RULEBOOK ON PROCEDURE OF KEEPING RECORDS OF NUCLEAR MATERIALS

I. FIELDS OF APPLY AND DEFINITIONS

Article 1.

With this Rulebook is prescribed methods for nuclear material accountancy, how nuclear material user is reporting to Serbian radiation protection agency (SRPNA) and how SRPNA is keeping records about nuclear material accountancy.

This Rulebook shall apply to any person or undertaking setting up or operating an installation for the production, separation, reprocessing, storage or other use of source material or special fissile material. It shall not apply to holders of end products used for non-nuclear purposes which incorporate nuclear materials that are in practice irrecoverable.

Article 2.

For the purposes of this Rulebook, the following definitions shall apply:

1. „nuclear materials“ means ores, source materials or special fissile materials as defined in Article 3. of the Law on radiation protection and nuclear safety;

2. „waste“ means nuclear material in concentrations or chemical forms considered as irrecoverable for practical or economic reasons and which may be disposed of;

3. „retained waste“ means waste, generated from processing or from an operational accident, measured or estimated on the basis of measurements, which has been transferred to a specific location within the material balance area from which it can be retrieved;

4. „conditioned waste“ means waste, measured or estimated on the basis of measurements, which has been conditioned in such a way (for example, in glass, cement, concrete or bitumen) that it is not suitable for further nuclear use;

5. „discards to the environment“ means waste, measured or estimated on the basis of measurements, which has been irrevocably discarded to the environment as the result of a planned discharge;

6. „categories“ (of nuclear material) are natural uranium, depleted uranium, uranium enriched in uranium-235 or uranium-233, thorium, plutonium, and any other material which the SRPNA may determine;

7. „item“ means an identifiable unit such as a fuel assembly or a fuel pin;

8. „batch“ means a portion of nuclear material handled as a unit for accounting purposes at a key measurement point and for which the composition and quantity are defined by a single set of specifications or measurements. The nuclear material may be in bulk form or contained in a number of items;

9. „batch data“ means the total weight of each category of nuclear material and, in the case of plutonium and uranium, the isotopic composition when appropriate. For reporting purposes the weights of individual items in the batch shall be added together before rounding to the nearest unit;

10. „effective kilogram“ is a special unit used in safeguarding nuclear material, obtained by taking:

    1) for plutonium, its weight in kilograms;

    2) for uranium with an enrichment of 0,01 (1 %) and above, its weight in kilograms multiplied by the square of its enrichment;

    3) for uranium with an enrichment below 0,01 (1 %) and above 0,005 (0,5 %), its weight in kilograms multiplied by 0,0001;

    4) for depleted uranium with an enrichment of 0,005 (0,5 %) or below, and for thorium, its weight in kilograms multiplied by 0,00005;

11. „material balance area“ means an area such that, for the purpose of establishing the material balance:

    1) the quantity of nuclear material in each transfer into or out of each material balance area can be determined;

    2) the physical inventory of nuclear material in each material balance area can be determined when necessary in accordance with specified procedures;

12. „key measurement point“ means a location where nuclear material appears in such a form that it may be measured to determine material flow or inventory, including but not limited to, the places where nuclear material enters, leaves or is stored in, material balance areas;

13. „book inventory“ of a material balance area means the algebraic sum of the most recent physical inventory of that material balance area, and of all inventory changes that have occurred since that physical inventory was taken;

14. „physical inventory“ means the sum of all the measured batch quantities or derived estimates of batch quantities of nuclear material on hand at a given time within a material balance area, obtained in accordance with specified procedures;

15. „material unaccounted for“ means the difference between the physical inventory and the book inventory;

16. „shipper/receiver difference“ means the difference between the quantity of nuclear material in a batch as measured at the receiving material balance area and the quantity as stated by the shipping material balance area;

17. „source data“ means those data, recorded during measurement or calibration or used to derive empirical relationships, which identify nuclear material and provide batch data, including: weight of compounds; conversion factors to determine weight of element; specific gravity; element concentration; isotopic ratios; relationship between volume and manometer readings; and relationship between plutonium produced and power generated;

18. „site“ means an area delimited by the SRPNA, comprising one or more installations, including closed-down installations, as defined in their relevant basic technical characteristics, whereby:

1) waste treatment or waste storage installations do not constitute a site in themselves;

2) in the case of a closed-down installation where source material or special fissile material in quantities less than one effective kilogram was customarily used, the term is limited to locations with hot cells or where activities related to conversion, enrichment, fuel fabrication or reprocessing were carried out;

3) „site“ also includes all facilities co-located with the installations which provide or use essential services including hot cells for processing irradiated materials not containing nuclear material; plants for the treatment, storage and disposal of waste;

19. „site representative“ means any person, undertaking or entity designated by the State being responsible for the declarations referred to in Article 3.2;

20. „installation“ means a reactor, a critical installation, a conversion plant, a fabrication plant, a reprocessing plant, an isotope separation plant, a separate storage installation, a waste treatment or waste storage installation; or any other location where source material or special fissile material is customarily used;

21. „decommissioned installation“ means an installation for which it has been verified that residual structures and equipment essential for its use have been removed or rendered inoperable so that it is not used to store and can no longer be used to handle, process or utilise source material or special fissile material;

22. „closed-down installation“ means an installation for which it has been verified that operations have been stopped and the nuclear material removed but which has not been decommissioned.

II. BASIC TECHNICAL CHARACTERISTICS AND PARTICULAR SAFEGUARD PROVISIONS

Article 3.

Any person or undertaking setting up or operating an installation for the production, separation, reprocessing, storage or other use of source material or special fissile material shall declare to the SRPNA the basic technical characteristics of the installation, using the relevant questionnaire shown in Annex I.

For the purpose of the first subparagraph ‘use’ of nuclear materials is taken to include, inter alia: power production in reactors, research in critical or zero energy installations, conversion, fabrication, reprocessing, storage, isotope separation, and ore concentration, as well as treatment or storage of waste.

For ore production, the provisions of Articles 24. and 25. apply.

SRPNA shall designate a site representative for each site on State’s territory who shall provide to SRPNA a declaration containing a general description of the site, using the questionnaire shown in Annex II.

The declaration shall be submitted within 120 days of the date of entry into force of this Rulebook and updates shall be submitted by 1 April of each year.

While the site representative carries the responsibility for the timely collection of the relevant information and the submission of the general description of the site to SRPNA, the responsibility for

the correctness and the completeness of the declarations remains with the persons or the undertakings setting up or operating the installation, and for buildings on a site which do not involve nuclear material. As far as possible the declarations provided for in paragraphs 1. shall be submitted in electronic form if they are kept in such form by the person or undertaking. If information is sent to SRPNA both in electronic and in paper form, the paper form shall prevail.

Article 4.

The declaration of the basic technical characteristics of new installations shall be communicated to SRPNA in accordance with Article 3.1. at least 200 days before the first consignment of nuclear material is due to be received.

For new installations with an inventory or annual throughput of nuclear material of more than one effective kilogram, all relevant information relating to the owner, operator, purpose, location, type, capacity and expected commissioning date shall be communicated to SRPNA at least 200 days before construction begins.

Changes in the basic technical characteristics for which advance notification is not required as specified in the particular safeguard provisions set out in Article 6., shall be communicated to SRPNA within 30 days after the modification is complete.

Using the questionnaire in Annex I, existing waste treatment or waste storage installations shall communicate to SRPNA the basic technical characteristics of their installation within 120 days of the date of entry into force of this Rulebook.

For other existing installations any additional information required by the questionnaire in Annex I shall be supplied within 120 days of the date of entry into force of this Rulebook.

Article 5.

To enable SRPNA to plan its safeguards activities, the persons or undertakings referred to in the first subparagraph of Article 3.1. shall communicate to SRPNA the following information:

1. annually, an outline programme of activities on the basis of Annex XI, indicating, in particular, provisional dates for taking a physical inventory;

2. at least 40 days before taking a physical inventory, the programme for such work.

Changes affecting the outline programme of activities and, in particular, the taking of physical inventories shall be communicated to SRPNA without delay.

Article 6.

Acting on the basis of the basic technical characteristics submitted pursuant to Article 3.1. and Article 4., SRPNA shall adopt particular safeguard provisions relating to the matters set out in paragraph 2. of this Article. The particular safeguard provisions shall be drawn up by means of a SRPNA decision addressed to the person or undertaking concerned, taking account of operational and technical constraints and in close consultation with the person or undertaking concerned.

Until SRPNA decision on particular safeguard provisions is adopted, the person or undertaking concerned shall apply the general provisions of this Rulebook.

The particular safeguard provisions shall include the following:

1. the material balance areas and the selection of key measurement points for determining the flow and stocks of nuclear materials;
2. the changes in basic technical characteristics for which advance notification is required;
3. the procedures for keeping records of nuclear materials for each material balance area and for drawing up reports;
4. the frequency of, and procedures for, taking physical inventories for accounting purposes as part of safeguards measures;
5. the containment and surveillance measures, in accordance with the arrangements agreed upon with the person or undertaking concerned;
6. the arrangements for sample-taking by the person or undertaking concerned solely for safeguards purposes.

The particular safeguard provisions may also specify the content of subsequent communications required under Article 5. as well as the conditions under which shipments and receipts of nuclear material require advance notification.

III. NUCLEAR MATERIAL ACCOUNTANCY

Article 7.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall maintain a system of accountancy and control for nuclear materials. This system shall include accounting and operating records and, in particular, information on the quantities, category, form and composition of these materials as provided for in Article 18., their actual location and the particular safeguards obligation as provided for in Article 17., together with details of the recipient or shipper when nuclear materials are transferred.

The system of measurements on which the records are based shall comply with the most recent international standards or shall be equivalent in quality to those standards. On the basis of these records, which shall be retained for a period of at least five years, it must be possible to draw up and substantiate the declarations made to SRPNA. Accounting and operating records shall be made available to SRPNA's inspectors in electronic form if they are kept in this form by the installation. Further details may be specified in the particular safeguard provisions referred to in Article 6. for each installation.

Article 8.

For each material balance area, the operating records shall include, where appropriate:

1. the operating data used to determine changes in the quantities and composition of nuclear material;

2. a list of inventory items, updated to the best extent possible, and their location;

3. the data, including derived estimates of random and systematic errors, obtained from the calibration of tanks and instruments as well as from sampling and analysis;

4. the data resulting from quality control measures applied to the nuclear material accountancy system, including derived estimates of random and systematic errors;

5. a description of the sequence of actions taken to prepare for, and take, a physical inventory, and to ensure that the inventory is correct and complete;

6. a description of the actions taken in order to ascertain the cause and magnitude of any accidental or unmeasured loss that might have occurred;

7. the isotopic composition of plutonium, including its decay isotopes, and reference dates, if recorded at the installation for operational needs.

When available, the data referred to in point 7. shall be communicated to SRPNA on request.

Article 9.

In respect of each material balance area the accounting records shall show the following:

1. all inventory changes, so that the book inventory can be determined at any time;

2. all measurement and counting results used to determine the physical inventory;

3. all corrections made to inventory changes, book inventories and physical inventories.

The accounting records relating to any inventory change and physical inventory shall show the material identification, batch data and source data for each batch. These records shall account separately for uranium, thorium and plutonium, in accordance with the categories listed in Article 18.4.2. In addition, for each inventory change, the date of the change and, when appropriate, the dispatching material balance area or the shipper and the receiving material balance area or the recipient shall be indicated.

Article 10.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall provide SRPNA with accounting reports.

The accounting reports shall contain the information available on the date of reporting and must be corrected at a later date if necessary. Accounting reports shall be transmitted to SRPNA in electronic form, except in cases where SRPNA has granted a written derogation.

On a reasoned request by SRPNA, further details or explanations in connection with these reports shall be supplied within three weeks.

Article 11.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall transmit to SRPNA, within 30 days of the date of entry into force of this Rulebook, an initial book inventory of all nuclear materials they are holding, using the format set out in Annex V. This Article does not apply to the persons or undertakings of waste treatment or waste storage installations.

Article 12.

For each material balance area, the persons or undertakings referred to in the first subparagraph of Article 3.1. shall transmit to SRPNA inventory change reports in respect of all nuclear materials using the format set out in Annex III.

Unless otherwise specified in the particular safeguard provisions referred to in Article 6. for an installation, these reports shall be sent monthly, at the latest 15 days after the end of the month, and shall state all inventory changes which have occurred or become known during that month.

For months in which a physical inventory is taken, and the physical inventory taking date is not the last date of the month, two separate inventory change reports shall be transmitted:

1. a first inventory change report containing any inventory changes up to and including the physical inventory taking date, which shall be sent at the latest, together with the second inventory change report, or together with the physical inventory listing and the material balance report if the latter are sent before the second inventory change report;

2. a second inventory change report containing all inventory changes from the first day after the physical inventory taking date to the end of the month which shall be sent within 15 days of the end of the month.

