FRAMEWORK COOPERATION AGREEMENT IN THE FIELD OF RADIATION PROTECTION

MADE BY AND BETWEEN:

NATIONAL RADIATION PROTECTION INSTITUTE, A CZECH PUBLIC RESEARCH INSTITUTION, ESTABLISHED UNDER STATE OFFICE FOR NUCLEAR SAFETY, REGISTERED UNDER NUMBER 86652052, HAVING ITS REGISTERED OFFICE AT BARTOŠKOVA 1450/28, 14000 PRAHA 4, CZECH REPUBLIC, AND REPRESENTED BY ZDENEK ROZLÍVKA, DIRECTOR,

Hereunder referred to as "NRPI",

and

INSTITUTE OF RADIOBIOLOGY OF THE NATIONAL ACADEMY OF SCIENCES, A STATE SCIENTIFIC INSTITUTION, REGISTERED AT GOMEL REGION EXECUTIVE COMMITTEE UNDER NUMBER 788, HAVING ITS REGISTERED OFFICE AT FEDYUNINSKOGO 4, 246007 GOMEL, REPUBLIC OF BELARUS, AND REPRESENTED BY IHAR CHESHYK, DIRECTOR,

Hereunder referred to as "IRB",

Hereafter referred individually as "Party" or collectively as "Parties"

1 OBJECTIVE AND IMPLEMENTATION

This Agreement defines the general terms and conditions under which the Parties will cooperate, on a balanced basis, on specific topics they have selected in the radiation protection area for peaceful purposes only. *Appendix* specifies the list of technical and scientific topics.

FORMS OF COOPERATION

- 1.1 Cooperation under this Framework Cooperation Agreement may include but are not limited to (hereafter "Actions"):
- a) Communication of general information in the radiation protection area;
- b) Exchange of technical and scientific information covered by Appendix;
- c) Exchange or use of and access to materials, software or installations;
- d) Training through research activities in the radiation protection area;
- e) Visit of Parties' staff for the needs of this Frame Agreement;
- f) Participation of one Party to R&D programmes performed by the other Party, e.g. such as funded programs through European Commission;
- g) Implementation of joint studies, projects, etc.

1.2 Project Agreements

Implementation of any Action within the framework of this Cooperation Agreement shall be subject to a separate project agreement, written in English and in Russian, signed and agreed upon by the Parties.

Each Project Agreement shall include:

- purpose and scope of Actions;
- specific conditions of Actions(including, if necessary, visit of staff, review meetings; specific confidentiality conditions if any, specific rights of use, expenses coverage, etc.);
- financial conditions;
- duration and schedule of Actions;
- a Technical Appendix including a detailed description of Actions, appointment of project managers and their roles.

For the avoidance of doubt access to software, data base and premises of one Party to/by the other Party may be subjected to supplementary and specific Agreements or authorizations (i.e. licence, authorization of access to premises, prevention plan, etc.).

2 COORDINATION

2.1 Coordinator

Each Party will designate a coordinator in charge of leading and coordinating the activities performed in the frame of this Cooperation Agreement (hereafter the "Coordinator").

Each Coordinator is in charge of:

- maintaining liaison with his/her counterpart;
- carrying out the general coordination of the cooperation under this Agreement;
- identifying the Actions, preparing and discussing their detailed contents;
- preparing and discussing the provisions of each Project Agreement to be proposed and agreed upon by both Parties;
- reviewing and updating the list Appendix;
- general coordination of Project Agreements.

The Coordinators shall convene meetings, when necessary, in Czech Republic and in Belarus or via any appropriate media such as video conference or call conference. The date, agenda and practical details of the meetings will be set by joint agreement by the Coordinators. Participants will be the two Coordinators and, when necessary, the Project Managers any other appropriate specialists from NRPI and IRB. Upon completion of the meetings, the minutes of the meetings will be drafted and shared with the other Party.

2.2 Project Manager

Each Party will designate a Project Manager for each Project Agreement.

