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INTEGRATED REGULATORY REVIEW SERVICE (IRRS)

FOLLOW-UP MISSION

TO

THE SLOVAK REPUBLIC

Bratislava, Slovak Republic

24 February to 2 March 2015

DEPARTMENT OF NUCLEAR SAFETY AND SECURITY

IAEA Integrated Regulatory Review Service IRRS

NUCLEAR REGULATORY AUTHORITY OF THE SLOVAK REPUBLIC

Regulation of nuclear safety is our mission ...

Integrated
Regulatory
Review Service

IAEA IRRS

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Integrated Regulatory Review Service

IAEA IRRS

INTEGRATED REGULATORY REVIEW SERVICE (IRRS)
FOLLOW-UP REPORT TO
THE SLOVAK REPUBLIC

Mission date:	*24 February to 3 March 2015*
Regulatory body:	*NUCLEAR REGULATORY AUTHORITY OF THE SLOVAK REPUBLIC – UJD SR*
Location:	*UJD SR/UVZ SR – HQ in Bratislava, SLOVAK REPUBLIC*
Regulated facilities and activities:	*Nuclear power plants, Radioactive Waste facilities, Environmental monitoring, Occupational Exposure in Nuclear Installations*
Organized by:	*International Atomic Energy Agency (IAEA)*

IRRS TEAM	
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REIERSEN Craig	Deputy Team Leader (United Kingdom)
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The number of recommendations, suggestions and good practices is in no way a measure of the status of the regulatory body. Comparisons of such numbers between IRRS reports from different countries should not be attempted.

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EXECUTIVE SUMMARY

At the request of the Government of the Slovak Republic, an international team of senior safety experts met representatives of the Nuclear Regulatory Authority, UJD SR, the Public Health Authority, UVZ SR, the Ministry of Interior, MoI SR, and VUJE, from 24 February to 2 March 2015 to conduct the IRRS follow-up mission. The peer review took place at the headquarters of UJD SR in Bratislava. The purpose of the IRRS follow-up mission was to review the measures undertaken following the recommendations and suggestions of the 2012 IRRS Mission. Contrary to what was agreed in 2012, the scope of the IRRS follow-up mission was not extended to cover the full range of responsibilities and activities of UVZ SR and functions for the regulation of facilities and activities other than nuclear facilities.

The review compared the Slovak Republic regulatory framework for safety against IAEA safety standards as the international benchmark for safety. The mission was also used to exchange information and experience between the IRRS team members and their counterparts from Slovakia in the areas covered by the IRRS.

The IRRS team consisted of 5 senior regulatory experts from 5 IAEA Member States and 3 IAEA staff members.

The IRRS team carried out a review of the measures undertaken following the recommendations and suggestions of the 2012 IRRS missions in the following areas: responsibilities and functions of the government; the global nuclear safety regime; responsibilities and functions of the nuclear safety regulatory body; the management system of the nuclear safety regulatory body; the activities of the nuclear safety regulatory body including the authorization, review and assessment, inspection and enforcement processes; development and content of regulations and guides; emergency preparedness and response; occupational radiation protection in nuclear installations; environmental monitoring; and waste management.

The mission included interviews and discussions with UJD SR, UVZ SR, MoI SR and VUJE staff. The IRRS team was provided with advance reference material and comprehensive documentation including the status of recommendations and suggestions set out in the initial IRRS mission report.

The IRRS team concluded that the recommendations and suggestions from the 2012 IRRS missions have been taken into account systematically by a comprehensive action plan. Significant progress has been made in many areas and many improvements have been implemented in accordance with the action plan.

The IRRS team identified a good practice related to information management in emergency situations. UJD SR has developed, implemented and is systematically maintaining and improving, an information management system which is significantly contributing to efficient management and response of the UJD SR emergency organisation for potential nuclear accidents.

During this follow-up mission, the IRRS team determined that 7 out of 11 recommendations and 18 of 20 suggestions made by the 2012 IRRS mission had been effectively addressed and therefore could be considered closed. The IRRS team made the following general observations:

- The division of responsibilities among State Authorities, recognised during the mission in 2012, remains a matter of concern. There also continues to be scope for improvement in the cooperation between these authorities;

- UJD SR has developed principles for the extensive revision of the Atomic Act, which is expected to be enacted in 2017. The revision will further improve the regulation of nuclear safety and will transpose provisions of latest EU directives and other international standards and reference levels;
- The efforts to ensure that data from the radiation monitoring network are readily available for use by competent authorities during normal as well as emergency situations should continue.

The IRRS team raised one new Recommendation and one Suggestion that indicate where improvements are necessary or desirable to continue enhancing the effectiveness of regulatory functions in line with the IAEA safety standards:

- The Ministry of Health, in cooperation with UJD SR, should continue to review, and where appropriate revise, the resources allocated to UVZ SR to ensure that it can fulfil its statutory obligations for radiation protection and environmental monitoring;
- UJD SR should consider extending the scope of its inspection programme to include, when appropriate, joint inspections with other regulatory authorities.

The findings by the IRRS team of 2012 that remain open can be found in Appendix **IV**.

The new IRRS team findings are summarized in Appendix **V**.

An IAEA press release was issued at the end of the mission.

I. INTRODUCTION

From 27 May to 7 June 2012, at the request of the Government of the Slovak Republic, an international team of 16 experts in nuclear and radiation safety visited the Nuclear Regulatory Authority of the Slovak Republic (UJD SR) to conduct an Integrated Regulatory Review Service (IRRS). The international expert team also met representatives of the company VUJE and the Ministry of Interior (MoI) and the Public Health Authority of the Slovak Republic (UVZ SR), the competent organization for radiation safety regulation, in relation to the regulation of occupational radiation protection in nuclear facilities, emergency preparedness and response and environmental monitoring. The purpose of the IRRS mission was to review the Slovak regulatory framework for nuclear and radiation safety for nuclear facilities. The mission did not include a comprehensive review of the national regulatory infrastructure for radiation safety of the Slovak Republic.

At the request of the Government of the Slovak Republic, an international team of senior safety experts met representatives of UJD SR, UVZ SR, MoI and VUJE from 24 February to 2 March 2015 to conduct the IRRS follow-up mission. The purpose of the IRRS follow-up mission was to review the measures undertaken following the recommendations and suggestions of the 2012 IRRS Mission. Contrary to what was agreed in 2012, the scope of the IRRS follow-up mission was not extended to cover the full range of responsibilities and activities of UVZ SR and other functions for the regulation of other facilities and activities than nuclear.

The peer review took place at the headquarters of UJD SR in Bratislava. The review mission was formally requested in April 2014. A preparatory meeting was conducted on 24th September 2014 at the IAEA Headquarters in Vienna, Austria, to discuss the purpose, objectives, scope and detailed preparations of the review in connection with the previous IRRS Mission conducted in 2012.

The IRRS team consisted of 5 senior regulatory experts from 5 IAEA Member States and 3 IAEA staff members.

The IRRS team carried out a review of the measures undertaken following the recommendations and suggestions of the 2012 IRRS missions in the following areas: responsibilities and functions of the government; the global nuclear safety regime; responsibilities and functions of the nuclear safety regulatory body; the management system of the nuclear safety regulatory body; the activities of the nuclear safety regulatory body including the authorization, review and assessment, inspection and enforcement processes; development and content of regulations and guides; emergency preparedness and response; occupational radiation protection in nuclear installations; environmental monitoring; and waste management.

After the initial 2012 IRRS mission, an action plan was developed based on its findings. The detailed results of this action plan implementation and supporting documentation were provided to the team as advance reference material for the mission. During the mission the IRRS team performed a systematic review of all topics by reviewing the advance reference material, conducting interviews with management and staff of UJD SR and representatives from UVZ SR.

During the entire course of the mission the IRRS team received excellent support and cooperation from the host institutions.

II. OBJECTIVE AND SCOPE

The purpose of this IRRS mission was to review the Slovak nuclear safety regulatory framework and activities, specifically the measures undertaken following the recommendations and suggestions of the 2012 IRRS mission. The IRRS review scope included all facilities regulated by UJD SR including 4 operating nuclear power reactors; 2 power reactors under construction; 3 power reactors under decommissioning; 1 operating radioactive waste treatment facilities and 1 radioactive waste repository. The review was carried out by comparison against IAEA safety standards as the international benchmark for safety. Contrary to what was agreed in 2012, the scope of the IRRS follow-up mission was not extended to cover the full range of responsibilities and activities of UVZ SR and other functions for the regulation of other facilities and activities than nuclear facilities.

It is expected that the IRRS mission will facilitate regulatory improvements in the Slovak Republic and other Member States from the knowledge gained and experiences shared by UJD SR, UVZ SR and IRRS reviewers and through the evaluation of the effectiveness of the Slovak nuclear regulatory framework and its good practices.

III. BASIS FOR REVIEW

A) Preparatory work and IAEA Review Team

At the request of the Government of the Slovak Republic, a preparatory meeting for the Integrated Regulatory Review Service (IRRS) follow up mission was conducted on 24th September 2014 in Vienna, Austria.

The preparatory meeting was carried out by the appointed Team Leader, Mr Andrej Stritar, Deputy Team Leader, Mr Craig Reiersen and the IAEA representatives, Mr Jean-René Jubin and Mr Hilaire Mansoux.

The IRRS mission preparatory team had discussions regarding the progress made by UJD SR and UVZ SR in addressing measures undertaken following the recommendations and suggestions of the 2012 IRRS missions. The Slovak team was led by the UJD SR Chairperson, Ms Marta Ziakova. The discussions resulted in agreement that only the IRRS findings from the 2012 mission were to be reviewed by the IRRS mission.

The representatives of the Slovak Republic provided the IRRS mission preparatory team with an overview on the progress made in response to the 2012 IRRS mission recommendations and suggestions.

This was followed by a discussion on the tentative work plan for the implementation of the IRRS in the Slovak Republic in February-March 2015.

The proposed IRRS team composition (senior regulators from Member States to be involved in the review) was discussed and the size of the IRRS team was tentatively confirmed. Logistics including meeting and work space, counterparts and Liaison Officer identification, lodging and transportation arrangements were also addressed.

The Slovak Republic Liaison Officer for the preparatory meeting and the IRRS mission was Mr Mikulas Turner, Director of the International Relations Division, UJD SR.

