

# THE ATOMIC ENERGY ACT, 2002

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## THE UNITED REPUBLIC OF TANZANIA



No. 7 OF 2003

I ASSENT

Benjamin W. Mkapa

*President*

23rd May 2003

**An Act to establish the Tanzania Atomic Energy Commission and to provide for its functions in relation to the control of the use of ionizing and non ionizing radiation sources, the promotion of safe and peaceful uses of atomic energy and nuclear technology, and to repeal the Protection From Radiation Act, 1983.**

ENACTED by the Parliament of the United Republic of Tanzania.

PART I  
PRELIMINARY

1. This Act may be cited as the Atomic Energy Act, 2003 and shall come into operation on such date (hereinafter referred to as the appointed day) as the Minister may, by notice published in the *Gazette*, appoint.

2.- (1) In this Act, unless the context requires otherwise:

"accident" means any unintended event including operating errors, equipment failures or other mishaps, the consequences or potential consequences of which are not negligible from the point of view of protection or safety;  
 "administer ionizing radiation" means an intentional act of subjecting ionizing radiation to persons for the purpose of medical treatment or diagnosis by a qualified expert whether it be internal or external ,  
 "appointed day" means the date on which this Act came into operation;

Short title  
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Interpre-  
tation

"approved medical practitioner" means a medical practitioner responsible for the medical surveillance of workers who are liable to receive a dose greater than three tenths of the annual maximum permissible dose, whose capacity to act in this respect is recognized by the Commission;

"apparatus" means equipment associated with the emission of radiation;

"article" means item or thing or equipment associated with emission of radiation;

"atomic energy" means ionizing radiation emitted as a result of electronic or nuclear transitions in an atom;

"authorization" means a permission granted in a document by the Commission to a legal person who has submitted an application to carry out a practice or any other action described in the general obligations for practices under this Act. The authorization can take the form of registration or a licence;

"authorized officer" means an officer appointed or authorized to perform any functions in relation to the enforcement of the provisions of this Act, and includes a police officer;

"Board" means the Board of the Commission as provided for in the Schedule to this Act;

"Commission" means the Tanzania Atomic Energy Commission established under section 5 of this Act;

"continuous exposure" means external or internal exposure where the source of radiation subjects the body or any critical organ to prolonged exposure or internal exposure due to continuous intake;

"Director-General" means the Director-General of the Commission;

"disease" includes injury and bodily or mental deficiency or abnormality;

"disposal" means the emplacement of waste in an approved, specified facility (e.g. near surface or geological repository) without the intention of retrieval. Disposal may also include the approved direct discharge of effluents (e.g. liquid and gaseous wastes) into the environment with subsequent dispersion;

"dose" means a measure of the radiation received or "absorbed" by a target;

"dose equivalent" means a quantity used by the International Commission on Radiation Units and Measurements (ICRU) in defining the operational quantities ambient dose equivalent, directional dose equivalent and personal dose equivalent;

- "dose limit" means the value of the effective dose or the equivalent dose to individuals from controlled practices that shall not be exceeded;
- "effective dose" means a summation of the tissue equivalent doses, each multiplied by the appropriate weighting factor;
- "emergency plan" means a set of procedures to be implemented in the event of a radiation accident;
- "equivalent dose" means the quantity  $H_{T,R}$  defined as  $H_{T,R} = D_{T,R} W_R$  where  $D_{T,R}$  is the absorbed dose delivered by radiation type R averaged over a tissue or organ T and  $W_R$  is the radiation weighting factor for radiation type R;
- "exposure" means the act or condition of being subjected to irradiation;
- "external exposure" means the act or condition of being subjected to irradiation by a source outside the body;
- "facility" means any assembly of devices, equipment, structures or natural features whether simple or complex which serves some purpose or performs some function, in the course of which radiation is, or is capable of being emitted;
- "former Commission" means the National Radiation Commission established under section 5 of the Protection From Radiation Act, 1983 (the repealed Act);
- "ionizing radiation" means the radiation of gamma rays and x-rays or corpuscular radiation, capable of producing ions directly or indirectly in its passage through matter;
- "internal exposure" means the act or condition of being subjected to irradiation by a source inside the body;
- "licensee" means a person holding a licence granted under this Act;
- "Minister" means the Minister for the time being responsible for matters relating to Atomic Energy and nuclear technology;
- "non ionizing radiation" means optical radiation, radio frequency radiation, low-frequency electric and magnetic fields, ultrasonic radiation and any other radiation with similar biological effects;
- "nuclear safety" means the condition and ability of a nuclear installation and its servicing personnel to prevent the uncontrolled development of a fission chain reaction or an inadmissible release of radioactive substances or ionizing radiation into the environment, and to reduce the consequences of accidents;
- "nuclear installation" means a nuclear fuel fabrication plant, nuclear reactor (including critical and sub critical assemblies), research

- reactor, nuclear power plant, spent fuel storage facility, enrichment plant or reprocessing facility;
- "physical protection" means a system of technical and organizational measures preventing unauthorized activities with nuclear installations, nuclear materials and selected items;
- "plant" means and includes any machinery, facility or installation, whether affixed to land or not, but does not include any thing comprised or to be comprised in any means of transport, whether by land, water or air;
- "Practice" means any human activity that introduces additional sources of exposure pathways or extends exposure to additional people or modifies the network of exposure pathways from existing sources, so as to increase the exposure or the likelihood of exposure of people or the number of people exposed;
- "premises" means and includes any land, whether built up or not, including any place underground and any land covered by water;
- "qualified expert" means an individual who by virtue of certification by appropriate boards or societies, professional licence or academic qualification and experience, is duly recognized by the Commission as having expertise in a relevant field of specialization e.g. medical physics, radiation Protection, occupational health, quality assurance or any relevant engineering or safety specialty;
- "radiation" means and includes both ionizing and non ionizing radiation;
- "radiation accident" means any occurrence or succession Of occurrences having the same origin, which results into the release of radioactive materials, or radiation doses, which exceeds the safety standards prescribed in this Act or the regulations;
- "radiation protection" means a system of technical and organizational measures to reduce or limit exposure of people and the environment;
- "Radiation Safety Officer" means an officer appointed under subsection (1) of section 57 of this Act;
- "Radiation Safety Inspector" means any person appointed under subsection (1) of section 9 of this Act to Perform radiation inspections and any other duties relating to inspections under this Act;
- "radioactive material" means any matter or substance containing one or more radionuclides the activity or concentration of which is sufficiently intense to entail a significant risk or disability or



disease to any person or organ on exposure;  
"radioactive waste" means some material that contains or is contaminated with radionuclides at concentrations or activities greater than exemption levels as established by the Commission and for which no use is foreseen;  
"sealed source" means a source consisting of radioactive material firmly incorporated in a solid of effectively inactive materials, or sealed in an inactive container of a strength sufficient to prevent, under normal conditions of use, any dispersion of radioactive material and any possibility of contamination;  
"single exposure" means external exposure where the source of radiation subjects the body or organ to exposure of short duration, or internal exposure following the intake of radionuclides over a short period;  
"source" means an apparatus, device, material or anything capable of emitting radiation;  
"undertaking" means and includes any trade, practice, business or profession and in relation to a public or local authority, includes any of the powers or duties of that authority, and, in relation to any other body of persons, whether corporate or incorporate, includes any of the activities of that body;  
"user" means a person or body of persons or institution authorized under this Act;  
"using radiation" means and includes possession, holding, storage, transporting, importing, exporting, installing, purchasing, selling or applying radiation in any activity:

- (1) in determining, for the purposes of this Act, whether any radioactive material is kept or used on any premises, no account shall be taken of any radioactive material kept or used in or on any vehicle, vessel or aircraft if either:
  - (a) the vehicle, vessel or aircraft is on those premises in the course of journey; or
  - (b) in the case of a vessel which is on those premises otherwise than in the course of a journey, the material is used in propelling the vessel or is kept in or on the vessel for use in propelling it,
- (2) any substance or article which, in the course of the carrying on

of any undertaking, is discharged, discarded or otherwise dealt with as if it were waste shall for the purposes of this Act, be presumed to be waste unless the contrary is proved;

- (3) any reference in this Act to be the contamination of a substance or article shall be construed as a reference to its becoming radioactive or possessing increased radioactivity as a result of its being so affected by either or both of the following, that is to say:
- (a) absorption, admixture or adhesion of radioactive material or radioactive waste; and
  - (b) the irradiation by neutrons and other ionizing radiation.

Applica-  
tion

3. This Act shall apply to Mainland Tanzania as well as Tanzania Zanzibar in respect of all persons or body of persons whose undertakings involve or include generally the use of atomic energy and nuclear technology and in particular the production, processing, handling, use, holding, possessing, storage, transport and disposal of natural and artificial radioactive materials and radiation devices in respect of any other activity which involves a risk or harm arising from radiation.