Each Project Manager will be in charge of:

- maintaining liaison with his/her counterpart.
- proposing and discussing the detailed technical and scientific contents of each Action in close association with his/her Coordinator.
- organizing the technical and scientific implementation of each Action covered by the Project Agreement and assigning of the particular research, technical and other complementary staff who will be involved in it;
- · communicating the results of the above activities to his/her Coordinator.

3 FINANCIAL PROVISIONS

3.1 As a general rule, the Framework Cooperation in itself will not induce any transfer of money between the Parties except for the specific cases jointly agreed on in separate agreements only.

4 CONFIDENTIALITY

- 4.1 The Parties agree that information disclosed by a Party (the "Disclosing Party") to the other Party (the "Receiving Party") under this Agreement and under Project Agreements shall be deemed confidential (hereinafter referred to as "Confidential Information") whatever the subject (technical, industrial, financial, commercial, etc.), the nature (know-how, methods, processes, technical or installation details, etc.), the form (written or printed documents, CD Rom, samples, drawings, etc.) and the mode of transmission (written, oral, computer, including networks and/or electronic mail).
- **4.2** The Receiving Party shall maintain the confidential nature of such Confidential Information and consequently:
 - a) protect and keep strictly confidential such Confidential Information and to treat Confidential Information with at least the same degree of care and protection as it uses to treat its own Confidential Information of same importance but in no instance shall such standards be less than reasonable care;
 - b) disclose such Information internally only to those of its employees (a) informed of such obligation (b) and having a need to know such Confidential Information in order to implement a Project Agreement;
 - use the Confidential Information only for the purposes agreed on by the Disclosing Party;
 - d) not to disclose such Confidential Information in any manner whatsoever either directly or indirectly to any third party, including subcontractors unless authorized by the disclosing Party, and providing that the third party beneficiary undertakes to be bound by the same obligations of confidentiality as those of this Agreement by prior written agreement; However each Party has the right to communicate Information covered by this article if it is required to be disclosed by the national or the European law;
 - e) not to reproduce, nor copy, nor duplicate in any manner, in whole or in part, unless such copies, reproduction or duplication are necessary for implementation of a Project Agreement;
 - f) return to the Disclosing Party on demand all Confidential Information which has been supplied to or acquired by the Receiving Party including all copies thereof and to delete all information stored in a machine readable form.

- **4.3** "Confidential Information" shall not include such information, which the receiving Party can show:
 - a) was in the public domain according to applicable national legislation prior to or after disclosure thereof and in such case through no wrongful act of the Receiving Party, or
 - b) was already known by the Receiving Party, as evidenced by the Receiving Party's written records, or
 - was lawfully received from third parties without fault of the Receiving Party and without restriction or breach of this Agreement, or
 - d) was published without restrictions or breach of this Agreement; or
 - e) was used or disclosed with the written authorization of the Disclosing Party, notably in the frame of Project Agreement or other agreement signed between the Parties.
- 4.4 Each Party shall promptly advise the other Party in writing of any unauthorized disclosure, misappropriation or misuse by any person of Confidential Information as soon as practicable after it becomes aware of such unauthorized disclosure, misappropriation or misuse.
 If any Party becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure notify the Disclosing Party, and comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the information.
- 4.5 Such confidentiality shall be maintained during a period of five (5) years following termination of this Agreement or Project Agreement concerned, whichever is the later. The Parties shall impose the same obligations on their employees, who obtain knowledge of Confidential Information, as far as legally possible, even for the time after the termination of employment
- 4.6 Transmission by a Party of Confidential Information under this Agreement shall not be construed as expressly or impliedly granting the receiving Party any Intellectual Property right in respect of any elements in relation to such Confidential Information, nor as a disclosure under patent law.
- **4.7** The present article is not binding to the Parties for the transmission of Confidential Information to the members of Boards of the Parties and responsible Ministries of the Parties, when applicable.

5 INTELLECTUAL PROPERTY AND ACCESS RIGHTS (USE)

5.1 Project Agreement **Definitions**

"Data Base" means data base files, either in machine readable, compiled and/or executable form, or in "Source Code", i.e. in human readable form and its documentation including technical information relating to the design, development, use or maintenance of any version of a data base which may be composed of Software in whole or in part.