The host institutions provided the IAEA and the IRRS review team with the advance reference material for the review in December 2014. In preparation for the mission, the IRRS team members conducted a review of the advance reference material and provided their initial review comments to the IAEA Team Coordinator prior to the commencement of the IRRS mission.

B) Reference for the review

The most relevant IAEA safety standards and the Code of Conduct on the Safety and Security of Radioactive Sources were used as review criteria. A more complete list of IAEA publications used as references for this mission is given in Appendix **VII.**

C) Conduct of the review

An initial IRRS team meeting was conducted on Monday, 23 February 2015, in Bratislava by the IRRS Team Leader and the IRRS IAEA Team Coordinator to discuss the general overview, the focus areas and specific issues of the mission, to clarify the basis for the review and the background, context and objectives of the IRRS and to agree on the methodology for the review and the evaluation among all reviewers. They also presented the agenda for the mission.

The Slovak Republic Liaison Officer was present at the initial IRRS team meeting, in accordance with the IRRS guidelines, and presented logistical arrangements planned for the mission.

The reviewers also reported their first impressions of the advance reference material.

The IRRS entrance meeting was held on Tuesday, 24 February 2015, with the participation of senior management and staff of all relevant institutions. Opening remarks were made by Ms Marta Ziakova, UJD SR Chairperson, and Mr Andrej Stritar, IRRS Team Leader. Ms Marta Ziakova gave an overview of the major regulatory changes in nuclear safety since 2012 and presented the status of progress made regarding previous IRRS findings.

During the mission, a review was conducted for all the review areas with the objective of providing the Slovak Republic and UJD SR with recommendations and suggestions for improvement as well as identifying good practices. The review was conducted through meetings, interviews and discussions.

The IRRS team performed its activities based on the mission programme given in Appendix **II**.

The IRRS exit meeting was held on Monday 2 March 2015. The opening remarks at the exit meeting were presented by Ms Marta Ziakova and were followed by the presentation of the results of the mission by the IRRS Team Leader, Mr Andrej Stritar. Closing remarks were made by Mr Jean-René Jubin on behalf of Mr Jim Lyons, Director, Division of Nuclear Installation Safety.

An IAEA press release was issued at the end of the mission.

1. RESPONSIBILITIES AND FUNCTIONS OF THE GOVERNMENT

1.1. NATIONAL POLICY AND STRATEGY

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R1	**Recommendation:** The Government should adopt a document that sets out the national policy and strategy for safety, which should include provisions for assuring that competence for nuclear safety, is maintained.

Changes since the initial IRRS mission

Recommendation 1: The Government of the Slovak Republic adopted in the year 2014 the document "Policies, principles and strategies for further development of nuclear safety" and has made this publicly available. The document provides a comprehensive summary of national policies, principles and strategies for nuclear safety of nuclear facilities constructed or operated in the Slovak Republic. The safety principles are based on IAEA Safety Fundamentals.

The IRRS team has reviewed the content of the document and has recognised that all elements listed in GSR Part 1 paragraph 2.3 are explicitly or implicitly included: fundamental safety objectives, international framework, governmental and legal framework, provisions for human and financial resources, basic provisions for framework for research and development and also emphasis on leadership and management for safety. The document takes into account the social and economic development of the country. The document sets out ten high level principles and 16 main goals to ensure that nuclear safety is sustained and improved. The document confirms the Slovak Government's commitment to provide sufficient resources to carry out regulatory activities and ensure that regulators have the necessary powers. Every three years the Government expects a report about the implementation of objectives set in this document.

Status of the finding in the initial mission

Recommendation 1 (R1) is closed as the Government of the Slovak Republic has adopted a document that sets out the national policy and strategy for safety.

1.2. ESTABLISHMENT OF A FRAMEWORK FOR SAFETY

There were no findings in this area in the initial IRRS mission.

1.3. ESTABLISHMENT OF A REGULATORY BODY

There were no findings in this area in the initial IRRS mission.

1.4. INDEPENDENCE OF THE REGULATORY BODY

There were no findings in this area in the initial IRRS mission.

1.5. PRIME RESPONSIBILITY FOR SAFETY

There were no findings in this area in the initial IRRS mission.

1.6. COMPLIANCE AND RESPONSIBILITY FOR SAFETY

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S1	**Suggestion:** UJD SR should consider revising the regulatory framework in order to reduce the number of formal regulatory authorisations for licensee activities.

Changes since the initial IRRS mission

Suggestion 1: UJD SR started, in 2013, preparations for the introduction of a new Atomic Act. UJD SR senior management was involved in the process of preparing the bases for the new Atomic Act. In August 2014 the document "The principles of the new Atomic Act" was approved by the UJD SR Board. A special working group was established to prepare a draft of the new Act which is expected to be completed in May 2015. The new Atomic Act should be issued by the end of 2016 with the expectation that it comes into force in mid-2017. It will take into account new EU legal documents, e.g. Directive 2014/87/EURATOM, Directive 2013/59/EURATOM as well as the latest WENRA Reference levels (2014). Representatives of UVZ SR are invited to participate in the working group.

The IRRS team reviewed the document "The principles of the new Atomic Act". It incorporates several principles that provide a basis for confidence that the administrative burden for the licensees could be reduced in the future. For example Principle 23 is requiring the new Act "… to take into consideration the Government Resolution No.152/2013 and all other related matters (CENTIRE), having a common denominator – reducing administrative burdens. If some administrative activity does not arise directly from the EU or from an international treaty, the imposed obligation should come with specific reasons why we are requiring it from the license holder."

Similarly, Principle No. 24 states: "Reduce the scope of documentation submitted to the authority. Follow the principle: elaborate the documentation, adhere to it and the Authority may request it for consultation." Principle 25 further states that only documentation assessed or requested by the Authority should be submitted by the licensee.

The IRRS team observed that the principles of the new Atomic Act include an intention to reduce the number of necessary formal authorisations to so called "big licences" that are limited to the issues that significantly influence the safety and environmental impact of the facility. Other types of modifications in the facility will be covered by a notification process and UJD SR may choose to inspect them. This is consistent with a graded approach as set out in GSR Part 1 Requirements 23 and 24.

Status of the finding in the initial mission

Suggestion 1 (S1) is closed on the basis of progress and confidence in effective completion as the legislative changes enabling reduction of administrative burden have been initiated but will not be enacted for some time.

1.7. COORDINATION OF DIFFERENT AUTHORITIES WITH RESPONSIBILITIES FOR SAFETY WITHIN THE REGULATORY FRAMEWORK

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R2	**Recommendation:** The Government should review and if necessary revise the

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
	legal framework and clarify the division of responsibilities among State Authorities in the area of nuclear and radiation safety, including emergency preparedness and response, in order to avoid overlaps or gaps in discharging regulatory functions and unduly burdening the licensees.
R3	**Recommendation:** UJD SR should, together with UVZ SR, analyse potential areas for improvement in their cooperation, including planning and coordination of their activities, communication of information about their decisions and rational use of their resources. They should accordingly update their mutual arrangements and propose changes in the legislative framework to the Government.

Changes since the initial IRRS mission

Recommendation 2: Following the IRRS mission in 2012 the Government of the Slovak Republic passed resolution No 647/2012 requiring UJD SR and the Minister of Health (delegated to UVZ SR) to assess existing regulatory responsibilities and the possibility of transferring responsibility for radiation aspects of the Public Health Authority's activities to UJD SR.

Under the same resolution UJD SR, the Ministry of Health and Ministry of Interior were asked to review the legal framework in the area of emergency preparedness and response in order to avoid overlaps/gaps in discharging regulatory functions.

With regard to emergency preparedness and response, the Atomic Act was amended as follows: "The Authority shall provide for the exercises and evaluation of the course and the consequences of incidents or accidents at nuclear installations and during transport of radioactive materials and preparation of proposals for measures or recommendations for further procedures at its workplace equipped with the necessary technical means; the Authority (UJD SR) submits proposals of measures or recommendation for further measures or recommendations to the Ministry of Interior of the Slovak Republic and to district offices at the seats of regions within the off-site emergency zone."

This clarifies to some extent ambiguities in the legal framework recognised during the IRRS mission in 2012 in relation to emergency preparedness and response.

There have been several meetings about the coordination of responsibilities for radiation protection between the Public Health Authority and UJD SR. In 2014 UJD SR contracted the VUJE Company to analyse the legislative frameworks implemented by UJD SR, the Ministry of Interior and the Ministry of Health, and to identify areas where there are potential overlaps or gaps in responsibility. The results are documented in the report: "Analysis of the legislative framework and the division of responsibilities in the field of nuclear safety and radiation protection". The report also took an initial step towards proposing solutions. The IRRS team noted that the findings of the report, which made suggestions relating to changes in legislation and coordination of regulatory activities between the relevant authorities, accorded with observations made by the IRRS team in 2012. However, the IRRS team recognised that the report is currently a draft to inform decision-making and that it will be subject to review by the relevant institutions.

The IRRS team observed that during the follow-up mission in 2015 several important observations identified during the original mission in 2012 are still valid and not resolved. These include:

- The operator of the nuclear facility has to get different licences from different authorities (more than 7). Multiple licensing might lead to conflicting licensing conditions. For each licence, the licensee has to submit separate applications (basically requesting approval of the same activity) to UJD SR as well as to UVZ SR and to other authorities like the Ministry of Environment;
- UJD SR plans and performs inspections of facilities, and UVZ SR has its own separate plans and inspections. UJD SR is sending its inspection plan for information to UVZ SR, but the team has observed that no real coordination of inspections takes place;
- In the event of violations each authority can stop operation of the facility;
- In some cases the legislation is not clear which body should take the initiative when responsibilities are shared.

The IRRS team considered that the Government resolution and efforts of UJD SR and UVZ SR do represent some progress, but there is currently no clear outcome or agreed way forward and there remains a lot of work to be done.

Recommendation 3: Regarding progress in addressing Recommendation 3, activities in this respect after the IRRS mission in 2012 are described in the response to Recommendation 2 above. UJD SR and UVZ SR expect that the analysis done by the VUJE Company and summarized in the document "Analysis of the legislative framework and the division of responsibilities in the field of nuclear safety and radiation protection" will help to identify further potential improvements in cooperation between UJD SR and UVZ SR. However, as noted above, this document is currently a draft and the relevant institutions will consider its findings before firm proposals are made to further enhance cooperation or propose changes to the legislative framework. UJD SR has recognized in its Advance Reference Material that this recommendation remains open. The IRRS team agrees with this conclusion.

