

List

00 - Nuclear Regulatory Framework for INB ITER

In application of the article 14 of the ITER agreement, concerning Public Health, Safety, Licensing and environmental Protection, the ITER Organization shall observe applicable national laws of the Host State in the field of public and occupational health and safety, nuclear safety, radiation protection, licensing, nuclear substances, environmental protection and protection against acts of malevolence. In application of the Headquarters agreement the IO complies with such regulation. Most of the dispositions of these laws have been abrogated and codified in several codes as the environmental code, the public health code and others. Consequently the references listed in this document are mandatory regulation for ITER design, construction, operation and decommissioning, ITER being a Nuclear Operator of a Basic Nuclear Installation.

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Change Log			
00 - Nuclear Regulatory Framework for INB ITER (2WBB8P)			
Version	Latest Status	Issue Date	Description of Change
v0.0	In Work	11 Sep 2009	
v1.0	In Work	15 Dec 2009	--> in WORK version
v2.0	Signed	19 Jan 2010	Update
v3.0	Approved	16 Nov 2011	list of regulation updated
v3.1	Disapproved	20 Feb 2012	Order 7 February 2012 added
v3.2	Approved	29 Feb 2012	Lina's comments one order 7th February 2012 added
v3.3	Approved	12 Nov 2012	Decree 9 November 2012 added
v3.4	Approved	19 Apr 2013	change: RFS I.2.e is superseded by ASN guide #13
v3.5	Signed	05 Jul 2013	entry in force of order dated 7 February 2012
v3.6	Approved	08 Jul 2013	some laws are codified in Environmental Code
v3.7	Approved	07 Feb 2014	new regulation added
v3.8	Approved	24 Jan 2017	<p>1-Creation of a new table for ITER specific regulation linked with the "Authorization of Creation"</p> <p>2-New regulations added by section General</p> <p>Ordonnance n° 2016-128 of 10 February 2016</p> <p>Linked to ITER specific regulation</p> <p>ASN decision 2014-DRC-028511 of 10 July 2014</p> <p>Linked to INB order</p> <p>ASN Decision No. 2014-DC-0417 of 28 January 2014</p> <p>decision 2014-DC-0420 of 13 February 2014</p> <p>ASN decision 2015-DC-0529 of 22 October 2015</p> <p>Linked to Radiological, chemical and electromagnetic protection</p> <p>Decision n°2015-DC-0521 of 30 November 2015</p> <p>Linked to EPSN</p> <p>COUNCIL DIRECTIVE 2014/87/EURATOM of 8 July 2014</p> <p>Decree n° 2015-799 of 1 July 2015</p> <p>Order of 30 December 2015</p> <p>Decree n° 2016-1925 of 28 December 2016</p> <p>Linked to ICPE</p> <p>Order of 2 May 2013</p> <p>Linked to waste</p> <p>Decision n° 2015-DC-0508 of 21st April 2015</p> <p>ASN guides</p> <p>Guide de l'ASN n°23</p> <p>Guide de l'ASN n°21</p> <p>ASN Guide n°19</p> <p>Guide de l'ASN n°17</p> <p>Guide de l'ASN n°15</p> <p>ASN Draft guide n°14</p> <p>ASN guide n°13</p> <p>ASN Guide n°12</p> <p>Guide n°9</p> <p>ASN Guide n°8</p> <p>ASN Guide 7-01</p> <p>Guide de l'ASN n°6</p> <p>ASN Guide 5-01</p> <p>Guide de l'ASN n°3</p> <p>ASN Guide 2-01</p> <p>ASN Note SD3</p>

			<p>Document SD3-D-02 issue 1 dated 4/9/2001</p> <p>3-New IDM links added: Fundamental safety rule RFS II.2 ITER_D_SKLFM5 SIN rule A-4212/83 ITER_D_SKLSRE Fundamental safety rule RFS II.2 ITER_D_SKLFM5 SIN rule A-4212/83 ITER_D_SKLSRE</p> <p>4-Regulation obsoleted (deleted) Order dated 26 April 2011</p>
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1 Purpose of the document

This document lists the nuclear regulatory framework to be applied to ITER.

The documents listed here may be accessed by internet on IDM and SQS portal and on the following useful links:

European directives :

<http://eur-lex.europa.eu/>

French legal portal :

<http://www.legifrance.gouv.fr/>

Site of Autorite de Surete Nucleaire, ASN (Regulator) for Basic Safety and Nuclear Licencing Regulation :

<http://www.asn.fr/>

text in English available on

<http://www.asn.fr/french-nuclear-safety-authority/references>

Regulation of hazardous activities

<http://www.ineris.fr/aida/>

2 Scope of the document

In application of the article 14 of the ITER agreement, concerning Public Health, Safety, Licensing and environmental Protection, the ITER Organization shall observe applicable national laws of the Host State in the field of public and occupational health and safety, nuclear safety, radiation protection, licensing, nuclear substances, environmental protection and protection against acts of malevolence. Most of the dispositions of these laws have been abrogated and codified in several codes as the environmental code, the public health code and others.