"Prior Knowledge" means any information and technical and/or scientific knowledge whether patentable or not, held by and/or owned by a Party having appropriate rights to use it for the implementation of a Project Agreement and prior to their Effective Date (signature date) or developed by it independently and which is necessary or useful to the implementation of collaboration. Prior Knowledge includes copyrights or other intellectual property rights (including but not limited to Patents, Software, data base, trademark, models) pertaining to such Information and/or Technical and/or scientific knowledge.

"Results" means the results, including information, whether or not patentable, which are generated by the implementation of an Action under this Framework Cooperation Agreement. Such results include notably rights related to copyright; design rights; patent rights; plant variety rights; or similar forms of protection as may be existing in the respective country of the Parties.

"Software" means software programs, either in "Object Code", i.e. in machine readable, compiled and/or executable form, or in "Source Code", i.e. in human readable form and its documentation including technical information relating to the design, development, use or maintenance of any version of a software program (hereafter "Software").

5.2 Prior Knowledge

5.2.1 Access rights to Prior Knowledge for implementation of a Project Agreement

Subject to the conclusion of a Project Agreement as stated in article 1 of the present Agreement a non-transferable and non-exclusive access rights to Prior Knowledge shall be granted to the other Party, to the extent necessary to enable this Party to carry out their own work under one or several Actions of this Frame Agreement provided that the Party concerned is entitled to grant them.

Such access rights shall be granted on a royalty-free basis, unless otherwise agreed in written by both Parties.

Access to software, data-base, specific material and access to installation may be subject to other specific Agreements.

- 5.2.2 Access rights to Prior Knowledge for use and access to Own Results
- 5.2.2.1 Parties shall enjoy access rights to prior Knowledge, if it is needed and necessary to use the Results provided that the Party concerned is entitled to grant them.

Subject to prior written agreement and specific contract such access rights shall be granted under fair and reasonable conditions agreed between both Parties.

5.2.2.2 Own Results

Information listed in Project Agreements shall be considered as Prior Knowledge. However, as these information are not transmitted with the aim to create Joint Results as defined in Article 5.3 hereinafter but for analysis needs notably, each Party grants to the other right to reproduce, represent and perform (access right) the results, as and where there are created, obtained from the analysis or work of a Party issued from the use of Information transmitted by the other Party (hereinafter referred to as "Own Results"). This access right covers only right to use the Own Result with no right to sublicense, for research and development activities of the Parties, free of charge, in their own country respectively, for an unlimited duration or for the duration of protection of the results if covered by an intellectual property right.

5.2.3 Any other use on the Prior Knowledge or Own Results may be granted at the absolute discretion of the owner Party.

5.3 Results

5.3.1 DEFINITIONS AND PROPERTY OF JOINT RESULTS

5.3.1.1 GENERAL PROVISIONS

Unless otherwise stated therein, any Result carried out during implementation of an Action under the Frame Agreement shall be jointly owned by both Parties except Own results defined in article 5.2.2.2 here above. The patent applications for Joint Results which appear to be patentable will be filed at both Parties' names, at their shared costs in all countries where there is a mutual filing agreement, and in the name and at the costs of anyone of the Parties in any other country, subject to the other Party waiving its rights in the country concerned.

Joint Results expressly exclude Results comprising in all or in part Prior Knowledge. In this case the Party shall apply article 5.3.4.

A co-ownership agreement shall be concluded when Joint Result comprises patent Software or data bases before any industrial or commercial use.

5.3.1.2 INTELLECTUAL PROPERTY RIGHTS AND RIGHTS OF USE

Each party will assign its intellectual property rights over the Joint Results to the other Party, which will accept, so that each Party holds all the necessary ownership rights over the Joint Results according to the provision here-above.

The rights include the utilization right, the reproduction right, the representation right, the modification rights subject to the limits of the natural person author rights, the right to lend or to hire, for all uses, for commercial and non-commercial purposes, advertising or non-advertising purposes, for all countries and for the duration of the copyrights if any or for an unlimited duration if the Joint Results are not protected by an intellectual property right, subject to specific limitations of use of article 5.3.2.

