

This is an unofficial translation of the text.

The translation is prepared based on Govt. Decree No. 155/2014 (VI. 30.) Korm. being effective from 01.07.2014.

## **Govt. Decree 155/2014. (VI. 30.) Korm.**

### **on the safety requirements for facilities ensuring interim storage or final disposal of radioactive wastes and the corresponding authority activities**

The Government, based on the authorization provided

in Paragraph *v*) of Section 67 of the Act CXVI of 1996 on Atomic Energy enrolled by Subsection (2) of Section 22 of the Act CI of 2013 on the amendment of the Act on Atomic Energy, certain acts related to energetics, armed security guards and of the Act CLIX of 1997 on nature conservation and field guards service,

related to Title 12 in Subparagraph *va*) of Paragraph *v*) of Section 67 of the Act CXVI of 1996 on Atomic Energy enrolled by Section 8 of the Act CCXXVII of 2013 on the amendment of certain acts related to energetic,

related to Section 121, in Paragraph a) of Subsection (1) of Section 31 of the Act CXXX of 2010 on law-making,

proceeding in its competence determined in Subarticle (1) of Article 15 of the Basic Law orders as follows:

#### *CHAPTER I*

#### *GENERAL PROVISIONS*

### **1. Effect of the decree**

#### **Section 1**

This decree shall apply to radioactive waste storage and disposal facilities providing the interim storage and final disposal of radioactive wastes (hereinafter together referred to as: storage and disposal facilities), their systems, structures and components important to safety, activities related to the storage facility and to those performing the activities, as follows:

*a*) in relation to storage and disposal facilities

*aa*) site examination and assessment,

*ab*) siting,

*ac*) construction,

*ad*) operation,

*ae*) closure, and

*af*) transition to institutional control;

b) in relation to systems, structures and components of storage and disposal facilities

ba) modification,

bb) decommissioning, and

bc) closure;

c) in relation to buildings of the storage and disposal facilities from the construction life cycle phase

ca) civil engineering technical design,

cb) building,

cc) fabrication and procurement of building materials and structures,

cd) put into use,

ce) renewal and modification,

cf) recovery, extension, and

cg) demolition;

d) special, safety related employment requirements for the employees of storage and disposal facilities;

e) management system of the storage and disposal facilities;

f) technical requirements of radiation protection for storage and disposal facilities;

g) operating organization of storage and disposal facilities; and

h) emergency preparedness activities of storage and disposal facilities.

## **2. Interpretive provisions**

### **Section 2**

In the application of this decree:

1. „0“ state: a documented total of state variables characterizing the pre-service state of safety classified system components that can be compared with the results of inservice inspections performed during the operation;

2. ALARA-principle: one of the basic principles of radiation protection, according to which the protection and safety shall be optimized during any activities using radiation sources, except for medical therapy purpose irradiation, to keep the personal doses, the number of persons exposed to radiation and the probability of radiation exposure at a reasonably achievable low level taking into account

economical and social factors, within the individual dose limits, considering the dose constraints related to the radiation source;

3. *Modification*: alterations during the operation life cycle phase of storage and disposal facilities

a) beyond the concept of repair of the storage and disposal facilities, its systems, system components, buildings and building structures;

b) of organizational structure of the licensee;

c) of management system of the licensee; as well as

d) documents submitted as annexes of the storage and disposal facilities' operating license application which are unrelated to paragraphs a)-c).

4. *Identical system component*: a part, structural element or system component that is identical to the original in its material, geometry, function, environmental resistance, reliability, fabrication technology, and type;

5. *Accident*: a beyond design basis event, during which a radiation exposure exceeding the limits of effective prescriptions may occur;

6. *Emergency response*: implementation of actions to mitigate the consequences of a radiological emergency jeopardizing human health, safety, property and environment;

7. *Accident management*: measures performed by the operator during events beyond the design basis with the aims as follows:

a) prevention of evolution of an event or design basis accident into a beyond design basis or severe accident;

b) achievement of long-term safe and stable conditions; and

c) mitigation of consequences;

8. *Internal regulation*: a set of procedures, regulations, management orders, instructions, strategies, and policies regulating the activity of a given organization;

9. *Contractor*: a contractor is a natural or legal entity that provides such goods or services for the licensee that directly or indirectly influence safety;

10. *Safety*: achievement of the appropriate operating conditions, prevention of accidents, mitigation of accident consequences in each life cycle phase of the radioactive waste interim storage facility and the radioactive waste disposal facility, as a result of which protection of employees, the population and environmental elements against dangers from ionizing radiation is achieved;

11. *Job important to safety*: a job position containing tasks with influence on safety of the storage and disposal facility or with a decision-making right thereabout, the

job description of which contains the activity or related tasks qualified as important to safety;

12. *System, structure and component important to safety*: that system, structure and system component, the inappropriate operation or failure of which may cause unpermitted radiation exposure of persons staying on the site of a storage or disposal facility or of the population, and that fulfils accident prevention or consequence mitigation safety function, and the failure of this system, structure or component has an important impact on safety because the occurrence of the failure triggers a process that endangers safety or because the existence of the failure reduces the chance to carry out the planned management of a potential deviation;

13. *Safety analysis*: a part of the safety case, which is performed by calculations or engineering considerations. It demonstrates that the analyzed storage or disposal facility, any of its systems or system components fulfils the predetermined physical or probabilistic safety criteria within the design basis;

14. *Safety case*: an assessment made by or for the licensee to evaluate all aspects of safety or protection that are related to site selection, siting, design, construction, operation and closure of a storage or disposal facility, which aims to ensuring that all relevant safety requirements are fulfilled during the planned or actual construction, modifications, procedures and operational practices to be implemented or altered, and the ageing of systems, structures and components;

15. *Safety function*: function intended to prevent incident or accident or to limit their consequences, which may or does contribute to the performance of fundamental safety functions;

16. *Safety report*: a document that summarizes and evaluates safety related facts, considerations and information that are required for licensing the particular life cycle phases of a storage and disposal facility;

17. *Safety culture*: assembly of characteristics and attitudes of organizations and individuals, which establishes that, as an overriding priority, safety issues receive the attention warranted by their significance;

18. *Safety policy*: a documented, continuously reviewed and updated commitment of the management towards safety to achieve high level of safety performance. It is supported by clear, understandably defined safety goals and the provision of resources to achieve the set goals;

19. *Safety related event*: an event affecting radiation safety in a storage or disposal facility, equipment or during an activity using radioactive material, which adversely influences safety and, by endangering the performance of a safety function, might result in unplanned radiation exposure to people as well as in unexpected release of radioactive materials into the environment;

20. *Replacement*: repair using an identical part;
21. *Decontamination*: partial or total removal of radioactive contamination by physical, chemical or biological processes;
22. *Deterministic safety assessment*: a safety assessment including calculations based on engineering considerations or physical models on the basis of pre-determined initial and boundary conditions;
23. *Lifetime*: value of the usability of systems, structures and components defined as duration, number of operations or number of load cycles when the risk of loss of performing their function is still not significant;
24. *Controlled zone*: an area under the effect of special regulations including radiation protection provisions due to potential irradiation or contamination by radioactive material. Entering or exiting the area shall be monitored;
25. *Isolation*: blocking of radioactive wastes from human and natural environment that ensures that the effect of radioactive materials possibly discharged to the environment under normal or other conditions remains under the prescribed limits;
26. *Event*: all such interventions, occurrences or lack of them, after which as a consequence there is a deviation from the presumed, designed conditions, as well as an effect or potential effect on the operations or safety of the storage and disposal facilities;
27. *Reasonably achievable*: a degree of actions that considers the current standards of science and technology, while graded to the severity of the different risks and undesirable consequences, which is determined by the authority based on the proposal of the licensee;
28. *Independent review*: the review of design, analysis and investigation results independently of the person, group or organisation who performed the design, analysis or investigation in order to determine that the design, analysis or investigation fulfils the authority requirements, selected standards or other enlisted directives;
29. *Barrier*: system component ensuring isolation of radioactive materials, which prevents or hinder the movement of radioisotopes or other materials between system components; the barrier can be artificial, e.g. constructed technical barrier or natural, e.g. geological barrier, like the geological environment fulfilling the barrier function that constitutes the disposal system of radioactive wastes;
30. *Similar part, structure or system component*: a part, structure or system component that is equivalent with the original as verified by a safety analysis approved by the authority;

31. *Waste acceptance criteria system*: criteria formulated on acceptance of radioactive wastes as part of the management process aimed at storage or disposal of radioactive wastes regarding the form, isotope compilation, activity and package of the waste;

32. *Waste package*: a product created via conditioning of the radioactive waste, which contains the waste form, some kind of package or the internal barriers;

33. *Waste disposal system*: a system providing disposal of radioactive wastes without the intention of retrieval, including the environment constituting the artificial and natural barriers;

34. *Waste form*: the physical and chemical form of the waste after treatment or conditioning, but before packaging;

35. *INES-classification*: the categorisation of events according to the International Nuclear Event Scale established by the International Atomic Energy Agency. The objective of the categorisation is to facilitate communication between the professional organisations and the public by indicating the safety significance of an event in a form agreed on by the licensee and the authority;

36. *Institutional control*: monitoring of the storage or disposal facility by an organization designated for this purpose, which can be active: monitoring, surveillance, recovery or passive: monitoring of land use;

37. *Management system*: a system created to define the management policy and management objectives and to attain the approved objectives effectively and sufficiently. The collection of interdependent or interacting elements, thus the management system integrates all elements of a given organisation into a coherent system in order to fulfil all of the objectives of the organisation. These elements include the structure, the resources and the procedures. The personnel, equipment and organisational culture, as well as the documented professional policies and processes are also part of the management system;

38. *Repair*: activity to restore the condition of systems and components, with the exemption of software of programmable equipment and computers, as well as buildings and building structures of the storage or disposal facility to the condition defined during design and described in the effective documentation;

39. *Reportable event*: Event to be reported to the authority supervising the safe use of atomic energy based on a regulatory requirement or specific authority decree;

40. *Licensed work position*: job positions essential to safety with mandatory licensing exams as required by the safety code or other authority regulation and by the training documentation of the licensee;

41. *Risk*: common measure, mathematical product of possible unfavourable consequences of a potentially dangerous action or happening, and the frequency of their occurrence;

42. *Conditioning*: conversion of the waste to solid state, placement of waste to container and to secondary container, by the application of these operations a waste package applicable for transportation, storage or final disposal can be produced;

43. *Decommissioning*: termination of the operation of that system, structure or component of a storage or disposal facility the realization of which was necessary only with interim nature before the closure of the storage or disposal facility;

44. *Closure*: implementation of every such activity or work affecting the whole disposal system or its certain parts, which are necessary for long term sustentation of the safe condition of the facility;

45. *Engineered radiation protection*: all those engineering measures that ensure that the radiation exposure of the population and the personnel working in facilities using materials or equipment emitting ionising radiation, such as the storage or disposal facilities, does not exceed the values defined in the effective regulations and by which the radiation exposure can be kept at the lowest reasonably achievable level, furthermore by which the least amount of radioactive materials is produced;

46. *Non-compliance*: the observation of unfulfilled requirements that records the deviation or absence of one or more quality attributes, or management system or system component from the defined requirements;

47. *International good practice*: an effective practical solution described in the documents of international professional organisations, acknowledged as a good practice by experts and review teams of these organisations;

48. *Pressure retaining equipment and pipelines*:

All those pressure retaining vessels, tanks, pipelines, safety valves and appliances exposed to pressure which belong to any of the safety classes. The elements directly connected to the pressurised parts such as flanges, nozzles, connecting elements, supports and hoisting eyes are also part of the pressure retaining equipment.