Status of the finding in the initial mission

Recommendation 2 (R2) is open. Although some improvements have been made in the area of coordination of emergency preparedness, the major challenge, the division of responsibilities among State Authorities, needs further attention.

Recommendation 3 (R3) is open. Although discussions have been initiated and conducted between the two authorities, further efforts should be made to improve cooperation between them.

1.8. COMPETENCE FOR SAFETY

There were no findings in this area in the initial IRRS mission.

1.9. PROVISION OF TECHNICAL SERVICES

There were no findings in this area in the initial IRRS mission.

2. GLOBAL NUCLEAR SAFETY REGIME

2.1. INTERNATIONAL OBLIGATIONS AND ARRANGEMENTS FOR COOPERATION

There were no findings in this area in the initial IRRS mission.

2.2. SHARING OF OPERATING AND REGULATORY EXPERIENCE

There were no findings in this area in the initial IRRS mission.

3. RESPONSIBILITIES AND FUNCTIONS OF THE REGULATORY BODY

3.1. ORGANISATIONAL STRUCTURE OF THE REGULATORY BODY AND ALLOCATION OF RESOURCES

There were no findings in this area in the initial IRRS mission.

3.2. EFFECTIVE INDEPENDENCE DURING CONDUCT OF REGULATORY ACTIVITIES

There were no findings in this area in the initial IRRS mission.

3.3. STAFFING AND COMPETENCE OF THE REGULATORY BODY

There were no findings in this area in the initial IRRS mission.

3.4. TRAINING & COMPETENCE ARRANGEMENTS

There were no findings in this area in the initial IRRS mission.

3.5. ADVISORY BODIES

There were no findings in this area in the initial IRRS mission.

3.6. USE OF TECHNICAL SUPPORT

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R4	**Recommendation:** UJD SR should develop provisions to assess the competence of its consultants and ensure systematically and formally that there is no potential conflict of interest.
S2	**Suggestion:** UJD SR should consider ensuring that it retains sufficient intelligent customer capability to specify technical support contract content and to select, manage, understand and receive the work of its contractors.

Changes since the initial IRRS mission

Recommendation 4: UJD SR uses technical support to obtain advice, assistance or services in the performance of its duties. The activities contracted to external organizations are controlled and managed in accordance with the UJD SR management system. The procurement (purchasing) process and its transparency are governed by a corresponding EU directive, national act, and government resolutions. Provisions of generally binding legal documents are specified in the internal UJD SR directive – Directive on procedures for public procurement. The procurement process must by transparent by the law. The process itself and its results can be subject of public interest.

UJD SR updated its internal Directive on public procurement in 2014. Article 3, Paragraph 23 of the Directive provides that the person overseeing the contract will ensure that he/she is satisfied that: a) potential conflict of interest issues have been considered, and b) the competence and capability required to carry out the contracted activities are appropriate.

As part of the technical support contracting process a check list is signed by the person overseeing the contract to confirm that procurement was done in compliance with rules and procedures. Supervision of the public procurement (purchasing) process is performed by the Public Procurement Office of the Slovak Republic. The process is also controlled by the Ministry

of Finance and the Supreme Audit Office of the Slovak Republic. Procurement (purchasing) is also subject to internal controls and audits carried out within UJD SR´s management system. As an additional measure against any potential conflict of interest Members of committees and advisory bodies of UJD SR are required to sign an affidavit that they are not in conflict of interest.

The IRRS team reviewed and acknowledged improvements in the purchasing procedures and was also shown evidence of their implementation.

Suggestion 2: As noted above, UJD SR has updated the internal Directive on procedures for public procurement to address potential conflict of interest issues and ensure that the competence and capability required to carry out the contracted activities are appropriate.

In order to deliver this contact oversight role, UJD SR has recognized the need to be an "intelligent customer". This requirement is now set out in Article 3, Paragraph 24 of the Directive which requires that UJD SR maintains and develops an intelligent customer status when contracts are let, such that the organization has a clear understanding and knowledge about the product or service and is qualified to purchase it.

Article 3, Paragraph 25 of the Directive defines the intelligent customer capability in detail. It states that the capability should include:

a) Negotiates the performance of specified tasks, fulfilment of defined requirements and other responsibilities provided by the provider of the external support,
b) Ensures adequate management, oversight and supervision of the work,
c) Supervises the provider and should be able to:
   - understand what the external expert assistance required for, including broader context for which the work is awarded,
   - know what is required from the support and how the results of work will be used,
   - specify the target, scope and requirements so that the final product meets the intended needs,
   - set a time frame for handover of the work,
   - provide any information that might be useful for external professional support,
   - ensure that external professional support was not unduly influenced by anyone and that the results reflect its own expert opinion,
   - supervise the work in accordance with the requirements and if needed, technically evaluate the work,
   - ensure regular communication with the provider of external professional support,
   - understand what should be the result of the work,
   - take over the work in a qualified manner.

In order to sustain an intelligent customer capability, any organization needs to understand and maintain the technical capabilities that it may need. It also needs to ensure that knowledge is managed effectively. The IRRS team found that UJD SR has anticipated its resource and competence needs and is actively managing its recruitment to secure the suitable capability. Where recruitment is needed, a case is made to the Minister of Finance for approval. Knowledge management is considered separately in this report under Management System of the Regulatory Body (see S4).

Status of the finding in the initial mission

Recommendation 4 (R4) is closed as UJD SR has developed appropriate provisions to assess the competence of its consultants and ensure systematically and formally that there is no potential conflict of interest.

Suggestion 2 (S2) is closed as UJD SR has developed appropriate provisions to retain suitable and sufficient intelligent customer capability.

3.7. LIAISON BETWEEN THE REGULATORY BODY AND AUTHORISED PARTIES

There were no findings in this area in the initial IRRS mission.

3.8. STABILITY AND CONSISTENCY OF THE REGULAROTY CONTROL

There were no findings in this area in the initial IRRS mission.

3.9. COMMUNICATION AND CONSULTATION WITH INTERESTED PARTIES

There were no findings in this area in the initial IRRS mission.

4. MANAGEMENT SYSTEM OF THE REGULATORY BODY

4.1. ORGANIZATIONAL POLICIES

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S3	**Suggestion:** UJD SR should consider establishing, and making prominent, a high level safety policy which places emphasis on safety as an overriding priority.

Changes since the initial IRRS mission

Suggestion 3: The top document in the UJD SR management system is the Quality Manual. This document includes a Quality Policy which contains 11 principles. The Quality Policy is available electronically on the Intranet. The physical version is available in the hallways at the UJD SR offices in Bratislava and Trnava and in the offices of resident inspectors. The Quality Policy was revised in 2014 to state, as the first policy statement, that "Safety is paramount, overriding all other demands". UJD SR has further reinforced the commitment to safety through other means, including a related briefing on the UJD SR management system to all staff in May-June 2014, and through explicitly referencing the priority to nuclear safety in the Atomic Act and in an internal UJD SR Directive offering guidance on issuing safety guides.

On the basis of the visible priority that is placed on safety as an overriding priority, the IRRS team considers that this suggestion is closed.

Status of the finding in the initial mission

Suggestion 3 (S3) is closed as UJD SR has established, and made prominent, a high level safety policy that places emphasis on safety as an overriding priority

4.2. MANAGEMENT SYSTEM ARCHITECTURE

There were no findings in this area in the initial IRRS mission.

4.3. RESOURCE MANAGEMENT

There were no findings in this area in the initial IRRS mission.

4.4. KNOWLEDGE MANAGEMENT

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S4	**Suggestion:** UJD SR should continue developing, and then implement a structured knowledge management process.

Changes since the initial IRRS mission

Suggestion 4: The IRRS team found that UJD SR has taken positive steps towards developing and implementing a structured knowledge management process. A project was initiated in 2013, drawing on support from the company VUJE and a knowledge management specialist consultancy, AITEN. The project intends to enable UJD SR to put in place a process-based knowledge management system which is integrated with the existing UJD SR competence management system and which in turn resides as part of the UJD SR integrated management system.

The approach proposed by the project team is based on established methodology developed by the company TVA in the United States, and IAEA-TecDoc-1586, adapted to make it suitable for the knowledge and competencies of a regulatory body. The key activities associated with this work include:

a) Mapping the knowledge of UJD SR staff which is used during the performance of their activities; identification of all existing knowledge and its categorization into individual groups of explicit, implicit and tacit (hidden) subgroups;
b) Transforming identified tacit knowledge to explicit knowledge through the creation or revision of procedures or instructions for all tasks performed by employees where they use hidden knowledge;
c) Based on mapping the knowledge of the key knowledge carriers, creating and populating the mentors' database with precisely definable identifiers;
d) Creating a knowledge database for the purpose of storing, sharing, merging, further developing and using the information in real time;
e) Analysing national or international activities of UJD SR with the aim of identifying and then using specific nomenclature consistently. Create a glossary of terms used by UJD SR staff in English and Slovak (searchable);
f) Proposing a structured knowledge management process for UJD SR. Incorporating knowledge management into the existing UJD SR management system.

The IRRS team found that good progress has been made by the project team. Early work to map levels of knowledge for nuclear safety Inspectors, and also to use this as a basis for judging vulnerability to loss of resource, has been piloted. There is a clear and well-structured plan for taking the work forward and the IRRS team observed the enthusiasm of the project team and the commitment of UJD SR senior management. The IRRS team commended the work to date, but also noted that implementing and sustaining the approach will require continued commitment from top management. The IRRS team also advised that a key to success is to ensure that the approach is simple, uses systems that are familiar to UJD SR staff where possible, and is embedded as part of the management system requirements.

Status of the finding in the initial mission

Suggestion 4 (S4) is closed on the basis of progress and confidence in effective completion as UJD SR has committed to develop and implement a structured knowledge management process, and good progress has been made against a comprehensive project plan.

4.5. MANAGEMENT OF ORGANIZATIONAL CHANGE

There were no findings in this area in the initial IRRS mission.

4.6. SAFETY CULTURE

There were no findings in this area in the initial IRRS mission.

4.7. COMMUNICATIONS WITH STAFF

There were no findings in this area in the initial IRRS mission.