In application of the Headquarters agreement the IO complies with such regulation. Consequently the references listed below are mandatory regulation for ITER design, construction, operation and decommissioning, ITER being a Nuclear Operator of a Basic Nuclear Installation.

3 Definitions, Abbreviations and Acronyms

ITER	International Thermonuclear Experimental Reactor
IDM	ITER Document. Management
SQS	Safety Quality and Security
INB	Acronym in French for Installation nucléaire de Base (<i>Basic nuclear installation</i>)
ASN	Acronym in French for Autorité de sûreté nucléaire (<i>French nuclear safety authority</i>)
AIEA	International Atomic Energy Agency (IAEA)
SIN	Acronym in French for Service des installations nucléaires (<i>Nuclear Facilities Department</i>)
DGSNR	Acronym in French for Direction Générale de la Sûreté Nucléaire et de la Radioprotection (<i>General Directorate for Nuclear Safety and Radiation Protection</i>)
DGT	Acronym in French for Direction générale du travail (<i>General Directorate of Labour</i>)
CAB	Cabinet
TDM	Acronym in French for Transport de matières dangereuses (<i>Transport of hazardous materials</i>)
HFD	Acronym in French for Haut fonctionnaire de défense (<i>Senior defence official</i>)
PCMN	Acronym in French for Protection et contrôle des matières nucléaires (<i>Nuclear material protection and control</i>)
PCMNS	Acronym in French for Protection et contrôle des matières nucléaires secrètes (<i>Secret nuclear material protection and control</i>)

Safety Important Component: Systems, Structures, and Components defined in the Regulatory Files in the list provided in RPrS: Detailed list of SIC (3E7K3K)

4 References

Preliminary safety report (<https://user.iter.org/?uid=35T7KK>)

5 Distribution and Retention

This document shall be diffused to all ITER staff, and be included as an annex to the PA. Each responsible officer for the design, construction, operation and dismantling of a system or subsystem, each contractor, has to check the applicable documents in his area of work. This document will evolve during ITER lifecycle and will be periodically updated

6 Revision of this document

Revision of this document will be done in a regular basis fixed to once per year, in order to gather new regulation to be applied. The regulation introduced in a new version will appear in **green**.

7 Structure of the Nuclear regulatory framework in this document.


The Nuclear regulatory framework for ITER included IAEA safety standards and requirements, applicable European directives implemented in the French Nuclear regulations as decrees and French regulation organised in Acts, Decrees, Ministerial Orders, circulars, and guidelines. Guidelines are not mandatory rules, the ones listed inhere are those that IO has chosen to be applied to ITER.

The main items for the Nuclear regulatory framework for ITER are as follows:

- basic nuclear facilities,
- safety reference framework,
- quality,
- radiological protection,
- wastes,
- nuclear materials management, protection and control,
- transport,
- pressurised vessels,
- incidents and accidents,
- Environmental protection

This document gives for the items listed above the corresponding Acts, Decrees, Orders to be applied, listed in the chronological order of publication. This appears in the first column of the tables below. In the second column the title or subject of application is given. In the third column, IDM number and/or additional comments are provided. New updated texts will appear at the end of each section.

These documents can be found on IDM organised as follow in the folder 29H8JC.
This folder contents the regulation listed herein and other related documents

<input type="checkbox"/>	 00 - Nuclear Regulatory Framework for INB ITER (ITER_D_2WBB8P v3.7)
<input type="checkbox"/>	 Authorization of Creation
<input type="checkbox"/>	 CODES and STANDARDS
<input type="checkbox"/>	 Conventions
<input type="checkbox"/>	 Documentation on consultation of public
<input type="checkbox"/>	 EU Directives
<input type="checkbox"/>	 Host Country
<input type="checkbox"/>	 IAEA
<input type="checkbox"/>	 Regulations
<input type="checkbox"/>	 Subjectwise Regulations

Codes and Standards

For each concrete system C&S have to be given by the responsible of the systems showing compliance with the safety requirements and safety demonstration.

The C&S are not available on IDM as far as they belong to the industry and have to be bought by the nuclear operator, by the designer or the manufacturer of any system or equipment.

8 Nuclear regulatory framework

1. Basic Nuclear Facilities

“Basic nuclear Facilities” is an English translation for the French “Installations Nucléaires de Base - INB”.

