

APPROVED BY
 First Deputy
 Prime Minister of
 the Republic of Belarus
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 _____, 2013

National Action Plan to Carry Out the Recommendations of the International Atomic Energy Agency (IAEA) Mission for the Integrated Nuclear Infrastructure Review (INIR) of the Republic of Belarus

No	Recommendations and Suggestions of IAEA	Realization Measures on for IAEA Recommendations	Terms	Responsible Agency
2. Nuclear safety*				
1.	<p><u>Recommendation No 1, clause 2.1 (Stage 2)</u> R-2.1 No 1** Taking into account legal framework [R-5.2 No 1], Belarus is to consider wording. It is to adhere to the fundamental safety principles of IAEA, which state that the main responsibility lies with the operating organization.</p>	<p>To draft and appropriately implement the project of the law of the Republic of Belarus “About the introduction of amendments and additions to the law on Nuclear Energy Use”.</p> <p>According to the established procedure to bring amendments and additions in the Edict of The President of The Republic of Belarus of 10 September 2010 No 450 “On the licensing of particular types of activities” and in accordance with them put the main responsibility on the operating organization.</p>	<p>2013</p> <p>2013</p>	<p>Ministry of Energy, Ministry of Emergency Situations(MES), National Academy of Sciences of Belarus (NAS), Ministry of Education, Ministry of Natural Resources and Environmental Protection, Ministry of Health and concerned authorities and entities MES</p>

2.	<u>Recommendation No 2, clause 2.2 (Stage 2)</u> R-2.1 No2 The Ministry of Emergency Situations/ the Nuclear Regulatory Authority is to accelerate realization of the existing project of the Technical code which examines (resolves) potential conflict of interests in case of providing of technical assistance to both the regulating authority and the operating organization In future, the Sosny and other technical support organizations have to minimize the possibility of conflict of interests related to provision of support both to the regulating authority and to the operating organization.	To approve TCP “Organization of the technical assistance. General requirements (OTA and GR)”.	2 nd quarter of 2013	MES (Nuclear Regulatory Authority), State Standardization Committee
3.	<u>The Suggestion, clause 2.1 (Stage 2)</u> S-2.1 No 1 The Institute “Sosny” should consider the possibility of founding an independent structural department to support the regulating authority.	To explore the issue of foundation of an independent structural department of State Scientific Institution “The Joint Institute for Power and Nuclear Research - Sosny”, its goals, tasks, personnel, possible sources of financing of its activity by discussion on the Meeting of the Academic Council of SSI “JIPNR Sosny”.	2013	NAS (State Scientific Institution “The Joint Institute for Power and Nuclear Research - Sosny”), MES (NRA)
4.	<u>The Suggestion, the clause 2.2 (Stage 2)</u> S-2.2 No 1 Belarus should take into account the necessity to research operating experience for future operating organization and regulating authority.	1. As part of the IAEA project BYE/2/004 “Developing Nuclear Power Infrastructure and Personnel Training” implementation of measures of management of knowledge in the field of nuclear energy and research of operating experience. 2. To consider the establishment of the department of the Nuclear Regulatory Authority responsible for a system of accumulation and review of operating experience. 3. To join international organizations on examination of experience and practice (WANO, the session of the Forum of the State Nuclear Safety Authorities of the Countries Operating WWER Type Reactors and others). 4. As part of the IAEA project undertake an internship on monitoring the whole lifecycle of the NPP.	2013 2013-2014 According with project realization plan	Ministry of Energy (Nuclear Plant Construction Directorate) MES (NRA) MES, Ministry of Energy MES (NRA)