Exemp-  
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exclu-  
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clearance

4-(1) Nothing in this Act shall apply to any material or use of any material, which contains radioactivity of less than 3,700 Becquerels and if there is no portion on it in which the concentration exceeds 74 Becquerels per gram of material.

(2) This Act shall not apply to ionizing radiation generators of a type approved by the Commission and any electronic tubes such as cathode ray tube for the display of visual images, provided that: -

- (a) they do not cause in any normal operating conditions an ambient dose equivalent rate or a directional dose equivalent rate, as appropriate, exceeding (1.0 microsievert per hour at a distance of 0.1 metre from any accessible surface of the apparatus; or
- (b) the maximum energy of the radiation produced is not greater than 5 KeV

(3) Sources including substances, materials and articles within notified or authorized practices may be exempted from further requirements

of this Act subject to complying with clearance levels approved by the Commission.

(4) Any exposure whose magnitude or likelihood is essentially unamenable to control through the requirements of this Act is deemed to be excluded from the application of this Act.

(5) Save as is provided for in this Act, the Minister may, upon the recommendation of the Commission, by order published in the *Gazette*, exempt from the operation of any of the provisions of this Act any person or body of persons using any material which contains radioactive substances of more than the prescribed limits, or for any other reason or reasons as may deem fit.

## PART 11

### THE TANZANIA ATOMIC ENERGY COMMISSION

5.-(1) There is hereby established a body corporate to be known as the Tanzania Atomic Energy Commission which shall seek to regulate the safe and peaceful use of atomic energy, promote and expand the contribution of atomic energy and nuclear technology to health and prosperity throughout the United Republic of Tanzania and shall:-

Establish-  
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the Com-  
mission

- (a) have perpetual succession and common seal;
- (b) in its corporate name be capable of suing and being sued;
- (c) subject to this Act, be capable of purchasing and otherwise acquiring or disposing any movable or immovable property and of entering into such contract as may be necessary or expedient for the performance of its functions under this Act or any other written law.

(2) There shall be the Board of the Commission to which the provisions of the Schedule to this Act shall have effect as to its constitution and procedure and to other matters in relation to it.

(3) The Board shall exercise such powers for the carrying out of such activities as are necessary, advantageous or proper for regulating the safe and peaceful use of atomic energy, promoting and expanding the use of atomic energy and nuclear technology.

(4) Without prejudice to sub-section (3), the Board shall primarily oversee, monitor, regulate and supervise the implementation by the secretariat of the functions prescribed under section 6 of the Act.

(5) Save for the provisions relating to the appointment of the Chairman, the Minister may, by order published in the *Gazette*, amend, add to, vary, revoke or replace any of the provisions of the Schedule.

Functions  
of the  
Commis-  
sion

6.-(1) The Commission shall:-

- (a) be responsible to all matters relating to the safe and peaceful use of atomic energy and nuclear technology including radioactive materials and radiation devices, with a view to ensuring the promotion of their applications and the Protection of workers, patients and the public generally from harm resulting from radiation;
- (b) advise On Policy issues and Provide information in the light of currently available knowledge on the proper, safe and peaceful uses of atomic energy and radiation sources, the possible hazardous effects, and the appropriate methods for enhancing the Protection Of workers, patients, the public generally and the environment from harm by radiation;
- (c) establish or adopt, in consultation with competent bodies inside and outside the country, standards of safety for the protection of health and the minimization of danger to life and property and to provide for the application and supervision of these standards in all undertakings or Practices involving the use of atomic energy and radiation sources;
- (d) establish and operationalize or implement a system for the control and authorization through registration and licensing of the importation, exportation, movement, Possession or use of atomic energy and radiation sources;
- (e) establish, promote or adopt guidelines upon which its regulatory actions are based;
- (f) review and assess submissions on safety from the operators both prior to authorizations and periodically during operation as required;
- (g) provide procedures for issuing, amending, suspending or revoking authorizations subject to any necessary conditions, that are clear and unambiguous and which shall specify the necessary elements as may be Provided in the regulations;
- (h) carry out regulatory inspections and ensure that corrective actions are taken if unsafe or Potentially unsafe conditions are detected;
- (i) take the necessary enforcement action in the event of violations of safety requirements, which actions include the closure of any radiation related services or radiation Premises;

- (j) exercise regulatory control over all matters relating to non ionizing radiation;
- (k) co-ordinate and make provision for, or carry out, or facilitate the carrying out, through the establishment or designation of institutions, the development or practical applications of atomic energy and nuclear technology for safe and peaceful purposes, including the production of electric power using nuclear reactors, with due consideration of the safety and needs of the nation;
- (l) prioritize and provide for, or carry out, or facilitate and co-ordinate the carrying out of, applied research designed to facilitate the evaluation, development or practical applications of atomic energy and radiation sources for safe and peaceful purposes, and of the modern methods for the control and minimization of the harmful effects of radiation exposure to workers, patients, the public generally and the environment;
- (m) establish and operate a system for the registration of, and the dissemination of information relating to research findings under this Act and to promote the practical applications of those findings for the purposes of advancing the peaceful and more advantageous use of atomic energy and radiation sources in the United Republic, and the effectual protection of workers, patients, the public and the environment from radiation harm;
- (n) formulate and implement programmes for the training of persons to become qualified experts in the development and practical applications of atomic energy, nuclear technology and the use of radiation sources and radiation protection;
- (o) hold or facilitate the conducting of seminars, workshops or short training courses including Public education for the safe and peaceful uses of atomic energy and nuclear technology;
- (p) promote national and international co-operation or collaboration on the applications of atomic energy and nuclear technology already introduced or intended for introduction in the United Republic;
- (q) liaise with ministries and the appropriate institutions in order to facilitate the incorporation into the syllabi of all relevant and appropriate knowledge in nuclear science and technology for the practical applications of atomic energy and the related safety and protection during utilization;
- (r) foster and facilitate the exchange of scientific and technical in

- formation, and the training of scientists and experts in the field of peaceful uses of atomic energy, nuclear technology, radiation Protection, nuclear safety and waste management;
- (s) establish and operate or facilitate the establishment and operation of a system for the control of radioactivity in foodstuffs, animal feeds and the environment; and for the management of radioactive waste emanating from various atomic energy and nuclear technology applications;
  - (t) acquire or establish any facilities, plant or equipment useful in carrying out its authorized functions, and to solicit or facilitate the soliciting of funds for the purposes;
  - (u) advise the Government on the administration of the International Atomic Energy Agency Safeguards and other related International Nuclear Agreements, Protocols, Conventions and Treaties;
  - (v) formulate and operate a national radiological emergency plan and Preparedness;
  - (w) inspect any radiation Practices or radiation Premises and where there is a breach of safety standards, order the closure of such Practices or premises or take action for locking the Premises;
  - (x) do anything or enter into any transaction which in the opinion of the Commission is calculated to facilitate the Proper exercise of its functions.

(2) The Commission may appoint such committees as it deems necessary for the Purpose of advising it on matters relating to its functions, Provided that the advice offered shall not relieve the Commission of its responsibility for making decisions and recommendations.

(3) The Commission may carry Out research Programmes on the promotion of peaceful use of atomic energy and nuclear technology at such places and at such times to be determined by it.

(4) For the Purposes of carrying out its functions, the Commission shall be deemed to be the controller of each and every license, or authorization which may be required by or under this Act in relation to any matter connected with the radiation protection of persons and the environment and the development and use in the United Republic of atomic energy and nuclear technology for safe and peaceful Purposes.

(5) For Purposes of the better Performance of its functions, the Commission shall establish and maintain a system of consultation and co

operation with any organization, institution, person or body of persons established by or under any written law, whether or not in the United Republic of Tanzania, whose functions are related to those of the Commission or whose participation or collaboration in the work of the Commission or any of its programmes is likely to advance the better and more effective furtherance of the objects and purposes of this Act.

7.-(1) There shall be appointed by the President of the United Republic a Director-General of the Commission who shall be a qualified expert in atomic energy and nuclear technology matters and who will serve for a term of five years and shall be eligible for re-appointment.

Appoint-  
ment and  
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(2) The Director-General shall be responsible to the Board for the proper administration and management of the functions and affairs of the Commission in accordance with the policy laid down by the Commission.

(3) Notwithstanding the provisions of subsection (1), the President may on his own motion or upon the recommendation of the Commission remove the Director-General from that post on any reasonable or sufficient cause or causes.

(4) Further to the appointment made under subsection (1) of this section, the Commission may advise the Minister to make further provisions for the establishment of Directorates, and appointment of its Directors.

8.-(1) There is hereby established a Secretariat of the Commission which shall subject to this Act be the executive, technical and administrative organ of the Commission.

The  
Secre-  
tariat

(2) The Director-General shall head the Secretariat and shall be the Secretary to the Board.

