National Report

Convention on Nuclear Safety

Republic of Latvia

The Radiation Safety Centre

Republic of Latvia

2004

Introduction

This is the third report submitted by Latvia under the Convention on Nuclear Safety. The present report provides updates of the previous reports. Changes in the nuclear and radiation safety regulatory system and progress related to decommissioning of the Salaspils research reactor are referred to in this report.

Nuclear safety regulatory infrastructure

Some changes have taken place in Latvia's nuclear safety and radiation safety regulatory infrastructure. The supervisor of Radiation Safety Centre (further also RDC) from 2001 to middle of 2003 was the Ministry of Environmental Protection and Regional Development. This Ministry was reorganised due to the changes of the Government and now has a new title – the Ministry of Environment. Consequently, some functions from the former ministry were moved to the other ministries. These legal changes affected neither functions nor status of the RDC.

All major activities related to safe management and decommissioning of the Salaspils research reactor are covered from the State budget within the program "Radiation safety and management of dangerous waste".

There are no changes in tasks of the Radiation Safety Centre or in its structure. For background information, the National report from 2001 could be used.

National policy regarding nuclear activities

There are no changes in national policy regarding nuclear activities in energy sector. Thus Latvia has no plan to use the nuclear power and there is no intention to develop such a plan. Latvia is always in favour regarding safety upgrades for existing nuclear facilities and, if such upgrades are not manageable in reasonable time, the relevant facilities shall be closed down and decommissioned.

Latvia's major concern is the safe use of nuclear energy especially the need to prevent any significant accident at the NPP with transboundary

effects. Consequently, Latvia have ratified the Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage.

Survey of main safety issues and main themes of the report

The recommendations, applicable for Latvia from previous two peer review conferences, which defined some particular issues regarding the next national report, are as follows:

1. Agreements with neighbouring countries on early notification and assistance,
2. Emergency preparedness arrangements including training activities,
3. Updates on regulations and agreements.

List of Nuclear Installations

There is no any nuclear installation according to the definition of the Nuclear Safety Convention in Latvia.

There is a Soviet design pool type research reactor, which had maximum thermal power 5000 kW utilising U-235 with 90% enrichment. Reactor was operated from 1961 to 1998. It is permanently shutdown and is in early stage of decommissioning. The decommissioning shall be finished in 2010.

Since the Concept for decommissioning was approved by the Government in 1998, the operator of facility – Radioactive Waste Management State Agency "RAPA", managed around 10% implementation from entire activities planed for decommissioning according the Concept.

There are some delays due to lack of agreement on spent fuel management. Therefore Government is in process to accept the new updated plan, which includes temporary solutions and clarifications regarding the future of the site.

References to supplementary annexes

There are two annexes at the end of this Report:

1. List of national legal documents relevant to NSC,
2. List of ratified international agreements, relevant to NSC.

Detailed article per article review

ARTICLE 1. OBJECTIVES

The objectives of this Convention are:

(i) to achieve and maintain a high level of nuclear safety worldwide through the enhancement of national measures and international co-operation including, where appropriate, safety-related technical co-operation;

The objectives of Nuclear Safety Convention are incorporated in the legal and institutional framework for radiation safety and nuclear safety. In this part of report only short comments are given with respect to how it is assured.

Latvia continuously develops its own national legal framework; the main documents relevant to Nuclear Safety Convention are shown in Annex 1. Since last Conference, some updates of national legal documents have been adopted; since May 2004 (after accession to the EU) the legal documents of EU are enforced.

It is an ongoing process to enhance regulatory capacity and implement additional safety measures in Latvia. As examples could be used:

- National technical co-operation project LAT/9/007. The objectives of the project are to strengthen knowledge management in selected institutions in the area of radiation protection, radioactive waste management, and nuclear regulatory activities.
- Several co-operation activities with Sweden and USA aimed to improve situation at facility level and enhance supervisory activities,
- Two PHARE projects (PHARE 2002 and PHARE 2003) have been prepared and accepted for implementation with the aims:
    - to upgrade response capabilities in case of emergency, illicit trafficking events,
    - to upgrade and expand the early warning system,
    - to enhance quality assurance within regulatory authority (with intention at the end of the project to reach level necessary for accreditation under ISO 9001:2000).