ITER specific regulation linked with the “Authorization of Creation”

References	Object	IDM link
Decree 9 November 2012	Decree no 2012-1248 dated 9 November 2012 authorizing ITER Organization to create a basic nuclear installation named « ITER » in Saint-Paul-lez-Durance (Bouches-du-Rhône)	ITER_D_CZK7M5
ASN Decision 2013-DC-0379 of 12 November 2013	establishing the prescriptions applicable to ITER Organization for the design and construction of the licensed nuclear facility INB No. 174 called ITER	ITER_D_TYNPAZ
ASN decision 2014-DRC-028511 of 10 July 2014	concerning the authorization to pour the concrete of the tokamak basemat	ITER_D_PP55W6
ASN decision 2015-DC-0529 of 22 October 2015	amending the prescriptions applicable to ITER Organization for the design and construction of the licensed nuclear facility INB No. 174	ITER_D_SHJWRS

General applicable regulation

References	Object	IDM link
Act no. 2006-686 of 13 June 2006 <i>Codified in the environmental code</i>	on transparency and security in the nuclear field (TSN law)	ITER_D_2ZQJWV

References	Object	IDM link
Decree no. 2007-830 of 11 May 2007	on the nomenclature of INB	ITER_D_27AHYZ
Decree no. 2007-1557 of 2 November 2007 (procedural decrees)	concerning licensed nuclear installations and nuclear safety regulations for the transport of radioactive materials	ITER_D_2EXE3W Application Decree of TSN Law
Council Directive 2009/71/Euratom of 25 June 2009	establishing a Community framework for the safety of nuclear facilities	ITER_D_2YJV84
Order 7 February 2012*	Establishing the general technical rules related to the Basic Nuclear Facilities	ITER_D_7M2YKF
ASN Decision No. 2013-DC-0360 of 16 July 2013	on the control of pollution and the impact on health and the environment of basic nuclear facilities	ITER_D_KXNN4W
ASN Decision No. 2014-DC-0417 of 28 January 2014	on the applicable rules to INB for the management of risks related to fire	ITER_D_TZYR3J
ASN decision 2014-DC-0420 of 13 February 2014	concerning material modifications of INB	ITER_D_TX5MGP
Ordonnance n° 2016-128 of 10 February 2016	containing various provisions in the nuclear field	ITER_D_SMXY9E

*The order 7th February 2012 came into force on **1 July 2013** except for 2 dispositions that came into force on 1 July 2012 (Article 4.3.2 and Article 4.4.3 II).

In addition, for existing INB (which is not the case of the ITER INB), some dispositions shall come into force later.

2. Safety reference framework

References	Object	IDM link
fundamental safety rule RFS I.1.a	concerning risks associated with aircraft crashes	ITER_D_35PYZT With input data from the Cadarache Centre's General Safety Presentation (PGSE)
fundamental safety rule RFS I.1.b	concerning risks associated with industrial environments and communication routes,	ITER_D_358JYN
fundamental safety rule RFS II.2	concerning the design and operation of ventilation systems in INB other than nuclear reactors	ITER_D_SKLFM5
fundamental safety rule RFS 2001-01	concerning seismic risk assessment for INB	ITER_D_2DUKSX
nuclear safety authority guide ASN/2/01 (formerly RFS V.2.g)	on how to take into account seismic risk	ITER_D_25EUYG
SIN rule A-4212/83	concerning meteorological measurement systems	ITER_D_SKLSRE
nuclear safety authority guide ASN/7/01	concerning fire	ITER_D_2ZT59M
ASN guide #13	Protection of basic nuclear installations against external flooding	ITER_D_G6PD4D
fundamental safety rule RFS I.3.c	concerning geological and geotechnical site studies, soil characterization and terrain behaviour studies	ITER_D_2F6KXS
fundamental safety rule RFS I.3.b	concerning seismic monitoring	ITER_D_34BD8T
Safety general presentation of Cadarache site (PGSE – V2) – December 2007	Documents from which data for external hazards parameters are taken for ITER site	Not on IDM

3. Radiological, chemical and electromagnetic protection

References	Object	IDM link
1990 Recommendations from the International Commission on Radiological Protection – ICRP publication 60.		
2007 Recommendations from the International Commission on Radiological Protection – ICRP Publication 103.		
Circular of 14th May 1985	on the prevention of occupational cancers (Official Journal of 6th June 1985), supplemented by Circular no.7 of 12th May 1986	
EU directive 90/641/Euratom of 4 December 1990	concerning the operational protection of workers at risk of exposure to ionizing radiation during their work in controlled areas	ITER_D_6QBJ9V
European directive 96/29/Euratom of 13 May 1996	defining the basic standards for health protection of public and workers against ionising radiation	ITER_D_27JEPK
Council recommendation of 12 July 1999/519 EC	on the limitation of public exposure to electromagnetic fields (0 Hz to 300 GHz)	ITER_D_6T9HWY
Decree no. 2001-97 of 1 February 2001 ('CMR' decree)	concerning the regulation of specific carcinogen regulations for the prevention of risks	ITER_D_6QC7J3 FR
Decree 2002-460 of 4 April 2002	concerning the general protection of the public against the hazards of ionising radiation (transposition of directive 96/29),	ITER_D_2WBADD