4.8. CONTROL OF DOCUMENTS

There were no findings in this area in the initial IRRS mission.

4.9. CONTROL OF RECORDS

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S5	**Suggestion:** UJD SR should consider reviewing its strategy for record retention to ensure that all documents that may be relevant for extended periods are retained accordingly.
S6	**Suggestion:** UJD SR should consider making assessment reports available on an electronic database.

Changes since the initial IRRS mission

Suggestion 5: UJD SR has acknowledged that records relating to inspection records and other regulatory interactions with licensees may be of safety benefit for extended periods. They have therefore established a Lotus Notes database for this material. The database will be maintained by UJD SR and will continue to hold reports after the 10 year period at which hard copies are passed to the government repository.

The IRRS team observed the database, which is currently subject to trial use before it is rolled out across the organisation. It appears logical and well-structured, and the IRRS team was advised that Inspectors had experienced no difficulty in using it.

Suggestion 6: UJD SR has introduced a new Lotus Notes database for assessment records ("Documentation Assessment"). This database will hold all new assessment records, and the IRRS team was also advised that legacy assessment reports, going back at least 5 years, will also be placed in the database. This database should help to provide a more accessible source of reference and better support the corporate memory of the organisation.

The IRRS team was advised that both databases referred to above will continue to hold records beyond the period at which hard copy records are sent to the state archive (10 years). The IRRS team welcomed this, and encouraged UJD SR to formalise the requirement for long-term retention of records held on these databases.

Status of the finding in the initial mission

Suggestion 5 (S5) is closed on the basis of progress and confidence in effective completion, as the database of inspection records has been developed, and good progress has been made in its trial application prior to full implementation.

Suggestion 6 (S6) is closed on the basis of progress and confidence in effective completion, as basis that the Documentation Assessment database has been developed and is being implemented.

4.10. PLANNING

There were no findings in this area in the initial IRRS mission.

4.11. GRADING THE APPLICATION OF RESOURCES

There were no findings in this area in the initial IRRS mission.

4.12. MEASUREMENT, ASSESSMENT & IMPROVEMENT

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S7	**Suggestion:** UJD SR should consider conducting a regular review of its management system, and reflect at the earliest opportunity on potential lessons learned from the TEPCO Fukushima Dai-ichi accident.

Changes since the initial IRRS mission

Suggestion 7: UJD SR has added a clause to the Directive on performance of the three yearly management system reviews. This makes provision for "system" audits which are normally carried out by external organizations. These reviews are more extensive than more targeted reviews that are conducted by UJD SR's internal auditors. The most recent external system audit was performed in 2013.

With regard to management system learning from the Fukushima Dai-ichi event, UJD SR has considered the currently available material but decided that no amendments to the management system are needed at this time. It has, however, confirmed that the full IAEA lessons learned report, expected later in 2015, will be reviewed and potential improvements will be identified where appropriate.

Status of the finding in the initial mission

Suggestion 7 (S7) is closed on the basis of UJD SR's commitment to conduct regular and system-wide reviews of the management system, and the commitment to take account of the IAEA lessons learned report.

5. AUTHORIZATION

5.1. GENERAL

There were no findings in this area in the initial IRRS mission.

5.2. THE LICENSING/AUTHORISATION PROCESS

There were no findings in this area in the initial IRRS mission.

5.3. REGULATORY DECISIONS

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S8	**Suggestion:** UJD SR should consider recommending to the government a placing of strict limits on the timescales to respond to applications for authorisations is reviewed.

Changes since the initial IRRS mission

Suggestion 8: New time periods for regulatory review of significant licence applications will be defined when amending the Atomic Act. This amendment will describe more explicitly the required documentation to be submitted to the nuclear safety regulatory authority (UJD SR). The chairperson of UJD SR has and will maintain the authority to extend any regulatory review period, whenever it is justifiable.

On 25.07.2013 the UJD SR Board meeting approved the original timeline for drafting a proposal for amending the Atomic Act. UJD SR, by Chairperson´s order No. 12/2014, established a special working group for amending the Atomic Act. The Working Group consists of representatives of each UJD SR division. Representatives of UVZ SR are also invited to participate in the working group.

On 21.08.2014 the UJD SR Board meeting approved the document "The principles of new Atomic Act". The principles represent the basis for the work of the Working Group to prepare the new Atomic Act. Principle 26 of the aforesaid document explicitly deals with the issue of Suggestion 8, while the principles from No. 16 to 19 and No. 28 deal with the reduction in the number of formal regulatory authorisations.

The drafting of the amended Atomic Act by the Working Group is under way and expected to be completed by the end of May 2015. The new Atomic Act is planned to be issued by the end of 2016. The new Atomic Act will take into account new EU legal documents e.g. Directive 2014/87/EURATOM and Directive 2013/59/EURATOM, as well as the latest WENRA Reference levels of 2014.

Status of the finding in the initial mission

Suggestion 8 (S8) is closed on the basis of progress and confidence in effective completion as strong commitment and substantial preparatory work has been demonstrated to review the placing of strict limits on the timescales to respond to applications for authorisations.

5.4. REQUIREMENTS FOR PERIODIC SAFETY REVIEW

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S9	**Suggestion:** The Government should consider reviewing, and where necessary revising, regulations on the scope and extent of the involvement of environmental authorities in the nuclear safety authorization process.

Changes since the initial IRRS mission

Suggestion 9: On 14.10.2014 the Parliament passed the amendment to the Act on Environmental Impact Assessment (EIA) No. 314/2014 Coll. It came into force on the 1st of January 2015. This amendment clarifies the link between the process of assessing the impacts on the environment of proposed activities and the other authorization procedures. The amendment also specifies the subject of impact assessment and the implementation process of fact-finding proceedings. Along with the amendment to the EIA Act, the amendments necessary to keep consistency were also introduced into the Atomic Act. In the new Atomic Act under elaboration a rigorous networking will be incorporated with the amended EU EIA Directive, the Aarhus Convention, as well as with the EIA Act, so that the public will have the rights conferred on them by the Aarhus Convention, but not extending the scope beyond the Aarhus Convention.

In the document "The principles of new Atomic Act", Principles No. 4, 17, 25 and 37 are also related to the topic of the suggestion.

Status of the finding in the initial mission

Suggestion 9 (S9) is closed as the recent amendment of the Act on Environmental Impact Assessment defines the scope and extent of the involvement of environmental authorities in the nuclear safety authorization process.

6. REVIEW AND ASSESSMENT

6.1. GENERAL

There were no findings in this area in the initial IRRS mission.

6.2. ORGANISATIONAL ASPECTS OF THE REVIEW AND ASSESMENT PROCESS

There were no findings in this area in the initial IRRS mission.

6.3. CAPABILITY FOR INDEPENDENT REGULATORY AUDIT CALCULATIONS

There were no findings in this area in the initial IRRS mission.

6.4. UPDATING OF REGULATIONS RELATED TO REVIEW AND ASSESSMENT

There were no findings in this area in the initial IRRS mission.

6.5. ACCEPTANCE CRITERIA

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S10	**Suggestion:** UJD SR should consider defining more solid bases for setting the numerical acceptance criteria for design basis accidents and also should consider reviewing the stage in the licensing process of a new plant, where the acceptance criteria are approved.

Changes since the initial IRRS mission

Suggestion 10: The UJD SR safety guide BNS I.11.1, related to the existing nuclear power facilities (VVER-440/V213) has been updated. The BNS was supplemented by text referring to the specific values of acceptance criteria in the quality assurance programs of nuclear installations and/or quality plans of selected equipment, respectively. Thus the acceptance criteria are clearly linked to specific criteria values in the quality assurance programs and/or quality plans as required by Annex No. 6 of UJD SR Decree No. 431/2011 Coll. and in the Government Ordinance No. 345/2006 Coll. (BSS).

The link to the source of the specific values of the exposure limits for the population during anticipated operational occurrences (acceptance criterion OU4) was taken from Annex 3 to Government Decree No. 345/2006 Coll. and incorporated into the BNS. The BNS was complemented also by recommended numeric values for exposure limits to the population for design basis accidents and for events in shut-down operational stages (acceptance criteria PH10 and SD7, respectively). When setting the numerical values of the exposure limits, UJD SR co-operated with the Public Health Authority (UVZ SR). The updated guideline passed the official commenting and review process and all acceptable comments were incorporated to the BNS text. The BNS was issued in October 2013. The changes in the guide imply updating of the affected UJD SR Decree No. 431/2011. The updating process of the decree is in progress. Currently, the UJD SR Department of Legislative and Legal Affairs is working on revising the decrees identified for updating. It is expected that the decrees could be released to the consultation process in March 2015. The above documents cover only the existing NPPs, but similar documents are planned to be elaborated for new build.

UJD SR Department of Legislative and Legal Affairs, in cooperation with all UJD SR technical departments, has initiated the preparation of a new Atomic Act. All related requirements for the

licensing process will be reviewed in the new Atomic Act, covering also the acceptance criteria for new nuclear power plant. The licensing process will be based on WENRA reference levels (2014) and IAEA safety standards. The process of revising the Atomic Act is expected to be completed by the end of 2016.

Status of the finding in the initial mission

Suggestion 10 (S10) is closed on the basis of progress made and confidence in effective completion as numerical acceptance criteria for design basis accidents for existing plants were defined in the relevant regulatory guides and the criteria for new build will be covered in the revision process of the Atomic Act.

6.6. PERIODIC SAFETY REVIEW – AGEING MANAGEMENT

There were no findings in this area in the initial IRRS mission.

6.7. OPERATIONAL EVENT INVESTIGATION, EXPERIENCE FEEDBACK

There were no findings in this area in the initial IRRS mission.

7. INSPECTION

7.1. GENERAL

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R5	**Recommendation:** UJD SR should stipulate in its general inspection procedure the maximum period between two inspections in the areas and programmes to be inspected.
S11	**Suggestion:** UJD SR should consider extending the scope of its inspection programme to include, among others, inspections outside working hours and joint inspections with other authorities.

Changes since the initial IRRS mission

Recommendation 5: UJD SR updated and issued a new version of its Inspection Procedure referenced as S310 005:15, in order to address Recommendation 5. According to the section 3.1 'Inspection Plan and Preliminary Inspection Plan' of this Inspection Procedure, UJD SR establishes a Preliminary Inspection Plan for a period of 3 years in order for all safety-related areas and programmes to be inspected within a 3-years cycle. Based on the Preliminary Inspection Plan an Annual Inspection Plan is established every year for the upcoming period. These provisions are adequate to ensure that any safety-related area or programme is inspected within a period of 3 years.