(ii) to establish and maintain effective defences in nuclear installations against potential radiological hazards in order to protect individuals, society and the environment from harmful effects of ionizing radiation from such installations;

The main approach utilised in Latvia is to ensure division of responsibilities between operators and regulatory authority; at the same time to maintain high level of professionalism and availability of technical tools to ensure and to verify safety. The main implementation requirements are defined in the regulations; these are used as pre-requisites for licence applications and incorporated into licensing conditions. The operator has to have comprehensive set of safety and QA/QC related requirements in internal documents for facility. The RDC controls how these provisions and requirements are fulfilled.

(iii) to prevent accidents with radiological consequences and to mitigate such consequences should they occur.

Methods to ensure protection from accidents have already been quoted – emergency preparedness aimed at early detection of any incident, fast response to mitigate any consequences. Moreover, the availability of funds have an impact to these activities, therefore, as it has been mentioned above, Latvia ratified the Protocol amending the Vienna Convention on civil liability for nuclear damage.

Capabilities for response are also ensured by 24 hour duty services in RDC, regular trainings of mobile teams, co-operation projects to ensure availability of technical tools and measurement equipment for the response.

ARTICLE 4. IMPLEMENTING MEASURES

Each Contracting Party shall take, within the framework of its national law, the legislative, regulatory and administrative measures and other steps necessary for implementing its obligations under this Convention.

The framework Law introduced main goals for safety – to protect the inhabitants and environment against the potential risk posed by radiation and nuclear applications. Based on the Law, comprehensive set of regulations was adopted (see Annex 1) and Regulatory authority was

established. The Law also defines the principles for safety and security and lists main obligations for all relevant parties.

With respect to legal obligations under the Convention on Nuclear Safety – to prepare national reports, to answer the questions posed by other parties, to present reports and to participate in peer review conferences, - these are also reflected into the Law as basic tasks for RDC – to assess situation, to prepare reports and to participate in discussions on such issues with the competent international organisations.

Regulatory infrastructure was explained already in previous report, hence only short resume is presented here – Radiation Safety Centre has licensing, supervisory and control functions, maintains relevant data bases, together with representatives from other institutions and professional associations deals with certification of radiation and nuclear safety officers and recognition of radiation and nuclear safety experts.

The main administrative activities relevant to this Convention are related to main operator – RAPA, which has full responsibility for safety and security at both the research reactor site and radioactive waste disposal site. The Ministry of Environment through State budget and other extra-budgetary sources provides funds for decommissioning and safety upgrades. The Ministry has established steering and management groups to utilise collective experiences and to find optimum solutions for major tasks.

ARTICLE 6. EXISTING NUCLEAR INSTALLATIONS

Each Contracting Party shall take the appropriate steps to ensure that the safety of nuclear installations existing at the time the Convention enters into force for that Contracting Party is reviewed as soon as possible. When necessary in the context of this Convention, the Contracting Party shall ensure that all reasonably practicable improvements are made as a matter of urgency to upgrade the safety of the nuclear installation. If such upgrading cannot be achieved, plans should be implemented to shut down the nuclear installation as soon as practically possible. The timing of the shut-down may take into account the whole energy context and possible alternatives as well as the social, environmental and economic impact.

There are no nuclear installations according to definition of this Convention, but there is a Soviet design pool type research reactor. Technical details have been provided in previous Reports.

Since all safety upgrades could not be achieved, the Cabinet of Ministers took a decision on permanent shutdown of this reactor in June 1998. Environmental Impact Assessment (EIA) for decommissioning was accomplished in 2004. Additional studies for updates of decommissioning project including definition of further activities on the site were performed; the proposal for next decision has been submitted to the Government.

ARTICLE 7. LEGISLATIVE AND REGULATORY FRAMEWORK

1. Each Contracting Party shall establish and maintain a legislative and regulatory framework to govern the safety of nuclear installations.

Latvia applies *the top to bottom* approach in developing our nuclear legislation - preparation a set of legal documents in the following order:

1. Law on Radiation Safety and Nuclear Safety
2. Law on Handling of Strategic Goods
3. Regulations on Licensing
4. Basic Safety Regulations
5. General regulations e.g. on Safe Transportation of Radioactive Materials, on Radioactive Waste Management
6. Specific regulations such as on Prevention of Illicit Trafficking, State System for Accounting and Control, on Export, Import and Transit of Dual Use Goods, on Physical Protection, etc.

There are more legal documents of general type, but with provisions relevant to this Convention in Latvia, such as the Criminal Code, the Administrative Code, the Customs Law, regulations on border control system, etc. Some requirements are prescribed by international agreements, such as Non-Proliferation Treaty, Safeguards Agreement, as well as in some major Conventions.