49. *Optimization*: radiation protection of persons subjected to public or occupational radiation exposure shall be optimized in a way that the personal dose, the probability of radiation exposure and the number of persons subjected to radiation exposure is as low as reasonably achievable considering economic and social factors;

50. *Self assessment*: a continuous and routine process carried out by the top management and management to evaluate the effectiveness of the performance for all the fields under their supervision;

51. *Ageing*: a process during which the material, physical characteristics of a system, structure or component change with time due to its use and accompanying wear, environmental effects or cyclic, fatigue loads by the usage.

52. *Ageing processes*: physical and chemical processes, which with the passing of time or during usage gradually change the characteristics of a system, structure or component.

53. *Ageing management*: engineering, operational and maintenance measures to keep the ageing degradation of systems, structures and components within acceptance limits. Acceptance limits are interpreted by maintaining the minimum required safety margins.

54. *Producer of radioactive waste*: that natural or legal entity apart from the licensee, during the activity of whom or what radioactive waste is being generated;

55. *Auxiliary system*: the system that has no individual function from the aspect of the operation of the storage or disposal facility or the performance of safety functions, but which shall be available for the operation of other systems or components so that they can perform their functions;

56. *Lifecycle of storage and disposal facilities*: the entirety of all the time periods of siting, construction, commissioning, operation, decommissioning and dismantling;

57. *Site survey*: the site survey and the respective assessment is a set of assessments performed to select the appropriate site from the aspect of safety of the storage or disposal facility and to define the design basis data. The scope of the examination includes the events and circumstances of natural or human origin that potentially endanger the storage of disposal facility, as well as the circumstances that influence the effect of the storage or disposal facility on the environment;

58. *Design basis*: the complex set of conditions and initiating events considered during the design of the storage or disposal facility including normal operation, anticipated operational occurrences and incidents. The storage or disposal facility can withstand these conditions and events without violating the defined criteria because of its appropriate design and by the operation of safety systems;

59. *Incident*: an event assumed in the design basis that entails effects being different than that of normal operation;

60. *Operational Limits and Conditions*: parameter limits as well as functional capabilities and performance levels for systems, structures, components and personnel, confirmed by analyses and measurements in order to safely operate a



licensed storage or disposal facility, and a collection of other rules defined in order to safely operate a licensed storage or disposal facility. All these limits, levels and rules shall be included in a written document;

61. *Operator*: one or more organisational units within the organisation of the licensee in possession of rights, obligations, competences and responsibilities established for operation of the facility;

62. *Operation*: operative activities of the operator to operate the systems, structures and components;

63. *Validation*: the assessment to check whether a system, system component, service, method, calculation tool, and computer program fulfils the functional, performance and interface criteria based on predefined and written conditions;

64. *Verification*: inspection process during which it is checked whether the system, system component, service, method, calculation tool, computer program, and the product of every phase of development and production fulfils all of the requirements defined in the previous phase;

65. *Emergency*: a state occurring in consequence of an extraordinary event, during which actions are or could be necessary to protect or mitigate the consequences affecting the population or environment;

66. *Retrievability*: retrieval of the radioactive waste from the repository system before the closure of the radioactive waste repository system;

67. *Arrest point*: a point in the process of an activity beyond which the activity can only be continued with the approval of a designated organisation.

### **3. Safety code of storage and disposal facilities**

#### **Section 3**

(1) Detailed safety requirements on the safety of storage and disposal facilities, management system of storage and disposal facilities, and implementation and supervision of activities according to the particular life cycle phase of storage and disposal facilities are included in Annex 1 and 2, in the Safety Code.

(2) Recommendations on the method how the safety requirements of the Safety Code falling in the scope of tasks of the atomic energy oversight organization related to the storage and disposal facilities are included in the guidelines published by the atomic energy oversight organization. The atomic energy oversight organization publishes the guidelines on its website.

(3) If the applicant submits the licence application in accordance with the content of the guidelines, and if the licensee performs the license-related activity according to the guidelines, then the atomic energy oversight organization shall consider the

chosen method being appropriate to verify the fulfilment of the requirements, and will not examine the suitability of the applied method.

(4) In case of applying methods different from the guidelines, the atomic energy oversight organization shall examine the correctness, compliance and comprehensiveness of the applied methods in detail.

(5) The atomic energy oversight organization, if it is necessary to ensure the safety of the storage or disposal facility, may specify conditions and obligations in its resolution and may require the verification of the fulfilment.

(6) Taking into consideration the scientific results, national and international experience, the Safety Code related to storage and disposal facilities shall be reviewed at least every ten years and updated as required. The guidelines shall be reviewed periodically as determined by the atomic energy oversight organization or out of order following a proposal of the licensee.

## *CHAPTER II*

### *GENERAL REQUIREMENTS FOR THE SAFETY OF STORAGE AND DISPOSAL FACILITIES, RESPONSIBILITIES OF THE LICENSEE*

#### **4. Safety objectives**

##### **Section 4**

(1) The safety goal of interim storage and final disposal of radioactive wastes in storage and disposal facilities is to isolate the radioactive isotopes contained in the radioactive waste posing risk to the people and environment from the biosphere and from the environmental elements affecting it, and by this means to protect the current and future generations and the environment.

(2) It is a general safety objective to ensure the protection of the general public and the environment against harmful effects of the ionising radiation.

(3) The radiation protection objective is to maintain the exposure of the concerned operating personnel and the public at all times below the specified limits, as low as reasonably achievable. This shall also be ensured in the case of radiation exposures resulted from design basis accidents and – as reasonably achievable – accidents beyond the design basis.

(4) The technical safety objective is that the potential consequences of all initiating events postulated during the design of the storage or disposal facility shall be within the acceptable range, and the probability of accidents shall be adequately low.

(5) The general safety objective shall be achieved first of all by the adequate design of the storage or disposal facility and effective safety measures of due extent and by maintaining them at an appropriate level. The systems, structures and components of the storage or disposal facility shall be designed in a manner that the general safety objective related to the operation of the storage or disposal facility and the supporting radiation protection and technical safety objectives supporting be achievable.

(6) The objectives specified in paragraphs (3)-(4) shall be in force until the transition to passive institutional control.

## **5. Safety policy**

### **Section 5**

(1) The licensee shall prepare a safety policy to facilitate fulfilment of the safety objectives. The safety policy shall contain such requirements, which guarantee that until transition of the storage or disposal facility to passive institutional control safety is paramount over all other activities performed in relation to the repository facility.

(2) The safety policy shall be submitted to the atomic energy oversight organization together with the construction license application. The atomic energy oversight organization approves the safety policy when grants of the construction license.

(3) The safety policy shall be described to the employees and contractors performing jobs important to safety such a way that they are able to apply its provisions during their activities.

(4) The licensee, considering the experiences gained during the operation and the new scientific knowledge related to the storage and disposal facilities, shall continuously sustain the safety level of the storage or disposal facility and enhance safety if justified.

(5) The licensee shall assess the appropriateness and implementation of the safety policy on a regular basis. The results of assessments shall be documented in the annual report.

## **6. Design**

### **Section 6**

(1) The licensee shall establish and operate a management system to direct the design process, which ensures the quality, harmony of the design and the compliance of the storage or disposal facility with the related safety requirements.

(2) The design process shall be determined in the early stage of the design by identifying all requirements related to design. Based on the requirements, to satisfy them, the designer provisions and tasks shall be determined in detail.

(3) The design of the storage or disposal facility shall be performed only by such a designer organization, which has the quality management system and appropriate skills as specified by design laws and approved by the licensee and is authorized to carry out this activity.

(4) The licensee shall provide for verification and evaluation of the appropriateness of the design, including the design tools and design data and results, independently of the developers.

(5) The licensee shall ensure that the details of design comply with the scope required for regulatory licensing of the particular life cycle phase of the storage or disposal facility.

(6) The licensee shall have all such design information, which is required for maintaining its responsibility for safety of the storage or disposal facility.

(7) The licensee shall remain capable of performing or making performed the activities related to sustaining safety throughout the licensed life cycle of the storage or disposal facility and of making the safety-related decisions.

## **Section 7**

(1) The storage and disposal facilities shall be so designed that the safety objectives set out are achieved throughout the life time of the storage and disposal facilities both in normal and abnormal operation state.

(2) The safety of disposal of radioactive wastes shall be ensured by the disposal system consisting of the waste form and package, the artificial barriers of the storage or disposal facility and the geological and hydrogeological environment, and by the complex set of purposive human activities related to operation, inspection and intervention, if necessary.

(3) Combination of elements of the waste disposal system shall ensure that the isolation capability of the whole system is not significantly influenced during the lifetime by a failure or degradation of any of its elements or components.

(4) The storage and disposal facilities, and their systems, structures and components shall be designed according to the general requirements related to design and the requirements in Annex 2.

## **7. Responsibility of the licensee for safety**

## **Section 8**

(1) The licensee shall assume responsibility for the safe siting, construction, operation, modification, closure and achieving the post-closure safe state, and the active institutional control, compliance with the requirements related to these activities. The licensee, even if the license has lost its validity for any reason, shall assume these responsibilities until the license for passive institutional control of the storage or disposal facilities becomes effective, when it is exempted from under this responsibility.

(2) The activity of the atomic energy oversight organization or its absence shall not exempt in any way or extent the licensee from the responsibility for safety. The licensee shall provide evidence for the authority in accordance with this decree that it complies with all obligations originating from its responsibility.

(3) The licensee shall implement and inspect all activities in a graded manner according to the risk caused by the radioactive wastes. The licensee shall perform this obligation even if the particular activity in its scope of responsibility is not carried out by its own employees.

(4) The licensee is obligated to coordinate and document the distribution of responsibilities with the producer and carrier of the waste.

## **Section 9**

(1) The licensee shall continuously comply with the legal requirements and the conditions of the license.

(2) If the radioactive waste is also a hazardous waste, then the requirements for hazardous waste shall also be taken into account. If the radioactive waste contains materials in which nuclear chain reaction can occur, the requirements for the management of nuclear material shall also be satisfied.

## **Section 10**

The licensee shall ensure the continuous availability of information, documentation and plans necessary for review of substantiation of safety related solutions and for the implementation of replacements, repairs and modifications until transition to passive institutional control.

## **Section 11**

(1) The licensee may involve suppliers in safety related activities according to this decree. The contractor's activity does not impair the licensee's responsibility, still the licensee shall assume the responsibility for preserving the safety of the storage or disposal facility.

(2) Prior to the start and during the performance of the contractor's activity the licensee shall ensure that the supplier is able to provide for the conditions required for the activity.

## **Section 12**

The licensee, independently of the activities of the atomic energy oversight organization, shall operate a full scope monitoring system being graded with regard to safety, which extends over all processes and participants relevant for the particular life cycle phase.

## **Section 13**

In order to achieve the safety objectives the licensee shall operate an efficient management system according to Annex 1 and shall ensure that the employees are committed towards safety and shall sustain a strong safety culture.

## **Section 14**

The licensee shall ensure until it is responsible for the storage or disposal facility that the appropriate human and financial resources required for the activities become available in due time.

## **Section 15**

(1) The licensee shall be obliged for ensuring that the operating personnel are available, qualified in terms of radiation protection and appropriate education and professional skills and hold the required license for the particular job according to the ministerial decree implementing certain provisions of the Act CXVI of 1996 on Atomic Energy (hereinafter referred to as the Atomic Act).

(2) The licensee shall take care of the training required for maintaining the qualification level of the operating organization. Such theoretical and practical training shall be ensured for the operating organization, during which the personnel learn and become acquainted with safety requirements and consequences of its activities.

(3) The licensee shall develop a training policy to comply with the contents of Subsection (2) and a training programme to implement the training policy before the site survey license become effective.

(4) Detailed safety requirements for the employees, training policy and programme are included in Annex 2.

### *Chapter III*

## *REQUIREMENTS FOR ACCEPTANCE OF AND ACCOUNTANCY FOR RADIOACTIVE WASTES*

### **8. Acceptance of radioactive waste**

#### **Section 16**

(1) Interim storage and final disposal of radioactive waste in a storage or disposal facility shall be performed only in compliance with the safety requirements and regulatory provisions set out in the license.