For months in which no inventory changes occur, the persons or undertakings concerned shall send the inventory change report, carrying over the ending book inventory of the previous month.

In order that they may be reported as a single inventory change, small inventory changes, such as transfers of samples for purposes of analysis, may be grouped together, as laid down in the particular safeguard provisions referred to in Article 6. for the installation concerned.

Inventory change reports may be accompanied by comments explaining the inventory changes.

Article 13.

For each material balance area, the persons or undertakings referred to in the first subparagraph of Article 3.1. shall transmit to SRPNA:

1. material balance reports, in the format set out in Annex IV, showing:
   1) beginning physical inventory;
   2) inventory changes (first increases, then decreases);
   3) ending book inventory;
   4) ending physical inventory;
   5) material unaccounted for;

2. a physical inventory listing, in the format set out in Annex V, showing all batches separately.

The reports and the listing shall be transmitted as soon as possible and at the latest within 30 days of the date on which a physical inventory was taken.

Unless otherwise specified in the particular safeguard provisions referred to in Article 6. for an installation, a physical inventory shall be taken every calendar year and the period between two successive physical inventory takings shall not exceed 14 months.

Article 14.

The persons and undertakings referred to in the first subparagraph of Article 3.1. shall transmit to SRPNA a special report whenever the circumstances referred to in Articles 15. or 22. arise.

The type of information to be supplied in such reports shall be specified in the particular safeguard provisions referred to in Article 6.

The special reports, and further details or explanations which may be requested by SRPNA in connection with these reports, shall be supplied without delay.

Article 15.

A special report shall be made in the following cases:

1. if, as a result of any unusual incident or circumstances, it is believed that there has been or might be an increase or a loss of nuclear material in excess of the limits specified for these purposes in the particular safeguard provisions referred to in Article 6.;

2. if the containment has unexpectedly changed from that specified in the particular safeguard provisions referred to in Article 6., to a point where an unauthorised removal of nuclear material has become possible.

The persons or undertakings concerned shall submit these reports as soon as they have become aware of any such loss or increase or sudden change in the containment conditions, or of anything which leads them to believe that there has been such an occurrence. The causes shall also be stated as soon as they are known.

Article 16.

In respect of reactors, calculated data on nuclear transformations shall be reported in the inventory change report at the latest when irradiated fuel is transferred from the reactor material balance area. In addition, other procedures for recording and reporting nuclear transformations may be specified in the particular safeguard provisions referred to in Article 6.

Article 17.

Nuclear materials subject to particular safeguard obligations entered into by Republic of Serbia in an agreement concluded with a third country or an international organisation shall, unless otherwise stipulated by such an agreement, be identified separately for each obligation in the following notifications:

1. initial book inventory provided for in Article 11.;
2. inventory change reports, including ending book inventories, provided for in Article 12.;
3. material balance reports and physical inventory listings provided for in Article 13.;
4. intended imports and exports provided for in Articles 20. and 21.

Unless specifically prohibited in any of those agreements, such separate identification shall not preclude the physical mixing of materials.

Paragraph 1. shall not apply to the Agreements concluded by Republic of Serbia with the International Atomic Energy Agency.

Article 18.

In any notification referred to in this Rulebook, quantities of materials covered by the Rulebook shall be expressed in grams.

The corresponding material accounting records shall be kept in grams or in smaller units. They shall be kept in such a manner as to render them trustworthy and, in particular, to comply with current practices in Republic of Serbia.

In the notifications, quantities may be rounded down when the first decimal is 0 to 4 and rounded up when the first decimal is 5 to 9.

Unless otherwise provided for in the particular safeguard provisions referred to in Article 6. the notifications shall include the following:

1. the total weight of the elements uranium, thorium and plutonium, and also, for enriched uranium, the total weight of the fissile isotopes;

2. separate material balance reports as well as separate line entries in inventory change reports and in physical inventory listings for the following categories of nuclear material:
   1) depleted uranium;
   2) natural uranium;
   3) uranium enriched to less than 20 %;
   4) uranium enriched to 20 % and above;
   5) plutonium;
   6) thorium.

Article 19.

SRPNA may grant producers and users of nuclear materials a written derogation from the rules governing the form and frequency of the notifications provided for in Articles 10. to 18., in order to take account of any particular circumstances in which safeguarded materials are used or produced.

The derogation shall be granted on submission of a request by the person or undertaking concerned using the form set out in Annex IX.

The derogation shall be granted only for a whole material balance area in which nuclear material is not processed or stored together with nuclear material for which no derogation can be granted.

SRPNA may grant a derogation for a material balance area holding:

1. quantities of nuclear material commensurate with those specified in Annex I-E, which are kept in the same state for long periods;

2. depleted uranium, natural uranium or thorium which is used exclusively in non-nuclear activities;

3. special fissile materials when used in gram quantities or less as sensing components in instruments;

4. plutonium with an isotopic concentration of plutonium-238 exceeding 80 %.

The persons or undertakings to whom a derogation is granted shall transmit an annual report to SRPNA by 31. January of each year, using the form set out in Annex X. This report shall describe the situation at the end of the previous calendar year.

In the case of exports of nuclear material to a third country, the persons or undertakings to whom a derogation has been granted shall transmit a report to SRPNA as soon as possible and, at the latest, within 15 days of the end of the month in which the export occurred, using the form set out in Annex X. This report shall indicate the quantity of nuclear material exported and the stock of nuclear material still subject to derogation.

In the case of imports of nuclear material from a third country the persons or undertakings to whom a derogation is granted shall transmit a request to SRPNA to add this material to the list of materials in respect of which the derogation applies. The request shall be transmitted to the Commission as soon as the transfer date is known to the person or undertaking and, at the latest, within 15 days of the end of the month in which the transfer occurred, using the form set out in Annex IX.

SRPNA may define other specific clauses concerning the form and the periodicity of the reports in the particular safeguard provisions referred to in Article 6.

If the conditions for derogation are no longer met, the derogation shall be withdrawn by SRPNA, acting upon receipt of information from the person or undertaking to whom a derogation is granted.

IV. TRANSFERS BETWEEN STATES

Article 20.

The persons or undertakings referred to in the first subparagraph of Article 3(1) shall give advance notification to SRPNA if any source materials or special fissile materials are exported to a third country;

Advance notification is required only:

1. where the consignment exceeds one effective kilogram;

2. where an installation transfers a total quantity of materials to the same State that could exceed one effective kilogram in any consecutive period of twelve months, even though no single consignment exceeds one effective kilogram.

The notification shall be given after the conclusion of the contractual arrangements leading to the transfer, using the form set out in Annex VI, and shall reach SRPNA at least eight working days before the material is to be packed for transfer.

If so required for reasons of physical protection, special arrangements concerning the form and transmission of the notification may be agreed upon with SRPNA.

Exports and shipments of nuclear material contained in waste or ores are not subject to the provisions of paragraphs 1. to 4.

Article 21.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall give advance notification to SRPNA if any source materials or special fissile materials are imported from a third country.

Advance notification is required only:

1. where the consignment exceeds one effective kilogram;

2. where an installation imports or receives a total quantity of materials from the same State that could exceed one effective kilogram in any consecutive period of twelve months, even though no single consignment exceeds one effective kilogram.

The notification shall be given as far in advance as possible of the expected arrival of the material and, at the latest, on the date of receipt, using the form set out in Annex VII, and shall reach SRPNA at least five working days before the material is unpacked.

If so required for reasons of physical protection, special arrangements concerning the form and transmission of the notification may be agreed upon with SRPNA.

Imports and receipts of nuclear material contained in waste or ores are not subject to the provisions of paragraphs 1. to 4.

Article 22.

A special report shall be submitted, as provided for in Article 14., by the persons or undertakings notifying a transfer under Articles 20. and 21. where, following exceptional circumstances or an incident, they have received information that nuclear materials have been lost or appear to be lost, or where there has been a considerable delay during transfer.

Article 23.

Any change of the dates for packing before transfer, transport or unpacking of nuclear materials which have been given in the notifications provided for in Articles 20. and 21., shall be communicated without delay, with an indication of the revised dates if known, unless the change gives rise to a special report.

V. SPECIFIC PROVISIONS

Article 24.

Any person or undertaking extracting ores in the territory of Republic of Serbia shall declare the basic technical characteristics of the ore extraction operations to SRPNA, using the questionnaire in Annex I-I, within 120 days of the date of entry into force of this Rulebook, and shall communicate the programme of activities in accordance with Article 5.

By way of derogation from Articles 7., 8. and 9., any person or undertaking extracting ores shall keep accounting records thereof indicating, in particular, the quantities of the ore extracted, with the average

uranium and thorium content, and the stock of extracted ore at the mine. The records shall also contain details of shipments, stating the date, consignee and quantity in each case. Such records shall be retained for at least five years.

Article 25.

By way of derogation from Articles 10. to 18., any person or undertaking extracting ores shall inform SRPNA, using the form set out in Annex VIII of:

1. the amount of material dispatched from each mine, by 31 January of each year for the previous calendar year;

2. exports of ores to third countries, by the date of the dispatch at the latest.

Article 26.

Any person or undertaking engaged, within the territory of Republic of Serbia, in transporting, or temporarily storing during transport, nuclear materials shall accept or hand over such materials only against a duly signed and dated receipt. This receipt shall state the names of the parties handing over and receiving the materials and indicate the quantities carried as well as the category, form and composition of the materials.

If so required for reasons of physical protection, the description of the materials transferred may be replaced by a suitable identification of the consignment. Such identification shall be traceable to records held by the persons or undertakings referred to in the first subparagraph of Article 3.1.

Those records shall be retained by the contracting parties for at least five years.

Article 27.

Any intermediaries taking part in the conclusion of any contract for the supply of nuclear materials, such as authorised agents, brokers or commission agents, shall keep all records relating to the transactions performed by them or on their behalf for at least five years after expiry of the contract. Such records shall contain the names of the contracting parties and indicate the date of the contract as well as the quantity, category, form, composition, origin and destination of the materials.

Article 28.

SRPNA may transmit to the International Atomic Energy Agency information and data obtained pursuant to this Rulebook.

Article 29.

By way of derogation from Article 11., any person or undertaking treating or storing nuclear material that has previously been declared as retained or conditioned waste shall transmit to SRPNA within 120 days of the date of entry into force of this Rulebook, an initial stock list of all nuclear material by category.

Any person or undertaking treating or storing nuclear material that has previously been declared as retained or conditioned waste, shall keep accounting records thereof.

By way of derogation from Articles 7. to 11., Article 13. and Article 17.1. for material that has been previously declared as retained waste and Articles 7. to 13. and Article 17.1. for material that has previously been declared as conditioned waste, these records shall include:

1. the operating data used to determine changes in the quantities and composition of nuclear material;

2. a stock list to be updated yearly after the physical inventory taking;

3. a description of the sequence of actions taken to prepare for and take a physical inventory, and to ensure that the inventory is correct and complete;

4. a description of the actions taken in order to ascertain the cause and magnitude of any accidental loss that might have occurred;

5. all stock changes, so that the book inventory can be established when requested.

The reporting requirements for the processing of retained waste shall be specified in the particular safeguard provisions referred to in Article 6.

Article 30.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall give advance notification to SRPNA of any processing campaign of material that has previously been declared as retained or conditioned waste, excluding repackaging or further conditioning without separation of elements.

This advance notification, using the form set out in Annex XII, shall include information on the amount of plutonium, high enriched uranium and uranium-233 per batch, the form (glass, high active liquid, etc.), the expected duration of the campaign, and the location of the material before and after the campaign. Such notification shall be communicated to SRPNA at least 200 days before the campaign starts.

Article 31.

The persons or undertakings referred to in the first subparagraph of Article 3.1. shall submit, by 31 January of each year at the latest, annual reports on:

1. shipments or exports of conditioned waste to an installation within or outside the territory of Republic of Serbia, using the form set out in Annex XIII;

2. receipts or imports of conditioned waste from an installation without a material balance area code, using the form set out in Annex XIV;

3. changes in location of conditioned waste containing plutonium, high enriched uranium or uranium-233, using the form set out in Annex XV.

VI. FINAL PROVISIONS

Article 32.

This Rulebook shall enter into force on the eighth day following its publication in the Official Gazette of Republic of Serbia.

ANNEX I

QUESTIONNAIRE FOR THE DECLARATION OF THE BASIC TECHNICAL CHARACTERISTICS OF THE INSTALLATIONS

I-A. REACTORS

Date: ……

IDENTIFICATION OF THE INSTALLATION

1. Name.

2. Location, exact address with telephone and fax numbers and e-mail address.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Present status (e.g. under construction, in operation or closed down).

