subject to the approval of the Board, have  
8 powers to enter into contracts or partnership with any international  
9 organisation, national governmental body, company, firm or person, which  
10 in its opinion shall facilitate the discharge of its functions.

11 (3) The Authority may make regulations with respect to civil  
12 liability for nuclear damage, prompt payment of compensation to the  
13 victims of nuclear accidents, establishment of Nuclear Damage Claims  
14 Committee and related matters.

15 (4) The Authority shall, in furtherance of sections 8 and 9 of this  
16 Bill, on its own, carry out investigations of practices, radiation facilities and  
17 any other nuclear installations including, exploration, mining and milling of  
18 radioactive ores to forestall any emergency or contingency.

#### 19 PART IV - MANAGEMENT, STAFF AND STRUCTURE OF

#### 20 THE AUTHORITY

21 **10.-(1)** There shall be for the Authority, a Director-General, who  
22 shall be the chief adviser to the Board.

Appointment of  
the Director-  
General

23 (2) There shall be appointed by the President of the Federal  
24 Republic of Nigeria for the Authority, a Director-General who shall be the  
25 Chief Executive of the Authority and be responsible for the day-to-day  
26 administration of the affairs of the Authority.

27 (3) The Director-General shall be a person of proven integrity and  
28 shall have not less than 12 years practical regulatory experience in the  
29 application of nuclear energy and ionising radiation in science and  
30 technology, nuclear safety and radiation protection.

Tenure of Office  
and Removal of  
the Director-  
General

- 1                   **11.**-(1) The Director-General shall hold office:  
2                   (a) for a term of five (5) years in the first instance and may be re-  
3 appointed for a further term of five (5) years; and  
4                   (b) on such terms and conditions as may be specified in his letter of  
5 appointment.  
6                   (2) Notwithstanding the provisions of subsection (1) of this section,  
7 the Director-General may:  
8                   (a) resign his appointment by a notice in writing, addressed to the  
9 President through the Board; or  
10                  (b) be removed by the President for inability to discharge the  
11 functions of his office (whether arising from infirmity of mind or body or any  
12 other cause) or for misconduct or corruption;  
13 provided that the removal of the Director-General shall not take effect without  
14 the approval of the Senate.

Other Staff of  
the Authority

- 15                  **12.**-(1) The Authority may, subject to the approval of the Board,  
16 appoint such other staff as it may deem necessary and expedient for the proper  
17 and efficient performance of the functions of the Authority; and on such terms  
18 and conditions as may be determined by the Board.  
19                  (2) Notwithstanding the provisions of subsection (1) of this section,  
20 employees of the Authority may also be appointed by way of transfer or  
21 secondment from any of the public services of the Federation or by contract.

Conditions of  
Service

- 22                  **13.** Service in the Authority shall be subject to the provisions of the  
23 Pension Reform Act, Corporate Policy and Procedure Guide and such  
24 conditions of service as approved by the Board. Accordingly, officers and  
25 employees of the Authority shall be entitled to pensions, gratuities and other  
26 retirement benefits as are prescribed under the Pension Reform Act as  
27 approved by the board.

Structure of  
the Authority

- 28                  **14.**-(1) There shall be established within the Authority, the following  
29 departments:  
30                  (i) Department of Authorization and Enforcement;

- 1 (ii) Department of Nuclear Safety;  
 2 (iii) Department of Nuclear Security and Safeguards;  
 3 (iv) Department of Medical and Industrial Application Safety;  
 4 (v) Department of Waste, Transport and Environmental Safety;  
 5 (vi) Department of Finance and Account;  
 6 (vii) Department of Administration and Human Resources;  
 7 (viii) Department of Planning, Research and Statistics;  
 8 (ix) such other department as may be approved by the Board on the  
 9 recommendation of the Director-General.

10 (2) Each department shall be headed by a General Manager who  
 11 shall be appointed by the Authority on the recommendation of the Director-  
 12 General or by way of promotion.

#### 13 PART V - FINANCIAL PROVISIONS

14 15.-(a) There is established for the Authority fund in this Bill  
 15 referred to as ("the Fund") comprising:

Fund of the  
 Authority

- 16 (a) budgetary allocations from the Federal Government  
 17 (b) gifts, testamentary dispositions or grants, provided that such are  
 18 not inconsistent with the objectives and functions of the Authority;  
 19 (c) all other financial assets that may, from time to time, be vested  
 20 in or accrue to the Authority in the course of performing its functions  
 21 pursuant to this Bill;  
 22 (d) monies borrowed and capital raised by the Authority under this  
 23 Bill or other enactments subject to the approval of the National Assembly;  
 24 and  
 25 (e) all such other sums as may be received by the Authority from  
 26 other sources provided that such are not inconsistent with the objectives and  
 27 functions of the Authority.

28 16.-(1) The Authority shall pay from the Fund established under  
 29 section 15 of this Bill-

Application of  
 the Fund

- 30 (a) the cost of administration of the Authority;

1 (b) allowances and benefits of members of the Board and for  
2 reimbursing members of the Board or of any committee set up by the Board and  
3 for such expenses as may be expressly authorised by the Board;

4 (c) the salaries, fees or other remuneration or allowances, and  
5 pensions, and other benefits payable to the staff and other employees of the  
6 Authority;

7 (d) for the development and maintenance of any property vested in or  
8 owned by the Authority;

9 (e) for maintaining general financial reserves subject to general or  
10 special directives that may be given in that behalf by the Board in accordance  
11 with the provisions of this Bill; and

12 (f) for, or in connection with, all or any of its functions under this Bill.

13 (2) Any monies generated or collected by the Authority from the  
14 sources listed in subsection (1) of section 15 which are in excess of its budget as  
15 approved by the National Assembly shall be paid into the Consolidated  
16 Revenue Fund of the Federation.

17 (3) The Authority shall set aside a minimum of 10% of its fund for  
18 staff entitlements as specified in the Corporate Policy and Procedure Guide  
19 subject to review by the Board, for the purpose of providing recognition for  
20 long service to the Authority and such fund shall be invested in an interest-  
21 yielding account subject to the recommendation of the National Pension  
22 Authority.

Annual Estimates,  
Accounts and  
Audits

23 17.-(1) The Authority shall submit to the Board an estimate of its  
24 expenditure and income (including payments to the Fund) for the next  
25 succeeding year not later than 28th February each year.

26 (2) The Authority shall keep proper accounts in respect of each year  
27 and proper records in relation to those accounts and shall cause its accounts to  
28 be audited not later than three months after the end of each year by auditors  
29 appointed from the list and in accordance with the guidelines supplied by the  
30 Auditor-General of the Federation.

1           18. The Authority shall prepare and submit to the National  
2           Assembly not later than 31st March in each year a report on the activities of  
3           the Authority during the immediate preceding year, and shall include in the  
4           report a copy of the audited accounts of the Authority for that year and of the  
5           auditor's report.

Annual and  
audited reports

6           PART VI - ESTABLISHMENT OF THE NATIONAL NUCLEAR  
7           SECURITY COMMITTEE

8           19.-(1) There is established a National Nuclear Security  
9           Committee (in this Bill referred to as "the Nuclear Security Committee").

Establishment  
of the National  
Nuclear Security  
Committee

10          20.-(1) The Nuclear Security Committee shall consist of:

Composition of  
the Nuclear  
Security Committee

11          (a) the National Security Adviser as the Chairman;

12          (b) the Chief of Defence Staff as the Vice-Chairman;

13          (c) the Solicitor-General of the Federation;

14          (d) the Director-General of the National Intelligence Agency;

15          (e) the Director-General of the Department of State Service;

16          (f) the Inspector-General of the Nigerian Police Force;

17          (g) the Comptroller-General of the Nigerian Customs Service;

18          (h) the Comptroller-General of the Nigerian Immigration Service;

19          (i) the Commandant-General of the Nigerian Security and Civil

20          Defence Corps;

21          (j) the Corps Marshal of the Federal Road Safety Corp;

22          (k) the Director-General of the Authority;

23          (l) the Chief Executive Officer of the Nigerian Atomic Energy

24          Commission;

25          (m) a representative of each of the following:

26          (i) the Ministry of Foreign Affairs;

27          (ii) the National Emergency Management Agency; and

28          (iii) one (1) other person to be appointed from within the Authority

29          by the Director-General.

30          (2) The Nuclear Security Committee shall meet at least twice

1 yearly provided that an emergency meeting may be convened as needed.

2 (3) The quorum of the meeting of the Nuclear Security Committee is  
3 six (6) members.

4 (4) The Chairman of the Nuclear Security Committee shall preside at  
5 meetings and in the absence of the Chairman, the Vice-Chairman, and in the  
6 absence of both, a member of the Committee elected by the members present  
7 from among their number, shall preside.

8 (5) For the purpose of a meeting, a member may be represented by a  
9 proxy, not below the rank of a Director or its equivalent.

10 (6) The Committee may request the presence of any person as it may deem  
11 necessary

Functions of  
the Nuclear  
Security  
Committee

12 21.-(1) The Nuclear Security Committee shall, in collaboration with  
13 the Authority:

14 (a) consider issues referred to it by the Director-General or any other  
15 member of the committee that may affect the security of the country, regarding  
16 nuclear and radiological installations and radioactive materials;

17 (b) participate in conducting threat assessment to provide the basis for  
18 determining physical protection measures; and

19 (c) define and develop a response strategy to nuclear security  
20 incidences.

21 PART VII - NATIONAL RESEARCH INSTITUTE FOR NUCLEAR SAFETY

22 AND RADIATION PROTECTION

Establishment  
of the National  
Institute for  
Nuclear Safety  
and Radiation  
Protection

23 22.-(1) The Authority shall establish a "National Institute for Nuclear  
24 Safety and Radiation Protection (in this Bill referred to as "the Institute") either  
25 independently or in collaboration with any University or other institution.

Appointment  
of General  
Manager and  
other Staff of  
the Institute

26 23.-(1) The Authority shall, with the approval of the Board, appoint  
27 for the Institute, a General Manager who shall be responsible to the Authority  
28 for the administration of the Institute.

29 (2) The General Manager shall-

30 (a) be a holder of a qualification not less than a Doctorate degree in

1 the field of nuclear science or engineering, or radiation sciences with not  
2 less than ten (10) years cognate experience; or

3 (b) possess practical experience of not less than ten (10) years in  
4 research, administration, training, and the application of nuclear energy,  
5 nuclear and radiation safety.

6 (3) The General Manager shall hold office-

7 (a) for a term of four (4) years in the first instance and may be  
8 reappointed for a further term of four (4) years, subject to satisfactory  
9 performance; and

10 (b) on such terms and conditions as may be specified in his letter of  
11 appointment.

12 (4) The Institute may, with the approval of the Authority, appoint  
13 such other employees and agents as it may deem necessary for the efficient  
14 performance of its functions under this Bill.

15 24.-(1) The General Manager may-

16 (a) resign his appointment by a notice in writing, addressed to the  
17 Director-General of the Authority; or

18 (b) be removed by the Director-General upon approval of the  
19 Board, for inability to discharge the functions of his office (whether arising  
20 from infirmity of mind or body or any other cause) or for misconduct or  
21 corruption.

22 25.-(1) The Authority shall establish a Management Board for the  
23 Institute which shall be chaired by the Director-General of the Authority.

24 (2) Other members of the Management Board referred to in  
25 subsection (1) of this section, shall consist of-

26 (a) two General Managers of the Authority responsible for  
27 radiation protection and nuclear safety;

28 (b) one member representing each host institution to the Institute.

29 (c) the General Manager of the Institute.

30 (3) Notwithstanding the provisions of subsection (2) of this

Removal of  
General Manager

Management  
Board of the  
Institute

1 section, the Management Board may co-opt relevant stakeholder(s) or  
2 expert(s) to attend its meetings but the person(s) so co-opted shall not have a  
3 counting vote or be counted towards quorum

Structure of the  
Institute and  
Annual Reports

4 26.-(1) The structure, staffing and other matters relating to the  
5 Institute shall be as determined by the Institute and approved by the Authority.