(2) Before accepting radioactive wastes in a storage or disposal facility the licensee shall determine the acceptance standards of radioactive wastes.

(3) Only such radioactive waste shall be stored in a storage or disposal facility, which has been conditioned and packed during the pre-acceptance management in a manner that complies with the acceptance standards determined by the licensee.

(4) The licensee shall determine the waste acceptance standards according to as follows:

*a)* limits for chemical compositions, thermal and radiation resistance, chemical and mechanical stability shall be considered,

*b)* the chemical and physical form of the waste together shall be such that the possibility of emission of radioactive isotopes is minimized,

*c)* such waste form and package shall be developed, which resist to radiation, thermal and chemical impacts,

*d)* the waste package shall have such mechanical stability, which provides an appropriate resistance against the impacts occurring during movement, and

e) the isotope compilation and contents of radioactive waste, including its content capable of chain reaction, shall be applicable to become known at acceptance in such a detail that compliance with the requirements determined in the safety analyses report can be verified.

(5) Any change regarding the waste acceptance standards shall be qualified as a modification. The licensee shall justify when the acceptance standards change that the change is in agreement with contents of the safety analysis.

## **Section 17**

(1) The licensee shall inspect if the accepted radioactive waste complies with the waste acceptance standards. The inspection requirements shall be determined in writing and shall be implemented accordingly. The requirements shall cover the examinations and analyses to be performed and the documentation of the inspection. The licensee shall inform the organization handing over the waste of the inspection requirements.

(2) The licensee shall inspect the data provided by the producer of the waste regarding the radioactive waste to inspect the compliance with the acceptance standards. If the inspection of compliance with waste acceptance standards makes it necessary, the licensee may request information about the waste management process applied by the waste producer, handing over organization and may review it on the scene before acceptance.

(3) Compliance of the waste design form and package design with the waste acceptance standards shall be justified via a series of tests.

## **Section 18**

The licensee is obliged to treat on-site radioactive waste does not comply with the waste acceptance criteria and the radioactive waste produced during the activities in the storage or disposal facility or shall take care of transporting that waste to another storage or disposal facility which is authorized to perform the treatment.

## **Section 19**

Further requirements on radioactive waste accepted by the licensee and the radioactive waste produced during its own related activities are included in Annex 2.



## **9. Radioactive waste accountability**

### **Section 20**

(1) The accountability conducted by the licensee shall contain:

*a)* quantity of all radioactive waste existing on the site and that have already been disposed,

*b)* place of origin of radioactive waste,

*c)* location, time and method of interim storage or final disposal of the radioactive waste,

*d)* physical and chemical properties of radioactive waste and radioactive isotopes in the waste.

(2) The contents of Subsection (1) shall not affect other accountability obligations of the licensee regarding radioactive waste included in other laws.

(3) The licensee shall provide individual identifiers to all waste package intended to be stored or disposed in order to ensure traceability.

(4) The licensee shall ensure the technical conditions for the accountability for radioactive wastes accepted or produced during the respective activities, as well as the storage and archiving of data generated.

### *CHAPTER IV*

### *REGULATORY OVERSIGHT*

## **10. Licensing and approval**

### **Section 21**

(1) In relation to storage or disposal facilities the following licensees are required

*a)* for site survey and site assessment:

*aa)* site survey framework programme license,

*ab)* site survey license,

*b)* for siting: site license,

*c)* for construction: construction license,

*d)* for operation: operation license,

*e)* for modification: modification license,

*f)* for closure: closure license,

*g)* for transition to active institutional control: active institutional control license,  
and

*h)* for transition to passive institutional control: passive institutional control license.

(2) In relation to storage and disposal facilities the license of the atomic energy oversight organization shall be requested

*a)* for constructing buildings and building structures, for building, demolition and put into use of elevators of buildings,

*b)* for modification, dismantling and closure of systems, structures and components important to safety, and

*c)* for modification of organizational structure, management system and document.

(3) The technical requirement system for inservice inspection of pressure retaining components and pipelines operated in storage and disposal facilities and overseen by the atomic energy oversight organization, and the scope, method of non-destructive testing of systems, structures and components important to safety, as well as the documents specifying the acceptance standards and schedule of the tests shall be approved by the atomic energy oversight organization according to Annex 2.

(4) The atomic energy oversight organization shall review the periodic safety review report of the storage and disposal facilities and conclude a resolution according to Section 102.

(5) The atomic energy oversight organization shall approve the emergency preparedness and response plan according to Section 112.

## **11. Deadlines of procedures**

### **Section 22**

In the regulatory procedures of the atomic energy oversight organization launched at request, the known clients, except for the client that submitted the application for the commencement of the procedure, shall be informed on the fact of commencement

*a)* thirty days within receipt of the application

*aa)* concerning procedures determined in Paragraphs *a)-d)* and *f)-h)* of Subsection (1) of Section 21,

*ab*) concerning procedures determined in Paragraph *e*) of Subsection (1) of Section 21, if the modification necessitates the modification of the operation license, and

*b*) fifteen days within receipt of the application concerning procedures determined in Paragraph *a*) of Subsection (2) of Section 21.

### **Section 23**

(1) The deadlines of administration of the atomic energy oversight organization

*a*) sixty days

*aa*) concerning procedures determined in Paragraphs *a*) and *b*) of Subsection (1) of Section 21,

*ab*) concerning procedures determined in Paragraphs *a*), *b*) and *c*) of Subsection (2) of Section 21,

*b*) six month

*ba*) concerning procedures determined in Paragraphs *d*), *f*)–*h*) of Subsection (1) of Section 21,

*bb*) in cases determined in Paragraph *e*) of Subsection (1) of Section 21, if modification of the storage or disposal facility necessitates the modification operation license of the storage or disposal facility, and

*bc*) in the procedures according to Subsection (5) of Section 21,

*c*) fifteen months concerning procedures determined in Paragraph *c*) Subsection (1) of Section 21.

(2) The manager of the atomic energy oversight organization may extend the administration deadline once if justified

*a*) with a maximum of thirty days in the cases determined in Paragraph *a*) of Subsection (1),

*b*) with a maximum of ninety days in the cases determined in Paragraphs *b*) and *c*) of Subsection (1).

### **Section 24**

If the application submitted by the client is incomplete, then the atomic energy oversight organization shall call the client to supplement the documentation

*a)* within four month after the receipt of the application in the procedures determined in Paragraphs *c)-h)* of Subsection (1) of Section 21,

*b)* within 30 days after the receipt of the application in the procedures determined in Paragraphs *a)-b)* of Subsection (1) of Section 21 and in Paragraph *a)* of Subsection (2) of Section 21.

## **Section 25**

The atomic energy oversight organization shall inform the persons and organizations determined in Subsection (5) of Section 11/A of the Atomic Act on the venue and time of public hearing at least 15 days before the public hearing.

## **12. Licensing**

### **Section 26**

(1) The atomic energy oversight organization shall apply graded regulatory procedures considering the impact on safety during the site survey and assessment, siting, construction, operation, modification, closure and transition to active and passive institutional control.

(2) The atomic energy oversight organization, during regulatory licensing, shall examine the technical requirements of radiation protection.

(3) Concerning procedures launched on request the atomic energy oversight organization shall be authorized to determine the file formats to be used for the documentation attached to the application and publish this information in its website.

### **Section 27**

(1) The documentation supporting the application shall be developed in such detail based on what the atomic energy oversight organization is able to individually review and assess the compliance with the requirements and provisions and the adequacy of the technical and administrative activities necessary for the compliance. The application and the supporting documentation can be submitted also via client gate.

(2) In the license application the schedule and implementation of the planned activities shall be described in such detail based on what the atomic energy

oversight organization is able to determine the arrest points used for inspection purposes and plan its inspections.

(3) Documents used for supporting or referenced in the submitted license application shall be submitted at request of the atomic energy oversight organization s.

(4) The documentation supporting the application shall be submitted in Hungarian, in a form which provides easy management and ability to track changes. The compilation of the application and its annexes shall demonstrate, both in detail and as a whole, unambiguously in a controllable manner that each part of the submitted documentation was prepared by authorised persons or organisations.

(5) Unless the licensee submits the documentation forming the basis of the application via the electronic client gate, then the documentation shall be submitted in printed form with two more copies than the number of co-authorities participating in the procedure. Additionally, one copy shall be submitted electronically, in a text editor format as agreed upon with the atomic energy oversight organization.

## **Section 28**

(1) The licensee shall exercise its rights granted in the authority resolution and shall fulfil its duties based on the documents that served as a basis for the authority decision.

(2) A hard copy of the documentation supporting the application shall be archived by the atomic energy oversight organization upon completion of the procedure. Deviation from the content of the documentation supporting the application retained by the atomic energy oversight organization, if the deviation is subject to a licensing obligation, is only possible with the consent of the atomic energy oversight organization.

## **Section 29**

The atomic energy oversight organization may conduct regulatory procedures subject to licensing with urgency, if it is necessary in order to eliminate an unfavourable safety condition. Such extraordinary proceeding shall not justify any omission of compliance with the requirements for the supporting documentation, and shall not result in giving priority to aspects different from those of safety, or shall not decrease safety.

## 13. Inspection and enforcement

### Section 30

(1) The atomic energy oversight organization in order to maintain safety, in each phase of the life cycles of storage and disposal facilities, shall at least inspect on a regular, scheduled basis:

*a)* if the storage and disposal facilities and their systems, structures and components are in compliance with requirements specified in the licences and laws;

*b)* if the design, site survey and assessment, siting, construction, operation, modification, closure and active institutional control of the storage or disposal facilities comply with the safety requirements and the conditions and circumstances supporting the authority licenses and the provisions of the license; furthermore

*c)* the compliance of the licensee's management system with the requirements specified in the present decree at least in terms of the following:

*ca)* the relevant documents and instructions are in conformance with the design requirements for the actual condition of the systems, structures and components and they are valid and complied with,

*cb)* the licensee fulfils its reporting obligation, composes reports having a content compliant with the provisions, and implements improvement measures determined subsequent to the investigation of events relevant to safety,

*cc)* the licensee identifies the discrepancies and deviations without unjustified delay, or remedies or justifies the permissibility thereof,

*cd)* the licensee utilises the collected experience, and forwards the results to the contractors and the atomic energy oversight organization,

(2) The technical radiation protection inspection shall extend to

*a)* those systems, structures and components pertaining to the operation of the storage or disposal facility, by which the radiation field is generated or from which radioactive materials are released and as a source term represent potential or actual radiation danger to individuals who come into contact with the radiation field; furthermore those systems, structures and components which restrict or mitigate harmful effects of the source term, as well as those systems and instruments which provide information regarding the radiation condition of the source term or its surrounding area; also

*b)* activities related to the processing, storage and disposal of radioactive wastes.

(3) From the aspects of factors important to safety, the atomic energy oversight organization is authorised to inspect the operation of the organisation of the licensee.

(4) The atomic energy oversight organization is entitled to perform inspections announced in advance or, if necessary in order to achieve goal of the inspection, unannounced inspections at the licensee and its suppliers. An unannounced inspection shall be declared to the authorised representative of the licensee on the scene by the representative of the authority, who shall immediately start the inspection after the execution conditions of the inspection have been created.

(5) In the case of a foreign supplier, the licensee is obliged to provide for the conditions of the inspection of the atomic energy oversight organization.

(6) During inspections of the atomic energy oversight organization, the party subject to inspection is obliged to cooperate with the atomic energy oversight organization and facilitate the effectiveness of the inspection, to make available its own inspection results and documents to the atomic energy oversight organization.

(7) The atomic energy oversight organization shall prepare annual inspection plans and publish it on its website. Those concerned shall be informed of the publication.

### **Section 31**

The atomic energy oversight organization inspections shall not exempt the licensee from the obligation to perform its own inspection activities.