(3) If the Director-General is absent from the United Republic for a period exceeding three months or incapacitated by reason of illness or for any other reason is unable to perform his duties for a period exceeding three months, an officer within the Secretariat shall be appointed by the Board to act in the place of the Director-General during any such period of absence from duty.

(4) the Secretariat shall perform the day to day activities of the Commission and keep under review the progress made in the Performance of the Commissions functions and the attainment of the objects and Purposes of this Act.

The staff  
of the  
S e c r e -  
tariat

9.-(1) The Commission may from time to time appoint and employ On such terms and conditions as the Commission may determine such Officers and employees as may be necessary for effective Performance Of its functions.

(2) The Commission may engage either temporarily or on such terms as it may think fit Persons who are experts in atomic energy and nuclear technology, subject to such other written laws.

Powers to  
appoint

10. The Commission may, subject to such conditions as it may impose, engage any person or body of persons to facilitate the appointment of such officers or employees of the Secretariat.

### PART III

#### CONTROL OF THE USE OF IONIZING RADIATION SOURCES AND INSTALLATIONS

##### *a. Prohibitions relating to the control of ionizing radiation sources and installations.*

Prohibi-  
tion on  
the use,  
Posses-  
sion,  
export,  
Storage or  
transport  
of  
ionizing  
radiation  
sources

11-(1) Except as Provided otherwise in this Act, no person shall on or after the appointed day, in Pursuance of his undertaking use, possess' export' store or transport any 'ionizing radiation sources unless he is licensed and registered as such in accordance with the provisions of this Part.

(2) Any Person who contravenes, fails or refuses to comply with the provisions of subsection (1) of this section, shall be guilty of an offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than three years or to both that fine and imprisonment and the court. convicting him may, in any appropriate case, in addition to the fine or Imprisonment imposed, make an order for the forfeiture of the source in question.



12- (1) No person shall cause ionizing radiation to be applied to any person for the purpose of diagnosing or treating a disease unless the application is prescribed by a medical practitioner or dentist registered or licensed under any written law.

Prohibition on administering ionizing radiation to persons

(2) No person shall administer ionizing radiation to another person unless the person administering it is in possession of a valid licence issued or registered under this Act.

(3) Any person who contravenes or willfully fails or refuses to comply with any of the provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than five hundred thousand shillings or to an imprisonment for a term of not less than six months.

13. (1) Except as provided otherwise in this Act, no person shall on or after the appointed day, in the furtherance of his undertaking install, use or possess any plant or apparatus designed for:

Prohibition on the use and possession of plants and apparatus

- (a) the production or use of atomic energy; or
- (b) the carrying out of any process which is preparatory or ancillary to the production or use of atomic energy and which involves or is capable of causing the emission of radiation; or
- (c) the accumulation, storage, processing or disposal of radioactive waste regardless of their origin unless he is registered or licensed for that purpose in accordance with the provisions of this Part.

(2) For the purposes of this section, installation of a plant shall include the adaptation of any plant, facility, apparatus or any part of it in order to achieve any of the purposes or obtain any of the effects specified in subsection (1) of this section.

(3) Any person who contravenes, or willfully fails or refuses to comply with any of the provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than three

years or to both that fine and imprisonment, and the court may, in addition to the fine or imprisonment imposed, make an order for the forfeiture of the plant or the apparatus in question.

Prohibition on importation of nuclear installations

14- (1) Except as provided otherwise in this Act, no person shall after the appointed day, import or cause to be imported into Tanzania any nuclear installation, material, plant or other apparatus which is intended to be made into a source of radiation, unless he has previously complied with the provisions of this Part which relate to importers and the importation of nuclear installations, and as such radiation devices to be imported shall comply with the specifications set out by the Commission.

(2) For the purpose of this section, the importation of an article, substance, material or part of an apparatus which, on being incorporated into or fixed, attached or connected to any existing plant or installation, would result in making the plant or installation a source of ionizing radiation, shall be deemed to be importation of a nuclear installation.

(3) Any person who contravenes, or willfully fails or refuses to comply with any of the provisions of this section shall be guilty of an offence and liable on conviction to a fine of not less than three million shillings or to imprisonment for a term of not less than three years or to both that fine and imprisonment, and in addition to the fine or imprisonment imposed, a court may make an order for the forfeiture of the nuclear installation in question.

Prohibition on operation of nuclear installations

15.-(1) No person shall operate or hold himself as qualified and capable of operating any apparatus, facility, plant or installation or any part of any apparatus, facility, plant or installation, which is or consists of a source or sources of ionizing radiation unless he is a qualified expert and is duly registered as such in accordance with the provisions of this Part.

(2) No user shall employ, permit or otherwise cause any person who is not a qualified expert to operate any plant, installation or apparatus, or any part of which constitutes his undertaking.

(3) Any person who contravenes or fails to comply with any of the Provisions of this section, shall be guilty of an offence and liable on conviction to a fine of not less than five hundred thousand shillings or to imprisonment for a term of not less than six months or to both that fine and imprisonment.

*b. Provisions relating to authorization.*

16. Prior to the granting of an authorization, the applicant shall be required to submit a detailed demonstration of safety, which shall be reviewed and assessed by the Commission in accordance with clearly defined procedures whereas the extent of the control applied shall be commensurate with the potential magnitude and nature of the hazard presented.

Submis-  
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detailed  
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17.-(1) Every person wishing to import, export, store or transport or whose business consists of the importation, exportation, storage or transportation of any apparatus, article, plant, installation or other material or substance which is a source or is intended to be used for the purposes of an undertaking involving the emission of radiation, shall do so only after securing a licence issued to him by the Commission under this section.

Licensing  
of impo-  
rters,  
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transporters

(2) A licence may be issued under this section upon an application being made to the Commission in the prescribed form and payment of prescribed fees.

(3) The licence issued under this section shall be in the prescribed form and shall contain such particulars in relation to the licensee and the article or other material to be imported as may be prescribed by the Commission.

(4) In considering whether or not to grant an authorization under this section, the Commission shall take into account the number of persons individually importing sources of radiation, and in the case of an applicant who is a user, whether he has fulfilled any requirements prescribed in respect of such applicants by the Commission.

(5) The Commission may issue a licence under this section subject to such conditions or limitations as it may deem fit or necessary to impose in any particular case and shall prescribe in the *Gazette* the requirements to be met by the licensee or the applicant.

(6) Any applicant shall be required to fulfill all the requirements Prescribed by the Commission by order in the *Gazette*.

Licensing  
of users

18.-(1) Any Person intending to become a user shall be required to secure a licence issued to him by the Commission under this section permitting him to do so.

(2) The provisions of section 17(2), (3) and (5) of this Act shall also apply to applications for and the grant of licenses under this section.

(3) A licence shall not be granted under this section to any person other than a body of Persons corporate or incorporate, and shall not be transferable.

(4) A licence granted under this section shall expire upon a specified period and may be renewable after fulfillment of the safety requirements Prescribed by the Commission.

Authori-  
Zation of  
qualified  
experts

19.-(1) Every person intending to carry out a Practice that involves the administering Of ionizing radiation to persons, shall before doing so acquire a registration or a licence from the Commission allowing him to administer ionizing radiation for the Purpose of diagnosing or treating a disease.

(2) The Commission shall, in consultation with competent bodies, establish a system for the authorization of qualified experts to administer ionizing radiation to persons, and in doing so the Commission may require such persons to perform qualifying tests in radiation protection by the Commission or institutions designated by it.

Registra-  
tion of  
mobile  
ionising  
radiation  
devices

20.-(I) With effect from the appointed day, no person shall:-

- (a) keep, or cause or permit to be kept, mobile ionising radiation devices of any description for the Purpose of its being used in the delivery by him of services to which this section applies; or
- (b) use, lend or let on hire, or cause or Permit to be used, lent or let on hire, mobile ionising radiation devices of any description in the course of the delivery by him of any such services, unless he is registered under this section in respect of that apparatus or is exempted from registration under section 21 in respect of mobile ionising radiation devices of that description.

(2) Every application for registration under this section shall be made to the Commission, specifying the mobile ionising radiation devices to which the application relates, and the nature of the services to which this section applies in the course of which the apparatus is to be used, lent or let on hire, and containing such other information as the Minister may, by regulation, Prescribe.

(3) Where an application is made to the Commission for registration under this section in respect of any apparatus, the Commission may register the applicant in respect of that device, either unconditionally or subject to such limitations or conditions as the Commission may see fit, or may refuse the application.

(4) Where the Commission has granted an application for the registration of any person under this section in respect of any mobile ionising radiation device, the Director-General shall furnish him with a certificate containing all material particulars of the registration.