6 (2)The Institute shall submit to the Authority for approval, such  
7 programmes as are in line with its functions.

8 (3)The Institute shall, not later than the 31st day of January in each  
9 year, submit to the Authority, an estimate of its income and expenditure for the  
10 next succeeding year which estimate shall form an integral part of the budget  
11 estimate of the Authority for that year.

Functions and  
Powers of the  
Institute

12 27.-(1) The Institute as a Technical Support Organisation (TSO) to the  
13 Authority shall have the functions and powers to-

14 (a) carry out research on matters relating to radiation protection,  
15 nuclear safety, security, safeguards and nuclear law;

16 (b) provide certified training programmes in radiation protection,  
17 nuclear safety, security, safeguards and nuclear law;

18 (c) review safety assessments as a means of evaluating compliance  
19 with safety requirements for all facilities and activities and to determine the  
20 measures that need to be taken to ensure safety as may be directed by the  
21 Director-General;

22 (d) operate standard laboratories for sampling, calibration and  
23 analyses of radioactivity and radiation sources; and

24 (e) charge reasonable and commensurate fees for its services.

#### 25 PART VIII - AUTHORISATION

Graded approach

26 28.-(1) The Authority shall apply the principle of graded approach in  
27 granting authorisation.

Authorisation

28 29.-(1) No practice mentioned in this Bill shall be conducted or  
29 undertaken unless so authorised or exempted by the Authority.

30 (2) Justified practices shall be authorised.

1           (3) Subject to the provisions of this Bill, the procedure and  
2 requirements for authorisation shall be established through regulations  
3 which shall-

4           (a) be made in respect to all activities and facilities;

5           (b) establish the instances when authorisation may be required and  
6 the exemptions;

7           (c) be updated whenever it becomes necessary; and

8           (d) be available to the public free of charge.

9           (4) An application for authorisation shall be made in the manner  
10 prescribed in the guideline for authorisation as may be issued from time to  
11 time by the Authority under this Bill.

12           (5) Any person who intends to make an application for  
13 authorisation to undertake any practice mentioned in this Bill, shall notify  
14 the Authority of the intention through a letter addressed to the Director-  
15 General and the applicant shall be required to furnish the Authority with  
16 such information as the Authority may prescribe.

17           (6) An application for authorisation under this Bill shall be made to  
18 the Authority specifying:

19           (a) the premises to which the application relates;

20           (b) the undertaking or the purposes of which those premises are  
21 used;

22           (c) the description of the source of ionising radiation proposed to  
23 be kept or used;

24           (d) the premises and the maximum quantity of radioactive material  
25 or source of ionising radiation, the strength and the output of the source to be  
26 kept or used there at any time;

27           (e) the manner in which the source of ionising radiation is proposed  
28 to be used in the premises; and

29           (f) such other information as may be prescribed by the Authority.

30           (7) Upon receipt of an application under subsection (4) of this

1 section, the General Managers of the relevant Department or any other officer  
2 directed by him shall inspect the premises to which the application relates and  
3 carry out such other investigations as required in section 41(4) of this Act.

4 (8) The Authority may-

5 (a) where it is satisfied with the information submitted by the  
6 applicant, grant the authorisation subject to such regulations, terms and  
7 conditions as may be determined by the Authority from time to time; or

8 (b) refuse an application for authorisation, but shall state the reason(s)  
9 for the refusal, in writing.

10 (9) Where an application is granted, the Authority shall-

11 (a) register the applicant in respect of those premises and in respect of  
12 the keeping and use thereon of the radioactive material or source of ionising  
13 radiation of the description to which the application relates; or

14 (b) Where the application relates to two or more sources of ionising  
15 radiation; register the applicant in respect of the keeping and use thereon of  
16 such one or more sources of ionising radiation as may be specified in the  
17 registration.

18 (10) On authorising a source or practice under this section in respect  
19 of any premises, the Authority shall furnish the registrant with a certificate  
20 containing all particulars of the authorisation and shall send a copy of the  
21 certificate to the relevant organs of government.

Restriction on  
Transfer

22 **30.-(1)** No person shall assign, transfer or receive, either totally or  
23 partially, any right or obligation specified in any licence under this Bill without  
24 authorisation from the Authority.

Validity of  
Authorisation

25 **31.-(1)** Authorisation granted pursuant to an application shall be valid  
26 for the period stipulated in the licence unless otherwise determined by the  
27 Authority.

28 (2) Any application for renewal of a licence shall be submitted at least  
29 three months before the expiration of the licence.

30 (3) Issuance or renewal of a licence may be granted in advance and

1 such licence shall take effect on the date of expiry of the current licence.

2 32.--(1) The Authority shall make publicly available, information  
3 on the procedures and requirements for suspension, modification,  
4 revocation or relinquishment of authorisation.

Invalidation of  
Licence

5 (2) The Authority may revoke, cancel, invalidate or suspend a  
6 licence granted by it where a licensee:

7 (a) has obtained it by making a fraudulent or incorrect statement;

8 (b) has failed to comply with the written directives of the  
9 Authority;

10 (c) has violated or omitted to comply with the conditions of the  
11 authorisation;

12 (d) has failed to comply with the provisions of this Bill or any order  
13 issued for their implementation;

14 (e) is prevented from performing his duty as authorised as a result  
15 of incapacity or for any other reason;

16 (f) has exposed the public or the environment to doses of ionising  
17 radiation beyond dose limits or constraints without the written consent of  
18 the Authority or has exposed the public or the environment to doses of  
19 ionising radiation beyond dose limits or constraints prescribed by the  
20 Authority; or

21 (g) for whatever reason, is no longer entitled to the authorisation.

22 33.--(1) No person shall site, construct, operate, or decommission a  
23 nuclear installation without a licence issued by the Authority in accordance  
24 with this Bill and the regulations made thereunder.

Nuclear  
Installations

25 (2) Upon receipt of an application under subsection (1) of this  
26 section, the following procedure shall ensue:

27 (a) the applicant shall ensure that notice of the application is  
28 published in 3 national dailies not more than 7 days after the submission of  
29 the application, with an invitation to any person who is likely to be affected  
30 by the granting of a nuclear installation licence pursuant to subsection (1) of

1 this section to make representation to the Authority on the health, safety and  
2 environmental issues connected with the application within 30 days of the date  
3 of publication of the application;

4 (b) The Head of the relevant department or any other officers directed  
5 by him shall inspect the site to which the application relates and carry out such  
6 other investigations as required in furtherance of this Bill;

7 (c) an applicant for a licence to site a nuclear facility shall perform a  
8 baseline survey of the site, including environmental impact assessment and  
9 evaluation of radiological conditions prior to construction so as to develop  
10 information for comparison at any time during the operation of the facility and  
11 during incident or end life or decommissioning; and

12 (d) at the design stage of a nuclear facility, the applicant for  
13 authorisation to construct and operate a nuclear facility shall prepare  
14 decommissioning plans for approval by the Authority.

15 (3) Pursuant to subsection (2) of this section, an applicant for  
16 authorisation to construct and operate a nuclear installation shall-

17 (a) Demonstrate to the Authority that adequate financial resources are  
18 available to cover the costs associated with safe decommissioning, including  
19 the management of resulting waste; and

20 (b) Provide financial assurances as may be defined by the Authority  
21 before initial operation of an installation is authorised.

22 (4) Financial requirements to ensure proper decommissioning shall  
23 be reviewed and updated as required by the Authority.

24 (5) The Authority shall submit a copy of any authorisation granted  
25 pursuant to subsection (1) of this section to-

26 (a) the relevant State that is likely to be affected by the activity, action  
27 or step of the applicant; or

28 (b) such other persons and agencies that are likely to be affected as the  
29 Authority may, from time to time, determine.

30 (6) The Authority may at any time during the construction of an

1 installation, request such information as it deems necessary to evaluate the  
2 health, safety, security or environmental aspects of the construction and  
3 future operation of the installation.

4 34.-(1) Any vessel that is propelled by nuclear power or which has  
5 on board any nuclear material shall not-

Restriction on  
Vessels propelled  
by Nuclear Power

6 (a) anchor or sojourn in the territorial waters, Exclusive Economic  
7 Zone, or other zone within the jurisdiction of Nigeria; or

8 (b) enter any port in Nigeria unless it possesses a nuclear vessel  
9 license.

10 (2) Where a vessel referred to in subsection (1) anchors or sojourns  
11 in the territorial waters, Exclusive Economic Zone, or other zone within the  
12 jurisdiction of Nigeria, the operator of the vessel shall notify the Nigerian  
13 Maritime Administration and Safety Agency or any other relevant  
14 government agency that is propelled by nuclear power or has on board  
15 nuclear material.

16 (3) The Nigerian Maritime Administration and Safety Agency or  
17 any other relevant government agency shall in turn immediately notify the  
18 Authority of the fact that a vessel is propelled by nuclear power or has on  
19 board any nuclear material.

20 (4) In the event of an emergency landing in Nigeria, of an aircraft  
21 which is propelled by nuclear power or which has on board any nuclear  
22 material, the operator of the aircraft shall notify the Nigerian Civil Aviation  
23 Authority that it is propelled by nuclear power or has on board nuclear  
24 material.

25 (5) The Nigerian Civil Aviation Authority shall in turn immediately  
26 notify the Authority of the fact that an aircraft is propelled by nuclear power  
27 or has on board any nuclear material.

28 (6) The Authority shall have the power to inspect all vehicles,  
29 vessels and aircrafts within the jurisdiction of Nigeria for nuclear or  
30 radioactive material.

Consumer  
Products

1           35.-(1) The production or supply to the public, of consumer products  
2 capable of causing exposure to ionising radiation without the express  
3 authorisation of the Authority is hereby prohibited:

4           Provided that where such authorisation is granted, it is the  
5 responsibility of the operator to ensure that those to whom the consumer  
6 products are being sold or supplied, are fully aware of the potential exposure to  
7 ionising radiation and of the full consequences of it.

8           (2) The provisions of this section do not apply to consumer products  
9 that are exempted.

10          (3) The Authority may issue a licence only where it is satisfied that the  
11 use of the consumer products shall not result to an undue radiation exposure to  
12 the users or to the environment.

13          (4) An applicant for a licence shall furnish detailed information on the  
14 product, its intended use and the function to be served by the radionuclides and  
15 such other information as may be specified by the Authority.

Mining and  
Milling of  
Radioactive Ores

16          36.-(1) Activities involving mining or milling of ores containing  
17 radioactive material are hereby prohibited except a licence to perform these  
18 activities is issued by the Authority.

19          (2) The issuance of a licence for siting, construction, operation,  
20 decommissioning of a mine, processing facility, exploration, excavation,  
21 mining and milling of ores containing radioactive material, as well as the  
22 transport and storage of the product of the mining and milling activities and  
23 radioactive waste management shall be subject to the appropriate regulations  
24 as may be laid down by the Authority.

25          (3) An applicant for a licence to conduct mining and milling of ores  
26 containing radioactive material shall submit to the Authority for approval, all  
27 plans, programmes and drawings related thereto, including radiation  
28 protection of personnel, the public and the environment, radioactive waste  
29 management, and decommissioning.

30          (4) The licence to be granted by the Authority shall be without

1 prejudice to the requirements contained in any applicable national laws on  
2 mining.

3 37.-(1) The sources of ionising radiation shall be as categorised in  
4 the Second Schedule of this Bill.

Categorisation  
of Sources

5 38.-(1) The Authority shall convene a public hearing on any  
6 application to site a nuclear installation in any part of the Federation;  
7 provided that notice of same shall be published in 3 national dailies not less  
8 than 60 days before the public hearing.

Public Hearings

9 (2) Pursuant to subsection (1) of this section, announcements shall  
10 be made in 3 different radio stations in the proposed location of the facility.

11 (3) Where the Authority is of the opinion that further public hearing  
12 or inquiry is necessary, it shall arrange for such hearing or inquiry to  
13 consider health, safety, security or environmental issues, as may be  
14 determined, from time to time.