3. Management				
5.	<p><u>The Suggestion, clause 3.6 (Stage 2)</u> R-3.6 No1 Belarusian organization supporting or monitoring nuclear energy program should improve its comprehension of development and implementation of guiding processes according to the IAEA's safety standards GS-R-3 which include the pattern of description of the most current processes connected with service of the NPP and consider training events such as workshops of the IAEA or other experts.</p>	<p>1. To take part in events of the IAEA and other organization for studying experience of development and implementation of guiding processes according to the IAEA's safety standards GS-R-3. 2. To bring studied information and experience of practice in its work. 3. To provide development and implementation of guiding systems according to the IAEA's safety standards No GS-R-3 "The Management System for Facilities and Activities", The IAEA Safety Guides No GS-G-3.1 "The Application of the Management System for Facilities and Activities", No GS-G-3.5 "The Management System for Nuclear Installations". 4. To create in NRA sustructural subdivisions which will be responsible for control system implementation in accordance with IAEA's safety standards GS-R-3. 5. To provide control of licensees' steadfast compliance of quality program realization within a matter of supervisory activities.</p>	<p>Permanently</p> <p>2013</p> <p>2013</p>	<p>MES (NRA), Ministry of Energy (Nuclear Plant Construction Directorate), NAS (State Scientific Institution "the Joint Institute for Power and Nuclear Research - Sosny"), State Standardization Committee</p> <p>MES (NRA), Ministry of Energy (Nuclear Plant Construction Directorate), NAS (State Scientific Institution "The Joint Institute for Power and Nuclear Research - Sosny")</p> <p>MES (NRA)</p>
4. Funding and Financing				
6.	<p><u>The Suggestion, clause 4.1(Stage 2)</u> S-4.1 No 1 Belarus is to consider creation of the financial risk management plan. Financial impacts of general risks connected both with nuclear energy program and delay of issuance of licenses and building are to be considered.</p>	<p>To develop the plan of management of financial risks in the process of NPP building having defined their sources, chances, consequences including delays of building and ways of control of these risks and their mitigation.</p>	<p>2014</p>	<p>Ministry of Energy, SI "Directorate for Nuclear Power Plant Construction" NAS of the Republic of Belarus</p>
5. Legal Framework				
7.	<p><u>The Suggestion, clause 5.1(Stage 1)</u> S-5.1 No 1 Belarus can consider an issue of adoption of amendment to The Convention on the Physical Protection of Nuclear Material accepted in 2005.</p>	<p>To summarize opinions of concerned authorities about viability of adoption of amendment to The Convention on the Physical Protection of Nuclear Material and bring The Suggestions in government.</p>	<p>2014</p>	<p>Ministry of Foreign Affairs (MFA), MES</p>

8.	<u>The Suggestion, clause 5.3(Stage 1)</u> S-5.3 No 1 Belarus is to continue efforts on reconsideration and introduction of changes in relevant bills for realization of nuclear energy program.	To accomplish reconsideration and introduction of changes in relevant bill following the implementation of nuclear energy program	Permanently	Ministry of Energy, MES, NAS, Ministry of Education, Ministry of Natural Resources and Environmental Protection, Ministry of Health and concerned authorities and entities
9.	<u>The Recommendation, clause 5.2 (Stage 1)</u> R-5.2 No 1 Relevant legislation should be reconsidered taking into account the fact that such questions as radioactive waste and spent fuel management, civil liability for nuclear damage and process of legal succession are registered in insufficient detail.	To prepare and submit relevant recommendations to the Law of Belarus “About the introduction of amendments and additions to the law on Nuclear Energy Use” to the Ministry of Energy.	2 nd quarter of 2013	MES, NAS, MFA
6. Guarantees				
10.	<u>The Suggestion, clause 6.2 (Stage 1)</u> (S-6.2 No 1) To be ready to realization of guarantees on the NPP, further consultations on the relevant approaches held by the other countries constructing NPPs and take an active part in relevant training IEAE courses (For example, “about project warranties”, “about accounting of nuclear materials and report”).	1. To take part in the events of the IAEA and other organization as received information by official channels. 2. To introduce received knowledge in the national infrastructure.	Permanently	MES, NAS, Ministry of Energy

11.	<u>The Suggestion, clause 6.2 (Stage 2) (S-6.2 No 2)</u> Belarus can consider an issue about further IEAE assistance in fulfilling requirements of The Full scope safeguards agreement and Supplementary protocol to the safeguards IEAE agreement according to established procedure in the frame of the national training course and/or mission of ISSAC CCAC (consulting services of State Systems of Accounting and Control of Nuclear Material).	To develop a stand on the issue on the IEAE assistance.	2013	MFA, MES
12.	<u>The Recommendation, clause 6.3 (Stage 2) R-6.3 No 1</u> Provisional concept of the IEAE question list on the project-estimated datum “pre-construction phase” should be performed to IEAE by common official channels.	Accomplished.	2012	MES
13.	<u>The Recommendation, clause 6.4 (Stage 2) (R.-6.4 No 1)</u> The analysis of sufficiency and consort of existing rules and making new necessary rules that fully allow fulfilling the requirements of the Full Scope Safeguards Agreement and The Supplementary Protocol to the safeguards IEAE agreement (and consideration IEAE, on request) should be finished.	To prepare the development and processing plan of documents.	2013	MES, NAS, Ministry of Energy
7. Control Basis				
14.	<u>Recommendation No1, clause 7.1 (Stage 2) (R.-7.1 No 1)</u> Belarus is to provide necessary human and financial resources that The MES/NRA can fulfill its controlling duties connected with license and control and evaluation of the first Belarusian NPP. Financial charges should include any necessary contractual services of assistance.	1. To prepare and contribute the design of normative legal act specified stage increase the NRA personnel according to the established procedure. 2. To make an optimal structure of the NRA. 3. To provide for the possibility to involve external expert organization for control. 4. To define the extant and funding charge of external expert services.	2013	MES, Ministry of Finance
15.	<u>Recommendation No2, clause 7.1 (Stage 2) (R-7.1 No 2)</u> The MES/NRA is to set priorities and rapidly conduct operations performed in the MES/NRA’s Plan of Actions especially connected with licensing and review and valuation of the first Belarusian NPP.	1. To expand the responsible for the licensing personnel of the department up to 6 people. 2. To form a new department for the overseeing of the safety of nuclear facilities. 3. To form a new department, which takes permanent charge of the conducting operations on the NPP– the inspectorate of the NPP.	2015 2015	MES(NRA), Ministry of Finance