2. The legislative and regulatory framework shall provide for:
(i) the establishment of applicable national safety requirements and regulations

See the list of documents in annexes.

Since the last report and changes in legal status of Latvia (joining the EU), there are certain modifications introduced in the legal documents; some EU regulations directly replaced relevant legal provisions of national regulations.

(ii) a system of licensing with regard to nuclear installations and the prohibition of the operation of a nuclear installation without a licence;

The set of **Licensing Regulations** was described in detail in the previous report. By last amendments in 2004 there are modifications introduced with respect to recognition of licenses issued by regulatory authorities in other EU countries and minor modifications due to introduction of the **Commercial law** instead to the **Law on entrepreneurial activities**.

Radiation Safety Centre maintains relevant data bases and inspection system to verify compliance with these regulations. In case of violations (there are few cases for minor users of radiation sources per year) the provisions of Administrative Penalty Law were applied.

(iii) a system of regulatory inspection and assessment of nuclear installations to ascertain compliance with applicable regulations and the terms of licenses;

Radiation Safety Centre executes the radiation and nuclear safety supervision and authorisation for all facilities. To verify compliance with environmental protection conditions, there is a National Plan for monitoring of the facilities of State significance – all relevant facilities (research reactor and radioactive waste disposal site and also facilities

utilising radiation sources with radioactivity exceeding the exemption limits one billion times) are under regular direct investigations including sample taking and direct measurements.

According to the Law on Environmental Impact Assessment, any major modification for such facilities shall be assessed. Additional assessments of safety are done during the licensing procedures – the license shall be renewed each third year.

(iv) the enforcement of applicable regulations and the terms of licences, including suspension, modification or revocation.

Radiation Safety Centre executes legal rights and duties for enforcement of applicable regulations – there had been few cases for suspension and modifications of licenses due to violations of relevant provisions and conditions of licenses by their holders. Revocation is possible, but since establishment of RDC in 2001 this provision has not been applied.

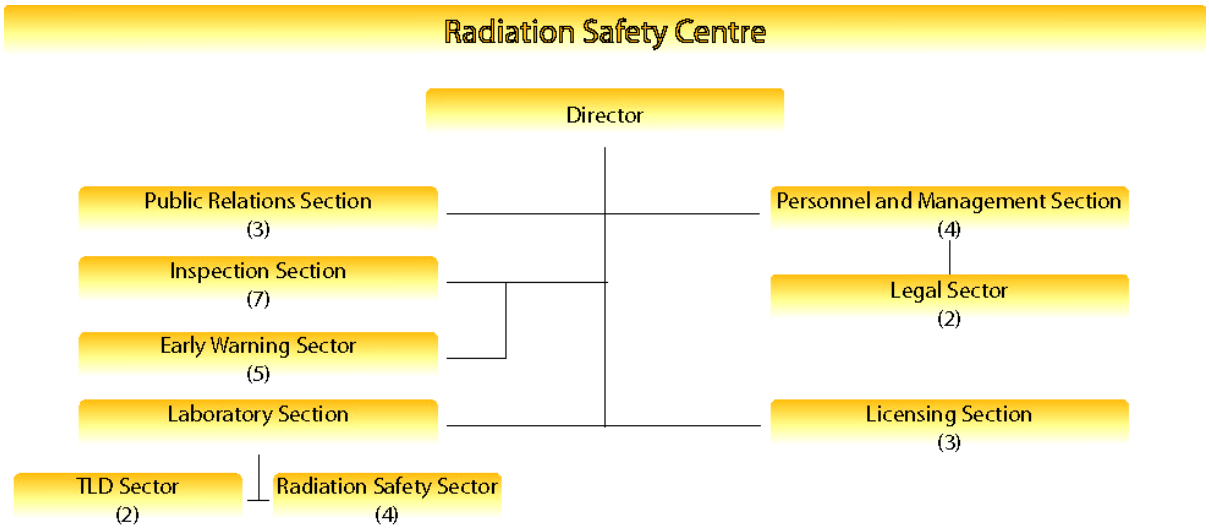
Other state institutions could also initiate the enforcement activities e.g. Security Police, which together with RDC verify physical security systems. There could be possibilities to withdraw transport license based on negative opinion from the road police, suspension or modification of license based on opinion from labour inspection etc. In any of such or similar cases RDC has the right to use enforcement methods related to license for practices with sources of ionising radiation.