6. Purpose and type.

7. Operating mode influencing its production (shift system adopted, approximate dates of operating periods in year, etc.)

8. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc.)

9. Layout of installation:
   1) structural containment, fences and access routes;
   2) incoming-material storage area;
   3) reactor area;
   4) test and experiment area, laboratories;
   5) outgoing-material storage area;
   6) nuclear waste disposal area.

10. Additional data per reactor:
    1) nominal thermal output;
    2) source material or special fissile material;
    3) initial core enrichments;
    4) moderator;
    5) coolant.

Note:

Answer „Not applicable“ can be given on questions which cannot be applicable. SRPNA still have rights to demand every additional information related to relevant questionnaire which is considered important. Properly filled and signed declaration is send to SRPNA.

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Description of nuclear material

11. Description of the use of nuclear material (Article 3.1.).

12. Outline drawings of fuel assemblies, fuel rods/pins, fuel plates etc., in sufficient detail to indicate general structure with overall dimensions. (Provisions for pin exchange should be described, if applicable, and an indication given if this is a routine operation.).

13. Fuel material (including material in control or shim assemblies, if applicable):
    1) chemical composition or main alloy constituents;
    2) average enrichment per assembly;
    3) nominal weight of nuclear material per assembly, with design tolerances.

14. Cladding material.

15. Method of identifying individual assemblies, rods/pins, plates etc., if applicable.

16. Other nuclear material used in the installation (briefly state material, purpose and method of use, e.g. as booster rods).

Flow of nuclear material

17. Flow sheet showing: points where nuclear material is identified or measured; material balance areas and inventory locations used for material accountancy; and the estimated range of nuclear material inventories at these locations under normal operating conditions.

18. Expected nominal fuel cycle data, including:
    1) reactor core loading;
    2) expected burn-up;
    3) annual refuelling amount;
    4) refuelling interval (on-load or off-load);
    5) forecast of throughput and inventory, and of receipts and shipments.

Handling of nuclear material

19. Layout of the fresh fuel storage area, drawings of fresh fuel storage locations, and description of packaging.

20. Drawings of fresh fuel preparation and/or assay room and reactor loading area.

21. Drawings of transfer equipment for fresh and irradiated fuel, including refuelling machines or equipment.

22. Drawings of reactor vessel showing location of core and openings in vessel; description of method of fuel handling in vessel.

23. Drawing of core showing: general layout, lattice, form, pitch and dimensions of core; reflector; location, shapes and dimensions of control devices; experimental and/or irradiation positions.

24. Number and size of channels for fuel assemblies and control devices in the core.

25. Spent fuel storage area:
    1) drawing of storage area;
    2) method of storage;
    3) design storage capacity;
    4) drawing of equipment for handling irradiated fuel;
    5) minimum cooling time before shipment of spent fuel;
    6) drawing and description of shipping cask for spent fuel (e.g. to determine whether sealing is possible).

26. Nuclear material testing area (if applicable):
    1) brief description of the activities performed;
    2) description of main equipment (e.g. hot cell, fuel assembly decladding and dissolving equipment);
    3) description of shipping containers for nuclear material and of waste and scrap packaging (e.g. to determine whether sealing is possible);
    4) description of storage area for non-irradiated and irradiated nuclear material;
    5) drawings of the above, if not covered elsewhere.

Coolant data

27. Coolant flow diagrams as required for heat balance calculations (indicating pressure, temperatures and mass flow rates at main points).

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

28. Description of nuclear material accountancy and control system (describe item and/or mass accountancy system, including assay methods used and assessed accuracies, supplying specimen blank forms used in all accountancy and control procedures). Period during which such records must be retained should be stated.

Physical inventory

29. Description of: procedures, scheduled frequency and methods for operator's physical inventory taking (both for item and/or mass accountancy, including main assay methods and expected accuracy); access to nuclear material in the core and to irradiated nuclear material outside the core; expected radiation levels.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

30. Organisational arrangements for material accountancy and control.

31. Information on the health and safety rules which have to be observed at the installation, and with which the inspectors must comply.

I-B. CRITICAL AND ZERO ENERGY INSTALLATIONS

Date: ……

IDENTIFICATION OF THE INSTALLATION

1. Name.

2. Location, exact address with telephone and fax numbers and e-mail addresses.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Present status (e.g. under construction, in operation or closed down).

6. Purpose and type.

7. Operating mode (shift system adopted, approximate dates of operating periods in year, etc.)

8. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc.)

9. Layout of installation:
   1) structural containment, fences and access routes;
   2) nuclear material receive storage area(s);
   3) fuel element assembling area, laboratories, etc.;
   4) critical assembly itself;

10. Additional data
    1) maximum expected operating power and / or neutron flux;
    2) basic type(s) of nuclear material(s) and enrichment;
    3) moderator;
    4) reflector, shield;
    5) coolant

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Description of nuclear material

11. Description of the use of nuclear material (Article 3.1.)

12. Outline drawings of fuel assemblies, fuel rods/pins, fuel plates etc., in sufficient detail to indicate general structure with overall dimensions;

13. Fuel material (including material in control or shim assemblies, if applicable).
    1) chemical composition or main alloy constituents;
    2) form and dimensions;
    3) enrichment of fuel rods/pins, fuel plates etc.;
    4) nominal weight of nuclear material, with design tolerances.

14. Cladding material.

15. Method of identifying individual assemblies, rods/pins, plates etc., if applicable.

16. Other nuclear material used in the installation (briefly state material, purpose and method of use, e.g. as booster rods).

Location and nuclear material handling

17. Description, including layout drawings, of:

    1) nuclear material storage and assembly areas and critical assembly (assemblies) proper (inventory locations);
    2) the estimated range of inventories of nuclear material in these locations;
    3) the physical arrangement of equipment used for assembling, testing and measuring nuclear material;
    4) the routes followed by nuclear material.

18. Sketch of critical assembly core showing core support structure, shielding and heat removal systems, with description (to be provided for each critical assembly if more than one in the installation).

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

19. Description of nuclear material accountancy and control system (describe item and/or mass accountancy system, including assay methods used and assessed accuracies, supplying specimen blank forms used in all accountancy and control procedures). Period during which such records must be retained should be stated.

Physical inventory

20. Description of: procedures, scheduled frequency and methods for operator's physical inventory taking (both for item and/or mass accountancy, including main assay methods and expected accuracy); access to nuclear material in the core and to irradiated nuclear material outside the core; expected radiation levels.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

21. Organisational arrangements for material accountancy and control.

22. Information on the health and safety rules which have to be observed at the installation and with which the inspectors must comply.

I-C. CONVERSION, FABRICATION AND REPROCESSING INSTALLATIONS

Date: ……

IDENTIFICATION OF THE INSTALLATION

1. Name

2. Location, exact address with telephone and fax numbers and e-mail addresses.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Present status (e.g. under construction, in operation or closed down).

6. Purpose and type.

7. Operating mode influencing its production (shift system adopted, approximate dates of operating periods in year, etc.)

8. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc.)

9. Layout of installation:
   1) structural containment, fences and access routes;
   2) routes followed by nuclear material;
   3) incoming nuclear material storage area;
   4) each main processing area and process laboratory;
   5) test or experimental areas;
   6) outgoing nuclear material storage;
   7) nuclear waste disposal area;
   8) analytical laboratory.

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Flow, location and handling of nuclear material

10. Flow sheet showing: points where nuclear material is identified or measured; material balance areas and inventory locations used for material accountancy; and the estimated range of nuclear material inventories at these locations under normal operating conditions. The description should include (if applicable):
    1) batch size or flow rate;
    2) method of storage or packing;
    3) storage capacity;
    4) general forecasts of throughput and inventory and of receipts and shipments.

11. In addition to point 10 above, a description and a layout drawing should be provided of feed storage areas for reprocessing installations, indicating:
    1) locations for fuel elements and handling equipment;
    2) type of fuel elements including nuclear material content and enrichment.

12. In addition to point 10 above, the description of the recycling stage of the process should include, if available:
    1) duration of temporary storage;
    2) schedules for external recycling (if applicable).

13. In addition to point 10 above, the description of the discard stage of the process should include the discard method (disposal or storage).

14. Under steady-state conditions, for each flow sheet referred to in points 10 and 17 and assuming the modes of operation in point 7, state:
    1) the nominal throughput per year;

2) the in-process inventory based on design capacity.

15. Description of the normal procedures adopted for complete or partial clean-out of the plant. Include description of special sampling and measurement points associated with the clean-out procedure and subsequent physical inventory taking, if not described in point 10 above.

Description of nuclear material

16. Description of the use of nuclear material (Article 3.1.)

17. Description, by means of flow sheets or otherwise, of estimated flow and inventory of all nuclear material for storage and process areas. The description should include:
    1) physical and chemical form;
    2) content range or expected upper limits for each category of solid or liquid discard material;
    3) enrichment range.

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

18. Description of the accountancy system used to record and report accountancy data and establish material balances, supplying specimen blank forms used in all procedures. Period during which such records must be retained should be stated.

19. Indicate when and how often material balances are established, including those established during campaigns. Description of method and procedure for adjusting accounts after a physical inventory taking.

20. Description of procedure for handling shipper/receiver differences and method of adjusting accounts.

21. Description of procedure for correcting accounts following procedural or clerical errors and its effect on shipper/receiver differences.

Physical inventory

22. Refer to point 15. Identify items of equipment on the flow sheets referred to in points 10 and 17 that are to be regarded as containers for nuclear material under physical inventory conditions. State the schedule of physical inventory taking during the campaign.

Methods for measurement, sampling and analysis

23. Description of method for establishing each measurement at the point indicated; equations or tables used and calculations made to determine actual quantities of weights or volumes should be identified. Indicate whether data are recorded automatically or manually. Method and practical procedures for sampling at each point indicated should be described.

24. Description of analytical methods used for accountancy purposes. Refer to a manual or report, if possible.

Control of measurement accuracy

25. Description of: measurement quality control programme needed for material accountancy purposes, including programmes (together with accuracy values) for the continuing appraisal of analytical, weight, volume and sampling precisions and biases, and for the calibration of associated equipment; method of calibrating the measuring equipment referred to in point 24; type and quality of standards used for analytical methods referred to in point 24; typeof analytical equipment used, indicating method and frequency of calibration.

Statistical evaluation

26. Description of methods for statistical evaluation of data collected in measurement control programmes for evaluating the precision and the accuracy of measurements and for estimating measurement uncertainties (i.e. determination of the standard deviations of random and systematic error in the measurements). Also description of statistical procedures used to combine individual error estimates to obtain the standard deviations of overall error for shipper/receiver differences, the book inventory, the physical inventory and material unaccounted for.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

27. Organisational arrangements for material accountancy and control.

28. Information on the health and safety rules which have to be observed at the installation and with which the inspectors must comply.

I-D. STORAGE INSTALLATIONS (*)[1]

Date: ……

IDENTIFICATION OF THE INSTALLATION

1. Name.

2. Location, exact address with telephone and fax numbers and e-mail addresses.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Present status (e.g. under construction, in operation or closed down).

6. Purpose and type.

7. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc.).

8. Layout of installation, showing structural containment, fences and access routes.

[1] Separate installations not normally associated with reactors, with enrichment, conversion and fabrication installations, or with chemical reprocessing and recovery installations.

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Description of nuclear material

9. Description of the use of nuclear material (Article 3.1.)

10. Description, by means of drawings or otherwise, of all nuclear material in the installation, showing:
    1) all types of items, including normal handling equipment;
    2) chemical composition or main alloy constituents;
    3) form and dimensions;
    4) enrichment;
    5) nominal weight of nuclear material, with design tolerances;
    6) cladding materials;
    7) methods of identifying items.

Location and handling of nuclear material

11. Description, by means of layout drawings or otherwise, of:
    1) nuclear material storage areas (inventory locations);
    2) the estimated range of inventories of nuclear material in these locations;
    3) nuclear material storage and/or shipping containers;
    4) the routes and equipment used for movement of nuclear material, if applicable.

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

12. Description of nuclear material accountancy and control system (describe item and/or mass accountancy system, including assay methods used and assessed accuracies, supplying specimen blank forms used in all accountancy and control procedures). Period during which such records must be retained should be stated.

Physical inventory

13. Description of procedures, scheduled frequency and methods for operator's physical inventory taking (both for item and/or mass accountancy, including main assay methods), and expected accuracy.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

14. Organisational arrangements for material accountancy and control.

15. Information on the health and safety rules which have to be observed at the installation and with which the inspectors must comply.