16.	<u>Recommendation No3, clause 7.1 (Stage 2)</u> (R-7.1 No 3) The MES/NRA is to finish the preparation of fulfilment rules of the process of review of building license.	To prepare and contribute the design of the Edict of the President of the Republic of Belarus of NPP building licence according to established procedure of adoption.	1 st quarter of 2013	MES (NRA)
17.	<u>Recommendation No4, clause 7.1 (Stage 2)</u> (R-7.1 No4) Belarus is to finish necessary revision of the relevant Edict of The President of The Republic of Belarus for supplying of necessary legal authorities by fulfilling control.	To prepare and send to the Council of Ministers of the Republic of Belarus according to the established procedure: the project of the normative legal act specifying the fulfilment of control (supervision) by republic state administration bodies during Belarusian's NPP building; the project of the legal act specified the control (supervision) for statutory compliance of nuclear and radiation safety precautions during using nuclear energy (except the activity connected with NPP's building).	May 1, 2013 December 31, 2013	MES (NRA)
18.	<u>The Suggestion, clause 6.2 (Stage 2)</u> (S-7.1 No 1) Belarus is to consider the question about the extension of bilateral cooperation for including technical expertise in the conformance to the compliance with law inspection of the preliminary safety analysis report concerned licensing of the first NPP.	To expand the framework of cooperation with the regulatory authorities of Russia and Ukraine: 1. To make contracts (agreements) with the Nuclear Energy Agency of the Organization for Economic Co-operation and Development (OECD/NEA) foresaw participation of "SEC NRS" and FSUE VO "Safety" in the technical expertise. 2. According to the agreement with Ukraine to provide the possibility to involve Ukrainian specialists in conduction of joint supervision on site of Belarusian NPP.	2013	MES, NAS, MFA
8. Radiation Protection				
19.	<u>Suggestion No1, clause 8.2 (Stage 2)</u> (S-8.2 No 1) Requirement to the fund, personnel of the organizations, which are parties to a radiological safety measures taking into account the implementation, phase of nuclear program.	Updating of the documents on radiation protection of personnel and population during operation of Belarusian NPP taking into account the newest IEAE requirements, holding of training seminars for specialists of the Ministry of Health of the Republic of Belarus.	2013-2017	Ministry of Health (Scientific practical centre of hygiene republican unitary enterprise (RUE "SPCH"), Republican Centre for Hygiene, Epidemiology and Public Health("RCHEPH"))
20.	<u>The Suggestion No2 clause 8.2(Stage 2)</u> (S-8.2 No 2) The Ministry of Health is to consider the possibility of its capacity building and necessary resources allocation (and organizational coordination) in the radiological safety sphere and value of exposure doses.	Workforce and technical capacity building by nuclear safety issues and value of exposure doses of personnel and population, preparation of regulatory legal acts and training of specialists taking into account results of IEAE missions.	2013-2017	Ministry of Health (RUE "SPCH", "RCHEPH")