ARTICLE 8. REGULATORY BODY

1. *Each Contracting Party shall establish or designate a regulatory body entrusted with the implementation of the legislative and regulatory framework referred to in Article 7, and provided with adequate authority, competence and financial and human resources to fulfil its assigned responsibilities.*

The Parliament delegated the regulatory functions to the Radiation Safety Centre, which is a single regulatory authority in field of radiation and nuclear safety. Functions and duties are prescribed by the Law on Radiation Safety and Nuclear Safety, more detailed duties, rights and working procedures are defined in regulations approved by the Cabinet of

Ministers. RDC is financed from the State budget, currently has limit for staff – 31. Composition of RDC is given in diagram below.



2. Each Contracting Party shall take the appropriate steps to ensure an effective separation between the functions of the regulatory body and those of any other body or organization concerned with the promotion or utilization of nuclear energy.

According the Law on state institutions, RDC itself has no functions related to the promotion or utilisation of nuclear energy. RDC is supervised by the Ministry of Environment, which is neither responsible for promotion nor for utilisation of nuclear energy. System of supervision is described in detail in the Law on state institutions – in short, there are no rights for the supervisor to affect directly the decision taking on the subject matters, only financial control and compliance with requirements from the Law on State civil servants is under control.

There are two facilities under supervision of the Ministry of Environment – both operated by the State agency RAPA – radioactive waste disposal site and former research reactor. Ministry executes the following functions regarding these facilities: supervision, setting up requirements and administrative supervision, and financing; but the RDC has independent functions to license facilities and to execute supervision and control over them.

ARTICLE 9. RESPONSIBILITY OF THE LICENCE HOLDER

Each Contracting Party shall ensure that prime responsibility for the safety of a nuclear installation rests with the holder of the relevant licence and shall take the appropriate steps to ensure that each such licence holder meets its responsibility.

For any facility with radiation sources in Latvia, the civil liability regime developed based on legal provisions from Vienna Convention on Civil liability is applicable. There is a clear statement in the Law - only operator is liable.

According to the Law on Radiation Safety and Nuclear Safety, the main person in any facility is the Job Supervisor, who bears major functions of license holder, prescribed by the Law. License holder shall nominate the Job Supervisor, which has to be certified. RDC leads the work of Certification Commission, which includes also experts from professional associations and educational centres. Certificate is issued by RDC, based on positive opinion from the Commission.

As the Law and relevant regulations had been analysed already in previous reports, this issue does not need further elaboration here.

ARTICLE 10. PRIORITY TO SAFETY

Each Contracting Party shall take appropriate steps to ensure that all Organizations engaged in activities directly related to nuclear installations shall establish policies that give due priority to nuclear safety.

National BSS lay down the principle for Radiation safety and nuclear safety - priority of protection measures in comparison to other measures.

In order to fulfil the requirements (set out in the quality assurance programme), the operator shall foresee the financial resources required for the performance of protection measures and regularly take inventory and examine material resources.

Verifications of these actions are performed by RDC during inspections and licensing.

ARTICLE 11. FINANCIAL AND HUMAN RESOURCES

1. *Each Contracting Party shall take appropriate steps to ensure that adequate financial resources are available to support the safety of each nuclear installation throughout its life.*

Both major facilities – research reactor and radioactive waste disposal are mainly financed from the State budget (there are some incomes by services and from tax on utilisation of natural resources for waste disposal). The Ministry of Environment explains and gives proof to the Government concerning adequate funding for each fiscal year and long-term programmes.

For the specific project – decommissioning of the research reactor, special funds or investment projects were approved by the Parliament or Government.

2. *Each Contracting Party shall take appropriate steps to ensure that sufficient numbers of qualified staff with appropriate education, training and retraining are available for all safety-related activities in or for each nuclear installation, throughout its life.*

In relevance to staff training and post graduate studies, special funds were used for drafting the Radiation Protection manual, Quality Assurance Manuals, and other documents. The Ministry of Environment assists the Universities to improve their syllabus according to the IAEA recommendations. There is ongoing technical cooperation project LAT/9/006 with aim to improve teaching materials. Similar activities are carried out under EU projects and bilateral co-operation with donor countries.

Since late 2003, the system for certification of radiation safety officers (job supervisors) is emplaced. This system ensures that all leading persons have to have adequate education and training and have to undergo regular re-training. Before this certification system the similar requirements had been used during the licensing process (in examination of applications).

For other personnel of facilities, the operator has prime responsibility to ensure qualification, training and re-training. Three universities have special programs for re-training of different groups of radiation workers.