Suggestion 11: In section 3.2, Inspection activities, of the updated Inspection Procedure it is stated that an inspection can be conducted outside normal working hours. It is further mentioned that this arrangement is also applicable for unplanned inspection. Evidence was provided to demonstrate that these inspection practices were actually implemented.

In 2012 the IRRS team also considered that in some areas, such as fire protection, it would be beneficial to conduct joint inspections with inspectors from different authorities. In this respect, after internal review, UJD SR informed the IRRS team that it does not intend to conduct joint inspections with other authorities because of organizational and legal reasons, for example related to establishing clear bases for possible enforcement action decisions. UJD SR explained its position, mentioning that, when necessary, the governmental organizations exchange information on inspection findings. The IRRS team noted this, but considers that, when appropriate, joint inspections should be conducted with other relevant governmental authorities.

Status of the finding in the initial mission

Recommendation 5 (R5) is closed as the maximum inspection period for any safety-related areas and programmes is set to 3 years.

Suggestion 11 (S11) is closed as inspections outside working hours are regularly carried out in accordance with the UJD SR Inspection Procedure. However, in order to address the second part of that suggestion a new suggestion is given below.

New observations from the follow-up mission

The IRRS team considers that where there is a possible interface between nuclear safety and areas regulated by different authorities, joint inspections provide an opportunity to conduct coordinated oversight. This can be done in a way that does not compromise the respective

responsibilities or independence of the participating regulatory authorities. Joint inspections can also help to provide a consistent, or "joined-up", message to the licensee. The organization of joint inspections could also be considered with regard to the resolution of Recommendation 3, related to cooperation between regulatory authorities.

FOLLOW UP MISSION RECOMMENDATIONS, SUGGESTIONS AND GOOD PRACTICES	
Observation: *UJD SR has decided not to organize any joint inspection with other regulatory authorities, referring to legal and organizational difficulties. However, joint inspections by different authorities are beneficial in areas of common interest (e.g., fire prevention and protection, emergency preparedness) and should be conducted.*	
(1)	**BASIS: GSR Part 1, Requirement 7 states that** *"Where several authorities have responsibilities for safety within the regulatory framework for safety, the government shall make provision for the effective coordination of their regulatory functions, to avoid any omissions or undue duplication and to avoid conflicting requirements being placed on authorized parties."*
(2)	**BASIS: GS-G-1.3 Para. 3.21 states that** *"In addition to the regulatory body, other governmental bodies may participate in the regulatory process according to national practices. The regulatory body should establish and maintain liaison throughout the lifetime of the facility with other relevant governmental bodies, and should develop and, where practicable, formalize working procedures with such bodies, whether at the national, regional or local level. Such bodies may undertake their own inspections of the facility, and it may be appropriate for the regulatory body to conduct joint inspections with one or more of them. In planning an inspection programme and determining a specific inspection plan, the regulatory body should consider whether inspectors from these bodies should participate in the inspection."*
SF1	**Suggestion: UJD SR should consider extending the scope of its inspection programme to include, when appropriate, joint inspections with other regulatory authorities.**

7.2. NUCLEAR POWER PLANTS

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S12	**Suggestion:** UJD SR should consider improving the recording and storing of information and findings gathered when witnessing activities (with the licensee) at supplier's facilities, including when these facilities are located in foreign countries.

Changes since the initial IRRS mission

Suggestion 12: Suppliers of the licensee must be overseen by the licensees. In order to ensure that licensees conduct effective oversight of their suppliers, UJD SR observes the licensees from time to time when they are performing such oversight of their subcontractors in the country or abroad. In response to Suggestion 12, UJD SR decided to deal with regulatory oversight of the licensee's activities at facilities of licensees' suppliers in a similar way as an inspection. Consequently, the same provisions for recording and storing information and findings gathered

when witnessing activities carried out by a licensee at suppliers' facilities are applied as for any other inspection. Section "3.2. Inspection activities" of the inspection procedure S 310 005:15 has been updated accordingly.

Status of the finding in the initial mission

Suggestion 12 (S12) is closed as the records of regulatory oversight conducted at facilities of licensees' suppliers are handled in the same manner as the inspection records.

7.3. WASTE FACILITIES

There were no findings in this area in the initial IRRS mission.

8. ENFORCEMENT

8.1. GENERAL

There were no findings in this area in the initial IRRS mission.

9. REGULATIONS AND GUIDES

9.1. EXISTING REGULATIONS AND GUIDES

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S13	**Suggestion:** UJD SR should consider elaborating more detailed guidance for the licensees for operational events evaluation and investigation.

Changes since the initial IRRS mission

Suggestion 13: UJD SR has considered elaborating more detailed guidance for the licensees for operational event evaluation and investigation. It has concluded that it would be helpful to have such guidance to prevent discrepancies, which could arise between UJD SR and licensee during event evaluation. To this end, the elaboration of such a guideline is included in the yearly plan for elaborating new guidelines. According to the plan the guideline shall be issued by the end of the year. The yearly plan will be approved by the Board of UJD SR in March.

Status of the finding in the initial mission

Suggestion 13 (S13) is open, as no formal decision has been taken yet to establish guidance for operational events evaluation and investigation.

9.2. PROCESS FOR DEVELOPMENT OF REGULATIONS AND GUIDES

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S14	**Suggestion:** UJD SR should consider improving internal directives to better reflect the way in which it reviews international standards and translates them into national regulations and guides.

Changes since the initial IRRS mission

Suggestion 14: UJD SR has put in place measures to better incorporate international standards into national regulations and safety guides, including guides and regulations developed by other organizations and submitted to UJD SR for comment purposes. UJD SR has updated three directives on: Issuing of the safety guides; the assessment of generally binding legal documents processed and forwarded by other ministries to the interdepartmental consultation proceedings; and the internal process of preparation and approval of UJD SR regulations. The new provisions embedded in the updated directives require that the relevant international standards including the IAEA safety standards, the international experience and research findings shall be considered and used as benchmark materials to draft, review and/or revise regulatory requirements and guides. In addition, within the triennial plans revised on an annual basis for the development of regulations and safety guides, the international documents to be taken into account for drafting or revising of safety guides and regulations, are referenced.

Status of the finding in the initial mission

Suggestion 14 (S14) is closed as relevant internal directives have been updated to better reflect the way in which international standards are reviewed and translated into national regulations and guides.

9.3. PROMOTION OF REVIEW OF THE REGULATIONS AND GUIDES TO INTERESTED PARTIES

There were no findings in this area in the initial IRRS mission.

10. EMERGENCY PREPAREDNESS AND RESPONSE

10.1. GENERAL REQUIREMENTS

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R6	**Recommendation:** The Government should review, and if necessary revise, the national level of the assessment of all radiological threats in line with international requirements and for updating of the National emergency response plan to nuclear or radiological accidents.

Changes since the initial IRRS mission

Recommendation 6: For response in event of a nuclear or radiological emergency, there are several Ministries, governmental, regional and local authorities, and other institutions involved. The IRRS mission in 2012 observed that coordination of their preparedness and response could be improved by updating the national emergency plan.

The Ministry of the Interior (MoI) is responsible for updating plans for civil protection and emergency management. According to the Amendment of the Law of Civil Protection (42/1994), which is presently under revision, the MoI has a duty to prepare a National Emergency Response Plan for Nuclear and Radiological Emergencies. The MoI has established a task force for development of this Plan in close cooperation with Ministry of Health, Ministry of Environment, Ministry of Economy, Ministry of Transport, and Nuclear Safety Regulatory Authority (UJD SR). The IRRS team was informed that one chapter of the Plan is a description of the tasks and responsibilities of all relevant organisations concerning both preparedness and response phases of nuclear or radiological emergencies.

The IRRS team was informed that the structure of the emergency plan provided by UJD SR is based on IAEA guidance (EPR Method document from 2003). Also, recent IAEA guidance will be used in development of the Plan.

The Plan, which was shown to the IRRS team in its draft form, also contains threat assessments of nuclear or radiological emergencies including those originating from other countries. Threat assessments are based on the IAEA Safety Requirements, and also are in line with the EU BSS.

The IRRS Team was also informed that the Plan will cover different phases of a nuclear or radiological emergency as required e.g. by the EU BSS: urgent, early and transition from emergency exposure situation to existing exposure situation. Implementation of EU BSS is expected in 2017 and 2018 respectively.

The new emergency plan will enter into force August 1, 2015 together with Amendment of the Law of Civil Protection (42/1994). The Plan will be tested during the INEX 5 exercise sponsored by the OECD/NEA in Dec 2015 – Jan 2016. The scenario of the INEX 5 exercise concerns an NPP accident connected to severe problems with infrastructure.

The IRRS team recognized the efforts of UJD SR to improve its emergency preparedness and also its intention to improve the national emergency plan for nuclear and radiological emergencies. However, there is still scope for further improvements, for example in preparing procedures to implement the new emergency plan and further enhance coordination, cooperation and communication between the involved organisations.

The IRRS team considered that an overall international review of the national arrangements for nuclear and radiological emergencies could help to identify further potential improvements to the

emergency arrangements. Such a review would be advisable some years after the National Emergency Response Plan has been enacted and also tested in several exercises.

Status of the finding in the initial mission

Recommendation 6 (R6) is closed on the basis of progress and confidence in effective completion as the new Emergency Response Plan for Nuclear or Radiological Emergencies will be issued in the near future covering international requirements and assessments of nuclear or radiological threats.

10.2. FUNCTIONAL REQUIREMENTS

10.2.1. Establishing emergency management and operations

There were no findings in this area in the initial IRRS mission.

10.2.2. Identifying, notifying and activating

There were no findings in this area in the initial IRRS mission.

10.2.3. Taking urgent protective actions

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R7	**Recommendation:** The Government should make provisions to update, at national level, operational intervention levels (OILs) in line with international requirements.

Changes since the initial IRRS mission

Recommendation 7: The Ministry of Health, through UVZ SR, is the organization responsible for defining Operational Intervention Levels, as part of its mandate to define measures to protect the public. In the planned implementation of EU Directive 2013/59/EURATOM, OILs will be introduced by UVZ SR into the national emergency plan.