21-(1) The Commission is hereby exempted from registration under section 19 of this Act in respect of any mobile ionising radiation device of every description that may come into its Possession or under its control in the course of the performance of its functions, under sections 17 and 18 in respect of import, export, transport, transit, use or Possession respectively

Exemption from registration and licensing

(2) No person or body of persons shall apply for registration or licensing as a Person using ionizing radiation if the activities of his undertaking involve the use of.

- (a) radioactive substances of a concentration of less than 74 Becquerels per gram for unsealed sources, the limit being increased to 3,700 Becquerels per gram for sealed sources;
- (b) navigation instruments or timepieces containing radio luminescent paint, but not their manufacture or repair except as provided for in paragraph (a);
- (c) a device emitting Ionizing radiation and containing radioactive substances in amounts greater than the values specified in Paragraph (a), Provided that it:-
  - (i) is of a type approved by the Commission;
  - (ii) Possesses advantages in relation to the potential hazard of the ionizing radiation it emits such that, in the opinion of the Commission, justifies its use;

(iii) it does not cause at any Point situated at a distance of a tenth of a metre from the accessible surface of the device and under normal operating conditions, a dose rate exceeding one microsievert per hour.

(3) The Minister may, upon the advice of the Commission, by order published in the *Gazette*, grant further exemptions from registration under this Part, by reference to such categories of persons, and such descriptions of radioactive substances and mobile ionising radiation devices, as he may specify in the order.

(4) Except as Provided for under subsection (1), any exemption under this section may be granted or confirmed subject to such limitations or conditions as may be specified by the Minister,

Liability  
of  
Licensee

22,-(I) Every Licensee to whom this section applies shall be responsible for ensuring that no radiation emitted as a result of the carrying on of his undertaking on his Premises, cause any harm or injury to any person or damage to any Property which is on the Premises or elsewhere subject to subsection (4) of this section.

(2) No person other than the licensee to whom this section applies shall be under any liability in respect of any harm to any person or any damage to any Property caused by any radiation to which subsection (1) applies.

(3) No Licensee shall incur any liability by virtue of subsection (1) in respect of any radiation whose emission, or the causing of any harm to any person or any damage to any property by their emission, is attributable to hostile action in the course of civil strife, any armed conflict, including any armed conflict within the United Republic of Tanzania.

(4) Whenever a physical or mental disability occurs in a person, and which an approved medical Practitioner:

- (a) ascribes to radiation exposure, the disability shall be Presumed to have resulted from, exposure to radiation from a source of strength sufficient to give rise to such disability;
- (b) ascribes to radiation as well as to other causes, the following factors shall be considered for the Purposes of establishing the cause of the disability, namely:

- (i) if the disability is of a nature known to be capable of being caused by either radiation or any other cause and it appears that the person may have been exposed to a source of radiation of a strength sufficient to have caused the disability, it shall be presumed that the disability, arose from one or more of such exposures if no record of personal exposures have been maintained to a standard approved by the Commission;
- (ii) if the disability is of a nature known to be capable of arising from radiation and from any other possible cause, and there exists a personal radiation exposure record in respect of that person which indicates that there have occurred in relation to him exposures in excess of the recommended dose limits, it shall be presumed that the disability occurred as a result of that radiation exposure;
- (iii) if the disability is of a nature known to be capable of arising from radiation and from any other possible cause, and there exists a personal radiation exposure record in respect of that person which has been maintained to a standard approved by the Commission, it shall be presumed that the disability did not arise from radiation exposure if the record indicates that the exposures have been within the permissible limits on all possible occasions of exposure.

23.-(1) Subject to the provisions of this Act, every licence issued under this Part may be modified in its terms, suspended or revoked.

Modifica-  
tion, sus-  
pension  
and revo-  
cation of  
licence

(2) The Minister shall make regulations providing for the circumstances and occasions on which a licence may be modified, suspended or revoked, and for the consequences of each of those events, and the procedure for the appeal against the decision made under this section, shall be the one provided for under section 26(3) of this Act.

*c. Provisions Relating to Records*

24.-(1) The Director-General shall keep and maintain a register in which all records of users shall be kept.

Register  
of users  
and mo-  
bile de-  
vices

(2) The register kept by the Director-General shall be in the prescribed form in which he shall enter and maintain such particulars in relation to users as the Commission may prescribe.

(3) Any person intending to use or administer ionizing radiation shall be required to submit his particulars to the Commission for verification before registering him under this Act.

(4) The Director-General shall, at least once in every calendar year, publish in the Gazette the Particulars as he may deem fit in respect of every Person whose records are kept in the register.

(5) Where an authorization granted to any person under this Part Permitting him to use Ionizing radiation is revoked, the particulars of that person shall be deleted from the register.

(6) The Director-General shall cause to be kept and maintained a register Of mobile devices.

Register  
of  
qualified  
experts

25.-(1) The Director-General in collaboration with any competent institution shall keep and maintain a register of qualified experts operating apparatus, installations and plants in undertakings owned by a user.

(2) As soon as Practicable after the Commission has accepted the application of any person for registration as a qualified expert under this section, the Director-General shall enter in the register in respect of that person such particulars as the Commission may by resolution prescribe.

(3) The provision of sub-section (2) of this section shall also apply to persons undertaking repairs, maintenance and installation of radiation devices, plants, and apparatus.

(4) All changes in the particulars registered under subsection (2) of this section, shall be entered in the register by the Director-General.

(5) The Director-General may, with the general or specific approval of the Commission rectify any clerical error, in the register or other document containing extracts from the register.

Removal  
or varia-  
tion of  
particu-  
lars

26.-(1) The Commission may, for the purpose of this Act, at anytime remove or vary particulars of any user from the register and assign reasons.



(2) The Commission may, on canceling or varying particulars under this section, give notice to that person.

(3) Any person aggrieved by the cancellation or variation of his particulars from the register may within sixty days appeal to the Minister whose decision on the matter shall be final and conclusive.

27. Every user shall have the duty to keep records of his practice in a format prescribed by the Commission.

Duty to keep records

#### PART IV

##### CONTROL OF RADIOACTIVITY IN FOODSTUFFS

28. The provisions of this Part shall be read together with the Tanzania Food, Drugs and Cosmetics Act, 2003.

The Tanzania Food Drugs and Cosmetics Authority Act, No. I of 2003

29. Save as is provided for under this Act, the Commission shall, in consultation with the Tanzania Food and Drugs Authority and other competent institutions, establish a system designated for the control of radioactivity in foodstuffs.

System for the control of radioactivity in foodstuffs

30. It shall be a requirement under this Part of this Act for any manufacturer, importer and exporter of foodstuffs specified in relevant regulations to obtain a radioactivity analysis certificate from the Commission before the said food is imported into the country or exported out of the country or distributed for human and animal consumption.

Requirement for radioactivity analysis

31.-(1) The system, as established under section 29 of this Act, shall ensure that exports and imports of food is stuffs are screened or analysed for radioactive materials contamination imported into the country or exported or distributed for human and animal consumptions.

Analysis for radioactive materials contamination

(2) The Commission shall analyse and issue a radioactivity analysis certificate in respect of every food sample representing the consignment in question.

Act No. 1  
of 2003

(3) Where the Commission is of the opinion that the foods analysed - is not fit for human consumption, due to the detected high levels of radio activities, it shall forward the radioactivity analysis certificate for consideration and final decision to the Director-General of the Tanzania Food and Drugs Authority established by the Tanzania Food, Drugs and Cosmetics Act, 2003.

(4) All customs and Port authorities at all entry and exit points in collaboration with the Commission and the Tanzania Food and Drugs Authority, shall bear a responsibility to ensure compliance Of this Act.

#### PART V

RADIATION PROTECTION, PHYSICAL PROTECTION, NUCLEAR SAFETY,  
RADIOACTIVE WASTE MANAGEMENT AND EMERGENCY PREPAREDNESS

Duty to  
ensure  
safety

32. It shall be the duty of every user to monitor measure, verify and record values, Parameters and facts with an impact on nuclear safety, radiation Protection, physical Protection and emergency Preparedness, to the extent laid down in the regulations made under this Act.

Accumu-  
lation of  
radioac-  
tive waste

33.-(1) Subject to the provisions of this Part, with effect from the appointed date, no person shall, except in accordance with an authorization granted in that behalf under this Part, accumulate, with a view to subsequent disposal, any radioactive waste on any Premises which are used for the Purposes of an undertaking carried on by him, or cause or permit any radioactive waste to be so accumulated, if he knows or has reasonable grounds for believing it or be radioactive waste

(2) For the Purpose of this section, where radioactive material is Produced, kept or used 0, any Premises, and any substance arising from the Production, storage or use of that material is accumulated in a part of the Premises appropriated for the Purposes, and is retained there for a period of three or more months, that substance shalt unless the contrary is Proved, be presumed:

- (a) to be radioactive waste, and
- (b) to be accumulated on the premises with a view to its subsequent disposal

Disposal  
of  
radioac-  
tive waste

34.-(1) Subject to the provisions of this Part, as from the appointed day, no Person shall, except in accordance with an authorization granted

in that behalf under section 35 of this Act, dispose of any radioactive waste on or from any Premises which were used for the purposes of an undertaking carried on by him, or cause or permit any radioactive waste to be so disposed of, if he knows or has reasonable grounds for believing it to be radioactive waste.