References	Object	IDM link
Decree no. 2002-775 of 3 May 2002	'Limit values for public exposure to electromagnetic fields emitted by equipment used in telecommunication networks or radioelectrical installations	IDM_D_6SGUBG FR
Decree 2003-295 of 31 March 2003	concerning interventions in radiological emergency situations or in case of long-term exposure, amending the public health code (transposition of directive 96/29),	ITER_D_2WCBSQ FR
Decree 2003-296 of 31 March 2003	concerning the protection of workers against the hazards of ionising radiation (transposition of directives 96/29 and 90/641),	ITER_D_27VEVV FR
Order of 1 September 2003	concerning calculation of doses received by people exposed to ionising radiation	ITER_D_35E4FJ
Order of 13 October 2003	concerning levels of intervention in radiological emergency situations	ITER_D_35L3PZ
Order of 30 June 2004 (modified by the Order of 9 February 2006)	Occupational exposure limits (establishing the list of occupational exposure limits)	ITER_D_6QSJL9 FR ITER_D_6SCL2A FR
Decree No. 2006-133 of 9 February 2006	Modifies art. R231-58 (M) of Labour code (fixing the binding occupational exposure limits for certain chemical agents in workplace air)	No text, just modification of art. R231-58 (M) of Labour code
Order of 26 October 2005	defining radiological protection control methods as per labour code article R. 231-84 and public health code article R. 1333-44	ITER_D_2LD7PV
Order of 15 May 2006	concerning the zoning and identification of monitored and controlled areas, specially regulated areas or prohibited areas (due to exposure to ionising radiation) and associated hygiene, safety and maintenance rules	ITER_D_2F8C2J

References	Object	IDM link
Decree 2007-1570 of 5 November 2007	amending the public health code	ITER_D_2FAMD_L FR
Decree 2007-1582 of 7 November 2007	amending the public health code	ITER_D_2FAMD_L FR
Directive 2008/46/CE of the European parliament and of the Council of 23 April 2008	on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (electromagnetic fields) (18 th individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC	ITER_D_6TCB4P
Decision n°2015-DC-0521 of 30 November 2015	on monitoring and recording modalities of radionuclides in the form of radioactive sources and products or devices containing them	ITER_D_TMQL2J
Public health Code, article R. 1333-75 and subseq		Legifrance.fr
Public health Code, article R. 1333-1 and subseq		Legifrance.fr
Labour code art. R. 4451-1 and subseq		Legifrance.fr
French Labour Code Art. L 4121-1 to 5	employer responsibilities	Legifrance.fr
Art. 4412-59 and following	applicable dispositions to a carcinogenic, mutagen and toxic for the fertility hazardous materials such beryllium	Legifrance.fr

For Beryllium and some other chemical risks, see appendix 1

4. Radioactive waste

References	Object	IDM link
Article 37 of the Euratom Treaty of 25 March 1957:	requires member states to "provide the Commission with such general data relating to any plan for the disposal of radioactive waste, as will make it possible to determine whether the implementation of such a plan is liable to result in the radioactive contamination of the water, soil or air space of another member state",	Not on IDM
Commission Recommendation 99/829/Euratom of 6 December 1999	regarding the application of article 37 of the Euratom Treaty,	ITER_D_356XM3
Law 2000-174 of 2 March 2000	authorising the approval of the common agreement on safe spent fuel and radioactive waste management	ITER_D_2ESRG3
note SD3-D-01 (rev. 1) of 4 September 2001:	Guidelines for the preparation of nuclear waste studies	ITER_D_3466ZD FR
note SD3-D-02 (rev. 1) of 4 September 2001:	Specifications for annual radwaste production in nuclear facilities	ITER_D_2W3WHF FR
Supplement to the waste study drafting guide, ASN (nuclear safety authority) waste study application monitoring procedures, Note SIN/FAR/SD3/no. 50489/01, 07/09/2001		
Commission Recommendation no. 2004/2/Euratom of 18 December 2003	on standardized information on radioactive airborne and liquid discharges into the environment from nuclear power reactors and reprocessing plants in normal operation	ITER_D_2NS3ZX