10. Human Resources

21.	<p><u>Recommendation No1, clause 10.1 (Stage 2)</u> (R-10.1 No 1) Human resource planning in The MES/NRA and its technical support arrangement (basically, “Sosny”), is to be urgently and close reconsidered and corrected taking in account the near-term outlooks of issuance of licenses on building in 2013 and as well international training drafts planned on 2012-2014. The next actions on definition, financing and conclusion the contract of external support can be started relies on the results.</p>	To build up a concept of dedicated state program “Nuclear and radiation safety” for implementing of NRA’s functions and other supervisory authorities.	2013	MES (NRA), Ministry of Finance
22.	<p><u>Recommendation No2, clause 10.1 (Stage 2)</u> (R-10.1 No 2) Since 2012 the employment by the regulating authority of the graduates of state universities and other educational institutes should become a priority in development of Belarusian human resources.</p>	<p>1. To work out the strategy on training and retraining of specialists of nuclear and radiation safety for the regulating authority. 2. To prepare the suggestions about the organization of the training, the advanced training and the retraining of specialists of nuclear and radiation safety for creation of reserves of regulator and its technical support organization and other interested organizations on all stages of development of the national nuclear program, as well taking in account corporate development plans on source of ionizing radiation use. 3. To work out and contribute the Automated Information System by managing human resources and nuclear knowledge of regulatory authority and its technical support organization (personnel of the regulatory authority and the list of vacancies, personnel reserve and its technical support organization, the list of higher-education teaching personnel, proved the preparation of personnel, the list of drafts, programs, courses, etc.). 4. The NRA is to conclude coordination contracts with higher education institutions, which train specialists on demanded specialities.</p>	2013 2013-2014 2013-2014 since 2013	<p>MES (NRA) MES(NRA), Ministry of Education (High Education Institutes) MES(NRA), Ministry of Education(High Education Institutes) MES(NRA), Ministry of Education(High Education Institutes)</p>
23.	<p><u>The Suggestion, clause 10.2 (Stage 2)</u> (S-10.2 No 1) The MES/ NRA is to consider about early finishing of the preparation of license</p>	<p>1. To approve the NRA’s power to license like as the Statute of NRA. 2. To work out the design of the Decree of the Council of Ministers of the Republic of Belarus</p>	2 nd quarter of 2013 For 6 months after the	MES(NRA)

	standards for NPP personnel for they are considered during human resource planning for operation organization of phase 3.	<p>“About the confirmation of the list of kinds of jobs. For their fulfilment the employers of operation organizations and contractors and(or) service providers of using nuclear energy need the permit for operating control of works for using of atomic energy, personnel requirements”.</p> <p>3. To work out and confirm the competence catalogue of managers, experts and employers of organizations of nuclear industry.</p> <p>4. To bring necessary amendments and changes in unified rating and skills guide for jobs and occupations of manual workers taking into account the construction of NPP in the Republic of Belarus.</p>	planning documentation is provided to the NRA and the power of the NRA is confirmed 2013-2014	
11. Participation of Stakeholders				
24.	<p><u>The Recommendation, clause 11.1 (Stage 2) (R-11.1 No 1)</u></p> <p>The MES/NRA is to finish preparation of the application /strategy of the policy of the regulatory authority as for information accessibility for public in order to transparency and enforcement of trust and for public apprehension of nuclear energy program of Belarus.</p>	To finish the development of strategy of information activity.	2 nd quarter of 2013	MES (NRA, BO RBIC RNIUP “Institute of Radiology”)
14. Emergency Planning				
25.	<p><u>The Suggestion, clause 14.1 (Stage 2) (S-14.1 No 1)</u></p> <p>The coordination of emergence response plan with neighbouring states that are included in precautionary action zone and urgent protective action planning zone.</p>	To work out the schemas on prompt notification in cases of nuclear or radiological accident by virtue of the concluded arrangements (contracts) with neighbouring states.	2014	MES
15. Physical Security and Physical Protection				
26.	<p><u>The Suggestion, clause 15.1 (Stage 1) (S-15.1 No 1)</u></p> <p>The governance is to carry out its obligations on development of high culture of physical security program creation.</p>	<p>1. According to established procedure to prepare and contribute the design of the Decree of the Council of Ministers of the Republic of Belarus “About amendments and changes to the Decree about physical protection of nuclear facilities” on questions of competence of state authorities and coordination activities between them.</p> <p>2. To work out the design of technological regulations on issues requirements to the culture of physical nuclear safety.</p> <p>3. To prepare the development of the culture of</p>	2013-2014	MES, MIA, MSS, NAS, Ministry of Energy Ministry of Energy, NAS