(2) Where any Person keeps any mobile radiation device for the purpose of its being used in the provision of services to which section 20 of this Act applies, he shall not, on or after the appointed day, dispose of any radioactive waste arising from any such apparatus so kept or cause or permit any such radioactive waste to be disposed of, except in accordance with an authorization granted in that behalf under this Part.

(3) Where on or after the appointed day any person, in the course of carrying on an undertaking, receives any radioactive waste for the purpose of its being disposed of, he shall not, except in accordance with an authorization granted in that behalf under this Part, dispose of that waste, or cause or permit it to be disposed of, knowing or having reasonable grounds for believing it to be radioactive waste.

(4) The disposal of any radioactive waste shall not require further authorization, if it is waste, which falls within the provisions of an authorization granted under subsection (1) or (2) of this section.

35.-(I) The power to grant authorizations under section 33 or 34 in respect of the accumulation or disposal of radioactive waste on or from any Premises used for any undertaking by any user shall be exercisable by the Commission.

(2) Before granting its authorization, to which sections 33 and 34 relate, the Commission shall consult with local authorities, water utilization, river basin or other public authorities as appear proper.

(3) An authorization may be granted either in respect of radioactive waste generally or in respect of such one or more descriptions of radioactive waste as may be specified in the authorization, and any such authorization may be granted subject to such limitations or conditions as the Commission may impose On granting that authorization.

(4) Upon granting an authorization, the Director-General shall:-

(a) furnish the person to whom the authorization is granted with a

Authority  
of accu-  
mulation  
and dis-  
posal of  
radioac-  
tive waste

certificate containing all material particulars of the authorization;  
and

(b) unless, for reasons of national security, it is in the opinion of the Commission necessary that knowledge of the authorization be restricted, send a copy of the certificate to local authority in whose area the radioactive waste is to be disposed of or accumulated, and to any other public or local authority consulted in relation to the application for the grant of the authorization.

Revoca-  
tion or  
variation  
of autho-  
rization

36.-(1) The Commission may at any time, either on its own motion, or on the directions of the Minister, revoke or vary any authorization granted under this Part and assign reasons.

(2) Upon the revocation or variation of an authorization, the Commission shall give notice to the person to whom the authorization was granted, and if a copy of the certificate of authorization was sent to any local authority, shall send a copy of the notice to that local authority.

Facilities  
for safe  
manage-  
ment of  
radioac-  
tive waste

37.-(1) The Commission shall require the Licensee to obtain adequate facilities for the safe management of radioactive waste.

(2) There shall be established a Central Radioactive Waste Management Facility known by its acronymy as CRWMF which shall serve as a National Centre for the collection, characterization, conditioning, segregation and generally the safe management of radioactive wastes.

(3) Where the Commission Proposes to arrange for the safe management of radioactive waste, at a CRWMF or disposal, it shall, before carrying out such undertaking, consult with any local or Public authority in whose area of jurisdiction the place would be situated.

(4) The Commission may, after consultation with the Minister, make charges for the use of any facilities established under subsection (2) of this section.

(5) If there is radioactive waste on any Premises and the Commission is satisfied that the waste Ought to be disposed of but by reason of the Premises being unoccupied, or the Occupier being absent or insolvent, or for any other reason it is unlikely that the waste will not be lawfully disposed of unless the Commission exercises its Powers under this subsection, the Commission may dispose of that radioactive waste as it deems fit.

38. The normal exposure of individuals shall be restricted so that neither the total effective dose nor the total equivalent dose to relevant organs or tissues caused by the possible combination of exposures from authorized practices exceeds any relevant dose limit specified in regulations made under this Act. Dose limits
39. Prior to the establishment of a nuclear installation by any person or body of persons, the Commission shall ensure, that an appropriate system is put in place to ensure nuclear safety and physical protection. Nuclear safety and physical protection
40. The Minister shall after consultation with the Commission make and Publish regulations in the *Gazette* requiring persons or categories of users to make provisions either by insurance or by such other means as may be specified, for the purposes of making available at all times funds sufficient to cover any claims which may be established against those persons as licensee, in respect of any injury to any person or damage to any property caused by radiation emanating from the activities of their undertakings. Licensee's liability
- 41--(I) The Director-General upon consultation with the Board, shall make and publish in the *Gazette* rules relating to emergency preparedness and, in particular, the procedure and manner of dealing with the accidents involving radiation sources or in connection with the use of sources in any premises or an occurrence of any such class or description as may be prescribed. Radio-logical emergency preparedness
- (2) Without prejudice to the generality of the power conferred by subsection (1) of this section, the rules may include provisions regarding:
- (a) the reporting and the procedure for the reporting the occurrence;
  - (b) the person or persons to whom the report is to be made;
  - (c) consequences on any person of not reporting the occurrence;
  - (d) the inspection of the premises where the occurrence had happened;and
  - (e) matters connected with legal proceedings resulting from such occurrences.
- (3) Every authorized person shall notify the Commission and any relevant intervening institutions promptly when a situation requiring protective action has arisen or is expected to arise and shall keep them informed of.-

- (a) the situation as it develops and how it is expected to develop;
- (b) the measures taken for the protection of workers and members of the public;
- (c) the exposure that has been incurred and that are expected to be incurred.

(4) Reports of occurrences of the nature to be provided for in the rules shall, except where the Director-General considers it in the interests of national security to restrict their publication, be made public in such manner and at such times as he may prescribe.

Liability of public authorities in respect of radiation sources and installations

42. For purposes of this Act, any department of Government, public or statutory corporation, board, local government authority or other public authority, which for the purposes of furthering its functions uses or is required to use radiation shall comply with the provisions of this Act in the same manner and to the same extent as any other person using radiation and the heads of those institutions shall be held responsible for non compliance.

## PART VI

### CONTROL OF RADIATION EXPOSURE FROM NATURAL SOURCES

The Mining Act, Act No.5 of 1998

43. The provisions of this Part shall be read together with the Mining Act, 1998 and the regulations made thereunder.

System for the control of natural radiation exposure

44. The Commission shall establish a system designated for the determination and control of radiation exposures associated with naturally occurring radioactive materials including mining activities and processing of radioactive ores.

Guidance levels and measurements of natural sources

45. The system established under section 44 above shall ensure that:—

- (a) guidance levels for the evaluation of natural radiation exposure of people are established and enforced;
- (b) systematic measurements and evaluation of the content of natural radionuclides in all environments with natural sources are made and the related risk assessed to enable intervention levels.

46.- (1) The Commission shall have power to enter, assess radiation hazards and establish a monitoring programme in mines, radioactive ores, processing plants and any other activities involving naturally occurring radioactive materials.

Power to enter and assess radiation hazards

(2) In exercising its powers under subsection (1) of this section, the Commission shall specify procedures for radiation safety of workers and proper disposal of wastes.

47. Where natural sources are intentionally and consciously utilized, including mining and processing of uranium ore subject to any written laws, their management shall be subject to the provisions of this Act to the same extent as that of other ionizing radiation sources.

Management of natural sources

## PART VII

### THE CONTROL OF DEVICES PRODUCING NON IONIZING RADIATION

48. The Commission shall, in consultation with other competent bodies, establish a system for authorization of the use of plants, apparatus and devices, which emit non ionizing radiation above levels prescribed in the regulations.

Authorization of non ionizing radiation sources

49. The Commission shall be responsible for inspection and surveillance of all activities involving the use or emission of non ionizing radiation and shall: -

Inspection and surveillance

- (a) Provide safety instructions and guidance to investigators and users of equipment capable of emitting non ionizing radiation,
- (b) provide feedback in the form of survey or audit reports to users to facilitate the use of correct procedures in the use of non ionizing radiation sources; and
- (c) take enforcement measures to ensure the safe use of non ionizing radiation sources.

50. All sources of non ionizing radiation shall be handled in accordance with the provisions of this Act and the regulations made under section 70 thereof.