15 (4) Notice is deemed to have been given in compliance with this  
16 Bill once subsections (1) and (2) of this section have been complied with.

17 39.-(1) Without prejudice to the powers of the Authority under this  
18 Bill, the Authority may exempt from regulatory requirements, practices and  
19 sources which comply with the exemption criteria established by the  
20 Authority.

Exemptions

21 (2) The Authority shall not grant exemption for practices deemed  
22 not to be justified.

23 40.-(1) No person shall use nuclear material or ionising radiation  
24 sources for purposes other than those specified in the authorisation.

Limitations and  
Conditions

25 (2) Any registration under this section in respect of any premises  
26 may be subject to such limitations or conditions as:

27 (a) including requirements for structural or other alterations in  
28 respect of any apparatus, equipment or appliance, nuclear material,  
29 radioactive substances or a source of ionising radiation from which  
30 radioactive waste is likely to arise;

1 (b) requiring the person to whom the licence or registration relates, at  
2 such times and in such manner as may be specified in the registration, to furnish  
3 the Authority with information as to the removal of nuclear material,  
4 radioactive sources or equipment generating ionising radiation from those  
5 premises to any other premises;

6 (c) prohibiting nuclear material, prescribed and radioactive  
7 substances or any source of ionising radiation from being sold or otherwise  
8 supplied from those premises unless it or the container in which it is supplied  
9 bears a label or other mark indicating that it is such a radiation source, or  
10 nuclear material and describing the class or category to which it belongs, and in  
11 either case complying with any requirements specified in the conditions in  
12 relation to it; and

13 (d) any licence required for sources of ionising radiation, and  
14 practices mentioned in this Bill may be limited to a specific radiation source or  
15 in relation to the nature and purpose of the activity or the practice specified for a  
16 given installation.

17 PART IX - INSPECTIONS

Appointments  
and Powers of  
Inspectors

18 41.-(1) The Authority shall designate inspectors who shall possess  
19 required qualifications and training and shall issue them with appropriate  
20 credentials indicating their legal status under this Bill.

21 (2) The Authority shall establish qualifications for inspectors and a  
22 training programme to ensure required high level of competence for the  
23 inspectors

24 (3) The Authority shall develop an inspection plan that includes  
25 programmed and reactive inspection which may be announced or  
26 unannounced.

27 (4) The inspectors shall inspect licensed or proposed nuclear or  
28 radiological installations, practices, nuclear material and other ionising  
29 radiation sources; and facilities of radiation safety service providers in the  
30 country to monitor compliance with the requirements of this Bill, any

1	applicable regulations, and the terms and conditions of authorisation issued	1
2	under its authority.	5
3	(5) The Authority shall station inspectors at the site of an activity or	2
4	practice where this is determined to be necessary.	6
5	(6) An inspector appointed in furtherance of the provisions of	2
6	subsection (1) shall have the powers to-	6
7	(a) enter, without hindrance, at any time approved by the Authority,	7
8	any premises, vehicle, ship or aircraft to which this section applies, with	8
9	such equipment as the inspector requires for the performance of such duty as	8
10	specified under this Bill;	10
11	(b) inspect any plans, drawings, records, registers or documents	11
12	pertaining to-	12
13	(i) the siting, design, construction, testing, development,	13
14	commissioning, operation, decommissioning or abandonment of a facility	14
15	or an installation,	15
16	(ii) the health, safety, security or environmental aspects of any	16
17	activity covered by this Bill,	17
18	(iii) any matter relevant to the enforcement of this Bill;	18
19	(c) carry out tests and take samples, measurements and	19
20	photographs of any installation;	20
21	(d) direct the owner or operator of any vehicle, ship or aircraft to	21
22	provide such information relating to the vehicle, ship or aircraft as he may	22
23	require; and	23
24	(e) direct operators of nuclear power installations, research	24
25	reactors and other facilities to carry out emergency drills and stop unsafe	25
26	operation and practices.	26
27	42. The inspector shall submit a report of the inspection or	27
28	investigation to the Authority for necessary or appropriate action within	28
29	such period as may be determined by the Authority.	29

Inspection Report

Inspection Report

## PART X - ENFORCEMENT POWERS

Enforcement  
Team

1  
2 43.-(1) there shall be constituted by the Authority, an Enforcement  
3 Team which shall be responsible for the enforcement of this Bill.

4 (2) The members of the Enforcement Team shall comprise-

5 (a) Inspectors of the Authority;

6 (b) Legal officers; and

7 (c) Law enforcement and security personnel.

8 (3) Upon request by the Director-General, the Inspector-General of  
9 Police or any other law enforcement or security agency shall second or deploy  
10 to the Authority such number of officers as may from time to time be required  
11 to supplement the Enforcement Team of the Authority.

12 (4) The Enforcement Team shall assist the Authority to -

13 (a) carry out investigation into any matter under this Bill;

14 (b) arrest any person that contravenes the provisions of this Bill;

15 (c) in furtherance of this Bill, with or without warrant, enter into and  
16 search any premises in respect of which the Authority or the officer reasonably  
17 suspects that an activity contrary to the provisions of this Bill is being or is  
18 about to be carried on and assist in confiscating any material for such purpose  
19 found there; and

20 (d) seal any facility involving the use or storage of nuclear material,  
21 radioactive sources or ionising radiation sources without authorisation as  
22 provided for under this Bill.

23 (5) Members of the Enforcement Team shall be specially trained and  
24 certified on radiation protection and safety by the Authority for the purposes of  
25 this Bill.

Enforcement  
Measures

26 44.-(1) Where an authorised person or entity is found to be in  
27 violation of this Bill, applicable regulations or the terms and conditions of the  
28 authorisation, an inspector shall take the necessary enforcement actions  
29 commensurate with the seriousness of the violation and shall within 24 hours  
30 of taking such measures submit a report to his immediate superior officer.

1 (2) In all cases, the person or entity subject to enforcement action  
2 shall, within the time stipulated by the Authority, take such remedial measures  
3 as the Authority may prescribe.

4 (3) Where there is a violation that is of minor safety or security  
5 concern, the Authority may issue a warning in writing and determine the period  
6 of time during which remedial action must be taken.

7 (4) Where there is an immediate safety or security hazard to people or  
8 the environment, the Authority may require the person or entity subject to  
9 enforcement action to suspend its activities until the situation has been  
10 corrected; in such cases, the Authority may also suspend, revoke or modify the  
11 terms and conditions of the authorisation.

12 (5) Where there is persistent or grave violation of the terms and  
13 conditions of an authorisation or in cases of significant release of radioactive  
14 material into the environment, the Authority may revoke the authorisation and  
15 require the authorised person to remedy any unsafe condition.

16 (6) Enforcement action may also include one or more of the  
17 following:

18 (a) corrective actions including verbal instructions from inspectors,  
19 imposition of additional regulatory requirements and conditions, and written  
20 warnings

21 (b) sanctions which may be administrative such as monetary fines or  
22 administrative charges or criminal sanctions

23 (c) an order for the authorised person or entity to prohibit workers  
24 who do not meet the applicable requirements from engaging in the activity or  
25 practice;

26 (d) confiscation of materials, sealing of premises and facilities or  
27 closing down any authorised or unauthorised activities.

28 (7) Enforcement actions taken under this section shall remain in force  
29 unless and until:

30 (a) withdrawn, reversed or modified by an action of the Authority; or



1                   **46.-(1) The Authority shall, within its legal framework, establish**  
 2 **processes for the establishment, adoption, promotion or amendment of its**  
 3 **regulations and guides.**

Procedure for  
 Establishment,  
 Adoption,  
 Promotion or  
 Amendment

4                   **(2) The processes referred to in subsection (1) shall take account**  
 5 **of:**

- 6                   **(a) internationally agreed standard;**
- 7                   **(b) feedback of relevant experiences;**
- 8                   **(c) technological advances, research and development work;**
- 9                   **(d) relevant operational lessons learned; and**
- 10                  **(e) institutional knowledge.**

11                  **PART XII - RADIATION PROTECTION AND CONTROL OF THE USE OF**  
 12 **IONISING RADIATION**

13                  **47.-(1) The Authority shall, in the performance of its functions**  
 14 **under this Bill, ensure that:**

Justification of  
 practices, dose  
 limitation and  
 optimisation

15                  **(a) no practice is adopted unless its introduction produces a**  
 16 **positive net benefit;**

17                  **(b) the normal exposure of individuals shall be restricted so that**  
 18 **neither the total effective dose nor the total equivalent dose to relevant**  
 19 **organs or tissues caused by the possible combination of exposures, exceeds**  
 20 **established limits prescribed by the Authority;**

21                  **(c) protection and safety shall be optimised in order that the**  
 22 **magnitude of individual doses, the number of people exposed and the**  
 23 **likelihood of incurring exposures are all kept as low as reasonably**  
 24 **achievable;**

25                  **(d) only justified practices are authorised.**

26                  **(2) The following practices are not justified:**

- 27                  **(a) practices, except for justified practices involving medical**  
 28 **exposure, that result in an increase in activity, by the deliberate addition of**  
 29 **radioactive substances or by activation, in food, feed, beverages, cosmetics**  
 30 **or any other commodity or product intended for ingestion, inhalation or**

1 percutaneous intake by, or application to, a person.

2 (b) practices involving the frivolous use of radiation or radioactive  
3 substances in commodities or in consumer products such as toys and personal  
4 jewellery or adornments, which result in an increase in activity, by the  
5 deliberate addition of radioactive substances or by activation; and

6 (c) human imaging using radiation that is performed as a form of art or  
7 for publicity purposes.

8 (3) The provisions of this section shall apply, in general, to all  
9 activities and facilities involving radiation exposure.

Basic requirements  
for medical  
exposure

10 48.-(1) The Authority shall-

11 (a) require that health professionals with responsibilities for medical  
12 exposures are specialised in the appropriate area and that they fulfill the  
13 requirements for education, training and competence in the relevant specialty;  
14 and

15 (b) ensure that the authorisation for medical exposures to be  
16 performed at a particular medical radiation facility allows qualified personnel  
17 (radiological medical practitioners, medical physicists, radiographers and any  
18 other health professionals with specific duties in relation to the radiation  
19 protection of patients) to assume the responsibilities specified in this Bill  
20 where they:

21 (i) are specialised in the appropriate area;

22 (ii) meet the respective requirements for education, training and  
23 competence in radiation protection, as may be prescribed by the Authority; and

24 (iii) are named in the registry maintained and updated by the relevant  
25 professional bodies

Basic requirements  
for occupational  
exposure

26 49.-(1) The Authority shall establish and enforce requirements to  
27 ensure that protection and safety is optimised and shall enforce compliance  
28 with dose limits or established dose constraints for occupational exposure as  
29 specified in the regulation.

30 (2) The Authority shall establish the responsibilities of employers and

1 licensees with regard to application of the requirements for occupational  
2 exposure in planned exposure situations.

3 (3) Before authorisation of a new or modified practice, the  
4 Authority shall require, as appropriate, and review supporting documents  
5 from the responsible parties that state:

6 (a) design criteria and design features relating to the exposure and  
7 potential exposure of workers in all operational states and in accident  
8 conditions; and

9 (b) design criteria and design features of the appropriate systems  
10 and programmes for monitoring of workers for occupational exposure in all  
11 operational states and in accident conditions.

12 (4) The Authority shall establish and enforce requirements for the  
13 monitoring and recording of occupational exposures in planned exposure  
14 situations.

15 (5) The Authority shall ensure that employers, registrants and  
16 licensees shall make special arrangements for:

17 (a) female workers, as necessary, for protection of the embryo or  
18 fetus and breastfed infants; and

19 (b) protection and safety for persons under 18 years of age.

20 **50.-(1)** The Authority shall establish the responsibilities of relevant  
21 parties that are specific to public exposure, establish and enforce  
22 requirements for optimisation, and establish and enforce compliance with  
23 dose limits for public exposure.