### **Section 32**

(1) The atomic energy oversight organization may conduct inspection on safety related areas of the use of atomic energy at the storage and disposal facility, at a licensee and its contractors without time limit. The licensee is obliged to ensure that atomic energy oversight organization inspector representative performing the inspection has unimpeded access to the storage or disposal facility and the sites of contractors at all times, furthermore to ensure the free movement of the person performing the authority inspection in the buildings, rooms and underground structures of the storage or disposal facility and the contractors' site.

(2) The representative of the storage or disposal facility is obliged to be present at inspections carried out either at the licensee or at any of its contractors.

(3) The party subject to regulatory inspection shall provide a representative having sufficient professional competency and authorisation, including the representative of the licensee in the case of an inspection of the atomic energy oversight organization at a contractor, is obliged to cooperate in conduct of the inspection and preparation of the inspection record and provide the available information.

(4) The completed authority inspection record shall be signed by the authority inspector of the atomic energy oversight organization and the representative of the party subject to inspection, and in the case of inspections performed at the contractors, the representative of the licensee.

### **Section 33**

(1) If as a result of the inspection, the atomic energy oversight organization determines that the party subject to regulatory inspection is in a breach of the provisions specified in its own regulation, or in the case of contractors in the internal regulation of the licensee, it shall draw the attention of the representative of the party subject to regulatory inspection to this fact in the record and by the establishment of a deadline call upon the representative – or the representative of the licensee in case of inspections at the contractors site – to restore the conditions specified for the safe use of atomic energy.

(2) The party subject to regulatory inspection shall satisfy the obligation included in the inspection record within the deadline specified therein. In the event of missing the deadline determined for the obligation the atomic energy oversight organization shall investigate the case in a procedure launched ex officio and initiate an enforcement process if the conditions exist.

(3) The atomic energy oversight organization performs inspections, which serve also special inspection aspects arising from the given lifecycle phase of the storage or disposal facility. The areas of inspection are determined by the current lifecycle phase of the storage or disposal facility and the provisions of the effective legislation, whilst the frequency and the extent to which the inspection is detailed are determined by the safety importance of the given area, and the experience of atomic energy oversight organization in licensing, assessment and inspection.

### **Section 34**

(1) The subject of a comprehensive inspection of the atomic energy oversight organization is a specific activity of the licensee. During a comprehensive



inspection, the atomic energy oversight organization shall examine the appropriate and harmonized processes of the storage and disposal facility being in a given life cycle phase, fulfilment of controlling, supervisory and assessment tasks of the management.

(2) The date and areas of inspection are specified in advance by the atomic energy oversight organization in its inspection plan and the licensee shall be informed thereon in due time, at least 15 days earlier.

(3) The atomic energy oversight organization shall prepare an evaluation about the experiences gained during the inspection, which evaluation is to be sent to the licensee. Based on the evaluation the licensee shall draw up and implement an action plan. The licensee shall report of the progress in the action plan in its regular reports to the atomic energy oversight organization.

### **Section 35**

(1) Should the atomic energy oversight organization experience identify any deviation from the provisions in connection with a part process, activity and event or from good practice, the atomic energy oversight organization performs a revealing inspection. Such inspections may be performed also regarding event investigations.

(2) The party subject to regulatory control shall develop and execute an action plan based on the inspection record. The licensee shall inform the atomic energy oversight organization regarding the performance of tasks in the form of regular reports.

### **Section 36**

(1) The atomic energy oversight organization performs ad hoc inspections in order to examine specific conditions of a resolution, actions, deviations, information, states or locations. Ad hoc inspections may be announced in advance or may take place in an unannounced manner.

(2) In the case of inspections announced in advance, the atomic energy oversight organization, based on a program or plan indicates the activity, action or location which it intends to inspect. The party subject to regulatory inspection is obliged to notify the atomic energy oversight organization in advance, at least 24 hours before the expected commencement time of the activity.

(3) The party subject to regulatory inspection shall take actions according to the inspection record. The licensee shall report to the atomic energy oversight

organization regarding the performance of tasks within the frame of regular reports.

### **Section 37**

(1) In order to enforce the compliance with legal provisions and authority requirements, if appropriate, the atomic energy oversight organization shall initiate an enforcement procedure.

(2) Depending on the safety impact of a breach of legislation or authority provision, the enforcement action may be as follows:

*a)* in the case of a breach of a legislative or authority provision having minor safety significance, a written warning to the licensee, in which the authority identifies the breach and its legal basis, the required action and the respective deadline;

*b)* in the case of a breach of a legislative or authority provision having higher safety significance, determination of supplementary conditions for the performance of the licensed activity;

*c)* in the case of a breach of a legislative or authority provision of major safety significance, limitation or suspension of the licensed activity, withdrawal of the license; and

*d)* a fine can be imposed together with the legal consequences described in *a)*-*c)* or individually in accordance with the legislation specifying the level of fine.

(3) In all the cases the atomic energy oversight organization shall require the licensee to investigate the identified deviations and implement the necessary measures in order to eliminate the deviations and to prevent their recurrence.

## **14. Content of the atomic energy oversight organization procedure**

### **Section 38**

(1) The atomic energy oversight organization supervises the state of the storage and disposal facilities and the activities of the licensees on a continuous basis in order to sustain safety. The supervision is performed primarily based on the documents submitted by the licensee, in particular on submissions, both regular and event reports, as well as on the analysis and evaluation of information collected during authority inspections.

(2) The atomic energy oversight organization shall make its decision based on a comprehensive and detailed assessment of available facts, in addition to the fulfilment of the legal requirements, also considering the circumstances and data

revealed during inspections. Accordingly, the atomic energy oversight organization shall examine the documents and data provided by the licensee in the mirror of the safety principles substantiating the design, the quality of implementation, the actual operational principles and practical operation of the as-built state of the storage and disposal facilities, its systems, structures and components and the operational activity. When making decisions, the atomic energy oversight organization shall enforce the safety aspects of the entirety of the storage and disposal facility.

(3) The atomic energy oversight organization shall review and assess the analyses submitted by the licensee, as well as other available technical documents, taking into consideration all available relevant information in order to determine that

*a)* the safety consequences of activities performed at the storage and disposal facilities are identified, and the fulfilment of the safety requirements is demonstrated;

*b)* the documentation submitted by the licensee is accurate and sufficient to judge whether the legal and authority requirements are being complied with; and

*c)* the intended technical solutions are proven to be adequate or qualified, thus suitable to attain the required safety level.

## **Section 39**

(1) The regulatory review and assessment shall extend to encompass each phase of the life cycle of the storage and disposal facility.

(2) The regulatory review and assessment of storage and disposal facilities shall in particular extend to:

*a)* safety characteristics associated with safety of storage and disposal facilities;

*b)* the impact of management, organisational and administrative factors on safety;

*c)* the effects of changes and modifications;

*d)* events and feedback of experience gained during the investigation thereof;

*e)* utilization of international experience.

### *CHAPTER V*

#### *LICENCES RELATED TO STORAGE AND DISPOSAL FACILITIES*

### **15. Site survey and assessment**

## Section 40

(1) A site survey framework programme shall be developed and implemented for the survey and assessment of the potential site. The survey framework programme shall be developed so that by its implementation the suitability of the site can be judged, the necessary data for safety analyses in support of operation and post-closure period can be determined.

(2) The applicant for developing the site survey framework programme, to characterize the area designated for the survey and its narrower and wider environment, shall collect the following data and analyze them from the aspect of suitability as a site:

*a)* data necessary for determination of state of the wider environment of the area,

*b)* data necessary for learning and understanding the time evolution of the environment around the site,

*c)* data necessary for identification of potential characteristics, events and processes associated with the site and the environment around the site,

*d)* data necessary for understanding the impact of any typical event and process on safety, and

*e)* archive survey data of the area and its environment.

(3) During the development and implementation of the framework programme the following shall be ensured

*a)* a graded, uniform and necessary extent acquaintance,

*b)* application of the best technically and economically available method and technology that ensures the achievement of the necessary results,

*c)* scientifically grounded characterization of data and analyzes of their uncertainty, and

*d)* retention and reproducibility of data.

(4) The site survey framework programme shall be complied with such a method and in such an extent that its implementation makes the acquaintance of the accommodating environment possible. In the survey framework programme the reasons of selecting the survey area shall be described, the wider and narrower environment based on the known data and the existing geological and feasible technical barriers, as well as the delimitation of the planned survey phases and building of them on each other. Survey objectives, the survey activities in each planned survey phase and the anticipated results shall be described.

## **Section 41**

In the site survey and assessment license application:

- a)* the site survey and assessment programmes and the methods and theoretical considerations to be used as parts of the programme shall be described, and
- b)* the planned distribution and schedule of survey phases of the activities aimed at the site survey and assessment,
- b)* it shall be demonstrated that the methods developed for the determination, survey and assessment of the site are suitable to determine the site-related data required by the design and to determine the suitability of the site.

## **Section 42**

The site survey framework programme shall incorporate the geological survey framework programme meant to demonstrate the geological suitability of the site. The geological survey framework programme shall be developed to make it possible to learn the original, natural balanced condition of the geological environment.

## **Section 43**

(1) The atomic energy oversight organization, by licensing the site survey framework programme accepts the suitability of the survey framework programme meant to determine the selection and suitability of the site of a storage or disposal facility.

(2) The acceptance of the site survey framework programme shall provide the licensee with exclusive rights

- a)* to implement the survey framework programme, and
- b)* to submit survey license applications for the particular survey phases determined in the programme.

## **Section 44**

(1) The implementation of the site survey activities shall be licensed in individual survey licensing procedures per survey phases determined in the survey

framework programme. The time validity of the license shall be determined by the atomic energy oversight organization considering the features of the given survey task and the schedule of implementation.

(2) A final report shall be developed about the survey activities completed during the survey programme, which shall include the evaluation of results of activities performed during the implemented survey phase and the substantiation of the next survey phase.

(3) The final report per Subsection (2) shall be attached to the license application for the survey activity planned to be implemented in the next survey phase, as well as the modifications judged to be necessary in mirror of results of the already performed survey. The atomic energy oversight organization, based on the evaluation of results of the completed survey tasks

- a)* may accept the modifications of the survey framework programme, and
- b)* may grant the license for the commencement of the next survey phase.

## **Section 45**

(1) The design documentation of the given survey phase shall be attached to the site survey license application.

(2) The survey design documentation shall contain the site survey plan and the design map related to the scale of mine maps and contents.

(3) The site survey plan shall contain:

- a)* the objective of the planned survey phase and its justification,
- b)* the summary and evaluation of former knowledge available about the area,
- c)* the survey tasks planned to achieve the survey objectives, denomination of the geological formation and structure planned to be surveyed, and the description technological and safety measures required for the implementation of survey tasks,
- d)* the public administration reference of the area and the corner points in EOVS coordinates,
- e)* listing of planned survey facilities, description of their locations and marshalling routes,
- f)* in relation to the individual survey activities
  - fa)* name and objective,
  - fb)* detailed description,

- fc)* amount and extent,
- fd)* description of technology to be applied,
- fe)* methodological description of evaluation of results,
- ff)* schedule and planned duration, and the time of planned completion of the given survey phase,
- fg)* the hazards anticipated during the survey and the description of measures planned in response to them, and
- fh)* its effects on the environment and nature, and the technical measures planned to prevent and mitigate the hazards to the environment, and the schedule of planned landscape architecture tasks.

### **Section 46**

(1) In the site survey license the atomic energy oversight organization shall determine the licensed duration of the given survey phase, the conditions required for technical-safety and property protection, public administration delineation of the survey area, the depth of the survey and corner points in EOV coordinates, and shall decide on the acceptance of content of the survey plan.

(2) The atomic energy oversight organization, based on the application of the licensee, may modify the site survey license if the licensee cannot complete the licensed survey duration necessary for the completion of the survey or if extension of the tasks is necessary.

(3) The application for modification of the site survey license shall contain the amended version of the documentation pertaining to the site survey license application to be modified, if the change affects them.