ARTICLE 12. HUMAN FACTORS

Each Contracting Party shall take appropriate steps to ensure that the capabilities and limitations of human performance are taken into account throughout the life of a nuclear installation.

The prevention of human errors is set up in National BSS (for example, requirements for defence in depth, quality assurance programmes, etc.).

Licensing Regulations and National BSS require adequate staff training and set up educational requirements for experts. The licensing procedure requires the applicants to submit information about available staff and their level of education.

Verification of activities are performed by RDC during inspections (annual plan for RDC is around 400 inspections). Findings from inspections are used to impose additional requirements for the licensees and also in licensing conditions during the re-licensing.

ARTICLE 13. QUALITY ASSURANCE

Each Contracting Party shall take appropriate steps to ensure that quality assurance programmes are established and implemented with a view to providing confidence that specified requirements for all activities important to nuclear safety are satisfied throughout the life of nuclear installation.

The Quality assurance programmes are requested by the national BSS. Any facility (especially "facilities of state significance") is requested to have QA and QC programmes. QA systems are developed by the operators and, in addition to these, also by service companies.

More stringent requirements are introduced for accreditation of laboratories and certification of dangerous goods.

One of the tasks for inspectors of RDC is to control the implementation of QA programs.

ARTICLE 14. ASSESSMENT AND VERIFICATION OF SAFETY

Each Contracting Party shall take the appropriate steps to ensure that:

(i) comprehensive and systematic safety assessments are carried out before the construction and commissioning of a nuclear installation and throughout its life. Such assessments shall be well documented, subsequently updated in the light of operating experience and significant new safety information, and reviewed under the authority of the regulatory body;

The legal basis for safety impact assessment is given in the Law on Environmental Impact Assessment. Other safety assessment requirements are elaborated in Licensing regulations and Basic Safety regulations.

The general public and any municipal or other institution in respective regions should have access to information concerning the evaluation of potential threat from nuclear facilities, as prescribed by the Licensing Regulations.

Information about planned activities and major changes at nuclear or radiation facilities should also be provided to the public. This information is used for decisions regarding licensing; licensing conditions and implementation is verified by inspections.

(ii) verification by analysis, surveillance, testing and inspection is carried out to ensure that the physical state and the operation of a nuclear installation continue to be in accordance with its design, applicable national safety requirements, and operational limits and conditions.

The Licensing Regulations and National BSS prescribe the duties for RDC in the field of inspections. Practical activities are coerced by internal document of RDC, the "Inspection Manual". During the 2004-2005, based on Law on state institutions, external documents (regulatory provisions of RDC) shall be developed to ensure knowledge for operators about working procedures of regulatory authority.

An inspector carries out verification of nuclear safety on regular basis and also performs unannounced inspections.

The Minister for Environment approves the "Control plan for facilities of State significance". Safety related tests are carried out according to this

plan. This plan is aimed at investigation of the impact of nuclear activities and radioactive waste management in adjacent areas.

ARTICLE 15. RADIATION PROTECTION

Each Contracting Party shall take appropriate steps to ensure that in all operational states the radiation exposure to the workers and the public caused by a nuclear installation shall be kept as low as reasonably achievable and that no individual shall be exposed to radiation doses which exceed prescribed national dose limits.

The Law on Radiation Safety and Nuclear Safety introduces the basic principles of limitation and optimisation. Verification of compliance is a duty of RDC, which also provides the occupational exposure control for all radiation workers in country and maintains relevant data base.

These requirements are further elaborated in National BSS. The limits are the same as in IAEA BSS and in EU Basic Safety Directive. There are ongoing investigations around the major radiation facilities and in different regions of country to assess and monitor public exposures. Additional to these activities, based on requests from individual persons, in few cases from other authorities, the RDC has conducted task oriented investigations at certain regions where practices with radiation sources have been conducted in the past or where suspicions on enhanced radiation levels have been raised.

ARTICLE 16. EMERGENCY PREPAREDNESS

1. *Each Contracting Party shall take the appropriate steps to ensure that there are on-site and off-site emergency plans that are routinely tested for nuclear installations and cover activities to be carried out in the event of an emergency.*

For any new nuclear and radiation facility, such plans shall be prepared and tested before it commences operation agreed by the regulatory body. The plans shall be agreed also with local municipalities and Fire and Rescue Services. These are preconditions for licensing.

National BSS prescribes main duties for Job supervisors with respect to emergency preparedness.