5.3.2 USE OF THE JOINT RESULTS WITH NO NEED TO CO-OWNERSHIP AGREEMENT

Each of the Parties shall be entitled to use free of charge and without requiring for consent of the other Party, without any right to transfer its rights (subject to paragraph 2 of Article 5.3.2) to third parties and on a non-exclusive basis the Joint Results in order to:

- execute the R&D activities on its own behalf,
- use Joint Results in their own installations or the installations which they operate.
- in addition, each of the Party may use free of charge the Joint Results for evaluation or investigation of third parties requests including safety authorities.

Access rights given by a Party on a Joint Software to a third party shall not include any right to receive Source Code or Object Code or any right to receive Software documentation in any particular form or detail without the other Joint owner prior written approval.

Each Party may have the right to grant non-commercial licenses on a non-exclusive basis to third-parties, without the right to sub-license and/or to directly use Joint Result for commercial purposes, subject to the following conditions:

- at least 45 days prior notice must be given to the other joint owner; and
- the notice in clause (i) above must include the name of the intended third-party licensee. If the intended licensee can be demonstrated by the joint owner to be a direct competitor of that joint owner or that the granting of access will cause adverse effect on the other Party, then the joint owner can give the licensing Party a notice objecting to the grant of the license, which must include a justification for such notice, within the 45 day notice period (i) and, where such notice is reasonable, the Party must not grant the intended license.

5.3.3 Use of the Joint Results with need to sign a co-ownership agreement

Any other uses by the Parties or third Party not specifically mentioned in 5.3.2 shall be subject to specific written agreement such as co-ownership agreement or joint license unless otherwise decided in a Project Agreement.

5.3.4 OWNERSHIP OF AND ACCESS RIGHT TO RESULTS COMPRISING PRIOR KNOWLEDGE OR IMPROVEMENT OF PRIOR KNOWLEDGE

"Developing Party/Financing Party" means the Party which is not the originate owner of a Prior Knowledge and which develop or finance enhancement or improvement of the Prior Knowledge owned by the other Party.

These Results shall be the entire property of the genuine owning party on the corresponding Prior Knowledge. This clause is not applicable to patentable Results for which article 5.3.1.2 applies.

The Developing Party or Financing Party shall enjoy a licence on these results on a free of charge basis for research and academic activities (a separate document shall be signed between party stating specific conditions of use or may be addressed in a Project Agreement). For the avoidance of doubt a Party which does not finance or develop the Result comprising Prior Knowledge of the other Party in the frame of the Agreement shall enjoy access rights on the concerned Results like a Developing Party or Financing Party.

5.3.5 Assigning of rights over Joint Result to third party

Should one Party wish to assign its part of the Joint ownership over one of the Joint Results / Joint Software to a third party, the other Party shall have a pre-emptive right.

The Assigning Party will be free to assign its rights to a third party under terms which cannot be more favourable than those which would have been given to the other Party waiving its pre-emptive right within a period of three months from receiving notice of intention to assign by the Assigning Party.

The Assigning Party undertakes to inform the assignee of the terms of this article 8 and to ensure that it adheres to its obligations "as is".

6 DISSEMINATION ACTIVITIES

At least 45 days prior notice of any dissemination activity shall be given to the other Party, including sufficient information concerning the planned dissemination activity and the data envisaged to be disseminated on any Joint Result. Dissemination activity on Own Results shall be made at the sole discretion of the owning Party.

Following notification, the latter may object within 30 days of the notification to the envisaged dissemination activity if it considers that its legitimate interests in relation to its Prior Knowledge or Own Result could suffer disproportionately great harm. In such cases, the dissemination activity may

not take place unless appropriate steps are taken to safeguard these legitimate interests. All publications or any other dissemination relating to Joint Result shall include the following statement to indicate that said Joint Result was generated in the framework of this Agreement and with the other Party collaboration:

The research leading to these results has been conducted by the Belarusian INSTITUTE OF RADIOBIOLOGY and the Czech NATIONAL RADIATION PROTECTION INSTITUTE.