Handling of non ionizing radiation

## PART VIII

## THE PROMOTION OF ATOMIC ENERGY AND NUCLEAR TECHNOLOGY

- Promotion of atomic energy and nuclear technology
51. It shall be the responsibility of the Commission to design and maintain a system aimed at ensuring an effective and proper promotion of safe and peaceful utilization of atomic energy and nuclear technology in the United Republic.
- Allocation of resources
- 52.-(1) For the purpose of this Part, the Commission shall allocate its resources in such a manner as to secure efficient atomic energy and nuclear technology utilization and the greatest possible benefits to the general public.
- (2) The Commission may enter into partnership with any institution or organization inside and outside Tanzania on the development and practical application of atomic energy and nuclear technology for peaceful purposes.
- (3) The Commission shall make arrangements to secure the necessary financing from sources within or outside the country or solicit and arrange for the supplying of any material services, equipment, and facilities to any institution or agency for research, development or practical utilization of atomic energy and nuclear technology, and that it may set forth the terms and conditions, on which any of these resources may be disbursed, distributed or given to such institutes or agencies.
- Approval of projects for utilization of atomic energy
53. Any person or body of persons, wishing to carry out an undertaking or project involving research, development and peaceful utilization of atomic energy and nuclear technology with own resources or assistance from within or outside the United Republic, shall submit to the Commission, with project plans and relevant agreements, an application for approval to do so, and that in considering such approval the Commission shall take into account how radiation protection, nuclear safety and radioactive waste management issues have been addressed in the project plans.
- Transfer of nuclear technology
54. In order to ensure the efficient and effective co-ordination of the transfer of nuclear technology and the peaceful utilization of atomic energy, the Commission may as soon as practicable establish or acquire the following: -



- (a) plants, equipment and facilities for the receipt, storage and issue or transportation of radiation sources or radioactive materials;
- (b) adequate health and safety measures;
- (c) control laboratories for the analysis and verification of safety in the various radiation practices of atomic energy utilization undertakings.

55. Where the Commission in consultation with the Minister considers that the United Republic interest requires that it is necessary that the development of atomic energy in the United Republic be fully and effectively utilized, it shall recommend to relevant ministry or ministries to establish through an Act of Parliament or designate national institutes or agencies for efficient research, development and practical application of atomic energy and nuclear technology in undertakings such as nuclear power, food irradiation and the like.

Establishment of Institutes or agencies

## PART IX

### THE OPERATIONS OF THE COMMISSION RELATING TO RADIATION PROTECTION SERVICES.

56.-(1) For the purposes of establishing, maintaining and operating radiation protection services, the Commission shall establish a system which will facilitate the:—

Radiation protection services

- (a) determination of the extent of exposure to radiation of the public generally and, in particular of radiation workers, patients, students, persons employed in research and teaching establishments and in hospital and dental surgeries, and assess the risk of disability ascribable to such exposure, subject to the provisions of this Act;
- (b) examination, if deemed necessary by radiation safety inspector of all premises in respect of which a licence to install or use apparatus emitting radiation is in force and all places in respect of which authorizations have been granted for the accumulation or disposal of radioactive waste;
- (c) correct and accurate appraisal of the extent of radiation exposures in the country;
- (d) proper collection and dissemination of information and advice to the public, and to licensees in particular, regarding measures necessary or desirable to be taken to reduce exposure to acceptable or prescribed limits;

- (e) effective and efficient operation of a national emergency response and preparedness programme which is linked to the international conventions on early notification in case of a nuclear accident or radiological emergency and that on request for assistance in case of a radiological emergency or any other relevant convention to which the United Republic is a party;
- (f) operation of a national coordinated radioactive waste management programme;
- (g) radiation safety and quality control of radiation and devices radiation premises through inspections and quality assurance checks.

(2) In addition to the provisions of subsection (1) of this section, the Commission shall make arrangements to facilitate the establishment and maintenance of personnel radiation dosimetry services by providing: —

- (a) personal radiation measuring devices to be worn by individuals occupationally exposed to radiation;
- (b) a reporting system for the maintenance of adequate records of personal radiation exposure measurements, making it possible for it to report to the Commission and to licensees at suitable intervals on the information contained in the records; and
- (c) early or efficacious warnings to individuals who have been or are likely to be subject to overexposure.

(3) The Commission shall designate or establish and maintain a National Calibration Laboratory for Radiation Dosimetry for the purposes of. -

- (a) ensuring that national dosimetry measurements are linked to the existing and approved international measurement system;
- (b) performing standard calibration of radiation survey instruments employed in individual or area monitoring programmes; and
- (c) providing training in radiation measurements.

(4) Every licensee shall be required to: —

- (a) make available an adequate number of survey instruments for area monitoring at radiation work place; and

- (b) send the radiation survey instruments to an approved dosimetry laboratory at least once a year and every after its maintenance or repair for calibration.

(5). The radiation protection services provided for under this Part may be rendered upon payment of fees to the Commission.

57.-(1) Every user shall, after consultation with the Director-General, appoint a qualified expert employed by him to be a Radiation Safety Officer in relation to his undertaking.

Appoint-  
ment an  
duties of  
Radiation  
Safety Of-

(2) For purposes of this section, where an undertaking consists of activities carried on in two or more different premises, and the carrying on of the activities in such premises involves the use of ionizing radiation, there shall be appointed a radiation safety officer in respect of each such premises.

(3) It shall be the duty of every Radiation Safety Officer appointed under this section to:-

- (a) advise the user appointing him in all matters pertaining to the protection of workers, patients, the public and the environment from radiation;
- (b) advise the user regarding formulation, the observance and enforcement of local rules for the protection of workers, patients, the public and the environment from ionizing radiation;
- (c) advise and liaise with the Commission regarding the implementation of radiation protection measures at his work place; and
- (d) assist the Commission in the enforcement of the provisions of this Act in relation to the undertaking in respect of which he is appointed.

58.-(1) Every Radiation Safety Inspector, in the exercise of his duties under this Act, shall have power to:

Powers of  
Radiation  
Safety In-  
spectors

- (a) make such examination and inquiries as may be necessary to ascertain that the provisions of this Act are being complied with;
- (b) examine, either alone or in the company of any other person or a police officer, any person with respect to any matter

connected with the enforcement of this Act, or require such person to be so examined;

- (c) take or confiscate any device or document or anything relating to radiation safety inspection for the purpose of establishing evidence against any contravention of the provisions of this Act; and
- (d) do such other act or thing necessary, expedient or desirable for the effective carrying into effect the provisions of this Act.

(2) Every Radiation Safety Inspector shall bear an identity card issued and signed by both the Chairman and the Director-General of the Commission for the purpose of authenticating him in the course of his duties as an Inspector.

Right to enter and inspect

59.-(1) Subject to the provisions of this Act, and of any other written law, a Radiation Safety Inspector or other authorized officer in the course of his duties shall have the right to enter any premises, vehicle, vessel or aircraft or anything to verify that all legal requirements are being complied with and upon such entry, require the production of any licence or certificate authorizing the use, possession, installation or transportation of any source or sources concerned, and has the right to scrutinize any register, notice, book or any document kept or required to be kept by the licensee in pursuance of this Act or any regulations, rules, directions or other provisions made or issued under it.

(2) Every owner or occupier, and every agent or employee of the owner or occupier of any premises, vehicle, vessel or aircraft in or on which there is any source installed or waste accumulated, disposed of or being transported or abandoned shall upon demand by a Radiation Safety Inspector in accordance with the provisions of this Act, furnish the means required or necessary to facilitate the entry, inspection, examination, inquiry, the taking of samples and any other act.

Confidentiality and custody of information

60.-(1) Every Board Member, Member of the Committee, Radiation Safety Inspector, every employee of the Commission, authorized officer and the Director-General, shall treat as confidential the source of any information which comes to his knowledge in the course of the performance of his duties, and which is of a type ordinarily considered as being subject to professional, commercial, trade or industrial secrecy.

(2) The provisions of this section shall remain in force in respect of all persons to whom they relate whether or not any such person has

ceased to be engaged or employed in the furtherance of the administration of the provisions of this Act.

## PART X

### FINANCIAL RESOURCES OF THE COMMISSION

61. The funds and resources of the Commission shall consist of the following: Funds of the Commission

- (a) such sums as may be appropriated by Parliament;
- (b) such sums accruing to the Commission by way of fees or other payments charged in respect of any services rendered by the Commission;
- (c) such sums accruing to the Commission by way of donations, grants, bequests or loans as the Commission may from time to time receive from any person, organization or institution;
- (d) such other sums or property which may vest in the Commission under this Act or any other written law or which may vest in the Commission in any other manner in the performance of its functions.

62.-(1) Funds of the Commission shall be managed and controlled by the Board which shall for that purpose be answerable to the Minister, subject to subsection (3) of this section. Management and control of Funds

(2) The funds shall be applied to meet the expenses of the Commission.

(3) The Minister may from time to time issue directives in writing regulating the use of the funds, and shall, after consultation with the Minister for Finance, make rules providing for the management of the funds and for the audit of the accounts of the funds.

63.-(1) Not less than two months before the beginning of any financial year the Board shall at its first meeting especially convened for that purpose, pass a detailed annual budget of the amounts respectively: Annual and supplementary budgets

- (a) expected to be received; and
  - (b) expected to be disbursed by the Commission during the financial year.
- (2) If in any financial year the Commission requires to make any

disbursement not provided for in the annual budget for the year, the Board shall meet and pass a supplementary budget detailing the disbursements.