For management of accidents the national Emergency Preparedness Plan is established and relevant regulations (on Preparedness and response in

case of Radiation accidents) have been adopted. The Plan sets requirements for regular testing and updating of the Plan (including theoretical exercises, table top exercises and practical exercises). Last national exercise aimed to test in real time communication systems and decision making process was done in 2003. Representatives from the State authorities participate also in similar events in neighbouring countries and Latvia participates in different international exercises.

Latvia has some bilateral agreements for early warning and assistance in case of radiological or nuclear accidents (with Ukraine, Lithuania on governmental level, with Estonia and Lithuania on level of regulatory authorities) and also agreements for cooperation in case of natural and man made accidents (including radiological) with several countries.

2. Each Contracting Party shall take the appropriate steps to ensure that, insofar as they are likely to be affected by a radiological emergency, its own population and the competent authorities of the States in the vicinity of the nuclear installation are provided with appropriate information for emergency planning and response.

These provisions are introduced in national plan and in regulations concerning radiation accidents. The information leaflets have been provided to population; population in vicinity of Ignalina NPP is provided with KI pellets together with instructions why and when they should be used.

There is attempt to prepare new leaflet in 2004 for medical doctors to provide the guidance regarding recognition of radiation effects to humans.

3. Contracting Parties which do not have a nuclear installation on their territory, insofar as they are likely to be affected in the event of a radiological emergency at a nuclear installation in the vicinity, shall take the appropriate steps for the preparation and testing of emergency plans for their territory that cover the activities to be carried out in the event of such an emergency.

As stated in introduction of the Report, Latvia's major concern is the Ignalina NPP in the vicinity. According to the Law on Civil Protection System, the main institution responsible for planning and implementation of these functions is Fire and Rescue Service.

The National Emergency Plan provides basic principles for emergency preparedness according to radiation and nuclear safety legislation.

Some information regarding this article of Convention on Nuclear Safety was given earlier in this report; ongoing PHARE projects to ensure early detection and response capability upgrades have also been mentioned.

ARTICLE 17. SITING

Each Contracting Party shall take the appropriate steps to ensure that appropriate procedures are established and implemented:

This part is not directly applicable to Latvia, however, brief information is provided below with respect to research reactor and radioactive waste disposal:

- These activities are covered by Law on Environmental Impact Assessment.
- Other safety assessment requirements are partly elaborated in Licensing regulations and new Regulations on building of radiation facilities.

(i) for evaluating all relevant site-related factors likely to affect the safety of a nuclear installation for its projected lifetime;

The Law on Environmental Impact Assessment and Regulations on building of radiation facilities governs these activities. The Government decided on composition of dedicated Commission, which is leaded by the Ministry of Environment. The Commission has to make opinion about proposal for special building activities; the RDC provides expert opinion on the safety considerations.

(ii) for evaluating the likely safety impact of a proposed nuclear installation on individuals, society and the environment;

The Law on Environmental Impact Assessment prescribes requirements for assessment of impact of proposed nuclear facilities on the environment.

The Radiation Safety Board (advisory body for the Government and for regulatory authority) has to make preliminary assessment of the proposal and additional evaluation after the EIA is finished.

The mechanism of public hearing is established by Licensing regulations. Based on opinions from the EIA and Radiation Safety Board, the decision on the subject matter can be taken and RDC can issue the license.

(iii) for re-evaluating as necessary all relevant factors referred to in sub-paragraphs (i) and (ii) so as to ensure the continued safety acceptability of the nuclear installation;

According to Licensing Regulations, the operational license could be granted for three year period. During the application process for renewal of operational license the operator (or Job supervisor) shall submit all safety relevant information.

According to National BSS, the supervision of radiation and nuclear facilities is a continuous process; therefore inspectors together with operators shall re-evaluate safety related information during the inspections of facilities.

(iv) for consulting Contracting Parties in the vicinity of a proposed nuclear installation, insofar as they are likely to be affected by that installation and, upon request providing the necessary information to such Contracting Parties, in order to enable them to evaluate and make their own assessment of the likely safety impact on their own territory of the nuclear installation.

Unfortunately, the Ignalina NPP had been built and operated without prior negotiations with Latvia. With respect to modifications at Ignalina NPP, the Lithuania used method of prior consultations (e.g. in year 2002 about modifications in waste management technologies).

All national plans on emergency preparedness in both countries (Latvia and Lithuania) had been jointly tested and further developed. Both countries collaborate also in other activities related to safety assessments.

Based on Law on Environmental Impact Assessment, any facility with potential impact to other countries shall be jointly assessed and relevant information shall be provided. But as stated in Introduction, there is no plans for building the NPP in Latvia, therefore the provisions for such facilities had not been realised in practice. Some more details on the process for EIA are also described in the Agreement between Latvia and Lithuania on cooperation in field of Environmental protection.