The IRRS team was informed that OILs, provided in the IAEA guides, will be used in the Slovak Republic.

Status of the finding in the initial mission

Recommendation 7 (R7) is closed on the basis of progress and confidence in successful conclusion as OILs in line with international requirements will be implemented in the national emergency provisions.

10.2.4. Protecting emergency workers

There were no findings in this area in the initial IRRS mission.

10.2.5. Assessing the initial phase

There were no findings in this area in the initial IRRS mission.

10.2.6. Keeping the public informed

There were no findings in this area in the initial IRRS mission.

10.3. INFRASTRUCTURAL ELEMENTS

10.3.1. Organisation

There were no findings in this area in the initial IRRS mission.

10.3.2. Plans and Procedures

There were no findings in this area in the initial IRRS mission.

10.3.3. Logistical support and facilities

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S15	**Suggestion:** UJD SR should consider improving the system for management of exchange of information among groups in its emergency organisation.

Changes since the initial IRRS mission

Suggestion 15: A new electronic system for information management has been implemented, and it is used by all expert groups of the emergency response organisation of UJD SR. A manual consisting of practical procedures was prepared. Training of staff members of emergency organisation is systematic and is organised twice a year for the whole staff. The information management system is used in all exercises (2 or 3 times annually) and its functionality is evaluated.

The information management system contains a considerable amount of background information (e.g. on-site emergency plans, manuals). Background information, manuals and procedures are also available in a paper form as a redundant system.

Status of the finding in the initial mission

Suggestion 15 (S15) is closed as an efficient information management system was put into use by the emergency response organisation of UJD SR.

New observations from the follow-up mission

The IRRS team observed that UJD SR not only addressed Suggestion 15, but went further by introducing and maintaining a very effective information management system.

FOLLOW UP MISSION RECOMMENDATIONS, SUGGESTIONS AND GOOD PRACTICES	
Observation: *The information management system of UJD SR for use during nuclear accidents enhances situational awareness by presenting important data in a user friendly and timely way to all staff members. It also assures proper recording of data, decisions and deliverables during an emergency.*	
(1)	**BASIS: GS-R-2 Para 5.25. that** *"Adequate tools, instruments, supplies, equipment, communication systems, facilities and documentation (such as procedures, checklists, telephone numbers and manuals) shall be provided for performing the functions specified in Section 4. These items and facilities shall be selected or designed to be operational under the postulated conditions (such as the radiological, working and environmental conditions) that may be encountered in the emergency response, and to be compatible with other procedures and equipment for the response (such as the communication*

FOLLOW UP MISSION RECOMMENDATIONS, SUGGESTIONS AND GOOD PRACTICES	
	frequencies of other response organizations), as appropriate. These support items shall be located or provided in a manner that allows their effective use under postulated emergency conditions."
GPF1	**Good Practice: UJD SR has developed, implemented and is systematically maintaining and improving, an information management system which is significantly contributing to efficient management and response of the UJD SR emergency organisation for potential nuclear accidents.**

10.3.4. Training, drills and exercises

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S16	**Suggestion:** The Government should consider making provisions for the use of UJD SR capabilities for conducting training and exercises as a basis for enhancing at national level the training and exercise programmes related to the management and response in radiation emergencies.

Changes since the initial IRRS mission

Suggestion 16: After the TEPCO Fukushima Dai-ichi accident, a large scale national nuclear exercise ("HAVRAN") was organised. All relevant organisations at governmental, regional and local level took part in the exercise. The exercise in November 2012 was a two-day event: day one was a full command post exercise with nuclear power plant accident scenario. During the second day field tests of e.g. evacuation and decontamination were performed. UJD SR had its emergency response centre continuously operational for 36 hours.

In the National Emergency Plan (see description in R6) there will be an obligation to take part in exercises held every third year. Furthermore, in the Atomic Act, which is expected to be issued at the end of 2016 a requirement of an NPP exercise every third year will be defined. Participation will be expanded to cover also governmental level in addition to the organizations within the emergency planning zone. Training for participants will be organized in connection with exercises.

UJD SR has also been active in organizing other types of training for stakeholders, For example the training in the Academy of Police Force contains the following topics: nuclear safety and technology, emergency preparedness and response arrangements, environmental monitoring and protection of public.

Status of the finding in the initial mission

Suggestion 16 (S16) is closed on the basis of progress and confidence for successful completion as with new legislation participation in training and exercises related to nuclear and radiological emergencies will be expanded to cover all relevant organisations including those on a national level.

11. OCCUPATIONAL RADIATION PROTECTION IN NUCLEAR FACILITES, RADIOACTIVE WASTE MANAGEMENT AND DECOMMISSIONING, PUBLIC AND ENVIRONMENTAL EXPOSURE CONTROL

11.1. OCCUPATIONAL RADIATION PROTECTION

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R8	**Recommendation:** UVZ SR should put in place a human resource management program which assures that the staff can carry out the foreseen activities which attend the present and future expanded utilization of nuclear power in Slovakia so that specific knowledge and experience in the area of occupational radiation protection is preserved.

Changes since the initial IRRS mission

Recommendation 8: Changes have occurred in the staffing of UVZ SR since the IRRS mission in 2012. The three senior staff working in the group for occupational and public radiation protection for nuclear facilities have all left the organization, and 1 new staff was recruited. In 2013, as requested by a Governmental resolution arising from the "HAVRAN" national exercise of an accident in a nuclear installation, UVZ SR prepared a report for the Ministry of Health on proposals for financing the radiation protection and radiation monitoring network. In this report UVZ SR has identified the additional staff resources needed for fulfilling its full mandate. According to this report, an increase of 12 technical staff would be necessary. The IRRS team was informed that this report is still being discussed by the Ministry of Health and the Ministry of Finance.

The IRRS team noted that the recruitment of new staff to replace leaving staff is a positive measure, but it is not sufficient to address the recommendation in terms of knowledge preservation.

Status of the finding in the initial mission

Recommendation 8 (R8) is open as no human resource programme was established to ensure knowledge maintenance and adequate resources within UVZ SR for regulatory oversight of occupational radiation protection in nuclear installations.

11.1.1. Structure of the regulations on occupational radiation protection

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S17	**Suggestion:** UVZ SR should consider planning the up-dating of the occupational radiation protection regulations in accordance with the ICRP 103 and subsequent ICRP recommendations and the GSR Part 3 interim version.

Changes since the initial IRRS mission

Suggestion 17: Like all EU States, the Slovak Republic has to transpose in its national regulatory framework the European directive 2013/59/EURATOM within 5 years after its publication. The government has required, by its Resolution No. 151/2014, the Minister of Health in collaboration with UJD SR to transpose the Council Directive by 6 February 2018. The

EU directive being fully compliant with GSR Part 3, its transposition will address the suggestion in a satisfactory manner.

The IRRS team was informed about the current status of work related to the transposition: a gap analysis between the EU directive and the current Slovak health legislation is currently being undertaken by UVZ SR. It is expected that this gap analysis will be expanded to all Slovak legislation, with the involvement of other national bodies, including UJD SR, by June 2015. Based on the extent of changes that are necessary, a new radiation protection Act might be drafted, in addition to revising regulations. Some aspects of the transposition, not related to occupational exposure control, will be implemented through the revision of the Atomic Act currently being drafted by UJD SR.

Status of the finding in the initial mission

Suggestion 17 (S17) is closed on the basis of progress made and confidence in effective completion, as initial actions have been taken to transpose the EU directive 2013/59/EURATOM into the Slovak national regulatory framework, together with a clear commitment from the Government expressed in Governmental Resolution No. 151/2014.

11.1.2. Arrangement under the radiation protection programme

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S18	**Suggestion:** UVZ SR should consider reviewing the fixed and mobile equipment available for their inspection activities and occupational radiation protection at the nuclear facilities.

Changes since the initial IRRS mission

Suggestion 18: This suggestion was made by the IRRS mission 2012 on the understanding that the equipment available to UVZ SR to conduct its inspections of nuclear installations was not sufficient and partly out-dated. The expectation was that UVZ SR would make an assessment of its needs for equipment, and take actions in order to acquire additional equipment and replace existing equipment. The IRRS team acknowledged that, under the "Joint Action Plan between the Government of the United States of America and the Government of the Slovak Republic to Combat Illicit Trafficking of Nuclear and Radioactive Materials and Related Technology", a number of training activities took place during 2013 and 2014 provided by specialists from the United States in the field of radiation protection. Under this Action Plan, UVZ SR was provided with some portable detection equipment. However, due to lack of required certification, this equipment cannot be used for inspection activities performed at nuclear installations.

During the follow-up mission, UVZ SR further explained to the IRRS team that on a yearly basis a list of equipment needed to perform all its activities (inspections of facilities but also laboratory activities) is prepared and submitted to the Ministry of Health. Due to budget restrictions it has not been possible to acquire new equipment in recent years. UVZ SR is relying on radiation detection equipment from the licensee when conducting inspections, after checking that it is being properly calibrated. The IRRS team considered that these practical arrangements do not ensure sustainable resources for UVZ SR to fulfil its statutory functions, and that the issue of lack of adequate equipment for UV SR remains.

Status of the finding in the initial mission

Suggestion 18 (S18) is open as no sustainable solution has been identified to ensure adequate radiation monitoring equipment for UVZ SR.

11.1.3. Individual monitoring

There were no findings in this area in the initial IRRS mission.

11.1.4. Radiation Protection Experts/Officers

There were no findings in this area in the initial IRRS mission.

11.2. RADIOACTIVE WASTE MANAGEMENT AND DECOMMISSIONING, PUBLIC AND ENVIRONMENTAL EXPOSURE CONTROL

11.2.1 Waste management

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
S19	**Suggestion:** The Government should consider ensuring that the updated policy and strategy document regarding the back-end of spent fuel management will be implemented in a timely manner.
S20	**Suggestion:** The Government, when assessing the period for recovery of the historical debt of funding, should take into account the risk involved in a long period of fund collection and consider that no undue burden is put on future generations.
R9	**Recommendation:** The Government should review the current legal and regulatory framework and identify any need for clarification in regards to the division of responsibilities between the waste owner/generator and the waste management organisation.