(3) The annual budget and every supplementary budget shall be in such a form and manner and shall include such details as the Minister may approve.

(4) Forthwith upon the passing of the annual budget or any supplementary budget, the Board shall submit to the Minister the budget for his approval.

(5) The Minister shall, upon the receipt of the annual budget or supplementary budget, approve or disapprove it or approve it subject to such amendments as he may consider fit.

(6) Where the Minister has approved any annual budget or supplementary budget, the budget as approved by him, whether with or without amendment, shall be binding on the Commission which, subject to the provisions of subsection (2) of this section shall confine its disbursement within the items and amounts contained in the applicable estimates as approved by the Minister.

(7) The Board may:

- (a) with the sanction in writing of the Minister make disbursement notwithstanding that the disbursement is not provided for in any budget;
- (b) adjust expenditure limits to take account of circumstances not reasonably foreseeable at the time the budget was prepared, subject to submitting a supplementary budget to the Minister within two months of the alteration of expenditure limits becoming necessary.

Powers to  
invest  
Act No.33  
of 1967

64. With the prior approval of the Minister in consultation with the Minister for Finance, the Commission may from time to time invest part of the monies available in accordance with the Trustees Investment Act, 1967.

Powers to  
borrow

65. With the prior approval of the Minister, the Commission may, from time to time, borrow monies for the purposes of the Commission by way of borrow, loan or overdraft, and upon such security and such terms and conditions relating to repayment of the princi

pal and payment of interest, subject to any such direction by the Minister and as the Commission may consider fit.

66.-(1) The Commission shall cause to be provided and kept proper books of accounts and record with respect to: Accounts and audit

- (a) the assets and liabilities of the Commission;
- (b) the receipt and expenditure of monies by, and other financial transactions of the Commission; and

shall cause to be made out for every financial year a balance sheet and a statement showing details of the income and expenditure of the Commission and all its assets and liabilities.

(2) Not later than six months after the close of every financial year, the accounts including the balance sheet of the Commission in respect of that financial year shall be audited by any auditors or audit firms appointed by the Board for that purpose.

(3) Every audited balance sheet shall be placed before a meeting of the Board for adoption and endorsement.

67. The Commission shall within six months after the close of the financial year, cause to be prepared and submitted to the Minister a report detailing the activities and operations of the Commission during that year and accompanied by: Annual statement on accounts and submission of a report to the Minister

- (a) a copy of the audited accounts of the Commission;
- (b) a copy of the auditors report on the accounts; and
- (c) such other information as the Minister may direct.

68. The Minister shall as soon as practicable, and in any case not later than twelve months after the close of a financial year, lay before the National Assembly the following documents in relation to that financial year: Annual statement and report to be laid before the National Assembly

- (a) a copy of the audited statement of accounts of the commission;
- (b) a copy of the auditors report; and
- (c) a copy of the implementation report by the Commission.

## PART XI

## MISCELLANEOUS PROVISIONS

Fees and charges

69. For the purpose of the better performance and furtherance of its objects under this Act, and whenever it deems necessary or expedient to do so, the Commission through the Minister in consultation with the Minister for Finance, may impose any fees or charges not specified in this Act to any licensee or such other person for any service rendered to or to be rendered by the Commission.

Regulations

70. (1) The Minister may, on his own motion or upon the recommendation or advice by the Commission, upon consultation with other relevant authorities or institutions make regulations for the better carrying out of the objects and provisions of this Act.

(2) Without prejudice to the generality of the power conferred by subsection (1) of this section, the Minister may make regulations:

- (a) providing for the conduct of the business of the Commission subject to the other provisions of this Act;
- (b) prescribing forms, certificates, procedures, fees and other matters in relation to licenses, registration and authorizations provided for under this Act;
- (c) limiting the use of radioactive materials, devices or equipment emitting dangerous radiation for any specified purpose including the use for medical, dental or surgical purposes;
- (d) restricting exposure to radiation in the lowest possible level;
- (e) determining the highest permissible doses;
- (f) determining the highest permissible concentration of radioactive materials;
- (g) designating any areas as controlled areas for the purposes of this Act, and provide for the labelling of such areas and radioactive materials;
- (h) requiring and providing a system for informing of workers and the public on the dangers capable of resulting from radiation and on the necessary safety precautions;
- (i) providing for special medical check-ups of workers before and after commencing their occupation and in definite time intervals;
- (j) providing for the control and regulation of the purchase, sale, handling, transport and transfer of radiation devices or radioac



- tive materials;
- (k) providing for the proper management, control and administration of the radiation protection services;
  - (l) providing for the formulation and establishment of a code of practice for both ionizing and non ionizing radiation; professional conduct for qualified experts and persons engaged in the operation, repair and maintenance of radiation devices, and nuclear installations;
  - (m) providing for the formulation and establishment of codes of practice for both ionizing and non ionizing radiation;
  - (n) providing for the control of radioactivity in foodstuffs, animal feeds and the environment;
  - (o) requiring and providing a system for effective promotion, safe and peaceful utilization of atomic energy and nuclear technology;
  - (p) providing for emergency response, medical, occupational, and public exposures;
  - (q) providing for any other matter which, in the opinion of the Minister, it is necessary that it be provided for so as to ensure the efficient performance of the functions of the Commission and, the furtherance of the objects and provisions of this Act;

(3) Regulations made under this section shall be published in the government *Gazette*.

Protection of  
Members of the  
Board and  
Officers of the  
Commission

71. No matter or thing done by any, member of the Board or any Officer of the Commission shall, if done *bonafide*, in the execution or purported execution of the functions conferred upon such member or officer by this Act or by regulations made hereunder, render such member or officer personally liable for such matter or thing.

Offences

72.-(1) Any person who knowingly and willfully destroys, damages or interferes in any way with any equipment, device, instrument, plant or installation or any part of it, which is a source of radiation in such a manner as to cause the uncontrolled or unregulated emission of radiation which causes injury or damage, loss of limb or any part or parts of the body or property of any person or loss of life, shall be guilty of an offence and liable on conviction to a fine of not less than five million shillings or to imprisonment for a term of not less than five

years or to both that fine and imprisonment.

(2) Any person who knowingly, willfully and without any reasonable excuse:—

- (a) fails or refuses to produce any register, licence, certificate, notice or other document required of him by a Radiation Safety Inspector in the performance of his functions under this Act;
- (b) in any other manner obstructs any Radiation Safety Inspector to the owner, occupier or other person responsible for the management of any source;
- (c) conceals, prevents or attempts to prevent a person from appearing before or being examined by a Radiation Safety Inspector;
- (d) in any other manner, obstructs any Radiation Safety Inspector in the course of performing functions under this Act; or

(e) contravenes, fails or refuses to comply with any other provision of this Act in relation to which contravention, failure or refusal no specific penalty is provided,

shall be guilty of an offence and liable on conviction to a fine of not less than one million shillings or to imprisonment for a term of not less than twelve months, or to both that fine and imprisonment.

(3) Where any person is convicted of an offence under this Act, the court convicting him may, in any appropriate case, in addition to any penalty that is imposed, make an order for the forfeiture, impounding, destruction, incapacitation, sealing or disposal in any other manner of any radioactive material, apparatus, substance or article in respect of which the offence in question may have been committed.

(4) The Commission, with the prior approval of the Board, shall also have powers to impose fines to any person or body of persons when it is satisfied that the person or body of persons has actually contravened the provisions of this Act.

73.-(1) In any proceeding for an offence or a suit claiming damages arising from or under this Act, without prejudice to any requirement to comply with any special condition included in the licence, certificate, authorization or regulations, any evidence that the holder of a licence, certificate or authorization has complied with the radiation safety standards or recommendations or radiation exposure limits published by the International Atomic Energy Agency or by

Evidence  
in legal  
proceedings

the International Commission on Radiological Protection and the International Radiation Protection Association shall be *prima facie* evidence that, the holder of such licence, certificate, or authorization has complied with radiation safety standards with respect to the requirements of this Act.

(2) Any authenticated records of exposure measurements maintained in accordance with the provisions of this Act shall, unless the contrary is proved, be accepted by any court of law before which proceedings arising from this Act are conducted, as evidence establishing causes of disability.

#### PART X11

##### CONSEQUENTIAL AND TRANSITIONAL PROVISIONS

Savings of Regulations, authorizations etc, issued under The Protection From Radiation Act, No. 5 of 1983

74. Save as otherwise stated, all orders, regulations, authorizations or prohibitions, contracts and or any transactions issued or made under the provisions of the Protection From Radiation Act, 1983, shall, upon the commencement of this Act, be considered as having been issued or made under the provisions of this Act, and shall have the same effect.