### **Section 47**

The licensee shall be obliged to notify the atomic energy oversight organization and the owner or user of the real estate affected by the survey activity in writing at least 8 days before the planned commencement date of the survey activity.

### **Section 48**

(1) The data obtained or used during the site survey and those used from former data shall be arranged to a uniform digital and space informatics database with such a detail and form that makes a subsequent reproduction of conclusions possible.

(2) The licensee shall send annually the data obtained from the geological survey to the organization performing the geological tasks of the State. The licensee shall be responsible for the completeness and actuality of data, which shall be retained by the organization performing the geological tasks of the State.

(3) If the licensee does not satisfy Subsection (2), the atomic energy oversight organization shall suspend the site licensing process until the requirement is satisfied.

### **Section 49**

(1) A complex final report shall be prepared about the implementation of the site survey framework programme and shall be attached to the site license application.

(2) If the submission of the complex final report, the final report evaluation the individual survey phases or if the site license application is dismissed the geological data learnt during the site survey shall only be used for supporting the license application required for performing the activities determined by this decree.

(3) The summary geological report development results of the geological survey shall be part of the complex final report, which shall contain at least the following:

*a)* denomination of the organisation authorised to perform the geological survey and the number of the resolution containing survey license,

*b)* individual objective of the survey and the name of the contractors and contributors,

*c)* description of geological structure of the area designated for geological survey, and its embedding to the geological and hydrological formations extending over the borders of the area,

*d)* performed surface and underground surveys, and their methods,

*e)* mineralogical lithography, geomechanical, geotechnical, geochemical, sedimentological, stratigraphical, tectonics, hidrogeological, geomicrobiological, geophysical, radiometry properties of the surveyed geological formation and structure,

*f)* complex geological history of the survey portion of space,



- g)* description of former and current survey data and results,
- h)* summary and evaluation of survey results,
- i)* list of professional literature used for the report, specifying the author, the year of publication, title and place of publication.

(4) The following shall be attached to the complex final report:

- a)* basic data of the survey,
  - aa)* the data of survey facilities and sampling locations fixed in space (x, y, z coordinates) and time (start and end date of construction and sampling),
  - ab)* documentation of the results of geophysical basic and interpreted measurements, mineralogical lithography, geomechanical, geotechnical, geochemical, sedimentological, stratigraphical, tectonics, hidrogeological, geomicrobiological, geophysical, radiometry properties and of palaeontology examinations,
  - ac)* documentation of the material testing results, with unambiguously designating the survey facilities and sampling locations, with the method and time of sampling, and the names of laboratories and professional institutes performing the various examinations,
  - b)* comparison data used for the evaluation, their origin,
  - c)* survey map and topographical map of the area by displaying the survey facilities, the geological, tectonics, geochemical and hidrogeological and other relevant thematic maps of the survey area in harmony with the content of the report,
  - d)* geological, tectonics, geomechanical, hidrogeological and other thematic sections, tables and photo documentation assisting the interpretation,
  - e)* the professional materials and professional reports completed within the frames of the geological survey.

(5) The performers of the survey shall prepare such a description of the used technical instruments and procedures, based on which the survey can be reproduced.

(6) The complex final report and the final reports evaluation of the individual survey phases shall be countersigned by the “general geological” and “geophysical” geological expert.

## **16. Siting**

### **Section 50**

(1) The atomic energy oversight organization by granting the site license shall accept the justification of lack of such site characteristics that would exclude the possibility of construction, furthermore the suitability of the conduction of site survey, assessment of data determined based on the site survey and the site-related design data derived from the assessment and the suitability of the site.

(2) The site license authorizes the licensee, taking account of the stipulations determined in the license, to implement the activities to create the technical and infrastructural conditions for the planned storage or disposal facility.

(3) The time validity of the site license shall be determined by the atomic energy oversight organization considering features of the siting activity and the planned schedule of implementation.

## **Section 51**

(1) In the site license application:

*a)* it shall be demonstrated that site characteristics that would exclude the possibility of construction do not exist, and

*b)* the following shall be described:

*ba)* implementation of the survey framework programme,

*bb)* determination of the site-related design data,

*bc)* planned programme of siting activity and

*bd)* the results of basic level assessment regarding environmental background radiation and epidemiology.

(2) The complex final report describing results of the site survey framework programme and the programme of siting activity shall be attached to the application. As a part of the complex final report or in a document independent of that, the derivation of site characteristics and the substantiation of their determination shall be described. In the programme of siting activities the programme of activities meant to create the technical and infrastructural conditions and its adequacy shall be described.

(3) The documents as per Paragraph (2) are approved by the atomic energy oversight organization in the site license. The atomic energy oversight organization accepts the complex final report of the report complying with Subsections (3) and (4) of Section 49, if the atomic energy oversight organization and the co-authorities participating in the procedure agreed with the assessment according to Paragraph *h)* of Subsection (3) of Section 49.

## **17. Construction**

## **Section 52**

The construction license is required for the construction and commissioning of the storage and disposal facilities. It gives authorization for the implementation of activities related to acceptance of radioactive waste, if the other licences required by law are available.

## **Section 53**

The safety analysis report supporting the construction shall be attached to the license application, in which it shall be demonstrated that

- a)* the requirements of this decree are satisfied, or will be satisfied at latest until the submission of the operation license, and
- b)* if the basic safety principles and criteria applied in the design are met, then the storage or disposal facility can be safely operated and its safety is ensured in the post-closure life cycle phase.

## **Section 54**

(1) The construction license shall be effective until the operation license comes into force, but at latest for 10 years from its issuance with the exception determined in Subsection (2). The time validity of the license can be extended on request with an additional 5 years, if the licensee demonstrates that the conditions of issuing the license still exist.

(2) If the storage or disposal facility is built in multiple phases and if there is no fundamental technical difference between the design of the separate systems ensuring the disposal of radioactive waste regarding either the construction or the closure and if the construction exceeds the deadline determined in Subsection (1), then:

- a)* the construction license can be granted on the request of the licensee being effective throughout the duration of the whole construction, or
- b)* if the construction license is not granted according to Paragraph *a)*, then on the request of the licensee the validity of the license can be extended for the whole construction of the storage or disposal facility.

(3) If at least two years pass between the construction periods, then before the commencement of the particular construction periods the applicant shall

demonstrate that the conditions for granting the license still exist. If the conditions of granting the license, also considering the former modification of the technology have changed, then the licensee shall apply for a new construction license for the further construction periods.

### **Section 55**

In the extension of a storage or disposal facility holding an effective operation license, if the storage technology is modified then the rules of construction licensing procedure shall apply.

### **Section 56**

Based on the plan described in the construction supporting safety analysis report, the storage and disposal facilities shall be realized with the appropriate technologies so that the safety functions of the disposal system be ensured also in the post-closure life cycle phase.

### **Section 57**

(1) During construction, operation, closure and active institutional control the impact of storage or disposal facilities on the environment shall be monitored; a monitoring programme shall be developed. The substantiation and development of the monitoring programme requires the establishment of the baseline condition of the environment shall be determined prior to the construction of the storage or disposal facility.

(2) At the first time, the monitoring programme shall be submitted as part of the construction supporting safety analysis report to the atomic energy oversight organization for approval; it is approved by the atomic energy oversight organization in the construction license.

(3) The monitoring programme shall be developed so that:

a) it contributes to the description of the appropriate protection of the public and environment, and as evidence of appropriate operation according to the licences granted for the storage and disposal facilities,

*b)* it can be demonstrated, based on the data obtained during monitoring that the disposal system operates according to the safety analysis report of the actual life cycle phase,

*c)* it makes possible to detect and identify any deviation from the expected operation and expected state,

*d)* the monitoring contributes to the demonstration and better specification of fundamental assumptions and models described in the construction supporting safety analyses report,

*e)* the monitoring facilitates the understanding of the state of the disposal system,

*f)* it ensures the data collection for decision-support, and

*g)* provides information for the preparation of the post-closure monitoring programme.

## **Section 58**

In order to learn the geological environment providing the disposal during the construction of the storage and disposal facilities the following data shall be collected:

*a)* data on characteristics of the geological environment to better specify the assumptions considered in the construction supporting safety analysis report, and

*b)* data on the geomechanical processes of the geological environment and geochemical and hydrogeological impacts of the construction process.

## **Section 59**

Any modification becoming necessary during the construction of the storage and disposal facility shall be designed, assessed, documented and implemented so that it remains in harmony with the safety impact of the modification. The modification shall not decrease the safety level.

## **18. Operation**

### **Section 60**

(1) In the possession of operation license a storage or disposal facility can be operated under the conditions and for the duration specified in the license.

Acceptance, management, interim storage and final disposal of radioactive waste shall be performed according to the conditions in the operation license.

(2) The atomic energy oversight organization shall set the validity of the operational license taking into consideration the operational features of the storage and disposal facilities and the planned time of facility level closure of the storage or disposal facility.

(3) The operation license can be extended upon request of the licensee. The safety analysis report supporting the updated operation of the storage or disposal facility shall be attached to the application. The time validity of the operation license is extended by the atomic energy oversight organization if its operation complies with the safety requirements and the operational limits and conditions.

## **Section 61**

(1) Prior to the submission of the operation license application of a storage or disposal facility the licensee shall be persuaded of the compliance of the physical state and the planned operation of the storage or disposal facility with the design, safety requirements and the operational limits and conditions, and in addition, the requirements for the closure of the storage or disposal facility shall be determined and the possibility of future compliance with them shall be demonstrated.

(2) In the operation license application:

a) it shall be demonstrated that the storage or disposal facility was completed according to the design,

b) it shall be demonstrated that the realised state is in compliance with the legal requirements,

c) it shall be demonstrated that modifications made in comparison with the construction supporting safety analysis are substantiated,

d) it shall be demonstrated that the safety related deficiencies recognized during the construction were eliminated,

e) the modifications that became necessary during the construction and that require amending the safety analysis report shall be summarized and shall be substantiated,

f) the availability of data related to "0" state necessary to monitor and assess the change in the condition of systems, structures and components important to safety shall be demonstrated,

g) the monitoring programme ensuring compliance with the safety analysis report substantiating the operation shall be described,

*h)* in the case of construction performed in several phases, the achievability of operation and construction of the storage or disposal facility shall be demonstrated simultaneously and it shall be described how the storage or disposal facility can be safely operated,

*i)* it shall be described how the licensee ensures the resources required for maintaining the safety of the storage or disposal facility until the transition to institutional control.

## **Section 62**

The following shall be attached to the license application:

*a)* the finalized safety analysis report substantiating operation that updates and supplements the content of the construction supporting safety analysis report, which shall verify that

*aa)* the storage or disposal facility operates in compliance with the valid design basis and the requirements for the closure of the disposal facility can be satisfied,

*ab)* the inspection, management, emergency operating and accident management provisions necessary for the safe operation are suitable for the achievement of the objectives of safe operation,

*ac)* the safe operation and closure are ensured under the operational limits and conditions,

*b)* the document containing the operational limits and conditions,

*c)* the document describing the procedures which ensure the maintenance of the condition of systems, structures and components important to safety,

*d)* accident operating procedures,

*e)* emergency preparedness and response plan.

## **Section 63**

(1) The licensee shall operate the disposal facility according to the operational limits and conditions determined in the operation license by continuously maintaining safety in such a way that the requirements determined for the post-closure period prescribed in the safety analysis report substantiating the operation are satisfied.

(2) The detailed requirements on operation are included in Annex 2.

## **19. Closure of the disposal facility**

### **Section 64**

(1) The closure license authorizes for the total closure of the disposal facility, the dismantling of the systems, structures and components that are not necessary for the active institutional control, and for the demolition of the unnecessary buildings and structures.

(2) The time validity of the closure license shall be determined by atomic energy oversight organization considering the features of the disposal facility and the schedule of the activity.