Basic requirements  
for Public Exposure

24 (2) The Authority shall establish the responsibilities of licensees,  
25 of suppliers, and of providers of consumer products in relation to the  
26 application of requirements for public exposure in planned exposure  
27 situations.

28 (3) The Authority shall establish and enforce requirements for the  
29 optimisation of protection and safety for situations in which individuals are  
30 or could be subject to public exposure.

- 1 (4) The Authority shall establish or approve constraints on dose and  
 2 constraints on risk to be used in the optimisation of protection and safety for  
 3 members of the public.
- 4 (5) When establishing or approving constraints in respect of a source  
 5 within a practice, the Authority shall take into account, as appropriate:  
 6 (a) the characteristics of the source and of the practice that are of  
 7 relevance for public exposure;  
 8 (b) good practice in the operation of similar sources;  
 9 (c) dose contributions from other authorised practices or from  
 10 possible future authorised practices, estimated at the design and planning  
 11 stage, so that the total dose to members of the public is not expected to exceed  
 12 the dose limit at any time after the start of operation of the source; and  
 13 (d) the views of interested parties.
- 14 (6) The Authority shall make and enforce compliance with  
 15 regulations and specify dose limits for public exposure.
- 16 (7) Prior to authorisation of a new or modified practice, the Authority  
 17 shall require the submission of, and shall review, the safety assessments and  
 18 other design related documents from the responsible parties that address the  
 19 optimisation of protection and safety, the design criteria and the design features  
 20 relating to the assessment of exposure and potential exposure of members of  
 21 the public.
- 22 (8) The Authority shall establish or approve operational limits and  
 23 conditions relating to public exposure, including authorised limits for  
 24 discharges.
- 25 (9) These operational limits and conditions to be established pursuant  
 26 to (8) above shall—  
 27 (a) be used by licensees as the criteria for demonstration of  
 28 compliance after the commencement of operation of a source;  
 29 (b) correspond to doses below the dose limits with account taken of  
 30 the results of optimisation of protection and safety;

1 (c) reflect good practice in the operation of similar facilities or  
2 activities;

3 (d) allow for operational flexibility; and

4 (e) consider the result of the prospective assessment for  
5 radiological environmental impacts undertaken in accordance with  
6 requirements of the Authority

7 (10) When a source within a practice could cause public exposure  
8 outside Nigeria or in areas beyond the jurisdiction or control of Nigeria, the  
9 Authority shall -

10 (a) ensure that the assessment for radiological impacts includes  
11 those impacts outside Nigeria or in areas beyond the jurisdiction or control  
12 of Nigeria;

13 (b) to the extent possible, establish requirements for the control of  
14 discharges;

15 (c) arrange with the affected foreign State the means for the  
16 exchange of information and consultations, as appropriate.

17 (d) The Authority shall ensure that all relevant parties shall apply  
18 the system of protection and safety to protect members of the public against  
19 public exposure.

20 **51.**-(1) The authorised persons or organisations responsible for  
21 facilities and activities that give rise to radiation risks shall have the prime  
22 responsibility for protection and safety; other parties shall have specified  
23 responsibilities for protection and safety.

Basic obligations  
for authorised  
persons

24 (2) The authorised persons or organisations responsible for any  
25 facility or activity that gives rise to radiation risks shall have the prime  
26 responsibility for protection and safety, which cannot be delegated.

27 (3) The principal parties responsible for protection and safety are -

28 (a) licencees, or the person or organisation responsible for facilities  
29 and activities for which notification only is required;

30 (b) employers, in relation to occupational exposure;

Commencement

1 (c) radiological medical practitioners, in relation to medical  
2 exposure; or

3 (d) those persons or organisations designated to deal with emergency  
4 exposure situations or existing exposure situations.

5 (4) Other parties who shall have specified responsibilities in relation  
6 to protection and safety:

7 (a) Suppliers of sources, providers of equipment and software, and  
8 providers of consumer products;

9 (b) Radiation protection officers;

10 (i) Referring medical practitioners;

11 (ii) Medical physicists;

12 (iii) Radiographers;

13 (iv) Qualified experts or any other party to whom a principal party has  
14 assigned specific responsibilities;

15 (v) Workers other than workers listed in (a)-(f) in this paragraph; or

16 (vi) Ethics committees as may be provided in regulations made by the  
17 Authority.

Obligation to  
Report

18 **52.-(1)** Where a nuclear or radiological emergency occurs, any person  
19 shall immediately report such incident or accident to the Authority.

20 (2) Where the occurrence of a nuclear or radiological emergency is so  
21 reported to the Authority as mentioned in subsection (1) of this section, the  
22 Authority shall-

23 (a) immediately investigate such emergency and its causes,  
24 circumstances and effects;

25 (b) in such manner as it thinks fit, define particulars of the period  
26 during which and the area within which, in its opinion, the risk of nuclear  
27 damage connected with the incident or accident exceeds the safety standard  
28 and regulatory practices made pursuant to this Bill;

29 (c) direct the operator in question to obtain the names, addresses and

1 identification features of all persons who were within that area during such  
2 period;

3 (d) publish by notice in the Federal Gazette, two national  
4 newspapers in circulation in that area, or such other means, including digital  
5 media, the fact that a nuclear emergency has occurred during that period  
6 within that area; and

7 (e) In the event of a nuclear or radiological emergency posing a risk  
8 of radioactive contamination that could spread beyond the territorial  
9 boundaries of Nigeria, the Authority shall immediately notify the  
10 International Atomic Energy Agency, the Board and the relevant agencies of  
11 any State that may be physically affected or to which the emergency could  
12 be of radiological significance.

#### 13 PART XIII - ORPHAN SOURCES

14 53.-(1) The Authority shall be responsible for-

15 (a) the search, recovery and ensuring proper control of orphan  
16 sources; and

17 (b) the development of a national strategy for improving control  
18 over vulnerable sources.

19 (2) The following steps shall be carried out in the development  
20 phase of a national strategy for regaining control over orphan sources:

21 (a) listing the problems or potential issues identified in the  
22 assessment phase;

23 (b) developing actions that will solve each problem, or where it is a  
24 complex situation, identifying the first steps towards a solution to the  
25 problem;

26 (c) prioritising these actions and presenting them in a format that is  
27 suitable for review by decision makers; and

28 (d) identifying the various departments within the Authority and  
29 Waste Management Organisation involved in and achieving agreement on  
30 assignment of responsibilities.

Recovery of  
orphan sources

1 (3) Upon discovery of orphan sources, the Authority shall transfer  
2 such sources to a Waste Management Organisation to develop a national  
3 strategy for taking control of orphan sources.

4 (4) Anyone who finds or encounters an orphan source shall  
5 immediately report them to the Authority.

Practices not  
covered by this  
Bill

6 54.-(1) Where a practice involving exposure to radiation is not  
7 covered by this Bill or any regulation made under the Bill, the person  
8 concerned with the practice shall:

9 (a) consult with the Authority with a view to ensuring adequate  
10 protection of life, health, property and the environment; and

11 (b) be under a duty to comply with any guidelines or directives as may  
12 be issued, from time to time, by the Authority in respect of such practice.

13 (2) The Authority may, from time to time, modify or issue new  
14 categories of sources and practices for the purposes of this Act or any  
15 regulation made pursuant to the Bill.

#### 16 PART XIV - DECOMMISSIONING

Requirements  
for  
Decommissioning

17 55.-(1) The Authority shall establish requirements for the  
18 decommissioning of nuclear installations and high activity radiological facility  
19 where high activity sources are used, including:

20 (a) remediation of the environment to its original state; and

21 (b) criteria for clearance from regulation following  
22 decommissioning.

23 (2) An applicant for authorisation under this Bill shall include in its  
24 application, a decommissioning plan which shall be submitted to the Authority  
25 and updated as is required by the Authority.

Determination  
for Shut-Down  
and Release

26 56.-(1) The Authority shall establish criteria for determining when a  
27 nuclear installation or part thereof should be permanently shut down.

28 (2) The Authority shall evaluate the end state of the installation after  
29 decommissioning activities have been completed to ensure that relevant  
30 regulatory requirements have been met.

1 (3) The installation shall not be released by the Authority from  
2 regulatory control until the licensee has demonstrated that the end state in  
3 the decommissioning plan has been reached and that any other additional  
4 regulatory requirements have been met.

5 PART XV - NUCLEAR EMERGENCY PREPAREDNESS

6 57.-(1) The Authority shall ensure that every authorised party  
7 makes adequate arrangements for emergency preparedness and response  
8 which arrangement shall include clear assignment of the responsibility to  
9 immediately notify the Authority of an emergency.

Emergency  
preparedness  
and response

10 (2) In performing its functions under subsection (1), the Authority  
11 shall have regard for the need to suspend authorisation for the purpose of  
12 timely emergency response, if necessary.

13 (3) The Authority shall collaborate with other response agencies to  
14 make preparations and arrangements for dealing with the consequences of  
15 incidents in facilities and activities that affect or may potentially affect the  
16 public or the environment including action to be taken during an emergency  
17 and its aftermath.

18 (4) In all cases, the Authority shall ensure that measures which are  
19 proportionate with the radiation risks are in place to adequately inform the  
20 general public and persons who are affected for emergency preparedness  
21 and response.

22 58.-(1) No authorisation to conduct an activity or practice, operate  
23 a facility, possess or use a source may be granted unless and until an  
24 appropriate emergency preparedness and response plan has been developed  
25 by the applicant and approved by the Authority.

Emergency Plans  
and Procedures

26 (2) The Authority in collaboration with other competent national  
27 agencies shall develop a National Emergency Plan and Procedures, which  
28 shall be periodically tested and assessed for coping with any nuclear and  
29 radiological emergencies.

30 (3) In preparing the National Emergency Plan and in the event of an

1 emergency, the Authority shall advise the Federal Government and Response  
2 agencies, and shall provide expert services in accordance with its functions  
3 under the Bill.

4 (4) The National Emergency Plan and Procedures for nuclear or  
5 radiological emergencies shall include an allocation of responsibilities and  
6 actions among relevant agencies.

7 (5) Every operator shall develop an emergency plan and procedure  
8 which shall be periodically tested and assessed for coping with any nuclear and  
9 radiological emergencies.

Loss of Control

10 59. Any person who manages a facility connected with radioactive or  
11 nuclear material and other radiological installations shall, immediately, report  
12 to the Authority any theft or loss of radioactive or nuclear material under his  
13 possession or control.

Operator's  
Intervention plan

14 60.-(1) The Authority shall, for any activity capable of resulting in  
15 accidental exposure of workers or members of the public to nuclear material or  
16 ionising radiation sources, require the operator to establish an intervention plan  
17 which shall deal with any foreseeable situation and organise emergency drills  
18 for demonstrating the efficacy of the planned counter-measures.

19 (2) Where a nuclear or radiological incident or accident capable of  
20 affecting the public occurs, the Authority shall direct the operator, to-

21 (a) immediately submit its emergency plan showing the roles and  
22 responsibilities of the relevant stakeholders; and

23 (b) cover the costs for the establishment, implementation and  
24 management of such emergency plan insofar as it relates to the relevant nuclear  
25 installation or any action contemplated under this Bill

26 (3) The Authority, prior to issuing a licence shall assess that such  
27 plans are effective and practicable for the protection of persons in case of any  
28 nuclear or radiological emergency.

Implementation  
of Emergency  
Plans

29 61.-(1) Where a nuclear or radiological incident or accident occurs,  
30 the operator shall implement the emergency plan as approved by the Authority.

1           62.-(1) The Authority shall-

2           (a) keep and maintain records of the details of every nuclear  
3 incident or accident;

4           (b) retain such records for at least 50 years from the date of the  
5 incident or accident; and on the request of any person, upon a court order to  
6 that effect, make such records available to such person provided that such a  
7 person endorses a confidentiality statement

8           (2) Where in the opinion of the Authority, a risk of nuclear damage  
9 arising from anything done, being done or purported to have been done, or  
10 which has been or is present in any nuclear installation in respect of which a  
11 nuclear installation licence is no longer in force, is within safety standards  
12 made pursuant to this Bill, the Authority may expunge the particulars in  
13 connection to it from the record.