I-E. ISOTOPE SEPARATION INSTALLATIONS

Date: ……

IDENTIFICATION OF THE INSTALLATION

1. Name.

2. Location, exact address with telephone and fax numbers and e-mail address.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Present status (e.g. under construction, in operation or closed down).

6. Building schedule (if installation not in operation):
   1) date building starts;
   2) date of installation acceptance;
   3) commissioning date.

7. Purpose and type (nominal separation capacity, enrichment facilities, etc.)

8. Operating mode influencing its production (shift system adopted, approximate periods of operating times in year, etc.)

9. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc.)

10. Layout of installation:
    1) structural containment, fences and access routes;
    2) containment of certain parts of the installation;
    3) routes followed by nuclear material;
    4) incoming nuclear material storage area;
    5) each main processing area and process laboratory, including weighing and sampling area, decontamination, purification and feed areas, etc.;
    6) test or experimental areas;
    7) outgoing nuclear material storage area;
    8) nuclear waste disposal area;
    9) analytical laboratory.

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Description of nuclear material

11. Description of the use of nuclear material (Article 3.1.).

12. Description, by means of flow sheets or otherwise, of estimated flow and inventory of all nuclear material for storage and process areas. The description should include:
    1) physical and chemical form;
    2) enrichment range for feed, product and tails;
    3) content range or expected upper limits for each category of solid or liquid discard material.

Flow, location and handling of nuclear material

13. Description, by means of diagrams or otherwise, of storage and process areas. The description should include:
    1) sampling and measuring points;
    2) batch size and/or flow rate;
    3) method of storage or packing;
    4) storage capacities.

14. In addition to point 13 above, the description of the installation should include:
    1) separation capacity;
    2) enrichment techniques or methods;
    3) possible points for feed, product and tails;
    4) recycling facilities;
    5) type and size of UF6 cylinders used, filling and emptying methods.

15. Power consumption should be given, where necessary.

16. Each diagram should indicate, under steady-state conditions:
    1) nominal throughput per year;
    2) physical inventory of in-process materials;
    3) material loss rate owing to leakage, decomposition, deposition, etc.;
    4) arrangements for regular plant maintenance (periodic shutdown or continuous component replacement, etc.)

17. Description of special sampling and measurement points associated with decontamination of off-process equipment that is to be maintained or replaced.

18. Description of process waste disposal point, including disposal method, storage period, type of disposal, etc.

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

19. Description of the accountancy system used to record and report accountancy data and to establish material balances, supplying specimen blank forms used in all procedures. Period during which such records must be retained should be stated.

20. Indicate when and how often material balances are established, including any established during campaigns. Description of method and procedure for adjusting accounts after a physical inventory taking.

21. Description of procedure for handling shipper/receiver differences and method of adjusting accounts.

22. Description of procedure for correcting accounts owing to procedural or clerical errors and the effect on shipper/receiver differences, if applicable.

Physical inventory

23. Identification of items of equipment mentioned in the description referred to in points 13. and 18. that are to be regarded as containers for nuclear material under physical inventory conditions. State the timing of physical inventory taking.

Methods for measurement, sampling and analysis

24. Refer to the information given under points 13 and 17 for location of sampling and measurement points.

25. Description of method for establishing each measurement at the point indicated; equations or tables used and calculations made to determine actual quantities of weights or volumes should be identified. Indicate whether data are recorded automatically or manually. Method and practical procedures for sampling at each point indicated should be described. Indicate number of samples taken and rejection criteria.

26. Description of analytical methods used for accountancy purposes. Refer to a manual or report, if possible.

Control of measurement accuracy

27. Description of programmes for the continuous appraisal of weight, volume and sampling precision and biases, and for the calibration of associated equipment.

28. Descriptions of type and quality of standards used for analytical methods referred to in point 26., type of analytical equipment used, method and frequency of calibration.

Statistical evaluation

29. Description of methods for statistical evaluation of data collected in measurement control programmes for evaluating the precision and the accuracy of measurements and for estimating measurement uncertainties (i.e. determination of the standard deviations of random and systematic error in the measurements). Also description of statistical procedures used to combine individual error estimates to obtain the standard deviations of overall error for shipper/receiver differences, the book inventory, the physical inventory and material unaccounted for.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

30. Organisational arrangements for material accountancy and control.

31. Information on the health and safety rules which have to be observed at the installation, and with which the inspectors must comply.

I-F. INSTALLATIONS USING NUCLEAR MATERIAL IN QUANTITIES EXCEEDING ONE EFFECTIVE KILOGRAM

Date: ……

For any installation of a type not referred to in sections A to E which uses more than one effective kilogram per annum, information should be given on the following:

1. identification of the installation,

2. general arrangements at the installation, including those relating to material use and accountancy, containment and surveillance,

3. description of the use of nuclear material (Article 3(1)),

4. nuclear material accountancy and control system, including techniques for physical inventory taking,

5. other information relevant to the application of safeguards.

The information required under these headings is, where applicable, the same as that required for the types of installations coming under sections V, G and D of this Annex.

I-G. INSTALLATIONS CANDIDATE MEMBERS OF THE CATCH All MBA (CAM)

Date: ……

For these holders, the total inventory is calculated as the sum of the stock of each category of nuclear material held, each expressed as a percentage of the following limits:

depleted uranium	350 000 g or
thorium	200 000 g or
natural uranium	100 000 g or
low enriched uranium	1 000 g or
high enriched uranium	5 g or
plutonium	5 g

For example:

1) a holder with 4 g of plutonium has a percentage inventory equal to 80 % (4/5);
2) a holder with 1 g of high enriched uranium plus 20 000 g of natural uranium has a percentage inventory equal to 40 % (1/5 + 20 000/100 000).

IDENTIFICATION OF THE INSTALLATION AND OF THE NUCLEAR MATERIAL

1. Name.
2. Owner and/or operator.
3. Location, exact address with telephone and fax numbers and e-mail addresses.
4. Type of nuclear material.
5. Description of containers used for storage and handling.
6. Description of the use of nuclear material (Article 3.1.).

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

The holders' obligations have been simplified as following:

A - Limits on holdings/movements

If any individual receipt of nuclear material exceeds the quantities indicated above or if the 'percentage inventory' of the installation exceeds 100 % at any time, SRPNA must be notified immediately.

B - Accounting/operating records to be maintained

Accounting/operating records must be kept in a manner permitting ready verification of reports made to SRPNA and of any correction thereto.

C - Inventory change reports (ICR)

Need be submitted only if an inventory change occurs.
A note explaining unusual inventory changes and corrections or any other piece of information included in the report should be attached. In particular, the identification and address should be given of any entity to which material is shipped (including export) or from whom material is received (including import).
Even if no inventory change occurred during the year, an ending book inventory by category as at 31. December must be declared. This declaration must be forwarded SRPNA by 31 January of each year.

D - Report form

No special form is required for the report under C above. The report can be made by letter.

I-H. WASTE TREATMENT OR WASTE STORAGE INSTALLATIONS (*[2])

Date: ……

IDENTIFICATION OF THE INSTALLATION

7. Name.

8. Location, exact address with telephone and fax numbers and e-mail addresses.

9. Owner (legally responsible body or individual).

10. Operator (legally responsible body or individual).

11. Present status (e.g. under construction, in operation or closed down).

12. Purpose and type.

13. Area layout (map showing the installation, boundaries, buildings, roads, rivers, railways, etc).

14. Layout of installation:
    1) structural containment, fences and access routes;
    2) routes followed by nuclear material;
    3) nuclear waste disposal areas;
    4) each main processing area and process laboratory;

[2] Separate installations engaged solely in the handling, storing or processing of waste materials (not forming a part of enrichment, conversion, fabrication, chemical reprocessing and recovery installations or of reactors).

5) test or experimental areas;
6) analytical laboratory.

GENERAL ARRANGEMENTS AT THE INSTALLATION, INCLUDING THOSE RELATING TO MATERIAL USE AND ACCOUNTANCY, CONTAINMENT AND SURVEILLANCE

Locations and handling of nuclear material

10. Description of the use of nuclear material (Article 3.1.).

11. Description, by means of drawings or otherwise, of:
    1) nuclear material storage areas (inventory locations);
    2) the estimated range of inventories of nuclear material in these locations;
    3) nuclear material storage and/or shipping containers;
    4) the routes and equipment used for movement of nuclear material, if applicable.

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

Accountancy system

12. Description of the nuclear material accountancy and control system, supplying specimen blank forms used in all accountancy and control procedures. Period during which such records must be retained should be stated.

Physical inventory

13. Description of procedures, scheduled frequency and methods for operator's physical inventory taking (both for item and/or mass accountancy including main assay methods), and expected accuracy.

OTHER INFORMATION RELEVANT TO APPLICATION OF SAFEGUARDS

14. Organisational arrangements for material accountancy and control.

15. Information on the health and safety rules which have to be observed at the installation and with which the inspectors must comply.

I-J. OTHER INSTALLATIONS (*[3])

Date: ……

IDENTIFICATION OF THE INSTALLATION AND OF THE NUCLEAR MATERIAL

1. Name.

[3] The term 'other' denotes all the installations not covered by sections A to H, and where nuclear material in quantities not exceeding one effective kilogram is habitually used. It also specifically includes ore producers (point 8 above).

2. Location, exact address with telephone and fax numbers and e-mail addresses.

3. Owner (legally responsible body or individual).

4. Operator (legally responsible body or individual).

5. Type of nuclear material.

6. Description of containers used for storage and handling (e.g. to determine whether sealing is possible).

7. Description of the use of nuclear material (Article 3.1.).

8. In the case of ore producers, the potential annual throughput of the installation.

9. The current status (e.g. under construction, in operation or closed down).

NUCLEAR MATERIAL ACCOUNTANCY AND CONTROL

10. Description of the procedures for nuclear material accountancy and control, including procedures for physical inventory taking.

11. Organisational arrangements for material accountancy and control.

ANNEX II

GENERAL DESCRIPTION OF THE SITE(1)

Site identification

Declaration No (2) Declaration date

Reporting period (3) Comments (4)

Entry (5)	**Ref. (6)**	**MBA code (7)**	**Building (8)**	**General description, including use of contents (9)**	**Comments (10)**

Name and signature of the site representative: ……

Explanatory notes

(1) The initial declaration should include all nuclear installations, and all other buildings on their sitesas described in Article 2.21. A separate entry should be made for each building on the site. Subsequent annual update declarations should include only those sites and buildings which have undergone a change since the previous declaration. A map of the site shall be attached with the initial declaration and updated when necessary.

(2) The 'Declaration No.' is a sequential number for each site, starting with '1' for the initial site declaration.

(3) The 'Reporting period' for the initial declaration is an 'as of' date, while for all subsequent annual updates the appropriate entry is the beginning and the ending date of the time period. It is understood that the information provided is valid as of the ending date. All dates should be reported using the DDMMYYYY format.

(4) Comments applicable to the whole of the site.

(5) Each 'Entry' in each declaration should be numbered sequentially, beginning with '1'.

(6) The 'Ref.' column should be used to refer to another entry. The contents of the 'Ref.' column consist of the relevant declaration and entry numbers (e.g. 10-20 refers to entry 20 of declaration 10). The reference indicates that the current entry adds to or updates information reported earlier. Several references may be inserted, if necessary.

(7) The ‘MBA code’ column should make reference to the MBA code to which the building in this entry belongs.

(8) The ‘Building’ column should include a building number or other designation that provides an unambiguous identification of the building on the schematic map of the site.

(9) The ‘General description’ for each building should include:

i. the approximate size of the building in terms of the number of floors and the total square metres of floor space
ii. the use of the building, including any prior uses of the building that might be relevant to interpreting other information, such as the results of environmental sampling, available to SRPNA;

iii. the main contents of the building, where this is not readily apparent from the stated use. However, descriptions of activities previously provided in the Basic Technical Characteristics questionnaire need not be repeated.

(10) Comments applicable to each entry.

NB: This form, duly completed and signed, or the equivalent form in electronic format, must be forwarded to SRPNA.