For the avoidance of doubt, a Party shall not publish Own Result or Prior Knowledge of the other Party, even if such Own Result or Prior Knowledge is amalgamated with Party's Own Result or Joint Result, without the other Party's prior written approval.

7 STAFF

The Party may host on their premises the staff of the other Party within this Framework Cooperation Agreement.

Any exchange of staff higher than 400 hours/year or any exchange which may induce interference with premises or hardware under applicable domestic law shall be made conditional to the acceptance of specific conditions between the Parties.

Subject to compliance with particular conditions of access specific to each Party, the Hosting Party shall give access to its sites, premises, equipment and support services (access to restricted areas possibly, restoration, etc.) necessary for the hosted Staff to carry out its occupational mission.

The employing Party whose staff is hosted (hereafter the "Assigning Party") shall disclose to the Hosting Party the necessary information about the skills of the staff in light of work to be performed. The Hosting Party will be free to accept or reject the proposed staff of the Assigning Party and may revoke any acceptance by invoking non-compliance by the staff with the rules of procedure applicable to external companies of the Hosting Party.

The Assigning Party will continue to assume in relation to the staff on assignment all its social and fiscal obligations and to exercise toward him all the disciplinary and administrative management prerogatives. The Assigning Party shall also support the occupational mission expenses. However, the Implementing agreements may provide for the reimbursement of these costs by the hosting part directly to the Assigning Party.

The Assigning Party remains responsible for its staff for the application of the whole labour legislation and regulation, including as regards to the health and safety of staff. It will take all steps to ensure that its staff complies with the rules of procedure imposed to external companies of the Hosting Party, including working hours or any security measures to be applied for access and circulation on the sites and in the premises. The Hosting Party undertakes to provide to the Assigning Party a copy of the rules of procedure applicable to external companies at first request. It is also committed to take the appropriate measures to ensure that the hosting staff had knowledge of the said regulation.

The Assigning Party undertakes to carry out at its costs medical visits or specific training which could be imposed by reason of the nature of the work carried out within the Hosting Party pursuant to one of the domestic law of the Party.

8 LIABILITY

8.1 Personal damage to the staff of each Party.

Each Party according to the domestic legislation in force bears all damages caused by its staff to the staff of the other Party.

8.2 Damage to the other Party's properties.

Each Party shall bear, without any claim against the other Party, any damage caused to its own properties and premises by the staff of the other Party when the staff thereof is hosted in the former Party's premises.

8.3 Third party liability.

In accordance with the appropriate domestic regulations, each Party remains liable for damage caused to third parties by its own staff hosted in the other Party's premises.

8.4 Information

Each Party makes no representation, warranty, assurance or guarantee to the other Party with respect to the commercial nature or use, technical feasibility, accuracy, completeness and to any third party rights on any information supplied in the framework of this Agreement and its Project Agreement or pertaining to.

9 FORCE MAJEURE

- Project Agreement caused by an event of force majeure. Force majeure is defined for the purposes of this Agreement as an event beyond the control of a Party, that could not have been reasonably foreseen at the date of signature of the Agreement or any Project Agreement respectively, and whose effects cannot be avoided by appropriate remedies and that prevent the performance of one of its obligation. Unless the delay in performing its obligations required the termination of the Agreement or any Project Agreement, the obligations that are prevented to be performed for cause of force majeure are suspended for the duration of the event. However the other Party may choose to terminate the Agreement or any Project Agreement if the delay lasts more than (2) two months by written notice send by mail with acknowledge of receipt. The event of force majeure shall be notified to the other Party as soon as possible.
- 9.2 The Parties intend to take as a case of force majeure any crisis situation involving a requisition by the national authorities of one or several laboratories of the Parties that prevents them to

- comply temporarily or permanently with one or more of its obligations under the Agreement or any Project Agreement.
- 9.3 Any default of a product or work or delays in making them available for the purpose of performing this Agreement or any Project Agreement and affecting such performance, including, for instance, anomalies in the functioning or performance of such product or work, do not constitute force majeure.

10 DISPUTES RESOLUTION

The Parties agree that any dispute arising out of the execution of this Agreement or any Project Agreement will be settled amicably, if possible and if necessary, with the assistance of one or more independent experts not acting as arbitrators.