References	Object	IDM link
Note SD3-D-07 Revision 0 of 6 September 2005	relating to the procedures for changing the waste zoning of a basic nuclear installation	
Law 2006-739 of 28 June 2006 <i>Codified in the environmental code</i>	on the sustainable management of radioactive materials and waste	ITER_D_27SW8F
Decree No. 2013-1304 of 27 December 2013	enforcing Article L. 542-1-2 of the French environmental code and establishing the requirements of the National radioactive materials and waste management plan	ITER_D_N62Y3V
Decision n° 2015-DC-0508 of 21 st April 2015	on the study on waste management and the balance sheet of the waste generated in nuclear installations	ITER_D_TZYDWB

5. ICPE

References	Object	IDM link
Decree no. 77-1133 of 19 July 1976	for application of law no. 76-663 on classified environmental protection facilities (codified in Environmental Code, art. R. 511-9 and Annex, and R. 511-10 and subseq).	<u>Abrogated</u>
Decree no. 2006-1454 of 24 November 2006	amending the nomenclature of classified facilities (radioactive ICPE) applies to ITER.	ITER_D_2MNHDV
Order dated 26 April 2011	on the implementation of best techniques available under art R.512-8 of environmental code	<u>Superseded by the order of 2 May 2013</u>
Order of 2 May 2013	amending the Order dated 29 June 2004 on the operational assessment provided for in Article R. 512-45 of the Environmental Code	ITER_D_PJE2JF
Environmental code, art. L. 511-2 and subseq		Legifrance.fr

6. *Transport*

References	Object	IDM link
Order of 26 March 1982	concerning the protection and control of nuclear materials during transport, amended by the order of 12 June 1986 and the order of 20 September 1993,	ITER_D_35L68H FR
European Agreement concerning the International carriage of dangerous goods by road, ADR 2009, version applicable as of 1 January 2009		ITER_D_6UXTJ2
Order of 29 May 2009	concerning the road transport of dangerous goods (Order “TMD”).	ITER_D_359ZQH
Decree No. 2009-1120 of 17 September 2009	concerning the protection and transport of nuclear materials; their installation and transport	ITER_D_3U9SQ7

7. Pressurised equipment

References	Object	IDM link
Council directive 87/404/EEC of 25 June 1987	aims to harmonize the laws of the Member States relating to simple pressurized equipment	ITER_D_33WLC3
European Directive 97/23/EC of 29 May 1997	aims to harmonize and update the regulations of member states concerning pressurized equipment.	ITER_D_23SW9P
Order dated of 21 December 1999	concerning the classification and conformity assessment of pressurized equipment	ITER_D_28HYJG
Order dated of 15 March 2000	concerning the operation of pressurized equipment	ITER_D_2F265C
Circular BSEI No. 06-080 of 6 March 2006	concerning application of Order dated 15 March 2000.	ITER_D_35DMGK_FR
Order of 12 December 2005	concerning nuclear pressure equipment (ESPN)	ITER_D_2229CW
COUNCIL DIRECTIVE 2014/87/EURATOM of 8 July 2014 *	amending Directive 2009/71/Euratom establishing a Community framework for the nuclear safety of nuclear installations	ITER_D_Q4N77V
Decree n° 2015-799 of 1 July 2015 **	relatif aux produits et équipements à risques	ITER_D_SK3QKL
Order of 30 December 2015 ***	on nuclear pressure equipment	ITER_SMP384
Decree n° 2016-1925 of 28 December 2016	On the follow-up of in-service pressure equipment	ITER_UD77ER_FR

* Art. 13 (Fluid classification): Transposition deadline: 28th February 2015 and Date of application: 1st June 2015

Rest of 2014/68/EU: Transposition deadline: 18th July 2016 and Date of application: 19th July 2016

** Date of application: from 1/07/2015 to 19/07/2016 depending on the article

*** Date of application : Art. 13 (wording changes: 3rd January 20126 and all text: 19th July 2061

8. *Incident, accident*

References	Object	IDM link
Vienna Convention of 26 September 1986	on assistance in case of nuclear accident or radiological emergency	ITER_D_28H5S7
Vienna Convention of 26 September 1986	on the early notification of a nuclear accident,	ITER_D_28H5TP
Decree 88-1056 of 14 November 1988:	Protection of workers in facilities using electric currents	ITER_D_33QBB9 FR
Law 88-1252 of 30 December 1988		ITER_D_2M4E3W
Decree 89-360 of 2 June 1989		ITER_D_3CP9R3
Circular of 30 December 1991	concerning the correlation between the on-site operation plan and the emergency plans for classified facilities	ITER_D_438U4H
Vienna Convention of 20 September 1994	on nuclear safety	ITER_D_28H5RL
Law 95-865 of 2 August 1995		ITER_D_2DVSX3
Decree 96-972 of 8 November 1996.		ITER_D_33S2JA
Order of 30 November 2001	on the installation of an emergency warning device around an INB subject to a specific intervention plan	ITER_D_2W7USR FR
Order of 10 October 2000	defining the periodicity, purpose and scope of electrical facility inspections, the protection of workers and the content of inspection reports	ITER_D_6TY4K6 FR
decree 2002-1553 of 24 December 2002	concerning explosion prevention measures applicable in workplaces.	ITER_D_2MQ398