ANNEX III

INVENTORY CHANGE REPORT (ICR)

Label/tag	Content	Comments	#
MBA	Character (4)	MBA code of reporting MBA	1
Report type	Character (1)	I for Inventory Change Report	2
Report date	DDMMYYYY	Date on which the report was completed	3
Report number	Number (8)	Sequential number, no gaps	4
Line count	Number (8)	Total number of lines reported	5
Start report	DDMMYYYY	Date of first day in reporting period	6
End report	DDMMYYYY	Date of last day in reporting period	7
Reporting person	Character (30)	Name of person responsible for the report	8
Transaction ID	Number (8)	Sequential number	9
IC code	Character (2)	Type of inventory change	10
Batch	Character (20)	Unique identifier for a batch of nuclear material	11
KMP	Character (1)	Key measurement point	12
Measurement	Character (1)	Measurement code	13
Material form	Character (2)	Material form code	14
Material container	Character (1)	Material container code	15
Material state	Character (1)	Material state code	16
MBA from	Character (4)	MBA code of shipping MBA (for IC codes RD and RF only)	17
MBA to	Character (4)	MBA code of receiving MBA (for IC codes SD and SF only)	18
Previous batch	Character (20)	Name of previous batch (for IC code RB only)	19
Original date	DDMMYYYY	Accounting date of the line to be corrected (always of first line in correction chain)	20
PIT date	DDMMYYYY	Date of physical inventory taking (PIT) to which MF adjustment refers (use with IC code MF only)	21
Line number	Number (8)	Sequential number, no gaps	22
Accounting date	DDMMYYYY	Date on which the inventory change occurred or became known	23
Items	Number (6)	Number of items	24
Element category	Character (1)	Category of nuclear material	25
Element weight	Number (24.3)	Element weight	26
Isotope	Character (1)	G for U-235, K for U-233, J for a mixture of U-235 and U-233	27
Fissile weight	Number (24.3)	Weight of fissile isotope	28
Isotopic composition	Character(130)	U, Pu isotopic weight (only if agreed in particular safeguard provisions)	29
Obligation	Character (2)	Safeguards obligation	30
Previous category	Character (1)	Previous category of nuclear material (use for IC codes CB, CC and CE only)	31
Previous obligation	Character (2)	Previous obligation (use for IC codes BR, CR, PR and SR only)	32
CAM code from	Character (8)	Code to identify the shipping small holder	33

CAM code to	Character (8)	Code to identify the receiving small holder	34
Document	Character (70)	Operator-defined reference to supporting documents	35
Container ID	Character (20)	Operator-defined identifier for the container	36
Correction	Character (1)	D for deletions, A for additions forming part of a deletion/addition pair, L for late lines (stand-alone additions)	37
Previous report	Number (8)	Report number of line to be corrected	38
Previous line	Number (8)	Line number of line to be corrected	39
Comment	Character (256)	Operator comment	40
Burn-up	Number (6)	Burn-up in MWdays/tonne (use for IC codes NL and NP in nuclear reactors only)	41
CRC	Number (20)	Hash code of line for quality control purposes	42
Previous CRC	Number (20)	Hash code of line to be corrected	43
Advance notification	Character (8)	Reference to advance notification sent to Euratom (use for IC codes RD, RF, SD and SF only)	44
Campaign	Character (12)	Campaign identifier for reprocessing installations	45
Reactor	Character (12)	Reactor code for reprocessing campaigns	46
Error path	Character (8)	Special code for evaluation purposes	47

Explanatory notes

1. MBA:
Code of the reporting material balance area. This code is notified to the installation concerned by the Commission.

2. REPORT TYPE:
I for inventory change reports.

3. REPORT DATE:
Date on which the report was completed.

4. REPORT NUMBER:
Sequential number, no gaps.

5. LINE COUNT:
Total number of lines reported.

6. START REPORT:
Date of first day of reporting period.

7. END REPORT:
Date of last day of reporting period.

8. REPORTING PERSON:
Name of person responsible for the report.

9. TRANSACTION ID:
Sequential number. This is used to identify all inventory change lines relating to the same physical transaction.

10. IC CODE:
One of the following codes must be used:

Keyword	Code	Explanation
Receipt	RD	Receipt of nuclear material from a material balance area within the European Union.
Import	RF	Import of nuclear material from a third country.
Receipt from non-safeguarded activity	RN	Receipt of nuclear material from a non-safeguarded activity (Article 34).
Shipment	SD	Transfer of nuclear material to a material balance area within the European Union.
Export	SF	Export of nuclear material to a third country
Shipment to non-safeguarded activity	SN	Transfer of nuclear material to a non-safeguarded activity (Article 34).
Transfer to conditioned waste	TC	Nuclear material contained in waste that is measured or estimated on the basis of measurements, and which has been conditioned in such a way (e.g. in glass, cement, concrete or bitumen) that it is not suitable for further nuclear use. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area. Separate records must be kept for this type of material.
Discards to the environment	TE	Nuclear material contained in waste that is measured or estimated on the basis of measurements, and which has been irrevocably discarded to the environment as the result of a planned discharge. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area.
Transfer to retained waste	TW	Nuclear material generated from processing or from an operational accident contained in waste that is measured or estimated on the basis of

		measurements, and which has been transferred to a specific location within the material balance area from which it could be retrieved. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area. Separate records must be kept for this type of material.
Retransfer from conditioned waste	FC	Retransfer of conditioned waste to the inventory of the material balance area. This applies whenever conditioned waste undergoes processing.
Retransfer from retained waste	FW	Retransfer of retained waste to the inventory of the material balance area. This applies whenever retained waste is retrieved from the specific location within the material balance area, either for any processing involving the separation of elements in the material balance area or for any shipment from the material balance area.
Accidental loss	LA	Irretrievable and inadvertent loss of a quantity of nuclear material as the result of an operational accident. Use of this code requires a special report to be sent to the Commission.
Accidental gain	GA	Nuclear material unexpectedly found, except when detected in the course of a physical inventory taking. Use of this code requires a special report to be sent to the Commission.
Category change	CE	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another as a result of an enrichment process (only one line to be reported per category change).
Category change	CB	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another as a result of a blending operation (only one line to be reported per category change).

Category change	CC	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another for all types of category change not covered by codes CE and CB (only one line to be reported per category change).
Rebatching	RB	Accountancy transfer of a quantity of nuclear material from one batch to another (only one line to be reported per rebatching).
Change in particular obligation	BR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17.1.), to balance the total uranium stock following a blending operation (only one line to be reported per change of obligation).
Change in particular obligation	PR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17.1.), used when nuclear material enters or leaves an accountancy pool (only one line to be reported per change of obligation).
Change in particular obligation	SR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17.1.), following an obligation exchange or a substitution (only one line to be reported per change of obligation).
Change in particular obligation	CR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17.1.), for all cases not covered by codes BR, PR or SR (only one line to be reported per change of obligation).
Nuclear production	NP	Increase in the quantity of nuclear material due to nuclear transformation.
Nuclear loss	NL	Decrease in the quantity of nuclear material due to nuclear transformation.

Shipper/receiver difference	DI	Shipper/receiver difference (see Article 2.19).
New measurement	NM	Quantity of nuclear material, in one particular batch, accounted for in the nuclear material balance area, being the difference between a newly measured quantity and the quantity formerly accounted for, and which is neither a shipper/receiver difference nor a correction.
Balance adjustment	BJ	Quantity of nuclear material accounted for in the material balance area, being the difference between the result of a physical inventory taken by the plant operator for his own purposes (without reporting a physical inventory listing to the Commission) and the book inventory established on the same date.
Material unaccounted for	MF	Book adjustment for material unaccounted for. Must be equal to the difference between the ending physical inventory (PE) and the ending book inventory (BA) reported in the material balance report (Annex IV). The original date must be that of the physical inventory taking, while the accounting date must be after the date of the physical inventory taking.
Roundings	RA	Rounding adjustment to make the sum of the quantities reported in a given period coincide with the ending book inventory of the material balance area.
Isotope adjustment	R5	Adjustment to make the sum of the isotope quantities reported coincide with the ending book inventory for U-235 of the material balance area.
Material production	MP	Quantity of nuclear material, obtained from substances originally not subject to safeguards, which has become subject to safeguards because its concentration now exceeds the minimum levels.

Termination of use	TU	Quantity of nuclear material considered as irrecoverable for practical or economic reasons which is: (i)incorporated in end products used for non-nuclear purposes; or (ii)contained in waste in very low concentrations measured or estimated on the basis of measurements, even if these materials are not discarded to the environment. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area.
Ending book inventory	BA	Book inventory at the end of a reporting period and at the PIT date, separate for each category of nuclear material and for each particular safeguards obligation.

11. BATCH:

The batch designation may be chosen by the operator, but:

1) in the case of the inventory change 'Receipt (RD)', the batch designation used by the shipper must be reported;
2) a batch designation must not be used again for another batch in the same material balance area.

12. KMP:

Key measurement point. The codes are notified to the installation concerned in the particular safeguard provisions. If no codes have been specified, '&' should be used.

13. MEASUREMENT:

The basis on which the quantity of nuclear material reported was established has to be indicated. One of the following codes must be used:

Measured	Estimated	Explanation
M	E	In the reporting material balance area.

N	F	In another material balance area.
T	G	In the reporting material balance area when the weights have already been given in a previous inventory change report or physical inventory listing.
L	H	In another material balance area when the weights have already been given in a previous inventory change report or physical inventory listing for the present material balance area.

14. MATERIAL FORM:

The following codes must be used:

Main type of material form	**Subtype**	**Code**
Ores		OR
Concentrates		YC
Uranium hexafluoride (UF6)		U6
Uranium tetrafluoride (UF4)		U4
Uranium dioxide (UO2)		U2
Uranium trioxide (UO3)		U3
Uranium oxide (U3O8)		U8
Thorium oxide (ThO2)		T2
Solutions	Nitrate	LN
	Fluoride	LF
	Other	LO
Powder	Homogeneous	PH
	Heterogeneous	PN
Ceramics	Pellets	CP
	Spheres	CS
	Other	CO
Metal	Pure	MP
	Alloys	MA
Fuel	Rods, pins	ER
	Plates	EP

	Bundles	EB
	Assemblies	EA
	Other	EO

Main type of material form	Subtype	Code
Sealed sources		QS
Small quantities/samples		SS
Scrap	Homogeneous	SH
	Heterogeneous (clean-outs, clinkers, sludges, fines, other)	SN
Solid waste	Hulls	AH
	Mixed (plastics, gloves, papers, etc.)	AM
	Contaminated equipment	AC
	Other	AO
Liquid waste	Low active	WL
	Medium active	WM
	High active	WH
Conditioned waste	Glass	NG
	Bitumen	NB
	Concrete	NC
	Other	NO

15. MATERIAL CONTAINER:

The following codes must be used:

Type of container	Code
Cylinder	C
Pack	P
Drum	D
Discrete fuel unit	S
Bird cage	B
Bottle	F
Tank or other container	T
Other	O

16. MATERIAL STATE:

The following codes must be used:

State	Code
Fresh nuclear material	F
Irradiated nuclear material	I
Waste	W
Irrecoverable material	N

17. MBA FROM:

Use only for inventory change codes RD and RF. For inventory change code RD, the code of the shipping material balance area is reported. If this code is unknown, the code 'F', 'Q' or 'W' (for the shipping MBA in France, the United Kingdom or a non-nuclear-weapon State) is reported and the shipper's full name and address must be entered in the comment field (40). For inventory change code RF, the country code of the exporting state, or the MBA code of the exporting installation if known, is reported, and the shipper's full name and addressmust be entered in the comment field (40).

18. MBA TO:

Use only for inventory change codes SD and SF. For inventory change code SD, the code of the receiving material balance area is reported. If this code is unknown, the code 'F', 'Q' or 'W' (for the receiving MBA in France, the United Kingdom or a non-nuclear-weapon State) is reported and the receiver's full name and address must be entered in the comment field (40). For inventory change code SF, the country code of the importing state or the MBA code of the importing installation if known, is reported, and the receiver's full name and addressmust be entered in the comment field (40).

19. PREVIOUS BATCH:

Batch designation before rebatching. The batch designation after the rebatching must be reported in field 11.

20. ORIGINAL DATE:

In the case of a correction, the day, month and year when the line to be corrected was originally entered must be reported. For correction chains, the original date is always the accounting date of the first line in the chain. For late lines (stand-alone additions), the original date is the date on which the inventory change occurred.

21. PIT DATE:

Date of the physical inventory taking as reported in the material balance report on which the book adjustment for MUF (material unaccounted for) is based. Use only with inventory change code MF.

22. LINE NUMBER:

Sequential number starting with 1 in each report, no gaps.

23. ACCOUNTING DATE:

Day, month and year when the inventory change occurred or became known.

24. ITEMS:

The number of items making up the batch must be reported. If an inventory change consists of several lines, the sum of the number of items reported must equal the total number of items belonging to the same transaction ID. If the transaction involves more than one element the number of items should be declared in the line(s) for the element category of highest strategic value only (in descending order: P, H, L, N, D, T).

25. ELEMENT CATEGORY:

The following codes must be used:

Category of nuclear material	Code
Plutonium	P
High enriched uranium (20 % enrichment and above)	H
Low enriched uranium (higher than natural but less than 20 % enrichment)	L
Natural uranium	N
Depleted uranium	D
Thorium	T

26. ELEMENT WEIGHT:
The weight of the element category referred to in field 25 must be reported. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

27. ISOTOPE:

This code indicates the fissile isotopes involved and should be used when the weight of fissile isotopes is reported (28). Use the code G for U-235, K for U-233, and J for a mixture of U-235 and U-233.