14           PART XVI - TRANSPORTATION OF RADIOACTIVE MATERIAL

15           63.-(1) All authorised persons under this Bill have the primary  
16 responsibility for the safety and security of nuclear and other radioactive  
17 material and radioactive waste.

18           (2) The Authority shall establish requirements for the safe and  
19 secure transport of nuclear and other radioactive material and radioactive  
20 waste.

21           (3) A consignor, carrier and consignee of radioactive material and  
22 radioactive waste shall obtain a licence from the Authority and notify the  
23 Authority well in advance and prior to the delivery, transport and receipt of  
24 any such material.

25           (4) During transportation, the consignor or the carrier shall be  
26 responsible for all damages to workers and the general public arising from  
27 inaccurate, wrong or incomplete notification and information.

28           (5) Any nuclear and other radioactive material and radioactive  
29 waste stored in transit shall be stored and handled in accordance with the  
30 provisions of the appropriate regulations.

Maintenance  
and Removal  
from Records

Requirements  
for Transportation

## 1 PART XVII - RADIOACTIVE WASTE AND SPENT FUEL MANAGEMENT

National Policy  
and Strategy on  
Radioactive  
Waste and Spent  
Fuel Management

2 64.-(1) The Authority shall develop a national policy for radioactive  
3 waste and spent fuel management in collaboration with other relevant agencies  
4 and bodies. Such policy shall be subject to the approval of the Federal  
5 Executive Council.

6 (2) The Authority shall ensure the implementation of the policy in a  
7 manner that reflects Nigeria's international commitment under the Joint  
8 Convention on the Safety of Spent Fuel Management and on the Safety of  
9 Radioactive Waste Management.

Control of  
Radioactive Waste  
and Spent Fuel  
Management

10 65.-(1) No person or entity shall operate a radioactive waste or spent  
11 fuel management facility without an authorisation issued by the Authority.

12 (2) The holder of an authorisation for any nuclear or radiological  
13 installation shall prepare and submit to the Authority adequate plans and  
14 procedure for the safe storage and management of radioactive waste or spent  
15 fuel generated by his activities.

16 (3) The Authority shall ensure the continuous regulatory control of  
17 radioactive waste and spent fuel management from generation to disposal.

18 (4) To ensure the safe and secure management of radioactive waste  
19 and spent fuel in Nigeria, the Authority shall establish applicable safety and  
20 security requirements and regulations for the protection of people and the  
21 environment from adverse impacts of radioactive waste and spent fuel  
22 management activities in accordance with the Joint Convention on the Safety  
23 of Spent Fuel Management and on the Safety of Radioactive Waste  
24 Management.

Responsibility  
for Safety and  
Security of  
Radioactive  
waste

25 66.-(1) The prime responsibility for ensuring the safety and security  
26 of radioactive waste and spent fuel rests with the holder of the relevant  
27 authorisation.

28 (2) The responsibility for ensuring the safety and security of  
29 radioactive waste or spent fuel for which no licensee or entity can be  
30 determined shall rest with the Authority.

1	67.-(1) The licensee of a nuclear waste disposal facility shall	Disposal Plan
2	prepare a plan for the closure of that facility that includes both active and	
3	passive institutional controls and submit same to the Authority for approval	
4	prior to the operation of that facility.	
5	68.-(1) No person shall import any radioactive waste generated	Prohibition of
6	outside the territory of Nigeria into the country.	Import of
7	(2) No license shall be given for the importation of any radioactive	Radioactive Waste
8	source unless an agreement to return the spent source to the manufacturer is	
9	made prior to importation.	
10	69.-(1) Radioactive waste or spent fuel generated within Nigeria	Restriction on
11	shall be exported only upon the issuance of an authorisation by the Authority	Export of
12	and in line with requisite terms and conditions as the Authority shall deem	Radioactive Waste
13	necessary.	
14	(2) The Authority shall have due regards to international	
15	conventions and practices with respect to exportation of such materials.	
16	70.-(1) Radioactive waste or spent fuel in transit shall be stored and	Packaging and
17	handled in accordance with regulations to be issued by the Authority.	Storage of
18	(2) A person who intends to dispatch radioactive waste shall carry	Radioactive Waste
19	out the packaging of the radioactive waste in compliance with the packaging	and Spent Fuel
20	and testing requirements as laid down in the Transport Regulations	Management in
21	71.-(1) The Carrier of radioactive waste shall be liable financially	transit
22	or otherwise for all incidents and accidents during transportation or storage	Liability of Carrier
23	in transit of the radioactive waste.	of radioactive
24	(2) Notwithstanding the provisions in subsection (1) of this	waste
25	section, the operator of a facility or carrier of radioactive waste, who is	
26	responsible for an incident resulting in radioactive contamination of the	
27	environment shall be liable on conviction, for the restoration of the	
28	environment or for the cost of such activities as are necessary for the	
29	restoration of the environment to its original state.	

## 1 PART XVIII - INSURANCE AND FINANCIAL RESPONSIBILITY

Insurance cover

2 72.-(1) every operator of a nuclear installation shall maintain an  
3 insurance cover with a qualified insurer designated by the Minister of Finance  
4 and accredited by the Authority or provide other financial guarantee adequate  
5 to cover his civil liability for any nuclear damage imposed on him by this Bill to  
6 not less than the equivalent in Naira of 300 million SDRs for any one nuclear  
7 damage.

8 (2) Based upon the approval of the Authority, the liability of the  
9 operator for any one nuclear damage may be limited to less than the equivalent  
10 in Naira of 300 million SDRs, but not less than equivalent in Naira of 150  
11 million SDRs, provided that the difference up to at least the equivalent in Naira  
12 of 300 million SDRs shall be made available by the Federal Government via  
13 appropriation by the National Assembly with a view to covering nuclear  
14 damage under this Bill.

15 (3) The insurance cover referred to in subsections (1) and (2) of this  
16 section, shall be made available for at least categories 1 and 2 radioactive  
17 sources as provided for in the Second Schedule of this Bill.

Nuclear Damage  
Compensation  
Fund

18 73.-(1) Provision shall be made in the Appropriation Act for a nuclear  
19 damage compensation fund which shall be held by the CBN and managed by  
20 the Authority.

21 (2) Nuclear Damage Claims Fund from which it shall be granted not  
22 less than the initial equivalent in Naira of 450 million SDRs, the financial  
23 guarantee required to be made available by the Federal Government of Nigeria  
24 with a view to covering nuclear damage, to the extent that the yield of insurance  
25 or other financial security is inadequate to satisfy such claims pursuant to this  
26 Bill.

27 (3) Where the Authority is satisfied that the total amount of claims of  
28 compensation against an operator of a nuclear installation that is unpaid  
29 exceeds the amount of security given by such operator under this Bill with  
30 respect to such claims, the Authority shall -

1 (a) submit a report to the President of the Federal Republic of  
2 Nigeria requesting for approval to pay from funds of the Nuclear Damage  
3 Claims Fund appropriated by the National Assembly on the nuclear damage  
4 in question, so as to render financial assistance to the operator to the amount  
5 by which the claims exceed or are likely to exceed the financial security; and

6 (b) by notice published in the Federal Gazette, suspend the  
7 obligation to pay the claims in respect of the nuclear damage until the  
8 National Assembly has decided on the recommendation.

9 (3) The liability of a person who has provided or shall provide  
10 financial security shall not be affected by any appropriation under  
11 subsection (2) of this section.

12 74.-(1) For a ten - year period from the date of entry into force of  
13 this Bill, upon approval of the Authority, the liability of the operator may be  
14 limited to less than the equivalent in Naira of 100 million SDRs in respect of  
15 a nuclear damage occurring within that period, provided that the difference  
16 up to the equivalent in Naira of 200 million SDRs shall be made available by  
17 the Federal Government via appropriation of the National Assembly, with a  
18 view to covering nuclear damage under this Bill.

Limitation of  
Liability

19 (2) Every operator of a nuclear installation shall maintain  
20 insurance cover with a Federal Government of Nigeria approved insurer  
21 acceptable to the Authority or provide other financial guarantees adequate to  
22 cover his civil liability for any nuclear damage imposed on him by this Bill  
23 to not less than the equivalent in Naira of 1 million SDRs for any one nuclear  
24 damage

25 75. Interest and cost that may be awarded by a court in actions for  
26 compensation of nuclear damage shall be payable in addition to the amounts  
27 pursuant to this Bill.

Interest and Cost

28 76. Persons who have suffered nuclear damage may enforce their  
29 rights to compensation by one single action, without having to bring  
30 separate proceedings according to the origin of the funds provided for such

Enforcement of  
rights

1 compensation.

Financial  
Guarantees

2 77.-(1) The Federal Government shall enforce the payment of claims  
3 against any operator liable for nuclear damage under this Bill.

4 (2) Where the yield of insurance or other financial guarantee  
5 maintained by the operator under this Part falls short of satisfying such claims  
6 referred to in subsection (1) the Federal Government shall make additional  
7 provision in respect of such claims; provided that in no case shall the civil  
8 liability of the Federal Government be less than the equivalent in Naira of 300  
9 million SDRs.

Responsibility  
of operator

10 78. Radiological damage other than nuclear damage shall be dealt  
11 with in accordance with relevant national tort laws.

Computation  
of Period

12 79. Where a damage is caused by a nuclear or radiological incident or  
13 accident arising from nuclear material or radioactive source which at the time  
14 of the incident or accident was stolen, lost, jettisoned or abandoned, the period  
15 established under this Bill shall be computed from the date of the incident or  
16 accident, provided that the period shall in no case exceed twenty years from the  
17 date of the theft, loss, jettison or abandonment.

Compensation  
of Staff of the  
Authority

18 80.-(1) Where a person who is employed in any capacity by or on  
19 behalf of the Authority, while so performing services, suffers a personal injury  
20 or contracts a disease attributable to ionising radiation from any radioactive  
21 material or to the flammable, explosive, poisonous or special properties of  
22 radioactive material, or to the ionising radiation produced by any apparatus and  
23 in respect of which no liability can be established under this Bill, the Authority  
24 shall:

25 (a) defray all reasonable expenses incurred by or on behalf of such  
26 person in respect of any medical treatment including, but not limited to the  
27 supply and maintenance of any artificial part of the body or other device,  
28 necessitated by such injury or disease; and

29 (b) pay any compensation in respect of disablement or death caused  
30 by such injury or disease.

1 (2) Nothing in this section shall preclude an employee of the  
2 Authority from claiming any benefit other than the compensation under this  
3 Bill.

4 PART XIX - LIABILITY FOR NUCLEAR DAMAGE

5 **81.**-(1) An operator shall be absolutely and exclusively liable for  
6 injury or damage done to any person or property upon proof that such  
7 damage has been caused by a nuclear or radiological incident or accident-

Absolute liability  
for Nuclear  
Radiological  
Damages

8 (a) in a nuclear installation by anything being present or which is  
9 done or by nuclear material, radioactive material or material contaminated  
10 with radioactive activity which has been discharged or released in any form  
11 from any regulated practice or activity; and

12 (b) by any nuclear material, radioactive material or material  
13 contaminated with radioactivity, while in the possession of or under the  
14 control of the operator during the conveyance from the nuclear or  
15 radiological installations, to any other place in Nigeria or in the territorial  
16 waters in Nigeria from or to any place outside Nigeria

17 (2) where liability under this Bill in respect of the same injury or  
18 damage is incurred by two or more operators, the liability of the operators  
19 shall, to the extent that the injury or damage attributable to a breach of duty  
20 imposed on each by this Bill is not reasonably separable, be treated as joint  
21 and several.

22 (3) where two or more operators are under a duty under this bill, the  
23 respective liability of each of them shall be clearly defined in a contractual  
24 document.