Transfer of assets by and liabilities Act No.5 of 1983

75. All properties, rights, obligations, liabilities and assets owned by the former Commission by virtue of the provisions of the Protection From Radiation Act of 1983, shall, on coming into operation of this Act, vest in the Commission established under this Act.

Transfer of staff and their rights Act No. 5 of 1983

76.-(1) An employee or appointee of the former Commission established under the Protection From Radiation Act, of 1983 shall, on the coming into operation of this Act, so far as may be practicable continue as an employee of the Commission in a post comparable to that which the employee held with the former Commission;

(2) Nothing in this section shall operate so as to prevent an employee or appointee of the former Commission from resigning or being terminated.

(3) The terms and conditions of employment or appointment of any employee or appointee transferred from the former Commission to the Commission shall not be less favourable than those enjoyed by that employee or appointee immediately prior to the date on which the transfer was made, and that the terminal benefits of the employee or appointee shall accrue from the date of employment or appointment by the Commission.

77.-(1) The former Commission shall pay all outstanding remunerations including previous social security contributions to its employees or appointees who have not been transferred to the Commission.

Outstanding  
remu-  
nerations

(2) The service of any employee or appointee transferred from the former Commission to the Commission shall be deemed to be continuous for the entire period from the date of the commencement of employment or appointment with the Commission and where such employee or appointee was a member of any statutory, voluntary pension or other superannuating social security benefits scheme, the Commission shall contribute to such scheme accordingly.

(3) Where an employee or appointee of the former Commission is not transferred to the Commission, his services with the former Commission shall be terminated and where such employee or appointee is a member of any statutory, voluntary pension or other superannuating social security benefits scheme such employee or appointee shall be paid terminal benefits in accordance with the laws and regulations governing such schemes immediately before such termination.

78. The Commission, after consultation with the Minister for Finance shall be exempted from the payment of income tax, stamp duty and any other direct taxation as the Minister for Finance may by order in the Government *Gazette* prescribe.

Exemp-  
tion  
from taxa-  
tion

79. The Protection From Radiation Act, 1983 is hereby repealed.

Repeal of  
the  
 Protec-  
tion From  
Radiation  
Act, Act  
No. 5 of  
1983  
Composi-  
tion of  
the Board

—————  
SCHEDULE.  
—————

(Section 5 (2))

*Provisions relating to the Board of the Commission*

1.- (1) The Board of the Commission shall consist of fifteen members as follows:-

(a) a Chairman, who shall be appointed as such by the President;

- (b) the Director General of the Commission for Science and Technology;
- (c) the Director of Science and Technology in the Ministry responsible for Science and Technology;
- (d) a senior State Attorney appointed by the Attorney-General on his behalf,
- (e) the Director of diagnostic services in the Ministry responsible for Health - Mainland Tanzania;
- (f) two representatives at a Directors' level or above in the Ministries responsible for health and agriculture - Tanzania Zanzibar;
- (g) a senior military officer who is an expert in atomic energy matters or the related field from the Tanzania Peoples Defence Forces;
- (h) a representative at a Directors' level or above in the Ministry responsible for energy and minerals;
- (i) a representative at a Directors' level or above in the Ministry responsible for Agriculture and Livestock Development;
- (j) three representatives from civil society appointed by the Minister, two of whom shall be from Tanzania Zanzibar;
- (k) any other two members appointed by the Minister from amongst the following:-
  - (i) Executive Director of Ocean Road Cancer Institute;
  - (ii) the Director responsible for Industries in the Ministry of Industries and Trade;
  - (iii) the Director responsible for International Co-operation in the Ministry of Foreign Affairs and International Cooperation;
  - (iv) a representative at the level of a senior lecturer or above and who is an expert in atomic energy matters from Universities;
  - (v) any other person considered competent in atomic energy matters.

(2) In making appointments of Members of the Board the Minister, shall ensure that he appoints persons who, in his opinion, have the necessary qualification or experience to enable them to make a useful contribution to the deliberations of the Commission and to the effectual performance of its functions.

The Vice-Chairman

2.-(1). The Members shall elect one of their member to be the Vice-Chairman who shall subject to his continuing to be a Member, hold office for a term of one year, but shall be eligible for re-election.

(2). The Minister when appointing members of the Board shall amongst other things consider and take it into account gender balance.

Tenure of office of the Members

3.-(1) A Member appointed under subparagraph(l) of paragraph (1) to this Schedule:-

- (a) shall, unless his appointment is sooner terminated by the Minister, or he ceases tenure of office in any other way to be member, hold office for a period of three years but shall be eligible for reappointment;
- (b) may at any time resign from his office by giving notice in writing addressed to the Minister, and from the date specified in the notice or, if no date is so specified from the date of receipt of the notice by the Minister, he shall cease to be a Member;

- (c) the office of a member who is absent without any reasonable cause from three consecutive meetings of the Board shall, notwithstanding any representations, become vacant;
- (d) in the event that a member other than a member from a civil society is unable to attend a meeting an alternate member duly endorsed by him may attend the meeting on his behalf
- (2) Where the office of a member becomes vacant pursuant to paragraph 3 (1) (a) or (c) or by reason of incapacitation or death, the Minister shall, acting in consultation with the Board appoint a person to fill the vacancy that is created.
4. When any Member of the Board, other than the Director-General is by reason of absence from the United Republic of Tanzania or illness or other sufficient cause unable to perform his duties as a Member of the Board, the appointing authority may appoint a temporary member in his place, and the temporary member shall hold office until he or she comes back or when the term of the office of the substantive Member expires, whichever occurs first. Appointment of a temporary member
- 5.- (1) The Board shall ordinarily meet at such times and places as it deems necessary for the transaction of its business, but shall meet at least once in every three months. Meetings of the Board
- (2) The Chairman, or in his absence the Vice-Chairman, may at any time call an extraordinary meeting of the Board, and shall call such a meeting upon a written request by a majority of members in office.
- (3) The Chairman, or in his absence the Vice-Chairman, shall preside at every meeting of the Board. In the absence of both the Chairman and the Vice-Chairman, the Members present shall elect a Member from amongst themselves to preside over the meeting.
6. The quorum at any meeting of the Board shall be half of all the members in office. Quorum
7. (1) Without prejudice to sub-paragraph (2), a question proposed at a meeting of the Board shall be decided by consensus, or where there is no consensus by a majority of the votes of members present and voting and in the event of an equality of votes then the person presiding shall have a casting vote in addition to his deliberative vote. Decisions of the Board
- (2) The Board may decide without a meeting by circulation of the relevant Board papers among the members and the expression of the views of the Members in writing, but any member may require that the decision be deferred and the subject matter be considered at a meeting of the Board.
8. (1) The Board shall cause to be recorded and kept details of all business conducted or transacted at its meetings, and the minutes of each meeting of the Board shall be signed by the person presiding at that meeting. Minutes of meetings
- (2) Any minutes purporting to be signed by the person presiding at a meeting of the Board shall, in the absence of proof of error, be deemed to be a correct record of the meeting whose minutes they purport to be.

Vacancies  
not to  
invalidate  
proceed-  
ings

9. The validity of any act or proceeding of the Board shall not be affected by any vacancy among its members whose minutes they purport to be.

Board to  
regulate  
its own  
proceed-  
ings

10. subject to the provisions of this Schedule, the Board may regulate its own proceedings.

Remu-  
nerations  
and  
allow-  
ances

11. Members of the Board shall be entitled to such remunerations, fees or allowances for their services and the Commission may from time to time prescribe such remunerations, fees and allowances Payable to members subject to approval by the Minister.

Official  
seal

12.-(1) There shall be an official seal of the Commission.

(2) The application of the Official seal of the Commission shall be authenticated by two signatories namely-  
(a) the Chairman of the Board or some other member of the Board other than the Director-General authorized by the Board on that behalf; and  
(b) the Director-General or some other employee of the Commission by the Board to act for that Purpose in place of the Director-General.

(3) Any instrument or contract which is executed or entered into by a person other than a body corporate, shall not be required to be under seal, may be executed or entered into on behalf of the Commission by the Director -General or any member of the Board if that member has previously been authorized, either specifically or generally by resolution of the Board to execute or enter into that Particular instrument or contract or that class of instrument or contract,

(4) Every document purporting to be a document executed or issued by or on behalf of the Commission and to be sealed with the official seal of the Commission authenticated in the manner provided for by sub-paragraph (2) to act for that purpose shall be deemed to be so executed or issued until the contrary is proved.

Proof of  
docu-  
ments

13. Any document purporting to be duly executed or issued under the seal of the Commission as to any resolution of the Board or as having been issued on behalf of the Commission, shall be receivable in all courts of law or tribunals or other bodies authorized to receive evidence and shall, unless the contrary is proven, be deemed, without further proof, to be sufficient evidence of what is contained in the document

Passed in the National Assembly on the 1st April, 2003

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*Clerk of the National Assembly*