References	Object	IDM link
Order 26 February 2003	Related to safety installations	ITER_D_6U3N74_FR
Decree no. 2003-110 of 11th February 2003	amending and supplementing the Tables of occupational diseases appended to Book IV of the Social Security Code	No text, just modification of social security code
European Directive ATEX of 1 July 2003	Based on two European Directives (94/9/CE and 1999/92/CE	ITER_D_35N5W5
Law n° 2004-811 of 13 August 2004	on modernization of civil security	ITER_D_2E96C2
Decree 2005-1269 of 12 October 2005	putting into application Article 8 of the Law n° 2004-811 of 13 August 2004 on modernization of civil security,	ITER_D_2LQW9D
Decree no. 2005-1157 of 13 September 2005	on the ORSEC plan and for application of article 14 of law no. 2004-811 of 13 August 2004 on modernization of civil protection	ITER_D_2MEEQY
Decree no. 2005-1158 of 13 September 2005	on specific intervention plans concerning certain fixed installations or structures and for application of article 15 of law no. 2004-811 of 13 August 2004 on modernization of civil protection	ITER_D_2WYY37
Order of 5 January 2006	concerning information required to draw up a specific intervention plan, in application of article 4 of decree no. 2005-1158 of 13 September 2005,	ITER_D_2WYR3H
Decree 2007-1572 of 6 November 2007	about technical enquiries on incidents and accidents related to nuclear activities	ITER_D_358WQM
INRS toxicological data sheet no. 92 ("Beryllium and mineral compounds")		INRS website
NFC 17-100	Lightning protection of structures	ITER_D_6V9DST_FR
NFC 17-102	Lightning protection of structures and open areas against lightning using early streamer émission air terminals.	ITER_D_6V9P45_FR

References	Object	IDM link
NFS 62-200	related to fire fighting	AFNOR
Public Health Code, article L 1333-6		Legifrance.fr
General code of local and regional authorities: articles R. 1424-1 to R. 1424-55		Legifrance.fr
IRSN Guidelines for design of on-site emergency plan		
Order dated 27 November 2013	relating to contractors operating within institutions performing nuclear activities and temporary employment agencies concerned by these activities	ITER_D_N696DN

9. Codes, standards, guides and others

References	Object	IDM link
ITER Structural Design Code for Buildings (I-SDBC), Part 1: Design Criteria		ITER_D_283B24 Chapter I-5
RCC-MR 2007	Design and construction rules for mechanical components of nuclear installations	To be bought by the users to AFCEN (Association Française pour les règles de Conception, de construction et de surveillance en exploitation des matériels des Chaudières Electro Nucléaires)
IEC 60364 Standard	“Electrical Installations for Buildings”	
“Guide for a transposition from recommended ventilation configurations for aerosol in ISO 17873 standard to means adapted for tritium”, SL53-MEM-2006-0004 Rev. 01		ITER D 346JB7
IEC 60754 series of standards	Test on gases evolved during combustion of materials from cables	
IEC 61034	Measurement of smoke density of cables burning under defined conditions	
IEC 60332	Tests on electric and optical fibre cables under fire	
ISO 17873 – Nuclear Facilities –	Criteria for the design and operation of ventilation systems for nuclear installations other than nuclear reactors	Iso.org

References	Object	IDM link
ISO 17873:2004	Nuclear Facilities- Criteria for the Design and Operation of Ventilation Systems for Nuclear Installations Other Than Nuclear Reactors	Iso.org
IEC standard 62305 “Lightning protection		
IEC standard 60754	Test on Gases Evolved During Combustion of Materials from Cables	
Eurocode EN 60332 / NF C 32-070	Tests on electric and optical fibre cables under fire conditions	
Eurocode EN 1998-1 Eurocode 8	Part 1: General rules, seismic safety rules and procedures for buildings Calculation of structural seismic resistance	
Eurocode EN 1998-2 Eurocode 8	Part 2: Bridges	
Eurocode EN 1337-1	Part 1: General rules Structural support systems	
Eurocode EN 1337-3	Part 3: Elastomer bearing pads	
Eurocode EN 15129	Antiseismic devices	
Eurocode EN 1991 – 1.3	Snow loads	
Eurocode EN 1991 – 1.4	Wind actions	
Norm NFC 17-100		
Norm NFC 17-102		
Norm NF EN 62305		
AFPS 90, Recommendations section,	Chapter 22: Aseismic bearing pads	
IEC 61226	NPP-I&C Important for Safety – Classification of I&C Functions	