ARTICLE 18. DESIGN AND CONSTRUCTION

Each Contracting Party shall take the appropriate steps to ensure that:

(i) the design and construction of a nuclear installation provides for several reliable levels and methods of protection (defense in depth) against the release of radioactive materials, with a view to preventing the occurrence of accidents and to mitigating their radiological consequences should they occur;

The Law on Radiation Safety and Nuclear Safety had set up the responsibility for safety (strict liability of operator) and requirements regarding emergency preparedness. These requirements are elaborated in more detail in National BSS and some provisions in regulations concerning physical protection.

Prevention of errors is set up by National BSS (example requirements for defence in depth, quality assurance programmes, etc.).

In general legislation these implementation procedures are introduced by Law on Conformity Assessment which set up procedures for approvals of equipment.

(ii) the technologies incorporated in the design and construction of a nuclear installation are proven by experience or qualified by testing or analysis;

These provisions are only partly incorporated in national nuclear legislation because new nuclear facility is not planned. Up to now the basic requirements regarding certification and testing of any equipment relevant to the radiation safety are used. These requirements are introduced for any facility; supervision is based on initial assessments (in licensing process), regular tests (by license holder, part of QA/QC). The information is provided to RDC annually, inspections with random measurements of some technical parameters provide additional information.

(iii) the design of a nuclear installation allows for reliable, stable and easily manageable operation, with specific consideration of human factors and the man-machine interface.

The prevention of human errors on legal level is set up in National BSS (requirements for defense in depth, calibration of equipment, quality assurance programmes, etc.). In general legislation these implementation procedures are introduced by Law and Cabinet Regulations on Conformity

Assessment. Implementation measures are assessed during the licensing and verified by inspections.

ARTICLE 19. OPERATION

1. Each Contracting Party shall take the appropriate steps to ensure that:

(i) the initial authorization to operate a nuclear installation is based upon an appropriate safety analysis and a commissioning programme demonstrating that the installation, as constructed, is consistent with design and safety requirements;

In general legislation these implementation procedures are introduced by Law on Conformity Assessment which sets up procedures for approvals of the equipment.

The Law on Radiation Safety and Nuclear Safety had set up the requirements for licensing of facilities of State significance; these are elaborated in more detail by Licensing regulations. In 2004 the new supplementary regulations in this field had been elaborated under the law on Building activities.

The Licensing regulations request the Job supervisor to provide all safety related information together with application for a license. Based on this information and other decisions with respect to building activities and outcomes from environmental impact assessments, the RDC has to decide about licensing and conditions of licence.

(ii) operational limits and conditions derived from the safety analysis, tests and operational experience are defined and revised as necessary for identifying safe boundaries for operation;

These provisions are only partly incorporated in national nuclear legislation because new nuclear facility is not planned. The operational limits and conditions in general is the part of licensing conditions, which are under considerations during the licensing. New conditions and working limits can be introduced ad-hoc if the operator requests so or based on findings from inspections. The regular updates of these conditions are introduced during the re-licensing process.

(iii) operation, maintenance, inspection and testing of a nuclear installation are conducted in accordance with approved procedures;

Main part of these provisions are covered by National BSS; more detailed (internal) requirements are elaborated into the "Inspection Manual" and will be also developed during 2004-2005 in external legal document – Regulatory provisions of RDC.

(iv) procedures are established for responding to anticipated operational occurrences and to accidents;

The National BSS sets up the basic requirements for the operator. These procedures shall be elaborated in working manuals and procedural documents developed by facilities. Assessments of procedures are done during the licensing process; the inspectors verify implementation and registration of them.

(v) necessary engineering and technical support in all safety related fields is available throughout the lifetime of a nuclear installation;

Owners and operators (job supervisor) are responsible to ensure engineering and technical support according to the National BSS. Applicants for license shall describe how auxiliary services will be ensured (usually applicant provides information about relevant service contracts). As mentioned earlier, the license usually is granted for 3 years and thus re-assessment is done periodically and additional requirements can be added. Verification of the situation is done by means of inspections.

(vi) incidents significant to safety are reported in a timely manner by the holder of the relevant licence to the regulatory body;

Law on Radiation Safety and Nuclear Safety, the National BSS, Regulations on preparedness and response in case of radiation accident, Regulations on physical protection and Regulations on State System of Accounting and Control of Nuclear Materials set up requirements on immediate reporting about accidents and incidents.