### **Section 65**

The disposal facility shall be closed according to the plan approved by the atomic energy oversight organization. The closure plan shall be attached to the closure license application, which shall contain:

- a)* the description of the state of the disposal facility and the characteristics of the wastes disposed or stored,
- b)* the dismantling plan of the systems, structures and components and demolition plan of the buildings,
- c)* the closure plan of the disposal or storage system,
- d)* the environmental remediation plan,
- e)* the description of the safety functions sustained during the active institutional control and of the fulfilment of them,
- f)* the planned monitoring activities, and
- g)* the procedures planned to be applied to retain the information related to the disposed wastes and the environment of the storage or disposal facility.

### **Section 66**

The following shall be attached to the closure license application:

- a)* the safety analysis report substantiating the closure developed based on the safety analysis report substantiating the operation, which shall verify that



*aa)* the storage or disposal facility can be safely closed and the unnecessary systems, structures and components and buildings can be dismantled or demolished,

*ab)* the inspection, management, emergency operating and incident management provisions necessary for maintaining the post-closure safe state are suitable for the achievement of the objectives of safe closure,

*ac)* the planned monitoring activity is in compliance with the requirements for monitoring contained in the safety analysis report substantiating the closure,

*b)* the document describing the procedures which ensure the maintenance of the conditions of the systems, structures and components ensuring the fulfilment of safety functions,

*c)* the document regulating incident management

## **Section 67**

(1) The closure shall be achieved according to the requirements laid down in this decree and the license issued by the atomic energy oversight organization in a way that safety during the closure is sustained and the post-closure safety requirements are satisfied.

(2) During the closure, the dismantling of the systems, structures and components and the demolition of buildings being unnecessary for active and passive institutional control, except for those to be utilized for other purposes, shall be performed.

## **Section 68**

(1) A report shall be prepared after completing the activities required for the closure, which shall be sent for approval of the atomic energy oversight organization. The report shall contain the description of the state of the environment ensuring the disposal, and the results and implementation of the closure.

(2) Based on the report the atomic energy oversight organization can oblige the licensees to carry out further activities to ensure safe closure of the storage or disposal facility. The atomic energy oversight organization shall be informed of the activities carried out upon the resolution by delivering the revised report.

(3) Completion of the closure is the day when the resolution approving the report becomes effective.

## **20. Active institutional control of the disposal facility**

### **Section 69**

(1) The licensees, subsequent to the closure of the storage or disposal facility shall take care of active institutional control of the facility. Based on the license for active institutional control the licensee shall monitor the disposal facility and its environment, and shall take the necessary actions to ensure the safety of the storage or disposal facility.

(2) The time validity of the license for active institutional control shall be determined by the atomic energy oversight organization considering the features of the disposal facility and the planned date of transition to active institutional control. The maximum validity of the active institutional control license is 50 years. If the atomic energy oversight organization, based on the results of the periodic safety reviews finds it necessary, the time validity of the active institutional control license can be extended.

### **Section 70**

(1) The safety analysis report substantiating the closure shall be reworked and revised according to the post-closure state and shall be attached to the license application. In the safety analysis report substantiating the closure it shall be demonstrated that the requirements determined for active institutional control are satisfied.

(2) The application for active institutional control shall be submitted to the atomic energy oversight organization together with the updated safety analysis report substantiating the closure. The atomic energy oversight organization issues the license for active institutional control by approving the updated safety analysis report substantiating the closure.

(3) If the atomic energy oversight organization during the active institutional control is informed of an unplanned actual or potential release of radioactive material to the environment, which does not imply any emergency response, it is authorized to order for action to recover or improve safety.

## **21. Passive institutional control of the disposal facility**

### **Section 71**

The license for passive institutional control authorizes the licensee to terminate the active institutional control. By coming into force of the license for passive

institutional control the regulatory supervision pursued by the atomic energy oversight organization over the disposal facility is terminated.

## **Section 72**

(1) The revised and updated safety analysis report substantiating the closure shall be attached to the application for a passive institutional control license, in which, using the experience of active institutional control, it shall be demonstrated that the state of the disposal facility is safe and transition to passive institutional control of the storage or disposal facility can take place.

(2) The atomic energy oversight organization, by sending the effective resolution related to passive institutional control informs the authorities and organizations concerned in their scope of competence or tasks of the transition to passive institutional control of the storage or disposal facility.

### *CHAPTER VI*

#### *LICENSING OF BUILDINGS, BUILDING STRUCTURES AND ELEVATORS OF THE STORAGE OR DISPOSAL FACILITY*

## **22. Licensing of building and building structures**

### **Section 73**

(1) A license of the atomic energy oversight organization is required for constructing, putting into use and demolition of the buildings and building structures of the storage or disposal facility.

(2) The issuance of a building license for the buildings and building structures of a storage or disposal facility shall take place after coming into force of the construction license of the storage or disposal facility.

(3) In the regulatory licensing procedure, for lack of specific building requirements related to the storage or disposal facility the general provisions shall be applied.

### **Section 74**

(1) The licensee shall classify the building and buildings structures related to the storage or disposal facility according to the intended storage or disposal function of the facility. The first instance of classification shall be included into the safety analysis report substantiating the construction of the storage or disposal facility.

The classification of the buildings and building structures of the storage or disposal facility shall be approved by the atomic energy oversight organization in the construction license of the storage or disposal facility. The classification shall be updated in the substantiating safety analysis report pertaining to the respective life cycle phase.

(2) A licensee shall submit an application in relation to buildings and building structures of the storage or disposal facility:

*a)* if the building process or its result has impact on the safety of management, interim storage or final disposal of the radioactive waste,

*b)* in the case of construction, extension or displacement of the building,

*c)* in the case of such a renewing, recovery, modernization, change of façade of the building or building structure, when during the listed construction activity the supporting structures or elements of the building needs to be changed, modified, demolished or reinforced, or when the number of individual functional elements in the building or their function is changed,

*d)* for putting in use of the building, and

*e)* for demolition of the building.

(3) If a construction activity is performed on the buildings and building structures of the storage or disposal facility being under the effect of the operation license, which is qualified as a modification, then beyond the building licensing procedure also the requirements for modification shall be applied.

## **Section 75**

(1) The building or demolition license shall be requested for the whole building or demolition activity wished to be performed.

(2) If the construction is planned to be implemented in several phases the building license can be requested for the buildings built in separate phases, and for those building parts which can fulfil separate and safe individual function.

(3) The time validity of the license shall be determined according to law on building authority procedures and building authority inspection.

(4) The building or demolition license shall contain:

*a)* demonstration of compliance with safety requirements and the related technical substantiation,

*b)* quality control programme providing the appropriate performance of the activity, or a reference to those regulatory procedures, in which the documents were submitted earlier,

*c)* licenses of other authorities corresponding to the procedure, description and summary evaluation of the documentation substantiating them, and

*d)* technical design documentation for building or demolition licensing with a content complying with the law on general building authority procedures.

## **Section 76**

(1) After the completion of the building works performed based on the building license – except if the atomic energy oversight organization orders differently in the building license – the building can be put in use after the put in use license of the building came into force, which shall be requested from the atomic energy oversight organization.

(2) If the building activity affects only portion of the building, its other parts can be used according to the conditions determined by the respective building license.

(3) The put in use license shall be requested together for more building concurrently constructed on the same site, or for more types of building works to be performed on the same building. Put in use license can be requested separately in the case of a building activity realized in more phases, buildings built in separate phases, and for building parts that can safely fulfil their function individually.

(4) The following shall be attached to the put in use license application:

*a)* list of those documents, which justify that the performed building activity ensures meeting of safety criteria,

*b)* those parts of the realized design documentation, which displays the realization deviating from the building license, and the technical substantiation of the deviations,

*c)* statements and justifications required by the law on building authority procedures and building authority inspection,

*d)* declaration on the fact that the quality documents justifying the compliance with the safety requirements related to building and installation works are complete and genuine, and the building is suitable for safely performing its functions, and

*e)* draft of modification wished to be introduced in the safety analysis report of the given life cycle phase.

## **Section 77**

During the assessment of the put in use license application the atomic energy oversight organization shall examine that

*a)* the building works were completed according to the building license, the respective technical design documentation, and to the licensed deviations,

*b)* the building is in a state suitable for safely fulfilling its function determined in the building license, and

*c)* declaration of the technical leader directing the building works is in agreement with the deviations and their mode of management, with the requirements from the quality control programme, and with the completeness of the quality control documentation.

## **Section 78**

(1) The atomic energy oversight organization shall determine the time validity of the put in use license considering the features and function of the building.

(2) The time validity of the put in use license can be extended upon request of the licensee, if it is demonstrated in the application that the building complies with the technical requirements until the end of the applied duration.

(3) During the assessment of the application for extension of validity of the put in use license the atomic energy oversight organization shall be persuaded that the building is in appropriate and safe condition according to its function, and the demonstration of technical compliance is in agreement with the actual facts.

## **Section 79**

The atomic energy oversight organization shall forbid the use of a building or a building part being without a license or deviating from the license, if it endangers the safety of the storage or disposal facility.

## **23. Licensing of elevators**

### **Section 80**

(1) A license of the atomic energy oversight organization shall be required for the construction of an elevator in a storage or disposal facility, for its permanent installation in the building, relocation, modification entailing changing its main technical data, put in use, and for its demolition.

(2) In addition to the provisions of the government decree on the building authority licensing, operation, inspection and inspectors, the license application shall contain:

- a) name of the elevator, identifier and installation place,
- b) intended function of the elevator, operation mode of the elevator,
- c) technical description of the elevator, and
- d) in the case of an elevator located in the controlled area of a storage or disposal facility the environmental parameters, including the temperature, humidity, analysis of potential for radioactive contamination and the description of safe operation based on the analysis.

## **Section 81**

In addition to the provisions of the government decree on elevators, escalators and moving sidewalks the put in use license application shall contain:

- a) name of elevator, identifier, place of installation, and
- b) a copy of the records taken on the put in operation of the elevator.

### *CHAPTER VII*

#### *LICENSING OF SYSTEMS, STRUCTURES AND COMPONENTS OF A STORAGE OR DISPOSAL FACILITY*

### **24. Licensing of systems, structures and components of a storage or disposal facility**

## **Section 82**

(1) Licensing of systems, structures and components of a storage or disposal facility important to safety, with the exception described in Subsection (2) – shall be realized in the construction life cycle phase of the storage or disposal facility, as part of the licensing procedures related to the storage or disposal facility or to the buildings of the storage or disposal facility.

(2) The waste form, package and barriers ensuring isolation shall always be handled as systems, structures or components important to safety in the case of radioactive waste storage or disposal facilities.

(3) From the operation life cycle phase of the storage or disposal facility an individual system-level license is required for the following activities related to the systems, structures or components important to safety

- a)* modification,
- b)* dismantling, and
- c)* closure,

if in the cases *a)* and *b)* the modification or dismantling of the system, structure or component does not affect the whole storage or disposal facility or the entire safety of the storage or disposal facility, and if in the case *c)* the closure of the system ensuring placement of radioactive waste does not extend over the whole placement system.

(4) Provisions for modification shall be used regarding licensing of system-level modifications and provision for closure shall be used regarding licensing of system-level dismantling and closure.

## **25. Licensing of pressure retaining equipment and pipelines**

### **Section 83**

Those pressure retaining equipment, including the connected pipelines, belong under the supervision of the atomic energy oversight organization, which contain radioactive material or can be contaminated thereby. The licensing and inspection rules related to the systems, structures and components of the storage or disposal facility shall be applied to the pressure retaining equipment with exemptions determined under this Subtitle.

### **Section 84**

(1) The atomic energy oversight organization shall be authorized to inspect the construction of the pressure retaining components under its supervision and the operation of all the already operated pressure retaining equipment and to oblige the licensee to take the necessary safety measures.