28. FISSILE WEIGHT:

Unless otherwise stated in the particular safeguard provisions, the weight of fissile isotopes must only be reported for enriched uranium and category changes involving enriched uranium. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

29. ISOTOPIC COMPOSITION:

If agreed in the particular safeguard provisions the isotopic composition of U and/or Pu must be reported in the format as a list of weights [number(18,3)] separated by semi-colons to denote the weight of U-233, U-234, U-235, U-236, U-238 or Pu-238, Pu-239, Pu-240, Pu-241, Pu-242. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

30. OBLIGATION:

Indication of the particular safeguards obligation assumed by the Community under an Agreement concluded with a third country or an international organisation, to which the material is subject (Article 17). The Commission will communicate the appropriate codes to the installations.

31. PREVIOUS CATEGORY:

Code of the category of nuclear material before the category change. The corresponding code after the change must be reported in field 25. Use only with the inventory change codes CE, CB and CC.

32. PREVIOUS OBLIGATION:

Code of the particular safeguards obligation to which the nuclear material was subject before the change. The corresponding obligation code after the change must be reported in field 30. Use only with the inventory change codes BR, CR, PR and SR.

33. CAM CODE FROM:

Code of installation of Annex I-G shipping material. The Commission will communicate to the operator or entity the appropriate code. Simplified reporting procedures apply to these operators.

34. CAM CODE TO:

Code of installation of Annex I-G receiving material. The Commission will communicate to the operator or entity the appropriate code. Simplified reporting procedures apply to these operators.
35. DOCUMENT:

Operator-defined reference to supporting document(s).

36. CONTAINER ID:

Operator-defined container number. Optional data element which can be used in those cases where the container number does not appear in the batch designation.

37. CORRECTION:

Corrections have to be made by deleting the wrong line(s) and adding the correct one(s), where appropriate. The following codes must be used:

Code	Explanation
D	Deletion. The line to be deleted must be identified by indicating in field 38 the report number (4), in field 39 the line number (22) and in field 43 the CRC (42) which were declared for the original line. Other fields need not be reported.
A	Addition (forming part of a deletion/addition pair). The correct line must be reported with all data fields, including the ‘previous report’ field (38) and the ‘previous line’ field (39). The ‘previous line’ field (39) must repeat the line

	number (22) of the line being replaced by the deletion/addition pair.
L	Late line (stand-alone addition). The late line to be added must be reported with all data fields, including the 'previous report' field (38). The 'previous report' field (38) must contain the report number (4) of the report in which the late line should have been included.

38. PREVIOUS REPORT:

Indicate the report number (4) of the line to be corrected.

39. PREVIOUS LINE:

For deletions, or additions forming part of a deletion/addition pair, indicate the line number (22) of the line to be corrected.

40. COMMENT:

Free-text comment field for short comments by operator (replaces separate concise note).

41. BURN-UP:

For inventory changes of type NP or NL in nuclear reactors, burn-up in MWdays/tonne.

42. CRC:

Hash code of line for quality control purposes. SRPNA will inform the operator of the algorithm to be used.

43. PREVIOUS CRC:

Hash code of the line to be corrected.

44. ADVANCE NOTIFICATION:

Reference code for the advance notification (Articles 20. and 21.). Use with inventory changes SF and RF and with those inventory changes of type SD and RD when the States where the shipper and receiver are located are not party to the same safeguards agreement with the International Atomic Energy Agency.

45. CAMPAIGN:

Unique identifier for the reprocessing campaign. Use only for inventory changes in the process material balance area(s) of spent fuel reprocessing installations.

46. REACTOR:

Unique identifier for the reactor from which irradiated fuel is being stored or reprocessed. Use only for inventory changes in spent fuel storage or reprocessing installations.

47. ERROR PATH:

Special code describing measurement errors and their propagation, for material balance evaluation purposes. The codes are agreed between the installation and SRPNA.

GENERAL REMARKS CONCERNING THE COMPLETION OF THE REPORTS

1. In the case of transfer of nuclear material, the shipper must provide the receiver with all the necessary information for the inventory change report.

2. If numerical data contain fractions of units, a point should precede the decimal digits.

3. The following 55 characters may be used: the 26 capital letters A to Z, figures 0 to 9 and the characters ‘plus’, ‘minus’, ‘slash’, ‘asterisk’, ‘space’, ‘equal’, ‘greater than’, ‘less than’, ‘point’, ‘comma’, ‘open bracket’, ‘close bracket’, ‘colon’, ‘dollar’, ‘percent’, ‘quotation mark’, ‘semi-colon’, ‘question mark’ and ‘ampersand’

4. Reports must be prepared according to a world-wide accepted labelled reporting format, agreed between SRPNA and operators.

5. The reports, duly completed and digitally signed, should be forwarded to the SRPNA.

ANNEX IV

MATERIAL BALANCE REPORT (MBR)

Label/tag	Content	Comments	#
MBA	Character (4)	MBA code of reporting MBA	1
Report type	Character (1)	M for Material Balance Report	2
Report date	DDMMYYYY	Date on which the report was completed	3
Start report	DDMMYYYY	Starting date of MBR (date of last PIT +1 day)	4
End report	DDMMYYYY	End date of MBR (date of current PIT)	5
Report number	Number (8)	Sequential number, no gaps	6
Element category	Character (1)	Category of nuclear material	7
Line count	Number (8)	Total number of lines reported	8
Reporting person	Character (30)	Name of person responsible for report	9
IC code	Character (2)	Type of inventory change	10
Line number	Number (8)	Sequential number, no gaps	11
Element weight	Number (24.3)	Element weight	12
Isotope	Character (1)	G for U-235, K for U-233, J for a mixture of U-235 and U-233	13
Fissile weight	Number (24.3)	Weight of fissile isotope	14
Obligation	Character (2)	Safeguards obligation	15
Correction	Character (1)	D for deletions, A for additions forming part of a deletion/addition pair, L for late lines (stand-alone additions)	16
Previous report	Number (8)	Report number of line to be corrected	17

Previous line	Number (8)	Line number of line to be corrected	18
Comment	Character (256)	Operator comment	19
CRC	Number (20)	Hash code of line for quality control purposes	20
Previous CRC	Number (20)	Hash code of line to be corrected	21

Explanatory notes

16. MBA:
    Code of the reporting material balance area. This code is notified to the installation concerned by SRPNA.

17. REPORT TYPE:
    M for material balance reports.

18. REPORT DATE:
    Date on which the report was completed.

19. START REPORT:
    Start date of MBR, date of the day immediately following the day of the previous physical inventory taking.

20. END REPORT:
    End date of MBR, date of current physical inventory taking.

21. REPORT NUMBER:
    Sequential number, no gaps.

22. ELEMENT CATEGORY:
    The following code for categories of nuclear material must be used:

Category of nuclear material	**Code**
Plutonium	P
High enriched uranium (20 % enrichment and above)	H
Low enriched uranium (higher than natural but less than 20 % enrichment)	L
Natural uranium	N
Depleted uranium	D
Thorium	T

23. LINE COUNT:
    Total number of lines reported.

24. REPORTING PERSON:
    Name of person responsible for report.

25. IC CODE:
    The different types of inventory information and of inventory change should be entered in the sequence indicated below. The following codes must be used:

Keyword	Code	Explanation
Beginning physical inventory	PB	Physical inventory at the beginning of the reporting period (must be equal to the physical inventory at the end of the previous reporting period).
Inventory changes (only codes in the list below)		For each type of inventory change, one consolidated line has to be entered for the entire reporting period (first increases, then decreases).
Ending book inventory	BA	Book inventory at the end of the reporting period. It must be equal to the arithmetic sum of the MBR entries above.
Ending physical inventory	PE	Physical inventory at the end of the reporting period.
Material unaccounted for	MF	Material unaccounted for. Must be calculated as 'ending physical inventory (PE)' minus 'ending book inventory (BA)'.

For inventory changes, one of the following codes must be used:

Keyword	Code	Explanation
Receipt	RD	Receipt of nuclear material from a material balance area within the European Union.
Import	RF	Import of nuclear material from a Third Country
Receipt from non-safeguarded activity	RN	Receipt of nuclear material from a non-safeguarded activity (Article 34).

Shipment	SD	Transfer of nuclear material to a material balance area within the European Union.
Export	SF	Export of nuclear material to a Third Country.
Shipment to non-safeguarded activity	SN	Transfer of nuclear material to a non-safeguarded activity (Article 34).
Transfer to conditioned waste	TC	Nuclear material contained in waste that is measured or estimated on the basis of measurements, and which has been conditioned in such a way (e.g. in glass, cement, concrete or bitumen) that it is not suitable for further nuclear use. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area. Separate records must be kept for this type of material.
Discards to the environment	TE	Nuclear material contained in waste that is measured or estimated on the basis of measurements, and which has been irrevocably discarded to the environment as the result of a planned discharge. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area.
Transfer to retained waste	TW	Nuclear material generated from processing or from an operational accident contained in waste that is measured or estimated on the basis of measurements and which has been transferred to a specific location within the material balance area from which it could be retrieved. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area. Separate records must be kept for this type of material.
Retransfer from conditioned waste	FC	Retransfer of conditioned waste to the inventory of the material

		balance area. This applies whenever conditioned waste undergoes processing.
Retransfer from retained waste	FW	Retransfer of retained waste to the inventory of the material balance area. This applies whenever retained waste is retrieved from the specific location within the material balance area, either for any processing involving the separation of elements in the material balance area or for any shipment from the material balance area.
Accidental loss	LA	Irretrievable and inadvertent loss of a quantity of nuclear material as the result of an operational accident. Use of this code in the MBR is only allowed if a special report was sent to the Commission when the inventory change occurred or became known.
Accidental gain	GA	Nuclear material unexpectedly found, except when detected in the course of a physical inventory taking. Use of this code in the MBR is only allowed if a special report was sent to the Commission when the inventory change occurred or became known.
Category change	CE	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another as a result of an enrichment process.
Category change	CB	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another as a result of a blending operation.
Category change	CC	Accountancy transfer of a quantity of nuclear material from one category (Article 18) to another for all types of category change not covered by codes CE and CB.
Change in particular obligation	BR	Accountancy transfer of a quantity of nuclear material

		from one particular safeguards obligation to another (Article 17(1)), to balance the total uranium stock following a blending operation.
Change in particular obligation	PR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17(1)), used when nuclear material enters or leaves an accountancy pool.
Change in particular obligation	SR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17(1)), following an obligation exchange or a substitution.
Change in particular obligation	CR	Accountancy transfer of a quantity of nuclear material from one particular safeguards obligation to another (Article 17(1)), for all cases not covered by codes BR, PR or SR.
Nuclear production	NP	Increase in the quantity of nuclear material due to nuclear transformation.
Nuclear loss	NL	Decrease in the quantity of nuclear material due to nuclear transformation.
Shipper/receiver difference	DI	Shipper/receiver difference (See Article 2.19).
New measurement	NM	Quantity of nuclear material, in one particular batch, accounted for in the nuclear material balance area, being the difference between a newly measured quantity and the quantity formerly accounted for, and which is neither a shipper/receiver difference nor a correction.
Balance adjustment	BJ	Quantity of nuclear material accounted for in the material balance area, being the difference between the result of a physical inventory taken by the plant operator for his own purposes (without reporting a physical inventory listing to the Commission) and the book

		inventory established on the same date.
Roundings	RA	Rounding adjustment to make the sum of the quantities reported in a given period coincide with the ending book inventory of the material balance area.
Isotope adjustment	R5	Adjustment to make the sum of the isotope quantities reported coincide with the ending book inventory for U-235 of the material balance area.
Material production	MP	Quantity of nuclear material, obtained from substances originally not subject to safeguards, which has become subject to safeguards because its concentration now exceeds the minimum levels.
Termination of use	TU	Quantity of nuclear material considered as irrecoverable for practical or economic reasons which is: (i)incorporated in end products used for non-nuclear purposes; or (ii)contained in waste in very low concentrations measured or estimated on the basis of measurements, even if these materials are not discarded to the environment. The quantity of nuclear material involved is to be subtracted from the inventory of the material balance area.

26. LINE NUMBER:
    Sequential number starting with 1, no gaps.

27. ELEMENT WEIGHT:
    The weight of the element category referred to in field 7 must be reported. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

28. ISOTOPE:

This code indicates the kind of fissile isotopes involved and should be used when the weight of fissile isotopes is reported. Use the code G for U-235, K for U-233, and J for a mixture of U-235 and U-233.