References	Object	IDM link
IEC 61508	Functional Safety of Electrical/Electronic/Programmable Electronic Related Systems	
IEC 62138, NPP-I&C, Important for Safety	– Software Aspects for Computer- Based Systems Performing Category B or C Functions	
IEC 61513, NPP-I&C	General Requirements for Systems	
CEA High Commissioner's note no. 44, dated 20th September 1981, amended 29th March 1982	Safety rules for handling beryllium and beryllium compounds	
CEA High Commissioner's note no. 86	Note regarding safety rules for handling beryllium and beryllium compounds	
ICNIRP Guidelines on limits of exposure to static magnetic fields, 2008		
Guide de l'ASN n°23	Établissement et modification du plan de zonage déchets des installations nucléaires de base	ITER_D_U27VXG
Guide de l'ASN n°21	Traitement des écarts de conformité à une exigence définie pour un élément important pour la protection (EIP)	ITER_D_U34URX
ASN Guide n°19	Application of the French Order dated 12/12/2005 on Nuclear Pressure	ITER_D_FXQ9NZ
Guide de l'ASN n°17	Contenu des plans de gestion des incidents et accidents de transport de substances radioactives	ITER_D_SMP2J3
Guide de l'ASN n°15	Maîtrise des activités au voisinage des installations nucléaires de base	ITER_D_T8JU65
ASN Draft guide n°14	Full clean-up methodologies acceptable in BNI	ITER_D_3V8EJ7

References	Object	IDM link
ASN guide n°13	Protection of basic nuclear installations against external flooding	ITER D HPZGW8
ASN Guide n°12	relating to the declaration and coding terms of criteria relating to significant events involving safety, radiation protection or the environment applicable to basic nuclear installations and the transportation of radioactive material	ITER D 45W8DM
Guide n°9	Déterminer le périmètre d'une INB	ITER D U64HFR
ASN Guide n°8	Conformity Assessment of Nuclear Pressure Equipment	ITER D DU9A7L
ASN Guide 7-01	for Implementation of Order of 31 December 1999, Topic: Fire Measures	ITER D 2ZT59M
Guide de l'ASN n°6	Mise à l'arrêt définitif, démantèlement et déclassement des installations nucléaires en France	ITER D 3PDSTX
ASN Guide 5-01	on Acceptance of inspection bodies for the nuclear pressure equipment	ITER D 2ESM29
Guide de l'ASN n°3	Recommandation pour la rédaction des rapports annuels d'information du public relatifs aux installations nucléaires de base	ITER D QQU2XG
ASN Guide 2-01	Taking seismic risk into consideration for nuclear facility civil work design EN	ITER D 25EUYG
ASN Note SD3	procedures for changing the waste zoning of a basic nuclear installation	ITER D 6VHEU2
Document SD3-D-02 issue 1 dated 4/9/2001	Specifications for annual waste analyses for nuclear facilities	ITER D 2W3WHF

10.Environmental protection

References	Object	IDM link
The Council Directive 85/337/EEC of 27 June 1985	on the assessment of the effects of certain public and private projects on the environment applies to ITER.	ITER_D_357J39
Directive 2003/4/EC of the European Parliament of 28 January 2003	about public access to environmental information and repealing Council Directive 90/313/EEC,	ITER_D_34JK3V
Decree no. 2008-251 of 12 March 2008	about local information commissions for INB.	ITER_D_2XVUVZ
Order dated 26th June 2013	Amending order dated 7th February 2012 establishing the general technical rules related to the Basic Nuclear Facilities	ITER_D_J89C34_FR
Environmental code, art. L. 122-1 and subseq , and art. R. 122-1 and subseq		Legifrance.fr
Environmental code, art. L. 123-1 and subseq , and art. R. 123-1 and subseq		Legifrance.fr
Environmental code, art. L. 121-1 and subseq , and art. R. 121-1 and subseq		Legifrance.fr
Environnemental code, art. L. 124-1 and subseq		Legifrance.fr

Appendix 1; Protection against Beryllium

Limit exposure values

In France, the Labour Ministry set at 0.002 mg/m³ for 8 hours of work the indicative average limit exposure value admissible for beryllium in air in workrooms and premises.

In the United States, the same value of 0.002 mg/m³ (expressed in Be) was determined in 1991 by ACGIH as a limiting exposure value for beryllium and its compounds.

REGULATION

Hygiene and safety at work

1° Room ventilation / purification

- Articles R.4222-1 to R.4222-3, R.4222-18 and R.4222-19 of the Labour Code.
- Circular from Labour Ministry, dated 9 May 1985 (not published in "J.O." *Official Gazette*).
- Enactments of 8 and 9 October 1987 ("J.O." *Official Gazette* dated 22 October 1987) concerning facility inspections.