25 (4) in the case of transport of nuclear or radioactive material, the  
26 consignor is liable for nuclear damage until the consignee has taken charge  
27 of the material involved, unless the consignor and the consignee enter into a  
28 contract to shift liability at another stage of transport.

29 **82.**-(1) An operator is not liable for injury or damage of any kind  
30 described under this Bill where the nuclear or radiological incident resulting

Exceptions

1 in the injury or damage occurred as a direct result of an act of armed conflict in  
2 the course of war, invasion or insurrection.

3 (2) An operator is not liable for injury or damage suffered by any  
4 person where the nuclear or radiological incident results from the gross  
5 negligence of the claimant or an intentional act of the claimant to cause harm.

6 (3) Where a nuclear or radiological incident or accident resulting in  
7 any injury or damage described under this Bill occurred wholly or partly as a  
8 result of an unlawful act or omission of any person done or omitted to be done  
9 with intent to cause injury or damage, any right of recourse of an operator shall  
10 be against that person

Limitations of  
the Right to  
Compensation

11 **83.**-(1) Nothing in this Bill shall be construed as limiting or restricting  
12 any right or obligation of any person arising under -

13 (a) any contract of insurance, including any insurance required in  
14 furtherance of this Bill to be maintained by an operator;

15 (b) any scheme or systems of health or hospitalisation insurance,  
16 employees' compensation or occupational disease compensation; or

17 (c) any survivorship or disability provision of or governing any  
18 superannuation or pension fund or plan.

19 (2) A person is barred from making a claim for compensation for  
20 nuclear damage under this Bill, if the action to establish the claim is not brought  
21 within:

22 (a) three years from the date on which the person suffering damage  
23 had knowledge or ought reasonably to have had knowledge and of the operator  
24 liable for the damage, but in any case not more than thirty (30) years after the  
25 incident causing the damage;

26 (b) thirty (30) years from the date of the nuclear incident in the case of  
27 loss of life or personal injury; or

28 (c) Ten (10) years from the date of the nuclear incident, in case of any  
29 other form of nuclear damage.

30 (3) Any person who has suffered nuclear or radiological damage and

1 who has brought an action for compensation, may amend his claim to take  
2 into account any aggravation of damage, even after the expiry of that period,  
3 provided that judgment has not been entered by the competent Court.

4 PART XX - NUCLEAR SAFEGUARDS

5 84.-(1) In accordance with Nigeria's international obligations, the  
6 Authority shall -

Implementation  
of Nuclear  
Safeguards Regime

7 (a) implement the Comprehensive Safeguards Agreement and the  
8 Protocol Additional to the Safeguards Agreement signed between Nigeria  
9 and the International Atomic Energy Agency on all sources or special  
10 fissionable material in all peaceful nuclear activities within Nigeria for the  
11 purpose of verifying that such material is not diverted to nuclear weapons or  
12 other nuclear explosive devices;

13 (b) cooperate with the International Atomic Energy Agency to  
14 facilitate the implementation of safeguards under the Safeguards Agreement  
15 and the Additional Protocol;

16 (c) establish and maintain a State System of Accounting for and  
17 Control of all nuclear material subject to safeguards;

18 (d) provide the International Atomic Energy Agency with  
19 information concerning nuclear material subject to safeguards and the  
20 features of installations relevant to safeguarding such material; and

21 (e) take all necessary steps to ensure that International Atomic  
22 Energy Agency inspectors can effectively discharge their functions under  
23 the Safeguards Agreement and Additional Protocol.

24 85. The Authority shall ensure effective conduct of safeguards in  
25 Nigeria by establishing and implementing -

Nuclear Safeguards  
Measurements

26 (i) a measurement system;

27 (ii) a system for the evaluation of measurement accuracy;

28 (iii) procedures for reviewing measurement differences;

29 (iv) procedures for carrying out physical inventories;

30 (v) a system for evaluation of unmeasured inventories;

1 (vi) records and reports systems for all material balance areas; and  
2 (vii) procedures for reporting to the International Atomic Energy  
3 Agency (IAEA).

Prohibition on  
Possession of  
Nuclear Explosives

4 86.-(1) In accordance with Nigeria's commitment to the full  
5 implementation of the African Nuclear Weapons Free Zone Treaty (Pelindaba  
6 Treaty):

7 (a) no person shall receive from any transferor of nuclear weapons or  
8 other nuclear explosive devices or control over such weapons or explosive  
9 devices, directly or indirectly to manufacture or otherwise acquire nuclear  
10 weapons or other nuclear explosive devices, or receive any assistance in the  
11 manufacture of nuclear weapons or other nuclear explosive devices;

12 (b) no person shall provide any form of support to non-state actors to  
13 develop, acquire, manufacture, possess, transport, transfer, use or threaten to  
14 use nuclear weapons or explosive devices or radiological dispersal devices.

15 (c) persons intending to carry out research and development activities  
16 related to the nuclear fuel cycle shall provide the Authority information on  
17 these activities prior to the commencement, regardless of whether these  
18 activities involve nuclear material; and

19 (d) any person performing activities subject to the Safeguards  
20 Agreement and the Additional Protocol, shall submit to the Authority  
21 information and data necessary for compliance with the undertaking by  
22 Nigeria arising from such instruments.

23 PART XXI - IMPORT AND EXPORT CONTROL

Requirements  
for Import and  
Export

24 87.-(1) The Authority shall not issue any import licence under this Bill  
25 except with the prior notification by the person exporting or the exporting  
26 country of the category of radioactive sources or nuclear material to be  
27 imported to the country.

28 (2) The Authority shall implement the provisions of the Code of  
29 Conduct on the Safety and Security of Radioactive Sources and its associated  
30 Guidance on the Import and Export of Radioactive Sources.

1 (3) The Authority shall establish an import and export  
2 authorisation regime for all categories of sources, by requesting for consent,  
3 evaluation of request, notification prior to shipment as a means of ensuring  
4 safety and security as provided for in the regulations.

5 (4) The import of some categories of radioactive sources may only  
6 be authorised where there is a contract with the supplier for the return of the  
7 source to the country of origin at the end of its useful life.

8 **88.**-(1) The Authority shall-

9 (a) in collaboration with the Nigeria Customs Service and such  
10 other relevant agencies and bodies, designate land, air and sea ports as entry  
11 points through which radioactive sources, nuclear material and sources  
12 emitting ionising radiation shall be imported into Nigeria;

13 (b) in collaboration with such other agencies and bodies, monitor  
14 all land, air and sea ports designated as entry points for import, transit and  
15 transshipment or export of radioactive sources, nuclear materials, devices  
16 generating ionising radiation, equipment and technology; and

17 (c) take such steps as are necessary to monitor all scrap metal  
18 dealers, steel recycling and rolling plants in the country including the import  
19 and export of scrap metal.

20 **89.**-(1) The Authority shall establish and publish a national list of  
21 controlled items, including nuclear material, pursuant to Nigeria's  
22 international obligations

23 (2) The import of some categories of radioactive sources may only  
24 be authorised when there is a contract with the supplier for the return of the  
25 source to its country of origin at the end of its useful life.

26 **PART XXII - NUCLEAR SECURITY AND NATIONAL CENTRE**

27 **FOR NUCLEAR SECURITY**

28 **90.**-(1) Any person authorised by the Authority for any nuclear  
29 installation, radioactive waste management facility, practices or ionising  
30 radiation sources shall have the prime responsibility for the safety and

Monitoring of  
Import and Export

List of  
Controlled  
items

Prime  
responsibility  
for safety and  
security

1 security of the installation, facility, practice or source.

2 (2) Prior to commencing any activity, a licensee shall submit to the  
3 Authority a plan to deal with cyber security threats and shall establish,  
4 implement and maintain a cyber-security plan that shall include measures for  
5 incident response and recovery from cyber attacks.

6 (3) Any person whose licence is revoked or invalidated or suspended  
7 shall continue to have the prime responsibility for the safety and security of any  
8 nuclear material and radiation sources under his custody.

9 (4) The Authority shall take appropriate measures necessary for  
10 safety culture and for security culture with respect to radioactive sources in a  
11 manner consistent with the provisions of the regulations and this Bill.

Requirements  
for security and  
physical protection

12 91.-(1) The Authority shall establish requirements for the physical  
13 protection of nuclear installations, radiological facilities, nuclear materials and  
14 radioactive sources, including:

15 (a) a categorisation of material based on an assessment of damage that  
16 could result from theft or diversion of a certain type and quantity of material  
17 from authorised uses or sabotage of a facility utilising that material;

18 (b) physical protection measures necessary for different categories of  
19 radioactive material either in use, storage or transportation;

20 (c) a system of authorisation including licence conditions for physical  
21 protection;

22 (d) a system of inspection and monitoring to verify compliance with  
23 applicable physical protection requirements; and

24 (e) enforcement measures in case of non-compliance or violation of  
25 applicable regulations or licence conditions.

Responsibility  
of Authorised  
persons

26 92.-(1) A person authorised to conduct activities or practices utilising  
27 nuclear material and other radioactive material and related facilities shall-

28 (a) primarily be responsible for ensuring the security and physical  
29 protection of such materials pursuant to applicable regulations and licence  
30 conditions;

1 (b) ensure that the implementation of safety and security  
2 requirements satisfies both safety and security objectives;

3 (c) be responsible for managing the implementation of safety  
4 requirements and security requirements by ensuring close cooperation  
5 between safety managers and security managers, with the objective of  
6 minimising risks; and

7 (d) ensure that safety and security measures are designed and  
8 implemented in such a manner that they do not compromise each other and  
9 also establish mechanisms to resolve potential conflicts and to manage  
10 safety-security interfaces.

11 (2) No person shall engage in illicit trafficking of any nuclear  
12 material or other radioactive material and related facilities.

13 93.-(1) No person shall demand radioactive or nuclear material or a  
14 device by threat, or by use of force, or by any other form of intimidation.

Threat or Use  
of Force

15 (2) No person shall receive, possess, transfer, alter, damage or  
16 dispose of radioactive/nuclear material or possess a device with the intent to  
17 cause death, serious bodily injury, substantial damage to property or to the  
18 environment or which causes or is likely to cause death or serious injury to  
19 any person or substantial damage to property or to the environment.

20 (3) No person shall use or damage a nuclear facility or interfere  
21 with its operation, or commit any other act directed against a nuclear facility  
22 in a manner which releases or risks the release of radioactive material.

23 (4) No person shall make a threat to -

24 (a) use nuclear material to cause death or serious injury to any  
25 person or substantial property damage, or

26 (b) commit an offence described in subsection (4)(a) of this section  
27 in order to compel a natural or legal person, international organisation or  
28 Nigeria to do or to refrain from doing any act.

29 94.-(1) Where there has been a theft, threat of theft or loss of Duty to Report

1 nuclear material or other radioactive material from a facility, the licensee shall -

2 (a) notify the Authority immediately of the circumstances of the  
3 incident;

4 (b) provide written information, including particulars, to the  
5 Authority within 48 hours after the notification; and

6 (c) provide the Authority with any additional information as may be  
7 requested

National Centre  
for Nuclear  
Security

8 95.-(1) There shall be established a National Centre for Nuclear  
9 Security.

10 (2) The functions of the National Centre for Nuclear Security shall  
11 include:

12 (a) supporting and facilitating the systematic development of  
13 sustainable human resources through the implementation of a tailored National  
14 Nuclear Security Training Programme;

15 (b) ensuring and enhancing sustainability in national nuclear security  
16 human resource development by cooperating with other national and  
17 international institutions;

18 (c) ensuring that the Centre provides technical support services for  
19 life cycle equipment management and scientific support for the prevention,  
20 detection of and response to nuclear security events;

21 (d) collaborate with other national and international institutions with  
22 similar objectives; and

23 (e) Carry out any other functions as may be determined by the Nuclear  
24 Security Committee.

25 (3) The structure, designation and other matters relating to the Centre  
26 shall be as determined by the National Nuclear Security Committee.