29. FISSILE WEIGHT:
    Unless otherwise stated in the particular safeguard provisions, the weight of fissile isotopes must only be reported for enriched uranium and category changes involving enriched uranium. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

30. OBLIGATION:
    Indication of the particular safeguards obligation assumed by the Community under an Agreement concluded with a third country or an international organisation, to which the material is subject (Article 17.). SRPNA will communicate the appropriate codes to the installations.

31. CORRECTION:
    Corrections have to be made by deleting the wrong line(s) and adding the correct one(s), where appropriate. The following codes must be used:

Code	Explanation
D	Deletion. The line to be deleted must be identified by indicating in field 17 the report number (6), in field 18 the line number (11) and in field 21 the CRC (20) which were declared for the original line. Other fields need not be reported.
A	Addition (forming part of a deletion/addition pair). The correct line must be reported with all data fields, including the 'previous report' field (17) and the 'previous line' field (18). The 'previous line' field (18) must repeat the line number (11) of the line being replaced by the deletion/addition pair.
L	Late line (stand-alone addition). The late line to be added must be reported with all data fields, including the 'previous report' field (17). The 'previous report' field (17) must contain the report number (6) of the report in which the late line should have been included.

32. PREVIOUS REPORT:
    Indicate the report number (6) of the line to be corrected.

33. PREVIOUS LINE:
    For deletions, or additions forming part of a deletion/addition pair, indicate the line number (11) of the line to be corrected.

34. COMMENT:
    Free-text comment field for short comments by operator (replaces separate concise note).

35. CRC:

Hash code of line for quality control purposes. SRPNA will inform the operator of the algorithm to be used.

36. PREVIOUS CRC:
    Hash code of the line to be corrected.

GENERAL REMARKS CONCERNING THE COMPLETION OF THE REPORTS

General remarks 2, 3, 4, 5 and 6 at the end of Annex III apply mutatis mutandis.

ANNEX V

PHYSICAL INVENTORY LISTING (PIL)

Label/Tag	Content	Comments	#
MBA	Character (4)	MBA code of reporting MBA	1
Report type	Character (1)	P for physical inventory listings	2
Report date	DDMMYYYY	Date on which the report was completed	3
Report number	Number (8)	Sequential number, no gaps	4
PIT date	DDMMYYYY	Date on which the physical inventory was taken	5
Line count	Number (8)	Total number of lines reported	6
Reporting person	Character (30)	Name of person responsible for report	7
PIL_ITEM_ID	Number (8)	Sequential number	8
Batch	Character (20)	Unique identifier for a batch of nuclear material	9
KMP	Character (1)	Key measurement point	10
Measurement	Character (1)	Measurement code	11
Element category	Character (1)	Category of nuclear material	12
Material form	Character (2)	Material form code	13
Material container	Character (1)	Material container code	14
Material state	Character (1)	Material state code	15
Line number	Number (8)	Sequential number, no gaps	16
Items	Number (6)	Number of items	17
Element weight	Number (24.3)	Element weight	18
Isotope	Character (1)	G for U-235, K for U-233, J for a mixture of U-235 and U-233	19
Fissile weight	Number (24.3)	Weight of fissile isotope	20

Obligation	Character (2)	Safeguards obligation	21
Document	Character (70)	Operator-defined reference to supporting documents	22
Container ID	Character (20)	Operator-defined identifier for the container	23
Correction	Character (1)	D for deletions, A for additions forming part of a deletion/addition pair, L for late lines (stand-alone additions)	24
Previous report	Number (8)	Report number of line to be corrected	25
Previous line	Number (8)	Line number of line to be corrected	26
Comment	Character (256)	Operator comment	27
CRC	Number (20)	Hash code of line for quality control purposes	28
Previous CRC	Number (20)	Hash code of line to be corrected	29

Explanatory notes

1. MBA:
   Code of the reporting material balance area. This code is notified to the installation concerned by SRPNA.

2. REPORT TYPE:
   P for physical inventory listings.

3. REPORT DATE:
   Date on which the report was completed.

4. REPORT NUMBER:
   Sequential number, no gaps.

5. PIT DATE:
   Day, month and year when the physical inventory was taken, reflecting the situation at 24.00.

6. LINE COUNT:
   Total number of lines reported.

7. REPORTING PERSON:
   Name of person responsible for report.

8. PIL_ITEM_ID:
   Sequential number, common to all PIL lines related to the same physical object.

9. BATCH:
   If batch follow-up is required in the particular safeguard provisions, the batch designation previously used for the batch in an inventory change report or in a previous physical inventory listing must be used.

10. KMP:
    Key measurement point. The codes are notified to the installation concerned in the particular safeguard provisions. If no code has been specified, '&' should be used.

11. MEASUREMENT:
    The basis on which the quantity of nuclear material reported was established has to be indicated. One of the following codes must be used:

Measured	Estimated	Explanation
M	E	In the reporting material balance area.
N	F	In another material balance area.
T	G	In the reporting material balance area when the weights have already been given in a previous inventory change report or physical inventory listing.
L	H	In another material balance area when the weights have already been given in a previous inventory change report or physical inventory listing for the present material balance area.

12. ELEMENT CATEGORY:

    The following codes must be used:

Category of nuclear material	Code
Plutonium	P
High enriched uranium (20 % enrichment and above)	H
Low enriched uranium (higher than natural and less than 20 % enrichment)	L
Natural uranium	N
Depleted uranium	D
Thorium	T

13. MATERIAL FORM:

The following codes must be used:

Main type of material form	Subtype	Code
Ores		OR
Concentrates		YC
Uranium hexafluoride (UF6)		U6
Uranium tetrafluoride (UF4)		U4
Uranium dioxide (UO2)		U2
Uranium trioxide (UO3)		U3
Uranium oxide (U3O8)		U8
Thorium oxide (ThO2)		T2
Solutions	Nitrate	LN
	Fluoride	LF
	Other	LO
Powder	Homogeneous	PH
	Heterogeneous	PN
Ceramics	Pellets	CP
	Spheres	CS
	Other	CO
Metal	Pure	MP
	Alloys	MA
Fuel	Rods, pins	ER
	Plates	EP
	Bundles	EB
	Assemblies	EA
	Other	EO
Sealed sources		QS
Small quantities/samples		SS
Scrap	Homogeneous	SH
	Heterogeneous (clean-outs, clinkers, sludges, fines, other)	SN
Solid waste	Hulls	AH
	Mixed (plastics, gloves, papers, etc.)	AM
	Contaminated equipment	AC
	Other	AO

Liquid waste	Low active	WL
	Medium active	WM
	High active	WH
Conditioned waste	Glass	NG
	Bitumen	NB
	Concrete	NC
	Other	NO

14. MATERIAL CONTAINER:

The following codes must be used:

Type of container	Code
Cylinder	C
Pack	P
Drum	D
Discrete fuel unit	S
Bird cage	B
Bottle	F
Tank or other container	T
Other	O

15. MATERIAL STATE:

The following codes must be used:

State	Code
Fresh nuclear material	F
Irradiated nuclear material	I
Waste	W
Irrecoverable material	N

16. LINE NUMBER:
Sequential number starting with 1 in each report, no gaps.

17. ITEMS:
Each physical inventory line must indicate the number of items involved. If a group of items belonging to the same batch are reported as several lines, the sum of the number of items reported must equal the total number of items in the group. If the lines involve more than one element category, the number of items should be declared in the line(s) for the element category of highest strategic value only (in descending order: P, H, L, N, D, T).

18. ELEMENT WEIGHT:
    The weight of the element category referred to in field 12 must be reported. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

19. ISOTOPE:
    This code indicates the fissile isotopes involved and should be used when the weight of fissile isotopes is reported. Use the code G for U-235, K for U-233, and J for a mixture of U-235 and U-233.

20. FISSILE WEIGHT:
    Unless otherwise stated in the particular safeguard provisions, the weight of fissile isotopes must only be reported for enriched uranium and category changes involving enriched uranium. All weights must be reported in grams. The decimal digits appearing in the accounting lines can be reported up to a maximum of three decimal places.

21. OBLIGATION:
    Indication of the particular safeguards obligation assumed by the Community under an Agreement concluded with a third country or an international organisation, to which the material is subject (Article 17.). The Commission will communicate the appropriate codes to the installations.

22. DOCUMENT:
    Operator-defined reference to supporting document(s).

23. CONTAINER ID:
    Operator-defined container number. Optional data element which can be used in those cases where the container number does not appear in the batch designation.

24. CORRECTION:
    Corrections have to be made by deleting the wrong line(s) and adding the correct one(s), where appropriate. The following codes must be used:

Code	Explanation
D	Deletion. The line to be deleted must be identified by indicating in field 25 the report number (4), in field 26 the line number (16) and in field 29 the CRC (28) which were declared for the original line. Other fields need not be reported.
A	Addition (forming part of a deletion/addition pair). The correct line must be reported with all data fields including the ‘previous report’ field (25) and the ‘previous line’ field (26). The ‘previous line’ field (26) must contain the line number (16) of the line being replaced by the deletion/addition pair.
L	Late line (stand-alone addition). The late line to be added must be reported with all data fields, including the ‘previous report’ field (25). The ‘previous report’ field (25) must contain the

	report number (4) of the report in which the late line should have been included.

25. PREVIOUS REPORT:
Indicate the report number (4) of the line to be corrected.

26. PREVIOUS LINE:
For deletions, or additions forming part of a deletion/addition pair, indicate the line number (16) of the line to be corrected.

27. COMMENT:
Free-text comment field for short comments by operator (replaces separate concise note).

28. CRC:
Hash code of line for quality control purposes. SRPNA will inform the operator of the algorithm to be used.

29. PREVIOUS CRC:
Hash code of the line to be corrected.

GENERAL REMARKS CONCERNING THE COMPLETION OF THE REPORTS
If, on the date the physical inventory was taken, there was no nuclear material in the material balance area, only labels from 1 to 7, 16, 17 and 28 above should be completed on the report.
General remarks 2, 3, 4, 5 and 6 at the end of Annex III apply mutatis mutandis.

ANNEX VI

ADVANCE NOTIFICATION OF EXPORTS/SHIPMENTS OF NUCLEAR MATERIAL

1. Reference code:
2. Material balance area code:
3. Installation (shipper): Installation (receiver):
4. Quantities split up by category of nuclear material and particular safeguards obligation:
5. Chemical composition:
6. Enrichment or isotopic composition:
7. Physical form:
8. Number of items:
9. Description of containers and seals:
10. Shipment identification data:
11. Means of transport:
12. Location where material will be stored or prepared:
13. Last date when material can be identified:
14. Approximate dates of dispatch:
    Expected dates of arrival:
15. Use:
16. Supply agency's contractual reference:

Date and place of dispatch of notification:
Name and position of signatory:
Signature:

Explanatory notes

1. Reference code for advance notifications to be used in the inventory change report (use up to eight characters).
2. Code of the reporting material balance area as notified by SRPNA to the installation concerned.

3. Name, address and country of the installation shipping, and of the installation receiving, the nuclear material. The receiver at the ultimate destination should also be indicated where applicable.

4. The total weight of the elements should be given in grams. The weight of fissile isotopes should be indicated, if applicable. The weights must be split up by category of nuclear material and particular safeguards obligation.

5. Chemical composition should be indicated.

6. If applicable, the degree of enrichment or the isotopic composition should be indicated.

7. Use the description of materials as laid out in Annex III (14.) to this Rulebook.

8. The number of items included in the shipment should be indicated.

9. Description (type) of containers, including features that would permit sealing.

10. Shipment identification data (e.g. container markings or numbers).

11. Indicate, where appropriate, the means of transport.

12. Indicate the location within the material balance area where the nuclear material is prepared for shipping and can be identified, and where its quantity and composition can if possible be verified.

13. Last date when material can be identified and when its quantity and composition can if possible be verified.

14. Approximate dates of dispatch and of expected arrival at destination.

15. Indicate the use to which the nuclear material has been assigned.

16. Indicate, where appropriate supply agency's contractual reference or, if not available, the date on which the contract was concluded or considered as concluded by the Supply Agency, and any useful references;

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX VII

ADVANCE NOTIFICATION OF IMPORTS/RECEIPTS OF NUCLEAR MATERIAL

1. Reference code:
2. Material balance area code:
3. Installation (receiver): Installation (shipper):
4. Quantities split up by category of nuclear material and particular safeguard obligation:
5. Chemical composition:
6. Enrichment or isotopic composition:
7. Physical form:
8. Number of items:
9. Description of containers and seals:
10. Means of transport:
11. Date of arrival:
12. Location where materials will be unpacked:
13. Date(s) when materials will be unpacked:
14. Supply agency's contractual reference:

Date and place of dispatch of notification:
Name and position of signatory:
Signature:

Explanatory notes

1. Reference code for advance notifications to be used in the inventory change report (use up to eight characters).
2. Code of the reporting material balance area as notified by SRPNA to the installation concerned.
3. Name, address and country of the installation receiving, and of the installation shipping, the nuclear material.
4. The total weight of the elements should be given in grams. The weight of fissile isotopes shall be indicated if applicable. The weights must be split up by category of nuclear material and particular safeguards obligation.