(2) The first post-fabrication inspection of the pressure retaining equipment of an operating storage or disposal facility belonging under the supervision of the atomic energy oversight organization, and the inservice and occasional inspections of them shall be carried out by the inspection organization of the licensee or by an authorized inspection organization independent of the licensee (hereinafter together referred to as: inspection organization) based on the authorization of the atomic energy oversight organization and under its control.



(3) The inspection organization and its employees shall be independent of impacts influencing their decisions, especially of the impact of parties interested in the result of the inspections.

(4) The inspection organization shall possess the employees and equipment required for the professional implementation of the technical and administrative tasks of the inspection, and so shall be capable of making judgements on compliance with the technical requirements, and of documenting the inspections.

(5) The atomic energy oversight organization shall be authorized to inspect the compliance of the inspection organization with the requirements of Subsection (4), the implementation of the first, inservice and extraordinary inspections, and the documentation of the equipment containing the technical information (hereinafter referred to as: passport).

(6) The atomic energy oversight organization shall designate among the planned inspections of the operating pressure retaining equipment under its supervision those which are to be inspected by it and shall notify the licensee of this decision. The licensee, based on the notification, shall inform the authority on the inspection at least 15 days prior to the planned date of the inspection.

## **Section 85**

(1) Construction of new pressure retaining equipment in an operating storage or disposal facility shall be managed as a modification. The provisions for modification shall be applied to the pressure retaining equipment belonging under the supervision of the atomic energy oversight organization considering the requirements of this Subtitle.

(2) In the case of construction of pressure retaining equipment the method and scope of manufacturer inspection, inservice inspection programme and its cycle time shall be determined in the design phase taking into account safety classification. The inservice inspections and the cycle times shall be approved by the authority in the modification license.

(3) The atomic energy oversight organization is authorized to forbid the put in operation of the new pressure retaining equipment in a procedure launched ex officio, if

*a)* the fabrication and first inspection were not performed according to the design,

*b)* the first inspection had an unsuccessful result,

*c)* hazard is being or may be caused to the personnel, public or the environment due to an extraordinary event affecting the pressure retaining equipment, or

*d)* an authority inspection determined a deficiency, deviation endangering the personnel, public or the environment and its elimination has not taken place yet.

## **Section 86**

(1) After the first successful put in operation the regulatory supervision of new pressure retaining equipment shall be performed according to the rules for operating pressure retaining equipment.

(2) The atomic energy oversight organization is authorized to forbid the operation of pressure retaining equipment in a procedure launched *ex officio*, if

*a)* an authority inspection determined a deficiency, deviation endangering the personnel, public or the environment and its elimination has not taken place yet.

*b)* it does not have a valid and successful inservice inspection,

*c)* the modification, repair is not in agreement with the design or the respective technical documentation, or

*d)* hazard is being or may be caused to the personnel, public or the environment due to an extraordinary event affecting the pressure retaining equipment.

## **Section 87**

(1) Prior to expiry of inservice inspection validity of the pressure retaining equipment, in a technically justified case, the licensee may apply for the modification of the time of inspection at the atomic energy oversight organization, if the inspections and examinations carried out demonstrate that:

*a)* the technical condition of the pressure retaining equipment is appropriate to safely operate it until the new time of the examination, or

*b)* a possible failure of the equipment does not jeopardize the personnel, public or the environment.

(2) In a technically justified case the licensee may request from the atomic energy oversight organization to substitute the prescribed inspection method of the pressure retaining equipment with another one if it complies with the same safety requirements.

(3) Provisions for modification shall be applied to the procedures according to Subsection (1) and (2).

## **CHAPTER VIII**

## *LICENSING OF MODIFICATIONS*

### **Section 88**

Provisions for modification shall be applied from the date when operation license of the storage or disposal facility becomes effective. Modifications planned in the construction phase shall be described in the documentation substantiating the operation license.

### **Section 89**

(1) Authority supervision of modifications is accomplished by instruments graded according to safety importance, and it shall extend over all technical, documentation and organisational modifications, furthermore to temporary modifications.

(2) The content and formal requirements for modifications subject to regulatory licensing obligation are independent of the design lifetime of the system, structure or component concerned by the modification.

(3) The authority shall not be influenced by the scheduled implementation date of the modification when determining the review method applicable to the substantiating documentation.

### **Section 90**

(1) Graded regulatory supervision takes place based on the categorization of modifications. Categorization of modifications shall be performed by the licensee according to Paragraph 2.3.13.0800 of Annex 2.

(2) Preliminary safety assessment by the licensee shall substantiate the categorization of a planned modification. The preliminary safety assessment shall be reviewed by the atomic energy oversight organization and it shall conclude if the categorization of the modification complies with the requirements. If the modification category determined by the licensee is not accepted by the atomic energy oversight organization, then the licensee shall be informed of the appropriate category.

### **Section 91**

(1) A license of the atomic energy oversight organization shall be required for the implementation of any modification that falls in Category 1 or 2 according to Paragraph 2.3.3.13.0800 of Annex 2. In the modification license the atomic energy oversight organization approves the categorization of the modification.

(2) Issuance of the license shall be requested by submitting the documentation substantiating the modification; a comprehensive safety assessment and the implementation schedule of the modification shall be attached thereto. In the documentation substantiating the modification the following shall be described:

- a) scope of the modification and justification of its necessity,
- b) plan of implementation of the modification,
- c) a demonstration that after the implementation of modification the safety functions determined for the operation and closure of the storage or disposal facility, as well as for the phase following its closure are fulfilled, and
- d) the list of documentation affected by the modification and a draft of the documentations needed to be modified.

(3) The regulatory license issued on Category 1 and 2 modifications, and the acceptance of categorization of Category 3 modifications authorizes the licensee to implement the modification. The validity period of the license shall be determined by the atomic energy oversight organization taking account of the attributes of implementation of the modification.

## **Section 92**

(1) Unless the atomic energy oversight organization does not order otherwise in the modification license, the licensee shall send the modification evaluation report to the atomic energy oversight organization for information within 30 days of the completion of the modification. In the case of Category 1 modifications it shall submit the application for modification of operation license of the storage or disposal facility.

(2) In the modification evaluation report the licensee shall confirm that it implemented the modification as specified in the license and shall evaluate the implementation process of the modification. The licensee, taking into account the experiences shall modify the management system and the other internal regulations in the necessary extent.

(3) If during the preparation for or implementation of a Category 1 or 2 modification the documentation substantiating the modification changes, then the licensee shall promptly inform the atomic energy oversight organization

thereon and shall initiate the modification of the former license or the issuance of a new one.

(4) If the documentation of a Category 3 modification changes, then the licensee shall review the category of the modification and proceed according to Section 90 if appropriate.

### **Section 93**

During the modification process the atomic energy oversight organization is authorized to conduct inspections taking account of the safety importance of the modification. The licensee is obliged to provide the necessary information for the implementation of the inspections. The atomic energy oversight organization, based on the inspection experiences may require analyses, assessments and authorized to oblige the licensee in a resolution to modify or supplement documents, modify or improve an activity, to perform additional or forbid activities.

#### *CHAPTER IX*

#### *REGULAR REPORTING OBLIGATION OF THE LICENSEE*

### **26. General provisions**

#### **Section 94**

(1) The licensee shall prepare regular reports regarding safety related activities in each lifecycle phase of the storage or disposal facility and shall submit these reports to the atomic energy oversight organization.

(2) The atomic energy oversight organization shall utilise the submitted reports in its supervisory activity which includes the tracking and assessment of the condition of the storage or disposal facility, its systems, structures and components, the safety level of the storage or disposal facility and the activity of the licensee.

#### **Section 95**

(1) The atomic energy oversight organization shall determine the scope of reporting obligation according to the risk represented by the operation of the storage or disposal facility and considering the technical features of the storage or disposal facility.

(2) The atomic energy oversight organization, in addition to the reports determined in this decree, is authorized to oblige the licensees in a decision made in its scope of competence to submit further reports.

## **Section 96**

A copy of the report submitted to an authority also participating in the regulatory supervision of the storage or disposal facility shall be sent to the atomic energy oversight organization simultaneously with the submission to the other authority.

## **Section 97**

The licensee shall organize the data and information appearing in its reports and shall evaluate them with adequate methods, and determine corrective actions in areas where deficiencies are revealed by the evaluation.

### **27. Safety analysis report**

## **Section 98**

(1) The licensee shall prepare a safety analysis report about the operation and safety of the storage or disposal facility and the safety of the post-closure phase of the facility and shall submit it to the atomic energy oversight organization in the cases determined by this decree.

(2) The licensee shall attach an updated safety analysis report to the facility level license applications pertaining to the given life cycle phase to substantiate the licensing procedure.

(3) In the safety analysis report the safety assessment shall be described to demonstrate the compliance with the safety requirements. As a part of it the technical feasibility of design, construction, operation, decommissioning, closure and post-closure activities shall also be demonstrated.

(4) The atomic energy oversight organization performs the safety assessment of the storage or disposal facility based on its licensing experiences, inspection results and the available other information, as well as on the safety analysis report of the licensee.

## **Section 99**

(1) The safety analysis report, except for the cases determined in Subsection (2) of Section 98, shall be updated within three months:

- a) if the legal requirements were changed,
- b) if the amount or activity of waste taken into account in the analyses was exceeded,
- c) if new results previously not taken into account were revealed in the monitoring and oversight programmes, or in the safety analyses, and
- d) based on the results of the periodic safety review.

(2) The updated safety analysis report shall be submitted to the atomic energy oversight organization.

(3) The effects of modifications affecting the storage or disposal facility shall be evaluated based on the contents of the safety analysis report.

(4) The atomic energy oversight organization, based on any inspection, report or event or in any other justified case is authorized to oblige the licensee in a resolution to prepare a safety assessment.

(5) The atomic energy oversight organization is authorized to oblige the licensee to provide information on any safety related matter.

## **28. Annual report**

### **Section 100**

(1) The licensee shall annually submit an Annual Report, for the first case by the 31st of March of the year following the date when the site survey framework programme license comes into force, and then by March 31 every year to the atomic energy oversight organization. The obligation to prepare the annual report and submit it to the atomic energy oversight organization shall exist for the period lasting until the coming into force of the license for passive institutional control.

(2) The annual report shall describe the following until granting the operation license for the storage or disposal facility:

- a) evaluation results related to the compliance and enforcement of the regularly reviewed safety policy,
- b) design of the storage or disposal facility and evaluation of the actual schedule of its implementation,
- c) information on the licensee's organization, financial, material and personal resources,
- d) activity of the contractors important to safety and evaluation of safety aspects,

e) justification and compliance of the most important modifications of the design, and

f) schedules of the coming years.

(3) In the period following granting the operation license of the storage or disposal facility the report shall describe:

a) summary of activities related to the storage or disposal facility,

b) safety related activities and the evolution of factors influencing maintenance of safety,

c) implementation of the most important modifications,

d) events occurred during the subject year that affects safety of the storage or disposal facility, implementation of corrective actions, compliance with the requirements of the atomic energy oversight organization,

e) evolution of safety indicators, and

f) licensee's own internal supervision activities.

## **Section 101**

The atomic energy oversight organization, based on the annual report, shall assess the licensee's activity. The evaluation shall address the compliance with aspects of smooth operation, operation with low risk and safety conscious operation.

### *CHAPTER X. FEJEZET*

#### *PERIODIC SAFETY REVIEW*

## **Section 102**

(1) The atomic energy oversight organization shall conduct a periodic safety review of the storage or disposal facility every 10 years. The objective of the periodic safety review is to review the safety requirements and compliance with safety requirements for the storage or disposal facility. The periodic safety review shall be conducted in the period lasting until the date when the resolution related to the passive institutional control of the storage or disposal facility comes into force.

(2) The atomic energy oversight organization shall conclude the periodic safety review by a resolution, which shall be issued in the case of the first review in the 10<sup>th</sup> year after the date when the operation license comes into force, then in the



10<sup>th</sup> year after the date when the resolution concluding the previous review comes into effect.