27 PART XXIII - APPEAL IN RESPECT OF LICENCE AND DISPUTE RESOLUTION

Appeal in respect  
of license

28 96.-(1) Any person may appeal to the Authority against a decision  
29 relating to a licence or to an application for a license or for renewal.

30 (2) Where such person is not satisfied with the decision of the

1 Authority, he may further appeal to the Board, giving reasons against such a  
2 decision in writing.

3 (3) Provided that such an appeal shall not have the effect of  
4 suspending the regulatory decision until the appeal is decided

5 97.-(1) The operators and persons subject to this Bill shall be Dispute resolution  
6 bound by the provisions of the guidelines made under this Bill.

7 (2) The Authority shall have powers to resolve disputes between  
8 persons who are subject to this Bill regarding any matter under this Bill or its  
9 subsidiary legislation.

10 (3) A party shall not have recourse to litigation until he has  
11 exhausted the dispute resolution mechanisms provided in this Bill or the  
12 Guidelines under this Bill.

13 (4) The period spent on alternative dispute resolution under this  
14 Bill shall not be counted in determining the limitation time under the  
15 relevant Limitation Laws.

#### 16 PART XXIV - LEGAL PROCEEDINGS

17 98. No suit shall be commenced against the Authority, a member Pre-action notice  
18 of the Board, the Director-General or any officer or employee of the  
19 Authority in their official capacity unless one month notice of intention to  
20 commence the suit has been served upon the Authority by the intending  
21 plaintiff or his agent; and the notice shall clearly and explicitly state the  
22 cause of action, the particulars of the claim, the name and address of the  
23 intending plaintiff and the relief which he claims

24 99. The Authority shall have power to prosecute offences under Power to  
25 prosecute  
25 this Bill

26 100. Any sum of money which by the judgment of any court has Defrayment of  
27 Judgment sum  
27 been awarded against the Authority shall, subject to any direction given by  
28 the court, where no notice of appeal against the judgment has been given, be  
29 paid from the Fund of the Authority



1 (3) Any person who imports or exports any radioactive source  
2 without a licence from the Authority, commits an offence and shall-

3 (a) in the case of an individual, be liable on conviction to  
4 imprisonment for a term of not less than 2 years or an option of fine of not  
5 less than N2,000,000 or to both such fine and imprisonment;

6 (b) in the case of a body corporate, be liable on conviction to a fine  
7 of not less than N10,000,000 and

8 (c) any offending Director or officer of the body corporate shall on  
9 conviction be liable to imprisonment for a term of not less than 2 years or an  
10 option of fine of not less than N2,000,000 or to both such fine and  
11 imprisonment.

12 (4) Any operator of a radiological facility under this Bill, who fails  
13 to take measures to secure any radioactive source in such manner as to result  
14 in unauthorised access, theft or loss of control of such sources, commits an  
15 offence and shall -

16 (a) in the case of an individual, be liable on conviction to  
17 imprisonment for a term of not less than 2 years or a fine of not less than  
18 N3,000,000 or to both such fine and imprisonment; or

19 (b) in the case of a body corporate, be liable on conviction to a fine  
20 of not less than N10,000,000; and

21 (c) any offending Director or officer of the body corporate shall  
22 each on conviction be liable to imprisonment for a term of not less than 2  
23 years or an option of fine of not less than N3,000,000 or to both such fine and  
24 imprisonment.

25 (5) Any person who imports or exports any nuclear material or  
26 proscribed substances without a licence from the Authority, commits an  
27 offence and shall-

28 (a) in the case of an individual, be liable on conviction to  
29 imprisonment for a term of not less than 5 years or an option of fine of not  
30 less than N5,000,000 or to both such fine and imprisonment; or

1 (b) in the case of a body corporate, be liable on conviction to a fine of  
2 not less than N20,000,000 and

3 (c) The offending Director or officer of the body corporate shall on  
4 conviction be liable to imprisonment for a term of not less than 5 years or an  
5 option of fine of not less than N5,000,000 or to both such fine and  
6 imprisonment

7 (6) Any operator of nuclear installation under this Bill, who fails to  
8 take measures to secure any nuclear material in such manner as to result in  
9 unauthorised access, theft or loss of control of such materials or sources,  
10 commits an offence and shall-

11 (a) in the case of an individual, be liable on conviction to  
12 imprisonment for a term of not less than 5 years or a fine of not less than  
13 N10,000,000 or to both such fine and imprisonment; or

14 (b) in the case of a body corporate, be liable on conviction to a fine of  
15 not less than N50,000,000; and

16 (c) any offending Director or officer of the body corporate shall on  
17 conviction be liable to imprisonment for a term of not less than 5 years or a fine  
18 of not less than N10,000,000 or to both such fine and imprisonment.

19 (7) Any person who carries out any activity referred to in this Bill and  
20 at the end of the activity abandoned, decommissioned or rehabilitated the  
21 installations thereof without a licence issued by the Authority commits an  
22 offence and shall:

23 (a) in the case of an individual, be liable on conviction to  
24 imprisonment for a term of not less than 5 years or a fine of not less than  
25 N5,000,000 or to both such fine and imprisonment; or

26 (b) in the case of a body corporate, be liable on conviction to a fine of  
27 not less than N25,000,000 and

28 (c) any offending Director or officer of the body corporate shall on  
29 conviction be liable to imprisonment for a term of not less than 5 years or a fine  
30 of not less than N5,000,000 or to both such fine and imprisonment.

1 (8) Any person who contravenes the provisions of section 87 of this  
2 Bill commits an illicit trafficking offence and shall be liable on conviction:

3 (a) in the case of an individual, to imprisonment for a term of not  
4 less than 5 years or a fine of not less than N5,000,000 or to both such fine and  
5 imprisonment; or

6 (b) in the case of a body corporate, to a fine of not less than  
7 N25,000,000; and

8 (c) any offending Director or officer of the body corporate shall on  
9 conviction be liable to imprisonment for a term of not less than 5 years or a  
10 fine of not less than N5,000,000 or to both such fine and imprisonment.

11 (9) Any person who, by any electronic means, compromises the  
12 security of any nuclear or other high activity installations commits an  
13 offence and shall be liable on conviction to a term of imprisonment for 5  
14 years.

15 (10) A consignor, consignee, transporter and/or freight forwarder  
16 (by air, land or sea) of nuclear material, radioactive material or wastes that  
17 breaches the provisions of section 63 of this Bill commits an offence and  
18 shall be liable financially or otherwise for all incidents or accidents during  
19 transportation or storage in transit of the nuclear material, radioactive  
20 sources and/or wastes.

21 (11) Any person who contravenes the nuclear non-proliferation  
22 status of Nigeria commits an offence and shall be liable on conviction to a  
23 term of imprisonment of not less than 25 years. In the case of a body  
24 corporate, to a fine of not less than N100,000,000.

25 (12) Any person who sabotages the safety or security of any  
26 nuclear installation, nuclear material or other radioactive material in use,  
27 storage or transportation or who sabotages any detection equipment such  
28 that the act endangers or is likely to endanger national security or poses  
29 danger to health or the environment, commits an offence and shall -

30 (a) in the case of an individual, be liable on conviction to a term of

1 imprisonment of not less than 25 years without an option of fine; or

2 (b) in the case of a body corporate, the offending Director or officer of  
3 the body corporate shall be liable on conviction to a term of imprisonment of  
4 not less than 25 years without an option of fine.

5 (13) Any person who receives, uses, possesses, transfers, alters ,  
6 disposes or who obtains by theft, robbery or fraudulent means, any radioactive  
7 or nuclear material with the intent to cause

8 (a) death or serious bodily injury,

9 (b) substantial damage to property or to the environment; or

10 (c) which causes or is likely to cause death or serious injury to any  
11 person or substantial damage to property, facility or the environment commits  
12 an offence and shall be liable on conviction to life imprisonment.

13 (14) Any person who demands radioactive or nuclear material or a  
14 device by threat of grievous harm or by use of force, or by any other form of  
15 intimidation commits an offence and is liable on conviction to life  
16 imprisonment.

17 (15) Any person who participates in the financing, planning  
18 preparation or perpetration of nuclear terrorist acts or in supporting terrorist act  
19 commits an offence and is liable to life imprisonment.

20 (16) Any person who, having had his licence revoked or invalidated or  
21 suspended, pursuant to section 44, fails to maintain primary responsibility for  
22 the safety and security of any nuclear material and radiation sources under his  
23 custody commits an offence and shall -

24 (a) in the case of an individual, to a term of imprisonment for 5 years  
25 or a fine of not less than N5,000,000 or both such fine and imprisonment; or

26 (b) in the case of a body corporate, to a fine of not less than  
27 N25,000,000; and

28 (c) any offending Director or officer of the body corporate shall on  
29 conviction be liable to imprisonment for 10 years or a fine of not less than  
30 N5,000,000 or to or to both such fine and imprisonment.

1 (17) The fine payable under this Bill shall be reviewed every Five  
2 (5) years by the Authority and the reviewed fines shall take effect from the  
3 date of publication in the Federal Gazette.

4 (18) in all cases, the courts, in imposing any punishment under this  
5 Bill shall be guided by the sentencing guideline provided in the  
6 Administration of Criminal Justice Act, 2015.

7 **105.**-(1) In furtherance to provisions of section 41 of this Bill, no  
8 person shall-

Obstruction  
and/or False  
Declaration  
to Inspector

9 (a) knowingly make a false or misleading statement to an  
10 inspector; or

11 (b) deliberately obstruct or hinder or attempt to obstruct or hinder  
12 an inspector from carrying out his functions under this Bill.

13 (2) Where an inspector from the Authority identifies himself to an  
14 operator, the operator shall immediately allow the inspector access to the  
15 facility.

16 (3) It shall be an offence punishable under the Bill for an operator to  
17 obstruct, delay, deny or hinder an inspector from performing his duties  
18 under the Bill.

19 **106.**-(1) Upon entry into force of this Bill, its provisions shall be  
20 applied to pending applications for authorisation.

Savings and  
transition

21 (2) All authorisations granted under The Nuclear Safety and  
22 Radiation Protection Act No.19 of 1995 shall be considered to have been  
23 granted under this law, until such time as such authorisation has been  
24 reissued, renewed, suspended, revoked or otherwise modified by the  
25 Authority pursuant to applicable laws and regulations.

26 **PART XXVIII - MISCELLANEOUS**

27 **107.** In this Act-

28 "accident" means any unintended event, including operating errors,  
29 equipment failures and other mishaps, the consequences or potential  
30 consequences of which are not negligible from the point of view of

Interpretation

1 protection or safety;

2 "activities and facilities" is a general term encompassing nuclear facilities,  
3 uses of all sources of ionising radiation, all radioactive waste management  
4 activities, transport of radioactive material and any other practice or  
5 circumstances in which people may be exposed to radiation from naturally  
6 occurring or artificial sources;

7 "authorisation" means permission granted in a document by the Authority to a  
8 legal person who has submitted an application to carry out a practice or any  
9 other action described in the Act or regulations made thereunder. The  
10 authorisation can take the form of a registration or a licence;

11 "authorised officer" includes qualified persons employed or engaged by the  
12 Authority to carry out any function under this Act;

13 "clearance" means the removal of radioactive material or radioactive objects  
14 within authorised practices from any further control by the Authority;

15 "code of conduct" means International Atomic Energy Agency Code of  
16 Conduct on the Safety and Security of Radioactive Sources  
17 (IAEA/CODEOC/2004);

18 "Authority" means the Nigerian Nuclear Regulatory Authority established  
19 under section 2 of this Act;

20 "contamination" means the presence of radioactive substances in or on a  
21 material or the human body or other place where they are undesirable or could  
22 be harmful;

23 "decommissioning" means all steps leading to the release of a facility, other  
24 than a disposal facility, from regulatory control other than confirming the  
25 decommissioned status of a facility. These steps include the processes of  
26 decontamination and dismantling;

27 "disposal" means the emplacement of spent fuel or radioactive waste in an  
28 appropriate facility without the intention of retrieval;

29 "emergency plan" means a set of procedures to be implemented in the event of  
30 an accident;