		physical nuclear security program.		
27.	<u>The Suggestion, clause 15.1 (Stage 2)</u> (S-15.1 No 1) The development and realization of planned legislative and regulatory documents should be finished.	To develop regulatory legal acts of physical protection of nuclear facilities accounting IEAE's recommendations.	2013-2014	NAS(State Scientific Institution "The Joint Institute for Power and Nuclear Research - Sosny"), MES, MIA, MSS, Ministry of Health, State Standardization Committee
28.	<u>The Suggestion, clause 15.3 (Stage 2)</u> S-15.3 No 1 The technical enquiry on the draft of the physical NPP's protection should be finished accounting the "design threat".	To take into account the "design threat" in development of the planning documentation on integrated engineered features of physical protection.	2013-2015	Ministry of Energy SI "Directorate for Nuclear Power Plant Construction"
29.	<u>The Recommendation, clause 15.2 (Stage 2)</u> (R-15.2 No 1) The "design threat" for NPP is to be defined.	1. To develop and confirm the plan of activities of working group on the definition of "the design threat" for the Belarusian NPP. 2. To define "the design threat".	2013	Ministry of Energy, MES, MSS, MIA
30.	<u>The Recommendation, clause 15.7 (Stage 2)</u> (R-15.7 No 1) All essential organization should develop and fulfil the development of high culture of physical nuclear security program.	1. To work out the development of high culture of physical nuclear security program. 2. To adopt the development of high culture of physical nuclear security program in practice of permanent work. 3. The execution of work on project International Science and Technology Centre (ISTC) No B-1177 in part concerned State Scientific Institution "the Joint Institute for Power and Nuclear Research – Sosny".	2013 Permanently 2013	Ministry of Energy, (SI "Directorate for Nuclear Power Plant Construction") MES, State Scientific Institution "The Joint Institute for Power and Nuclear Research - Sosny") NAS (State Scientific Institution "The Joint Institute for Power and Nuclear Research - Sosny")
16. Nuclear Fuel Cycle				
31.	<u>The Suggestion, clause 16.1 (Stage 2)</u> (S-16.1 No 1) Belarus should consider about revision of existing normative legal base in management policy of spent fuel and introduce the missing links in the Strategy of radioactive waste handling which should be approved by the Government of the Republic of Belarus.	1. To prepare the design of the Strategy of radioactive waste handling. 2. To bring the design of the Strategy of radioactive waste handling according to the established procedure on approval of the Government.	2017 2018	NAS, Ministry of Energy, MES and concerned authorities and entities
17. Radioactive Waste				
32.	<u>The Suggestion, clause 17.1 (Stage 1)</u> S-17.1 No 1 Belarus is to consider a revision of existing normative legal base in radioactive waste management policy and, as appropriate, to introduce missing links in the Strategy of	1. To improve the design of the Strategy of radioactive waste handling taking into account remarks of IEAE's mission (November 26 – 30, 2012) 2. To bring the design of the Strategy of radioactive	2013 2014	NAS, Ministry of Energy, MES and concerned authorities and entities

	radioactive waste handling.	waste handling on approval in The Government according to the established procedure.		
33.	<u>The Recommendation, clause 17.1 (Stage 2)</u> R-17.I No 1 The Government of The Republic of Belarus is to approve the Strategy of radioactive waste handling.			
34.	<u>Suggestion No1, clause 17.1 (Stage 2)</u> S-17.1 No 1 It is proposed to introduce the creation of tracking observation system for nuclear wastes in the design of the Strategy of radioactive waste handling on adaptation.			
35.	<u>Suggestion No1, clause 17.2 (Stage 2)</u> S-17.2 No 1 To consider approaches to long-term handling of high-level radioactive wastes which inquiry disposing in underground structures and to introduce them to the Strategy of radioactive waste handling.	To prepare the suggestions about introduction of the scientific research of studying approaches to the long-term handling of high-level radioactive wastes which inquiry disposing in underground structures according to the established procedure.	2013	NAS, Ministry of Energy, MES
36.	<u>Suggestion No2, clause 17.1 (Stage 2)</u> S-17.1 No 2 The classification scheme of radioactive wastes in Belarus is to be brought in line with the existing IEAE's system.(Phase 2)	To bring the amendments and/or changes in "Sanitary Regulations on Handling Radioactive Waste (SRHRW-2005)" 2.6.6.11-7-2005.	2015	Ministry of Health
37.	<u>Suggestion No2, clause 17.3 (Stage 2)</u> S-17.3 No 1 The issue of joint handling medium and high level wastes in one object can be studied as part of the research on the national level. (Stage 1)	To prepare the suggestions about introduction of the scientific research of joint handling with medium and high level wastes in one object.	2013-2014	NAS (State Scientific Institution "the Joint Institute for Power and Nuclear Research - Sosny"), MES

*Units according to the governing document of the International Atomic Energy Agency No NG-T-3.2 "The value of the layout in development of national nuclear infrastructure"

** Units with IEAE recommendations and the suggestions according to the Mission Report on the Integrated Nuclear Infrastructure Review (INIR)