### **Section 103**

(1) The licensee shall be obliged to perform an own periodic safety review for the storage or disposal facility before the deadline determined for performance of the review of the atomic energy oversight organization

(2) During the periodic safety review the licensee shall analyze the agreement of the storage or disposal facility with its licensing basis, and all the deviations identified shall be eliminated or shall request an approval for its existence from the atomic energy oversight organization.

(3) The safety review shall cover:

*a)* identification of deviations from the safety regulations related to the storage and disposal facilities and from the international good practice, evaluation of safety significance of the deviations,

*b)* identification and evaluation in the condition of the storage or disposal facility and its systems, structures and components, and modifications affecting the systems, procedures and the licensee's organization, taking into account the operating experience of the storage or disposal facility, including the maintenance of technical conditions of systems, deviations from normal condition and the respective response actions,

*c)* radiation protection characteristics of the storage or disposal facility, including the occupational and public doses, and the results of environmental monitoring,

*d)* criteria system for waste acceptance,

*e)* experiences related to the factors influencing safety in the post-closure period, analyzing the time behaviour of the storage or disposal system,

*f)* assumptions in the safety analyses reports to demonstrate that they are still valid,

*g)* identification and evaluation of new knowledge and facts related to the storage or disposal system concluding from the scientific results and technical development, and from monitoring of parameters,

*h)* identification and evaluation of difference of previous and new results if the analyses are repeated with new analysis methods or tools.

(4) The licensee shall specify and justify the scope of the safety review based on Subsection (3). The scope of the review shall be as broad as reasonably possible

by considering the safety aspects of the storage or disposal facility required for the safe application of atomic energy.

(5) All area belonging to the scope of the safety review according to Subsection (3) shall be examined and the identified deviations shall be compared with the licensing requirements, valid safety regulations and practice.

## **Section 104**

(1) A comprehensive safety assessment of the storage or disposal facility shall be performed and based on the results of the periodic safety review it shall be demonstrated and justified that the storage or disposal facility is sufficiently safe.

(2) Based on the results of the review the licensee shall be obliged to develop and implement an action programme to eliminate all the deficiencies revealed.

(3) The licensee shall submit the results of the periodic safety review, the report containing the factors influencing the safety of the storage or disposal facility and the programme of necessary actions to the atomic energy oversight organization at latest one year before the date determined in Subsection (2) of Section 102 for the termination of the review.

(4) The atomic energy oversight organization shall conclude its resolution based on the licensee' periodic safety review report and the conclusions of the regulatory review of the periodic safety review report. In the resolution the atomic energy oversight organization is authorized to modify the operation license or the license for active institutional control, if it determines changes in the circumstances substantiating them or increase of safety risks. If the increase of safety risks is of unacceptable extent, then the atomic energy oversight organization shall determine new conditions in its resolution for further pursuing the activity by setting deadlines and warning the licensee of the legal consequences and shall be authorized to require new obligations for the licensee.

### *CHAPTER XI*

### *INVESTIGATION OF EVENT REPORTS*

## **Section 105**

(1) In the period before the operation license of the storage or disposal facility comes into force, the important failures and non-compliances detected during design, siting and construction, including the deviations revealed in the

management system causing potential non-compliances shall be reported to the atomic energy oversight organization within 8 days after their detection.

(2) The licensee shall promptly investigate the cause of the failure or non-compliance and a report shall be prepared about the result of which. The investigation report shall be submitted to the atomic energy oversight organization within 60 days after the detection of the deviation.

### **Section 106**

(1) Subsequently to the coming into force of the operation license of the storage or disposal facility the licensee shall submit an event report to the atomic energy oversight organization about any reportable event occurred in the storage or disposal facility.

(2) The reportable events shall be determined by the atomic energy oversight organization in the license related to the storage or disposal facility according to the given life cycle phase based on the proposal of the licensee. The atomic energy oversight organization shall be authorized to modify the scope of reportable events in the resolution terminating the periodic safety review or in the frame of a procedure launched ex officio to consider the changes in the legal requirements or change in the licensee's activities and to ensure the safety aspects.

### **Section 107**

(1) The licensee shall perform the event reporting obligation as follows:

*a)* in the case of an event that does not require nuclear emergency response

*aa)* an event of immediate reporting obligation shall be reported via electronic voice connection (phone or other) within 2 hours after the occurrence or detection,

*ab)* an event of non-immediate reporting obligation shall be reported via phone within 14 hours after the occurrence or detection, and

*ac)* every event shall be reported in writing within 16 hours after the occurrence to the atomic energy oversight organization,

*b)* the INES classification of all the events shall be sent to the atomic energy oversight organization within 16 hours.

(2) The report according to Paragraph *d)* of Subsection (1) shall contain a short description of the event, description of the state evolved, the actions taken or

planned to take, and the description of expected effects, and the preliminary safety assessment of the event.

### **Section 108**

(1) The atomic energy oversight organization based on the proposal of the licensee shall determine the INES classification of the event.

(2) The atomic energy oversight organization shall inform the International Atomic Energy Agency if the INES classification of the event reaches or exceeds Class 1 within 24 hours after the occurrence or detection of the event. The licensee shall be obliged to send the event classification form containing the data necessary for information, filled in English to the atomic energy oversight organization within 20 hours following the event.

(3) The licensee, in a manner agreed with atomic energy oversight organization, shall inform the public on any event reaching or exceeding Class 1 in the INES scale within 24 hours, while in the case of below scale events a regular public information shall be performed. The licensee shall send the release containing the information about the INES classification of Class 1 or higher events to the atomic energy oversight organization within 20 hours after the occurrence or detection of the event.

### **Section 109**

(1) The licensee shall commence the investigation activity when reporting the reportable event to the atomic energy oversight organization. During the investigation the cause and consequences of the event shall be identified. Based on the results of the investigation the licensee shall take actions to prevent recurrence of the event and to prevent the occurrence of similar events.

(2) The licensee shall submit a report about the investigation conducted pursuant to Subsection (1) and its results to the atomic energy oversight organization within 45 days after the occurrence or detection of the event. If it is needed for the investigation or assessment necessary for preparation of the event report the atomic energy oversight organization may extend the deadline for the submission of the report if it is so requested by the licensee.

### **Section 110**

(1) The atomic energy oversight organization shall be authorized to join the event investigation activity of the licensee according to Subsection (2) or to conduct an independent investigation. The atomic energy oversight organization shall be authorized to use the contribution of an independent expert in addition to the institute determined in Subsection (3) of Section 17 of the Atomic Act.

(2) The atomic energy oversight organization shall examine the reported event when it is reported based on the available information and shall:

- a) analyze and assess based on the licensee's event investigation report,
- b) analyze and assess based on the information continuously provided by the licensee, and conduct an on-scene investigation if needed, or
- c) investigate and assess on the scene independently of the licensee's investigation.

(3) During the on-scene investigation the atomic energy oversight organization shall be authorized to request information from the concerned persons, from the licensee's employees, hold an on-scene investigation, and order for reconstruction of the event.

(4) The atomic energy oversight organization due to the event occurred at the licensee, considering the conclusions of the report or investigation according to Subsection (2), events occurred in other storage or disposal facilities, and the operating experience, in order to ensure the safety of the storage or disposal facility, protection of health, environment or property, shall be authorized to order for taking actions.

## **Section 111**

(1) In order to facilitate the international nuclear regulatory information exchange, the atomic energy oversight organization prepares reports about technical-safety related events and sends these reports to the organizations of other countries performing similar regulatory activities. The licensee shall cooperate with the atomic energy oversight organization in the development of such reports.

(2) The atomic energy oversight organization in order to utilize international experience shall share with the licensee the information received from international organizations

### *CHAPTER XII*

#### *PREPARATION FOR OCCURRENCE OF INCIDENTS AND ACCIDENTS, RESPONSE ACTIVITIES*

## **Section 112**

(1) The licensee shall develop an emergency preparedness and response plan and shall establish an emergency response organization.

(2) The licensee shall request the approval of the emergency preparedness and response plan containing the description of the emergency response organization together with submission of the application for the construction license. The atomic energy oversight organization shall approve the plan together with granting the construction license for the storage or disposal facility. Any change of the emergency preparedness and response plan shall be considered as a modification, the atomic energy oversight organization shall approve it in the frame of a modification licensing process.

## **Section 113**

(1) Emergency response activity related to the storage or disposal facility shall be planned in a manner to cover all activities in the responsibility of the licensee meant to respond to accidents identified in the safety analyses entailing radioactive release or radiation exposure and mitigate the consequences thereof.

(2) The leader of the emergency response organization is the manager of the storage or disposal facility or an employee fully entitled by the manager to take actions.

(3) If an emergency occurred, the leader of the emergency response organization shall take care of implementing the emergency response actions determined in the law, and shall ensure continuous information to the emergency response organization of the atomic energy oversight organization in accordance with the emergency preparedness and response plan.

## **Section 114**

(1) The licensee after the occurrence of an emergency situation associated with the use of atomic energy or occurrence of a natural or industrial disaster shall determine the emergency class promptly but within 15 minutes after detection. The licensee within 30 minutes after the detection of the emergency situation shall alert the concerned organizations of the national nuclear emergency response system in line with the manner and content determined in the emergency preparedness and response plan.

(2) The licensee within 60 minutes after the detection of the emergency shall send written information in line with the emergency preparedness and response plan about the known circumstances and consequences of the event.

(3) After the performance of the alerting tasks, the licensee shall regularly inform the designated organization of the national nuclear emergency response system. The condition and technology reports shall be forwarded as the emergency situation evolves, but at least every 1.5-2 hours, or any other method shall be used to provide information, which equivalently ensures the information for an independent assessment of the emergency conditions.

### *CHAPTER XIII*

### *CLOSING PROVISIONS*

#### **Section 115**

This decree shall enter into force at 11 PM on the day when it is promulgated.

#### **Section 116**

This decree, taking account of Section 117, shall apply to the procedures launched or repeated after its coming into force.

#### **Section 117**

(1) The licensee of the storage or disposal facilities which operate when this decree comes into force shall submit a report to the atomic energy oversight organization until March 1, 2015.

(2) The licensee shall demonstrate based on the review performed that which of the requirements relevant for it and for the storage or disposal facility in the subject of the report are not met partly or totally.

(3) The licensee shall propose in the report the deadlines of meeting the requirements that are partly or totally not met, and shall submit an application to atomic energy oversight organization for exemption until the proposed deadlines necessary to comply with the given requirements. The exemption shall be granted for a determined period, and the deadlines shall be adjusted to the cycle period of the periodic safety reviews of the given storage or disposal facility.

(4) The atomic energy oversight organization, by meeting the deadline for administration determined in Paragraph *b*) of Subsection (1) of Section 23 shall

decide about the exemption and its licensed deadline according to the following aspects:

- a)* extent of risk increase due to deviation from the requirements, and
- b)* scope, cost and implementation time of actions needed to comply with the requirement.

### **Section 118**

The atomic energy oversight organization shall conclude the resolution of the first periodic safety review

- a)* by December 15, 2017 in relation to the Radioactive Waste Treatment and Disposal Facility (Püspökszilágy), and
- b)* by December 15, 2022 in relation to the National Radioactive Waste Repository (Bátaapáti).

### **Section 119**

The activities of the licensee of the geological survey license meant to justify the geological suitability of the storage or disposal facility site granted by the mining authority based on the Ministerial Decree 33/2013. (VI.23.) NFM of the minister of national development on the geological and mining requirements, issued before the coming into force of this decree for the siting and design of the radioactive waste disposal facility and the radioactive waste interim storage facility, shall be proceeded according to the legally binding license. The final report of the survey shall be subject to the prescriptions of

- a)* this decree and the legally binding license for the preparation,
- b)* this decree for licensing.

### **Section 120**

This decree is meant to provide compliance with the COUNCIL DIRECTIVE 2011/70/EURATOM of 19 July 2011 establishing a Community framework for the responsible and safe management of spent fuel and radioactive waste.