Changes since the initial IRRS mission

Suggestion 19: The Atomic Act and the Act on National Nuclear Fund were amended by Act No. 143/2013 Coll. to transpose Directive 2011/70/EURATOM on establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste. On 19 November 2014 the Ministry of Economy presented the draft National Policy and National Program on the Management of Spent Fuel and Radioactive Waste. After the intergovernmental commenting period the document will be submitted to the government for approval and will then be sent to the European Commission before 23rd August 2015.

In the updated "Strategy for the final stage of peaceful utilization of the nuclear energy in SR", in line with the Directive 2011/70/EURATOM and approved by governmental resolution No. 26/2014, two realistic alternatives are considered to solve the back-end of the management of spent nuclear fuel (SNF), these being direct disposal of SNF in the deep geological repository of suitable properties and disposal of SNF in an international repository.

The draft National Program contains a set of short-term activities with corresponding deadlines as well as longer term activities (e.g. siting related activities) coupled to preliminary time estimates. The team verified the existence of such a list of activities in the field of predisposal and disposal of radioactive waste and spent nuclear fuel, the associated deadlines to it and the allocation of responsible parties, as well as activities in the area of research and development.

Suggestion 20: The IRRS team verified that in the updated strategy document, approved by Government resolution No. 26/2014, the period for recovery of historical debt of funding radioactive waste and spent nuclear fuel activities has been reduced from 70 to 35 years. For the coverage of the historical debt, contributions are paid to the account of the Ministry of Economy.

It is considered that the level of payments, which will be levied by the operator of the transmission system and operators of distribution systems and forms part of price of delivered electricity to electricity end consumers for reimbursement of the historical deficit, will be continually distributed over the long term time horizon and will cover actual needs, which would be updated every 5 years.

The mechanism of collection of financial resources for recovery of historical debt is mentioned in the updated strategy document which is in line with the governmental resolution No. 426/2010 Coll., amended by governmental resolutions No.19/2013 Coll. and No. 297/2013 Coll.

Recommendation 9: Clarification in regards to the division of responsibilities between waste owner/generator and the waste management organization is given in Act No. 143/2013 Coll. amending Act No. 541/2004. This was verified by the IRRS team.

Pursuant to Article 21 paragraph 1 of the amendment of Atomic Act No. 143/2013 the originator of the radioactive waste is responsible for assurance of safe management of radioactive waste in compliance with the National Programme prior to their acceptance to the repository and the licence holder for management of radioactive waste is responsible for safety of the radioactive waste management facilities.

Moreover the Atomic Act in its amendment No. 143/2013 specifies in Article 3 paragraph 9 that the disposal of radioactive waste or spent fuel may only be carried out, on the basis of a licence issued by the Authority, by a legal entity which has been founded, established or authorised by the Ministry of the Economy of the Slovak Republic. This legal entity must be a holder of a licence for the operation of a repository, and the Slovak Republic must hold a 100% stake in the entity. At the same time, this entity may not be the holder of a licence for the operation of a nuclear reactor.

Status of the finding in the initial mission

Suggestion 19 (S19) is closed on the basis of progress made and confidence in effective completion as two Acts have been amended, the strategy document has been updated and approved and the National Policy and National Program on the management of spent fuel and radioactive waste will soon be published.

Suggestion 20 (S20) is closed as the period for recovery of the historical debt for funding of spent fuel and radioactive waste activities has been reduced to 35 years and the necessary funding mechanism is present to cover it.

Recommendation 9 (R9) is closed as sufficient clarification is provided in the amended Atomic Act in regards to the division of responsibilities between the waste owner/generator and the waste management organisation.

11.2.2 Decommissioning

There were no findings in this area in the initial IRRS mission.

11.2.3 Environmental monitoring for public protection

2012 MISSION RECOMMENDATIONS, SUGGESTIONS	
R10	**Recommendation:** The Government should establish and operate a unified national radiation monitoring system and should ensure its results could be used by competent authorities in normal situations as well as during emergencies.
R11	**Recommendation:** The Government should establish the strategy, and update the reference levels, for decision making for chronic (existing) exposure situations and bring the strategy in line with GSR Part 3.

Changes since the initial IRRS mission

Recommendation 10: In its 2013 report on proposals for financing radiation protection and a radiation monitoring network, UVZ SR has evaluated the needs associated with the establishment of a unified national radiation monitoring network. The Resolution of the Government No. 28/2013 under part VI item 7 in relation to the evaluation of the HAVRAN exercise requested the Minister of Health, in cooperation with other ministries, to propose to the government an institutional, technical and personnel upgrade of the existing radiation monitoring network. As previously mentioned, this report is still being discussed between the Ministry of Health and the Ministry of Finance. The data collected by several different measuring networks in the country are still not readily available in one place to support decision making.

Recommendation 11: The establishment of a strategy to deal with existing exposure situations, and the definition of appropriate reference levels will be taken care of by UVZ SR during the transposition of the EU Directive 2013/59/EURATOM. The need to revise an existing regulation dealing with Radon in buildings, NORMS in construction materials has already been identified.

Status of the finding in the initial mission

Recommendation 10 (R10) is open as the efforts to ensure that data from the radiation monitoring network are readily available for use by competent authorities during normal as well as emergency situations should continue.

Recommendation 11 (R11) is closed on the basis of progress made and confidence in effective completion as existing exposure situations will be addressed in the Slovak regulatory framework through the transposition of EU Directive 2013/59/EURATOM.

New observations from the follow-up mission

Recommendations 8 and 10 and Suggestion 18 remain open. All these findings relate to Government actions in connection with providing resources to UVZ SR to discharge its regulatory functions related to occupational exposure and environmental monitoring for nuclear installations. In its 2013 report prepared in response to Government resolution 28/2013, UVZ SR has evaluated its needs for resources and suggested funding mechanisms to meet these needs. The IRRS Team considers that this report should give additional impetus to review, and possibly revise, the allocation of resources to UVZ SR.

In addition, the transposition of EU Directive 2013/59/EURATOM in the next three years is a major task for the Slovak Republic, and mainly for UVZ SR, and the Government should ensure that UVZ SR has adequate resources to implement the Government resolution 151/2014 by which it is committed to transpose the directive before 6 February 2018.

FOLLOW UP MISSION RECOMMENDATIONS, SUGGESTIONS AND GOOD PRACTICES	
Observation: *There is an issue of allocation of resources to UVZ SR that was identified during the 2012 IRRS mission. This remains unresolved. The Government Resolution No. 28/2013 under part VI item 6 in relation to the evaluation of the HAVRAN exercise requested the Minister of Health, in cooperation with Ministry of Finance, to propose to the government changes in the competencies and in the system of financing of UVZ SR.*	
(1)	**BASIS: GSR Part 1, Requirement 3, para 4. states that** *"... the government shall be responsible for ensuring that the regulatory body has sufficient resources to fulfil its statutory obligations."*
RF1	**Recommendation: The Ministry of Health, in cooperation with UJZ SR, should continue to review, and where appropriate revise, the resources allocated to UVZ SR to ensure that it can fulfil its statutory obligations for radiation protection and environmental monitoring.**

IRRS FOLLOW-UP MISSION TEAM

APPENDIX I - LIST OF PARTICIPANTS

INTERNATIONAL EXPERTS:		
STRITAR Andrej	Slovenian Nuclear Safety Administration (SNSA)	andrej.stritar@gov.si
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IAEA STAFF MEMBERS		
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MANSOUX Hilaire	Division of Nuclear Safety and Radiation Waste	h.mansoux@iaea.org
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LIAISON OFFICER		
TURNER Mikulas	Nuclear Regulatory Authority of the Slovak Republic (UJD SR)	mikulas.turner@ujd.gov.sk

APPENDIX II - MISSION PROGRAMME

<table>
<tr><th>Time</th><th>23-MON</th><th>24-TUE</th><th>25-WED</th><th>26-THU</th><th>27-FRI</th><th>28-SAT</th><th>01-SUN</th><th>02-MON</th></tr>
<tr><td>9:00-10:00</td><td rowspan="3">Arrival of Team Members</td><td>Entrance Meeting</td><td rowspan="3">Interviews</td><td rowspan="3">Interviews</td><td rowspan="3">Host reviews draft report and prepares comments</td><td>Discussion of Executive Summary</td><td rowspan="8">Free</td><td rowspan="3">Exit Meeting</td></tr>
<tr><td>10:00-11:00</td><td rowspan="2">Interviews</td><td rowspan="2">Submission of the final Draft to the Host</td></tr>
<tr><td>11:00-12:00</td></tr>
<tr><td>12:00-13:00</td><td>Lunch</td><td>Lunch</td><td>Lunch</td><td>Lunch</td><td colspan="2">Lunch</td><td rowspan="6">Departure of Team Members</td></tr>
<tr><td>13:00-14:00</td><td rowspan="4">Interviews</td><td rowspan="4">Interviews/ TM write and deliver preliminary findings to Admin. Assistant</td><td>TM discuss findings and Executive Summary</td><td rowspan="3">TM and Host discuss host comments/TM review and finalize draft report.</td><td rowspan="3">TL finalises the presentation</td><td rowspan="3">TC drafts the Press Release</td></tr>
<tr><td>14:00-15:00</td><td rowspan="3">Initial Team Meeting</td></tr>
<tr><td>15:00-16:00</td><td>TM finalize findings/write Report and deliver them to Admin. Assistant</td></tr>
<tr><td>16:00-17:00</td><td rowspan="3">Social Event</td></tr>
<tr><td>17:00-18:00</td><td>Meeting with UJD SR Liaison Officer</td><td>Daily Team Meeting</td><td>Daily TM Meeting</td><td>Daily TM Meeting</td><td colspan="2" rowspan="3">Free</td></tr>
<tr><td>18:00-19:00</td><td rowspan="2">Dinner</td><td rowspan="2">Dinner</td><td rowspan="2">Dinner</td><td rowspan="2">Dinner</td></tr>
<tr><td>19:00-20:00</td></tr>
<tr><td>20:00-24:00</td><td>Free</td><td>Team Members (TM) write Report</td><td>TM write findings</td><td>Submission draft to Host for comments and review</td><td>TM / Admin. Assistant edit Report</td></tr>
</table>