5. Chemical composition should be indicated.

6. If applicable, the degree of enrichment or the isotopic composition should be indicated.

7. Use the description of materials as laid out in Annex III (14.) to this Rulebook.

8. The number of items included in the shipment shall be indicated.

9. Description (type) of containers and, if possible, of the seals affixed.

10. Indicate, where appropriate, the means of transport.

11. Expected or actual date of arrival in the reporting material balance area.

12. Indicate the location within the material balance area where the material will be unpacked and can be identified, and where its quantity and composition can be verified.

13. Date(s) when material will be unpacked.

14. Indicate, where appropriate supply agency's contractual reference or, if not available, the date on which the contract was concluded or considered as concluded by the Supply Agency, and any useful references;

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX VIII

REPORT OF ORE EXPORTS/SHIPMENTS (1)

Undertaking (2):
Mine (3):
Code (4):
Year:

Date	**Consignee**	**Quantity contained in g:**		**Remarks**
		of uranium	**of thorium**	

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory notes

The shipment report is to be made at the latest by the end of January of each year for the previous year, with a separate entry for each consignee. The export report is to be made for each export consignment at the date of shipment.

1. Name and address of the reporting undertaking.
2. Name of the mine in respect of which the report is made.
3. Code of the mine as notified to the undertaking by the Commission.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX IX

REQUEST FOR DEROGATION OF AN INSTALLATION FROM THE RULES GOVERNING THE FORM AND FREQUENCY OF NOTIFICATIONS

1. Date:
2. Installation:
3. Material balance area code:
4. Category of nuclear material:
5. Enrichment or isotopic composition:
6. Quantities:
7. Chemical composition:
8. Physical form:
9. Number of items:
10. Type of derogation (Article 19.2.):
    1) small quantities kept unchanged for a long period
    2) non-nuclear activities
    3) sensing components
    4) Pu with Pu-238 content greater than 80 %
11. Intended use:
12. Particular safeguards obligation:
13. Date of transfer: From:

Date and place of dispatch of request:
Name and position of signatory:
Signature:

Derogation granted as above… Date:.....
Name and position of signatory granting the derogation:
Signature:… (for SRPNA)

Explanatory Notes

This form should be used either when the initial request is made for derogation of an installation from the rules governing the form and frequency of notifications, or when nuclear material which may qualify for a derogation is imported from a third country.

Point 13. should be used only in the case of imports, and should state the name and address of the shipper.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX X

ANNUAL REPORT OR EXPORT REPORT FOR DEROGATED NUCLEAR MATERIAL (1)

MBA code:		
Declaration date:	Declaration No:	Name of the installation:
Reporting period:	from:	to:

Type of report (2)	Entry (3)	Ref. (4)		Inventory change information (5)	MBA code or name and address of corresponding installation	Element	Enrichment	Weight of element	Use		Type of derogation under Article 19(2)
		Declaration	Entry						Nuclear or non-nuclear (6)	Description (7)	

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory Notes

1. This form should be used either as an annual report to declare any changes in the inventory of nuclear material held by the MBA to which a derogation has been granted as well as the stocks at the beginning and at the end of the reporting period (Article 19.3.), or as an export report in the case of exports to a third country (Article 19.4.).

2. The 'Type of report' column should show 'A' when the form is used for an annual report or 'EXP' when the form is used to report exports of nuclear material from the MBA to which a derogation has been granted.

3. 'Entry' in each declaration should be numbered sequentially, beginning with '1'.

4. The 'Ref.' column should be used to refer to another entry. The contents of the 'Ref.' column consist of the relevant declaration and entry numbers. The reference indicates that the current entry adds to or updates information reported earlier.

5. The 'Inventory change information' column should be used to state the type of inventory change that occurred during the reporting period and/or the stock at the beginning and at the end of the reporting period. The IC codes of Annex III should be used. The code BB should be used to update the stock at the beginning of the period.

6. A separate entry should be made for each type of derogation, for each corresponding installation and for each type of inventory change.

7. The 'Nuclear or non-nuclear' column should show 'N' if the nuclear material is used in nuclear activities or 'NN' if it is used in non-nuclear activities.

8. The 'Description' column should indicate the actual or intended use of the nuclear material.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX XI

OUTLINE PROGRAMME OF ACTIVITIES

Communications should, if possible, cover the next two years.
In particular, communications should indicate:

1. types of operations, e.g. proposed campaigns with indication of type and quantity of fuel elements to be fabricated or reprocessed, enrichment programmes, reactor operating programmes, with planned shutdowns,

2. expected schedule of arrival of materials, stating the amount of material per batch, the form (UF6, UO2, fresh or irradiated fuels, etc.), anticipated type of container or packaging,

3. anticipated schedule of waste processing campaigns (other than repackaging, or further conditioning without separation of elements), stating the amount of material per batch, the form (glass, high active liquid, etc.), anticipated duration and location,

4. dates by which the quantity of material in products is expected to be determined, and dates of dispatch,

5. dates and duration of physical inventory taking.

This communication, duly completed and signed, must be forwarded to SRPNA.

ANNEX XII

ADVANCE NOTIFICATION OF FURTHER WASTE PROCESSING ACTIVITIES (1)

Name of installation: Declaration date:
Declaration No:

Entry (2)	Ref. (3)	Waste type prior to conditioning (4)	Conditioned form (5)	Number of items (6)	Quantity (7)			Location (8)	Processing location (9)	Processing dates (10)	Processing purpose
					Pu	HEU	U-233				

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory notes

1. This form should be used for advance notification when further processing of waste is planned in accordance with Article 31. Any subsequent change in processing dates or processing location should also be notified. A separate entry should be made for each campaign of further processing other than repackaging of the waste, or its further conditioning not involving the separation of elements, carried out for storage or disposal purposes.

2. 'Entry' in each declaration should be numbered sequentially, beginning with '1'.

3. The 'Ref.' column should be used to refer to another entry. The contents of the 'Ref.' column consist of the relevant declaration and entry numbers (e.g. 10-20 refers to entry 20 of declaration 10). The reference indicates that the current entry adds to or updates information reported earlier. Several references may be inserted, if necessary.

4. The 'Waste type prior to conditioning' column should state the type of waste before any conditioning took place, e.g. hulls, feed clarification sludge, high active liquid, or intermediate active liquid.

5. The 'Conditioned form' column should show the current conditioned form of the waste, e.g. glass, ceramic, cement or bitumen.

6. The 'Number of items' column should show the number of items, e.g. glass canisters or cement blocks, to be involved in a single processing campaign.

7. The 'Quantity' column should include, if available, the total amount, in grams, of plutonium, high enriched uranium or uranium-233 contained in the items entered in the 'Number of Items' column. The entry in the 'Quantity' column may be based on the quantity data used in the inventory change reports, and does not require a measurement of each item.

8. The 'Location' column should include the name and address of the installation and should show the location of the waste at the time of the declaration. The address must be sufficiently

detailed to indicate the geographical position of the location in relation to other locations specified in this or other declarations, and to indicate how the location may be reached should access be necessary. If a location is on the site of a nuclear installation, the installation code should be included in the location column.

9. The ‘Processing location’ column should show the location where the planned processing is to take place.

10. The ‘Processing dates’ column should indicate the dates on which the further processing campaign is expected to begin and to end.

11. The ‘Processing purpose’ column should indicate the intended result of the processing, e.g. recovery of plutonium or separation of specified fission products.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX XIII

ANNUAL REPORT ON EXPORTS/SHIPMENTS OF CONDITIONED WASTE (1)

Name of the shipping installation:
MBA code of the shipping installation:

Reporting period from:
to:

Date	**MBA code of the receiving installation or Name and address of the receiving installation (2)**	**Conditioned form (3)**	**Quantity (4)**	**Remarks**
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory notes

1. This report shall include all the shipments or exports of conditioned waste to installations within or outside the territory of Republic of Serbia that have occurred during the reporting period.

2. MBA code to be filled in for shipments to installations within the territory of Republic of Serbia, full name and address to be filled in for exports to installations outside territory of Republic of Serbia, or when the MBA code is unknown.

3. The ‘Conditioned form’ column should show the conditioned form of the waste, e.g. glass, ceramic, cement or bitumen.

4. The quantity column may be based on the quantity data recorded at the installation and does not require measurements of the items exported/shipped.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX XIV

ANNUAL REPORT ON IMPORTS/RECEIPTS OF CONDITIONED WASTE (1)

Name of the receiving installation:
MBA code of the receiving installation:

Reporting period from:
to:

Date	**Name, address and, if known, MBA code of the shipping installation**	**Conditioned form (2)**	**Quantity (3)**	**Remarks**
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	
			g of P g of U-235 g of U g of T	

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory notes

1. This report is required for conditioned waste which has been received from installations without an MBA code or from installations outside the territory of Republic of Serbia.

2. The 'Conditioned form' column should show the conditioned form of the waste, e.g. glass, ceramic, cement or bitumen.

3. The quantity column may be based on the quantity data recorded at the installation and does not require measurements of the items imported/received.

This form, duly completed and signed, must be forwarded to SRPNA.

ANNEX XV

ANNUAL REPORT ON CHANGES IN LOCATION OF CONDITIONED WASTE (1)

Name of installation: Declaration date:
Declaration No: Reporting period:

Entry (2)	Ref. (3)	Waste type prior to conditioning (4)	Conditioned form (5)	Number of items (6)	Quantity (7)			Previous Location (8)	New location (9)
					Pu	HEU	U-233		
NB: All transfers of conditioned waste should be grouped by type of waste (prior to conditioning and after conditioning) and by previous location									

Date and place of dispatch of report:
Name and position of signatory:
Signature:

Explanatory notes

1. Annual report to declare any changes in location of wastes covered by point (c) of Article 32 that occurred during the preceding calendar year. A separate entry is required for each change of location during the year.

2. 'Entry' in each declaration should be numbered sequentially, beginning with '1'.

3. The 'Ref.' column should be used to refer in the current entry to another entry. The contents of the 'Ref.' column consist of the relevant declaration and entry numbers (e.g. 10—20 provides a reference to entry 20 of declaration 10). The reference indicates that the current entry adds to or updates information in another entry earlier declared. Several references may be reported, if necessary.

4. The 'Waste type prior to conditioning' column should show the type of waste before any conditioning took place, e.g. hulls, feed clarification sludge, high active liquid, or intermediate active liquid.

5. The 'Conditioned form' column should show the current conditioned form of the waste, e.g. glass, ceramic, cement or bitumen.

6. The 'Number of items' column should show the number of items, e.g. glass canisters or cement blocks, to be involved in a single processing campaign or the number of items moved during the year from the same originating ('previous') location to the same new location.

7. The 'Quantity' column should include (if available) the total amount, in grams, of plutonium, high enriched uranium or uranium-233 contained in the items entered in the 'Number of Items' column. The 'Quantity' column may be based on the quantity data used in the inventory change reports, e.g. the average quantity of nuclear material per item, and does not require a measurement of each item.

8. The ‘Previous location’ column should indicate the location of the waste before the change in location (see also explanatory note no 8 for Annex XII).

9. The ‘New location’ column should indicate the location after the change (see also explanatory note no 8 for Annex XII).

This form, duly completed and signed, must be forwarded to SRPNA.

STATEMENT

I. Legal basis for adoption of Rulebook

Legal basis for adoption of this Rulebook is Article 58.2. in connection with Article 6.1.1. of Law on radiation protection and nuclear safety ("Off. Gazette RS", no. 36/09) based on which SRPNA is prescribing methods for nuclear material accountancy. Licence holder which produce, reprocess, use or storage nuclear materials is in obligation to keep the records on those materials according with ratified international contracts and data from those records submit to SRPNA. The Governing Board of SRPNA shall have the authority to adopt regulations set by the Law based on Article 8.5.5. of Decision about founding of SRPNA ("Off. Gazette RS", no. 76/09).

II. Reasons for adoption of Rulebook

Main reason for adoption of this Rulebook is responsibility of SRPNA to prescribe the methods for nuclear material accountancy, which licence holder which produce, reprocess, use or storage nuclear materials is in obligation to keep.

III. Resources for implementation of Rulebook

For implementation of this Rulebook, funding is not necessary.