2° Showers

- Enactment dated 23 July 1947 as amended, for enforcement of Article R.4228-8, R.4228-9 and R.3121-2 of the Labour Code. Table 1 of dirty works, appended to enactment dated 23 July 1947, indicates the preparation and handling of dual beryllium and sodium fluoride.
- Articles L.4121-1 to 5 from the French Labour Code which instates the Health responsibilities of the employer concerning chemical products
- As Beryllium is a carcinogenic the dispositions to apply concerns the dangerous chemical agents, toxics and mutagenic. Art. R.4412-59 and 60 from the French Labour Code.

3° Prevention of cancer of occupational origin, and limit exposure value

- Circulars from Labour Ministry dated 14 May 1985 ("J.O." *Official Gazette* dated 6 June 1985), 5 May and 12 May 1986 (not published in "J.O." *Official Gazette*)

4° Occupational diseases

- Article L. 461-4 of the Social Security Code: mandatory declaration of position, to the health insurance fund "Caisse primaire d'assurance maladie" and to the labour inspectorate: Table No. 33.

5° Diseases of occupational nature

- Article L. 461-6 of the Social Security Code and Decree dated 3 August 1963 ("J.O." *Official Gazette* dated 23 August 1963): medical declaration of such diseases.

6° Special medical supervision

- Enactment dated 11 July 1977 ("J.O." *Official Gazette* dated 24 July 1977) as amended, establishing the list of works requiring special medical supervision, and circular dated 29 April 1980 (not published in "J.O." *Official Gazette*).

7° Labelling

- a) of beryllium and its pure compounds, except dual aluminium and beryllium silicates.

- enactment dated 10 October 1963, as amended ("J.O." *Official Gazette* dated 21 January 1984) and circular dated 29 January 1986 (not published in "J.O." *Official Gazette*). This enactment stipulates labelling including, notably:

- the "Highly toxic" symbol
- the list of particular risks and precautionary instructions.

b) for *preparations* containing beryllium or its compounds, except dual aluminium and beryllium silicates:

- enactment dated 21 February 1990 ("J.O." *Official Gazette* dated 24 March 1990) and circular dated 29 January 1986 (not published in "J.O." *Official Gazette*).
- Circular of Labour Ministry dated 29 January 1986 (not published in "J.O." *Official Gazette*).

8° Prohibited works

Enactment dated 8 October 1990 ("J.O." *Official Gazette* dated 9 November 1990) listing the work positions for which resort to employees under definite term work contract or employees of temporary work agencies is prohibited (works involving exposure to beryllium and beryllium salts) and circular dated 26 November 1990 (not published in "J.O." *Official Gazette*). These provisions are rendered applicable to farming establishments, by enactment dated 27 June 1991 ("J.O." *Official Gazette* dated 17 July 1991).

Environmental protection

Facilities classified for environmental protection. Paris. Imprimerie des Journaux Officiels (Official Gazette printers), brochures No. 1001:

- Nos. 281 to 289, concerning various metal treatments:
- enactment dated 10 July 1990 concerning waste discharge in underground waters.

Population protection

Decree dated 29 December 1988 concerning poisonous substances and preparations (Articles R. 5149 to R 5167 of the Public Health Code) ("J.O." *Official Gazette* dated 31 December 1988) and circular dated 2 September 1990 ("J.O." *Official Gazette* dated 13 October 1990):

- storing in defined conditions
- labelling (see 7°).
- controlled transfer/sale.

Transport

Refer to the following regulations, as required:

1° National transport (road, rail)

- RTMD (enactment dated 15 April 1945, as amended)

Beryllium in finished parts, in ingots, in sintered form, or in compressed powder beads

- Class: 6.1. • Hazard code: 60
- Group: 61 360 • Material code: 2,811
- Labelling: No. 6.1 A

Beryllium and other compounds in powder condition, in flakes or crystals

- Class: 6.1. • Hazard code: 60
- Group: 61 260a • Material code: 2,811
- Labelling: No. 6.1

Beryllium oxide in powder state, in flakes or crystals

- Class: 6.1. • Hazard code: 60
- Group: 61 260a • Material code: 2,811
- Labelling: No. 6.1

In sintered form

- Class: 6.1. • Hazard code: 60
- Group: 61 360a • Material code: 2,811
- Labelling: No. 6.1 A

In solution:

- Class: 6.1. • Hazard code: 60
- Group: 61 260b • Material code: 2,810
- Labelling: No. 6.1

2° International transport (road, rail)

- TDM

3° Air transport

- IATA

4° Transport in sea harbours and sea transport

- RPM (enactment dated 27 June 1951, as amended)
- IMDG (OMCI).