APPENDIX III - MISSION COUNTERPARTS

	IRRS Experts	UJD SR Lead Counterpart	UJD SR Support Staff
1.	**LEGISLATIVE AND GOVERNMENTAL RESPONSIBILITIES**		
	Andrej STRITAR Craig REIERSEN	E. Metke	M. Pospisil M. Biharyova
2.	**GLOBAL NUCLEAR SAFETY REGIME**		
	Andrej STRITAR Craig REIERSEN	M. Turner	-
3.	**RESPONSIBILITIES AND FUNCTIONS OF THE REGULATORY BODY**		
	Andrej STRITAR Craig REIERSEN	E. Metke	J. Husarcek D. Zemenova
4.	**MANAGEMENT SYSTEM OF THE REGULATORY BODY**		
	Andrej STRITAR Craig REIERSEN	J. Husarcek	E. Metke A. Gieci
5.	**AUTHORIZATION**		
	Ferenc ADORJAN Jean-Rene JUBIN	O. Grof	T. Sedlak
6.	**REVIEW AND ASSESSMENT**		
	Ferenc ADORJAN	T. Sedlak	L. Kubisova

	IRRS Experts	UJD SR Lead Counterpart	UJD SR Support Staff
	Jean-Rene JUBIN		
7.	**INSPECTION**		
	Ferenc ADORJAN Jean-Rene JUBIN	I Smrtnik	-
8.	**ENFORCEMENT**		
	Ferenc ADORJAN Jean-Rene JUBIN	I Smrtnik	-
9.	**REGULATIONS AND GUIDES**		
	Ferenc ADORJAN Jean-Rene JUBIN	M. Pospisl	M. Biharyova
10.	**EMERGENCY PREPAREDNESS AND RESPONSE**		
	Hannele AALTONEN	A. Sokolikova	-
11.	**OCCUPATIONAL RADIATION PROTECTION IN NUCLEAR FACILITES, RADIOACTIVE WASTE MANAGEMENT AND DECOMMISSIONING, PUBLIC AND ENVIRONMENTAL EXPOSURE CONTROL**		
	Walter BLOMMAERT Hilaire MANSOUX	J. Homola V. Jurina	A. Zavazanova M. Drahos

APPENDIX IV - RECOMMENDATIONS (R) AND SUGGESTIONS (S) FROM THE PREVIOUS IRRS MISSION THAT REMAIN OPEN

Section	Module	R/S	Recommendation/Suggestion
1.7	**1**	**R1**	The Government should review, and if necessary revise, the legal framework and clarify the division of responsibilities among State Authorities in the area of nuclear and radiation safety, including emergency preparedness and response, in order to avoid overlaps or gaps in discharging regulatory functions and unduly burdening the licensees.
1.7	**1**	**R2**	UJD SR should, together with UVZ SR, analyse potential areas for improvement in their cooperation, including planning and coordination of their activities, communication of information about their decisions and rational use of their resources. They should accordingly update their mutual arrangements and propose changes in the legislative framework to the Government.
9.1	**9**	**S13**	UJD SR should consider elaborating more detailed guidance for the licensees for operational events evaluation and investigation.
11.1	**11**	**R8**	UVZ SR should put in place a human resource management program which assures that the staff can carry out the foreseen activities which attend the present and future expanded utilization of nuclear power in Slovakia so that specific knowledge and experience in the area of occupational radiation protection is preserved.
11.1	**11**	**S18**	UVZ SR should consider reviewing the fixed and mobile equipment available for their inspection activities and occupational radiation protection at the nuclear facilities.
11.2	**11**	**R10**	The Government should establish and operate a unified national radiation monitoring system and should ensure its results could be used by competent authorities in normal situations as well as during emergencies.

APPENDIX V - RECOMMENDATIONS (RF), SUGGESTIONS (SF) AND GOOD PRACTICES (GPF) FROM THE 2015 IRRS FOLLOW UP MISSION

Section	Module	RF/SF/GPF	Recommendation, Suggestion or Good Practice
11.2	**11**	**RF1**	The Ministry of Health, in cooperation with UJZ SR, should continue to review, and where appropriate revise, the resources allocated to UVZ SR to ensure that it can fulfil its statutory obligations for radiation protection and environmental monitoring.
7.1	**7**	**SF1**	UJD SR should consider extending the scope of its inspection programme to include, when appropriate, joint inspections with other regulatory authorities.
10.3	**10**	**GPF1**	UJD SR has developed, implemented and is systematically maintaining and improving, an information management system which is significantly contributing to efficient management and response of the UJD SR emergency organisation for potential nuclear accidents.

APPENDIX VI - REFERENCE MATERIAL PROVIDED BY UJD SR

[1] Knowledge Management UJD SR:

- *KMUJD-02_03-SPR-001-00 Sprava EN*
- *Pru00EDloha 01_Dotaznu00EDk*
- *Pru00EDloha 02_IKP M08*
- *Pru00EDloha 03_Diagram M08*
- *Pru00EDloha 04_Smernica M08*
- *Pru00EDloha 05_Mapa*
- *Pru00EDloha 06_Diagram H01*
- *Pru00EDloha 07_Diagram H07*
- *Pru00EDloha 08_T matica H01*
- *Pru00EDloha 09_T matica H07*
- *Pru00EDloha 10_Mapovanie vedomostu00ED H01*
- *Pru00EDloha 11_Mapovanie vedomostu00ED H07*

[2] General Items

- *00_IRRS_Slovakia_2012_Final report*
- *01_IRRS_FU_2015 UJR Progress Report*
- *02_Government Resolution No_647_2012*
- *03_Government Resolution No_256_2014*
- *03_Policies, principles and strategies dev NS(GR No_256_2014) EN*
- *04_Type (list) of decisions issued by the UJD SR*
- *05_Chairman order No_12_2014 Establishment of WG for new Atomic act*
- *06_Principles of new Atomic act EN*
- *07_Atomic act No_143_2013*
- *08_Analysis of legislative framework EN*
- *09_Directive on procedures for public procurement EN*
- *10_Notice of public procurement*
- *11_Public procurement act No_25_2006 in amendments*
- *12_Quality policy of the UJD SR (eng)*
- *13_Atomic act No_541_2014 (in amendments)*
- *14_Directive on issuing of the safety guides*
- *15_Directive on the assessment of generally binding legal docs*
- *16_Directive internal process preparation approval UJD SR regulations*
- *17_Management system and safety culture - slides of lecture*
- *19_Directive on the performance of internal audit of QMS*
- *20_Mikitova_E_External_autit_2013*
- *21_UJD SR management review 2013 EN*
- *22_Requirements for deterministic safety analyses for NPP with VVER-440_V213*
- *23_Inspection procedure*
- *24_Inspection plan for 2014*
- *24_Inspection plan for period 2013-2015*
- *25_Chairman_s order No_10_2012 Action plan implementing IRRS findings*
- *26_Letter No_SKR-7-31-2014, MoI, December 2014*
- *27_Government Resolution No_151_2014*
- *28_Emergency procedure HP27*
- *29_Evaluation training exercise IAEA-UJD SR 4-6Nov14*
- *30_Government Resolution No_772_2011_EN*
- *31_Table of activities and deadlines _in Slovak_x – copy*

- *32_Gov Regulation_Decommissioning_Fund_297 2013 EN*
- *33_Gov_Resolution_Exercise_accident_NI_28 2013 EN*
- *34_Gov_Resolution_Strategy_Backend_26 2014 EN*

[3] Link to UJD SR online ARM:

- *http://www.ujd.gov.sk/ujd/web.nsf/$All/339341BD984A0BBDC1257DB6002E868B*

APPENDIX VII - IAEA REFERENCE MATERIAL USED FOR THE REVIEW

1.	**IAEA SAFETY STANDARDS SERIES No. SF-1** - Fundamental Safety Principles
2.	**IAEA SAFETY STANDARDS SERIES No. GSR PART 1** - Governmental, Legal and Regulatory Framework for Safety
3.	**IAEA SAFETY STANDARDS SERIES No. GSR PART 3** - Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards
4.	**IAEA SAFETY STANDARDS SERIES No. GS-R-2 -** Preparedness and Response for a Nuclear or Radiological Emergency
5.	**IAEA SAFETY STANDARDS SERIES No. GS-R-3 -** The Management System for Facilities and Activities
6.	**IAEA SAFETY STANDARDS SERIES No. NS-R-1** – Safety of Nuclear Power Plants: Design
7.	**IAEA SAFETY STANDARDS SERIES No. NS-R-2** – Safety of Nuclear Power Plants: Operation
8.	**IAEA SAFETY STANDARDS SERIES No. NS-R-4 -** Safety of Research Reactors
9.	**IAEA SAFETY STANDARDS SERIES No. GS-G-1.1-** Organization and Staffing of the Regulatory Body for Nuclear Facilities
10.	**IAEA SAFETY STANDARDS SERIES No. GS-G-1.2 -** Review and Assessment of Nuclear Facilities by the Regulatory Body
11.	**IAEA SAFETY STANDARDS SERIES No. GS-G-1.3-** Regulatory Inspection of Nuclear Facilities and Enforcement by the Regulatory Body
12.	**IAEA SAFETY STANDARDS SERIES No. GS-G-1.4 -** Documentation for Use in Regulatory Nuclear Facilities
13.	**IAEA SAFETY STANDARDS SERIES No. GS-G-2.1 -** Arrangements for Preparedness for a Nuclear or Radiological Emergency
14.	**IAEA SAFETY STANDARDS SERIES No.GS-G-3.1 -** Application of the Management System for Facilities and Activities
15.	**IAEA SAFETY STANDARDS SERIES No. GS-G-3.2 -** The Management System for Technical Services in Radiation Safety
16.	**IAEA SAFETY STANDARDS SERIES No. RS-G-1.3 -** Assessment of Occupational Exposure Due to External Sources of Radiation
17.	**IAEA SAFETY STANDARDS SERIES No. RS-G-1.4 -** Building Competence in Radiation Protection and the Safe Use of Radiation Sources
18.	**IAEA SAFETY STANDARDS SERIES No. NS-G-2.10 -** Periodic Safety Review of Nuclear Power Plants Safety Guide
19.	**IAEA SAFETY STANDARDS SERIES No. NS-G-211 -** A System for the Feedback of Experience from Events in Nuclear Installations Safety Guide
20.	**INTERNATIONAL ATOMIC ENERGY AGENCY** - Convention on Early Notification of a Nuclear Accident (1986) and Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (1987), Legal Series No. 14, Vienna (1987).

APPENDIX VIII - UJDSR ORGANIZATIONAL CHART