- 1 "IAEA" means the International Atomic Energy Agency;
- 2 "IAEA GSR Part 3" refers to the Radiation Protection and Safety of  
3 Radiation Sources: International Basic Safety Standards: General Safety  
4 Requirements Part 3 No. GSR Part 3;
- 5 "exclusion" means exposures that are not amenable to regulatory control  
6 such as those from natural sources like cosmic rays;
- 7 "exemption" means the determination by the Authority that a source or  
8 practice need not be subject to some or all aspects of regulatory control on  
9 the basis that the exposure (including internal exposure) due to the source or  
10 practice is too small to warrant the application of those aspects or that it is the  
11 optimum option for protection irrespective of the actual level of the doses or  
12 risks;
- 13 "facilities and activities" means nuclear facilities, uses of all sources of  
14 ionising radiation, all radioactive waste management activities, transport of  
15 radioactive material and any other practice or circumstances in which  
16 people may be exposed to radiation from naturally occurring or artificial  
17 sources;
- 18 "Graded approach" means for a system of control, such as a regulatory  
19 system or a safety system, a process or method in which the stringency of the  
20 control measures and conditions to be applied is commensurate, to the  
21 extent practicable, with the likelihood and possible consequences of, and the  
22 level of risk associated with, a loss of control;
- 23 "incident" means any unintended event, including operating errors,  
24 equipment failures, initiating events, accident precursors, near misses or  
25 other mishaps, or unauthorised act, malicious or non-malicious, the  
26 consequences or potential consequences of which are not negligible from  
27 the point of view of protection or safety;
- 28 "Licence" means a legal document issued by the Authority granting  
29 authorisation to perform specified activities related to a facility or activity;
- 30 "Licensee" means the holder of a current licence granted by the Authority

- 1 for an activity or practice who has recognised rights and duties for the activity  
2 or practice, particularly in relation to safety and security;
- 3 "medical exposure" means exposure incurred by patients for the purposes of  
4 medical or dental diagnosis or treatment; by carers and comforters; and by  
5 volunteers subject to exposure as part of a programme of biomedical research.
- 6 "meeting" includes video conference meeting;
- 7 "notification" means a document submitted to the Authority by a legal person  
8 to notify an intention to carry out a practice involving nuclear and/or  
9 radioactive material;
- 10 "nuclear accident" means any accident involving facilities or activities from  
11 which a release of radioactive material occurs or is likely to occur and which  
12 has resulted or may result in an international transboundary release that could  
13 be of radiological safety significance for another State;
- 14 "nuclear damage" means:
- 15 (a) loss of life or personal injury;
- 16 (b) loss of or damage to property; and each of the following to the  
17 extent determined by the law of the competent court:
- 18 (c) economic loss arising from loss or damage referred to in sub-  
19 paragraph (a) or (b) of this paragraph, insofar as not included in those  
20 paragraphs, if incurred by a person entitled to claim in respect of such loss or  
21 damage;
- 22 (d) the costs of measures of reinstatement of impaired environment,  
23 unless such impairment is insignificant, if such measures are actually taken or  
24 to be taken, and insofar as not included in sub-paragraph (b) of this paragraph;
- 25 (e) loss of income deriving from an economic interest in any use or  
26 enjoyment of the environment, incurred as a result of a significant impairment  
27 of that environment, and insofar as not included in sub-paragraph (b) of this  
28 paragraph;
- 29 (f) the costs of preventive measures, and further loss or damage  
30 caused by such measures; and

1 (g) any other economic loss, other than any caused by the  
2 impairment of the environment, if permitted by the general law on civil  
3 liability of the competent court, in the case of sub-paragraphs (a) to (e) and  
4 (f) of this paragraph, to the extent that the loss or damage arises out of or  
5 results from ionising radiation emitted by any source of radiation inside a  
6 nuclear installation, or emitted from nuclear fuel or radioactive products or  
7 waste in, or of nuclear material coming from, originating in, or sent to, a  
8 nuclear installation, whether so arising from the radioactive properties of  
9 such matter, or from a combination of radioactive properties with toxic,  
10 explosive or other hazardous properties of such matter;

11 "nuclear fuel" means Fissionable nuclear material in the form of fabricated  
12 elements for loading into the reactor core of a civil nuclear power plant or  
13 research reactor;

14 "nuclear fuel cycle" means all operations associated with the production of  
15 nuclear energy, including mining, milling, processing and enrichment of  
16 uranium or thorium; manufacture of nuclear fuel; operation of nuclear  
17 reactors; reprocessing of nuclear fuel; decommissioning; and any activity  
18 for radioactive waste management and any research and development  
19 activity related to any of the foregoing;

20 "nuclear incident" means any occurrence or series of occurrences having the  
21 same origin which causes nuclear damage or, but only with respect to  
22 preventive measures, creates a grave and imminent threat of causing such  
23 damage;

24 "nuclear installation" means a nuclear fuel fabrication plant, research  
25 reactor (including subcritical and critical assemblies), nuclear power plant,  
26 spent fuel storage facility, enrichment plant or reprocessing facility;

27 "nuclear material" means Plutonium except that with isotopic concentration  
28 exceeding 80% in plutonium-238; uranium-233; uranium enriched in the  
29 isotope 235 or 233; uranium containing the mixture of isotopes as occurring  
30 in nature other than in the form of ore or ore residue; any material containing

- 1 one or more of the foregoing;
- 2 "nuclear material capable of causing nuclear damage" see "nuclear material",
- 3 "nuclear damage";
- 4 "nuclear reactor" means any structure containing nuclear fuel in such an
- 5 arrangement that a self-sustaining chain process of nuclear fission can occur
- 6 therein without an additional source of neutrons;
- 7 "nuclear safety" means the achievement of proper operating conditions,
- 8 prevention of accident and mitigation of accident consequences, resulting in
- 9 protection of workers, the public and the environment from undue radiation
- 10 risks;
- 11 "nuclear security" means the prevention and detection of, and response to,
- 12 criminal or intentional unauthorised act involving nuclear material, other
- 13 radioactive material, associated facilities or associated activities;
- 14 "operator" means any organisation or person applying for authorisation or
- 15 authorized and/or responsible for safety when undertaking activities or in
- 16 relation to any nuclear facilities or sources of ionising radiation;
- 17 "orphan source" means a radioactive source that is not under regulatory
- 18 control, either because it has never been under regulatory control or because it
- 19 has been abandoned, lost, misplaced, stolen or otherwise transferred without
- 20 proper authorization;
- 21 "practice" means any human activity that introduces additional sources of
- 22 exposure or exposure pathways or extends exposure to additional people or
- 23 modifies the network of exposure pathways from existing sources, so as to
- 24 increase the exposure or the likelihood of exposure of people or the number of
- 25 people exposed;
- 26 "premises" includes any land whether covered by a building or not and includes
- 27 any underground and any land covered by water;
- 28 "President" means the President of the Federal Republic of Nigeria;
- 29 "providers of consumer products" includes the designers, manufacturers,
- 30 producers, constructors, installers, distributors, sellers, and importers and

- 1 exporters of consumer products;
- 2 "radiation source" means a radiation generator, or a radioactive source or  
3 other radioactive material outside the nuclear fuel cycles of research and  
4 power reactors;
- 5 "radioactive material" means a material designated in this Act and by the  
6 Authority as being subject to regulatory control because of its radioactivity;
- 7 "radioactive source" means radioactive materials that is permanently sealed  
8 in a capsule or closely bonded, in a solid form and which is not exempt from  
9 the Authority's control; it also means any radioactive material released if the  
10 radioactive source is leaking or broken, but does not mean material  
11 encapsulated for disposal, or nuclear material within the nuclear fuel cycles  
12 of research reactors;
- 13 "radioactive waste management" means All administrative and operational  
14 activities involved in the handling, pretreatment, treatment, conditioning,  
15 transport, storage and disposal of radioactive waste;
- 16 "radioactivity" means the phenomenon whereby atoms undergo  
17 spontaneous random disintegration, usually accompanied by the emission  
18 of radiation;
- 19 "radiological installation" means installations other than nuclear  
20 installations;
- 21 "registration" means a form of authorisation for practices of low or moderate  
22 risk whereby the legal person responsible for the practice has, as  
23 appropriate, prepared and submitted a safety assessment of the facilities and  
24 equipment to the Authority. The practice or use is authorised with conditions  
25 or limitations as appropriate;
- 26 "regulations" means a collection of instructions for the handling and use of  
27 nuclear materials, equipment and various sources of ionising radiation  
28 formulated by the Authority;
- 29 "reprocessing" means a process or operation, the purpose of which is to  
30 extract radioactive isotopes from spent fuel for further use;

- 1 "sabotage" means any deliberate act directed against a nuclear facility or  
2 nuclear material in use, storage or transport which could directly or indirectly  
3 endangers the health and safety of personnel, the public and the environment  
4 by exposure to radiation or release of radioactive substances;
- 5 "safety culture" means the assembly of characteristics and attitudes in  
6 organisations and individuals which establishes that, as an overriding priority,  
7 protection and safety issues receive the attention warranted by their  
8 significance;
- 9 "safety requirement" means the generally applicable requirements to be  
10 fulfilled in safety assessment for facilities and activities, as published in the  
11 IAEA Safety Standards for protecting people and the environment: Safety  
12 Assessment for Facilities and Activities General Safety Requirements No.  
13 GSR Part 4 (Rev. 1);
- 14 "security culture" means characteristics and attitudes in organisations and of  
15 individuals which establish that security issues receive the attention warranted  
16 by their significance;
- 17 "source of ionising radiation" means any source of radiation, for the purposes  
18 of radiation protection, capable of producing ion pairs in biological material(s)
- 19 "special fissionable material" means plutonium-239, Uranium-233; Uranium  
20 enriched in the isotope 235 or 233; any material containing one or more of the  
21 foregoing; and such other fissionable material as determined by the IAEA. The  
22 term "special fissionable material" does not include source material;
- 23 "source" Anything that may cause radiation exposure - such as by emitting  
24 ionising radiation or by releasing radioactive substances or radioactive  
25 material - and can be treated as a single entity for purposes of protection and  
26 safety;
- 27 "source material" means Uranium containing the mixture of isotopes occurring  
28 in nature; Uranium depleted in the isotopes 235; Thorium; any of the foregoing  
29 in the form of metal alloy, chemical compound or concentrate; any of other  
30 material containing one or more of the foregoing in such concentration as the

1 IAEA may determine;  
2 "SDR" refers to Special Drawing Right which is the unit of account defined  
3 by the International Monetary Fund and used by it for its own operations and  
4 transactions;

5 "strong background" refers to the characteristic of being well-informed,  
6 knowledgeable, scholarly or erudite as well as having up to a decade worth  
7 of experience in a field, and being regarded as an authority within that field;

8 "threat assessment" means the process of analysing systematically the  
9 hazards associated with facilities, activities or sources within or beyond the  
10 borders of Nigeria in order to identify:

11 (a) those events and the associated areas for which protective  
12 actions may be required within Nigeria;

13 (b) the actions that would be effective in mitigating the  
14 consequences of such events;

15 "waste" include:

16 (a) substance which constitute scrap material or an effluent or other  
17 unwanted surplus substance arising from the application or any process and  
18 also includes any substance or article which is required to be disposed of as  
19 being broken, worn out, contaminated or otherwise spoil;

20 (b) any substance or article which in the course of carrying on any  
21 process provided for in this Act is discharged, discarded or otherwise dealt  
22 with as if it were waste shall for the purposes of this Act be presumed to be  
23 waste unless the contrary;

24 "WMO" means - Waste Management Organisation.

25 108. This Bill may be cited as the Nuclear Safety, Security and Short title  
26 Safeguards Bill, 2019.

#### EXPLANATORY MEMORANDUM

This Bill seeks to repeal the Nuclear Safety and Radiation Protection Act No. 19 of 1995, enact the Nuclear Safety, Security and Safeguards Act and Re-Establish the Nigerian Nuclear Regulatory Authority.