Description on Emergency preparedness at facility level is a pre-requisite for licensing and verification of the compliance with these provisions are made during the inspections.

(vii) programmes to collect and analyse operating experience are established, the results obtained and the conclusions drawn are acted upon and that existing mechanisms are used to share important experience with international bodies and with other operating organizations and regulatory bodies;

Only part of these provisions exists in national BSS with respect to information exchange among users of similar equipment and methodologies or practices. To facilitate such processes (in realisation of task prescribed by the Law on Radiation Safety and Nuclear Safety), few times per year the RDC organises dedicated discussions (working group meetings, seminars, etc.) with representatives from professional associations and main operators.

RDC maintains relevant data bases, which include inspection findings; files for each operator containing all the relevant information and results obtained in tests and calibrations are also maintained.

With respect to international exchange of information, the RDC coordinates participation of experts from Latvia in relevant international forums and strives to publish technical documents and recommendations (in form of books and some quotes also on Internet home page).

(viii) the generation of radioactive waste resulting from the operation of a nuclear installation is kept to the minimum practicable for the process concerned, both in activity and in volume, and any necessary treatment and storage of spent fuel and waste directly related to the operation and on the same site as that of the nuclear installation take into consideration conditioning and disposal.

These provisions are set up in the Cabinet Regulations on the Radioactive Waste Management. Any operator, which could generate radioactive waste, provides annual reports and plans, which are analysed by RDC. During the licensing process requirements for radioactive waste management are prepared and included in the license conditions if needed.

Verification of compliance with these waste management requirements is made during the inspections.

Annex 1

National legal documents relevant to Convention on Nuclear Safety

1. The Law on Radiation Safety and Nuclear Safety (2000)
2. The Law on Handling of Strategic Goods (2004)
3. The Cabinet Regulations for Protection against Ionising Radiation (2002)
4. The Cabinet Regulations on State System of Accounting and Control of Nuclear Materials (2004)
5. Procedures for Issuance of Special Permits (Licences) and Permits for Operations with Sources of Ionising Radiation, and Procedures by which the Establishment of Ionising Radiation Facilities of State Significance or the Performance of Essential Modifications thereto are Publicly Discussed (2001)
6. The Cabinet Regulations on Protection against Ionising Radiation during Transportation of Radioactive Materials (2001)
7. The Cabinet Regulations on Requirements for Physical Protection of Sources of Ionising Radiation (2002)
8. The Cabinet Regulations on Requirements for Practices with Radioactive Waste and Materials Related Thereto (2002)
9. The Cabinet Regulations on Criteria and Principles for Determining Equivalence of Different Radioactive Waste (2002)

Annex 2

List of ratified international agreements (relevant to NSC)

Conventions:

1. 1963 Vienna Convention on Civil Liability for Nuclear Damage was acceded on 15 March 1995,
2. 1988 Joint Protocol relating to the Application on the Vienna Convention and the Paris Convention was acceded on 15 March 1995,
3. 1960 Convention concerning the Protection of Workers against Ionising Radiation was ratified on 8 March 1994,
4. 1986 Vienna Convention on Early Notification of a Nuclear Accident was acceded on 28 December 1992,

5. 1986 Vienna Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency was acceded on 28 December 1992,
6. 1994 Convention on Nuclear Safety was acceded on 25 October 1996
7. Protocol to Amend the Vienna Convention On Civil Liability for Nuclear Damage was ratified on 5 December 2001
8. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management was accepted on 27 March 2000.

Agreements:

1. 1968 Treaty on the Non-Proliferation of Nuclear Weapons was acceded on 31 January 1992,
2. Agreement between Republic of Latvia and the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons is in force since 21 December 1993,
3. Protocol between the Government of the Republic of Latvia and the International Atomic Energy Agency Additional to the Agreement for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons is in force since 12 July 2001.
4. Agreement on the Exchange of Radiation Monitoring Data was sign on 7 June 2001,
5. Agreement between the Government of the Republic of Latvia and the Government of the Republic of Lithuania on Early Notification of Nuclear Accidents, Exchange of Information and Co-operation in the Field of Nuclear Safety and Radiation Protection signed on 12 August 2003,
6. Agreement between the Government of the Republic of Latvia and the Cabinet of Ministers of Ukraine On Early Notification of Nuclear Accidents, on Exchange of Information and Co-Operation in the Field of Nuclear Safety and Radiation Protection signed on 17 October 2001