Any dispute which cannot be settled amicably shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by one or more appointed arbitrator in accordance with the said Rules, with at least one arbitrator of legal education. The applicable law shall be the substantive Law of Belgium and the place of arbitration will be Brussels.

Arbitration proceedings and arbitral award shall be conducted in English.

11 DURATION AND TERMINATION

- 11.1 This Agreement is concluded for a five (5) years period from its Effective Date. This Agreement may be amended at any time by mutual written agreement of both Parties.
- 11.2 This Agreement may be terminated by either mutual agreement of the Parties or one of the Parties through written notice to the other Party. This Agreement shall terminate after six months from notice of a Party to the other one to terminate this Agreement or from the date of the mutual written agreement of both Parties.
- 11.3 Any uncompleted Project Agreement at the date of termination (whatever the cause) of this Agreement shall continue to be valid until its completion pursuant to the provisions of this Agreement or any Project Agreement.
- 11.4 Termination of this Agreement or any Project Agreement for any reason does not affect the articles of the Agreement designed to remain effective after termination of the Agreement.

12 MISCELLANEOUS

- 12.1 The Agreement is concluded *intuitu personae* by the Parties. Rights and obligations resulting from the Agreement or any Project Agreement shall not be transferred or ceded by the Parties in any way or by any means without the prior and written consent of the other Parties.
- 12.2 This agreement and its Appendices constitute the entire agreement between the Parties with respect to its purpose. It supersedes all prior proposals, communications and any other provisions contained in documents exchanged between the Parties and regarding the purpose of the Agreement.
- 12.3 Any modification, extension or renewal of this Agreement shall become effective only if drawn up in writing and duly signed by the authorized representatives of the Parties. The Parties exclude explicitly the tacit renewal of the Agreement even if one or both Parties continue(s) to execute the Agreement.
- 12.4 If any of the provisions of this Agreement or Project Agreement is found to be void or unenforceable, such decision shall not affect the validity of the remaining provisions. The Parties shall negotiate in good faith to agree upon a mutually satisfactory provision to be substituted for the provision so found to be void or unenforceable.
- **12.5** The headings used in this Agreement are for convenient reference only and shall not be used for interpreting the provisions of this Agreement.

13 EXPORT CONTROL

In case export control license is required for exchange of any information in the frame of this Agreement or any Project Agreement (according to the Council Regulation (EC) No. 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items, as modified) the party to whom the information has to be transferred shall sign an End-User Certificate for the use of the information. No information shall be transferred or use before the appropriate export control licence had been issued by the competent national authority. Each Party is aware that noncompliance with Regulation CE No. 428/2009 is considered as a customs offense under Czech domestic law.

14 FINAL PROVISIONS

14.1 The Parties will meet no less than ninety (90) days before the scheduled termination of this Agreement to review the status of their cooperation. Thus, they may consider extending this Agreement for a further period.

- **14.3** The Parties have also signed a translation of this Agreement from the English version, in Russian language, in two originals counterparts on the same date here above mentioned.
- **14.4** The English version shall prevail over any other translation.

FOR NRPI

For IRB

RNDr. Zdenek ROZLÍVKA

Ihar CHESHYK, PhD MSc

Director of NRPI

Director of IRB

Appendix

List of Scientific Topics

- a) Radiation exposure to human, biota and ecosystems
- b) Remediation of contaminated agricultural, forest and other areas
- c) Joint on-site and laboratory experimental research
- d) Mathematical modelling of radionuclide transfer
- e) Contamination of foodstuffs, feedstuffs and raw materials, and resultant human exposure
- f) Internal contamination in human and biota
- g) Emergency preparedness and response, monitoring network (incl. early warning network)
- h) Development and test of the new instruments, methods and procedures in the contaminated territory
- i) Ultra-low activity measurements and determination of trace radio-elements
- j) New dosimetry methods
- k) Biological dosimetry
- I) Radon measurements and human exposure
- m) Natural exposure (building materials, water, NORM)
- n) Radiation protection, risk communication, development of radiation safety culture