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NUCLEAR ENERGY AGENCY
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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- to assist its member countries in maintaining and further developing, through international co-operation, the scientific, technological and legal bases required for a safe, environmentally sound and economical use of nuclear energy for peaceful purposes;
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Case law

Australia

Barngarla Determination Aboriginal Corporation RNTBC v District Council of Kimba (No 2) [2020] FCAFC 39

Pursuant to the National Radioactive Waste Management Act 2012, No. 29 2012 as amended, the Government of Australia called for landowners to nominate land for a National Radioactive Waste Management Facility (NRWMF) in the first half of 2015; 28 nominations were received. Over the following two years, a process of technical site assessment and public consultation with communities situated near those sites winnowed the number of prospective sites down to three, all located in the state of South Australia. Public consultations, on-site technical assessments and community sentiment assessments were then conducted for those three nominated sites, located in two local government areas.

Following delays caused by legal challenges, final community sentiment votes were undertaken by the Australian Electoral Commission on behalf of the District Council of Kimba and the Flinders Ranges Council in late 2019. Those votes sought to determine community support for hosting a radioactive waste management facility in both communities. Eligibility for voting was determined in the same way as for local government elections, under the South Australian Electoral Act. The results of those ballots were as follows:

- Kimba: Yes 62%; No 38%
- Flinders Ranges: Yes 47%; No 53%

The Government of Australia announced that it would no longer pursue the Flinders Ranges site and that it would move forward with the more technically suitable of the two Kimba sites (Napandee). Subject to the completion of necessary procedural steps, the Napandee site is now expected to proceed to the detailed environmental impact assessment and licensing processes.

Legal action revolved around the question of eligibility to vote in the local ballot and in particular around the issue of native title. Native title involves the recognition by Australian law that Aboriginal people have rights and interests to particular land that come from their traditional laws and customs. The concept recognises that, in certain cases, there was and is a continued beneficial legal interest in land held by Aboriginal Australians that survived the acquisition of title to the land by the Crown at the time of sovereignty. Native title can co-exist with non-Aboriginal proprietary rights and, in some cases, different Aboriginal groups can exercise their native title over the same land. In the case regarding the Kimba ballot, the persons who held native title to particular land in the Kimba local government area did not reside within the boundaries of that local government area and therefore did not have the same automatic right to vote as residents. The representative group for those persons sought the right for all its members to vote in the ballot. It is noteworthy that native title is not recognised for the land that was nominated.

Japan

Update on the situation regarding preliminary injunctions against nuclear power plant operations since the Fukushima Daiichi nuclear power plant accident

Five preliminary injunctions¹ have been issued against nuclear power plant (NPP) operations stemming from the Fukushima Daiichi NPP accident. The latest decision is the injunction issued by the Hiroshima High Court on 17 January 2020 to prohibit operations at the Ikata NPP (“the 2020 decision”), owned and operated by the Shikoku Electric Power Company, Incorporated (SEPCO).

This is the second preliminary injunction issued against NPP operations by a Japanese High Court. It was preceded by the decision by the Hiroshima High Court in 2017 (“the 2017 decision”).² The following information provides an outline of the 2020 decision and explains how it differs from the 2017 decision.

1. Overview

In this case, appellants living in the vicinity of the Ikata NPP demanded a preliminary injunction against plant operations based on their personal rights.

2. Court’s decision

2.1. Standard of review

A preliminary injunction against operation at the Ikata NPP will be issued if there is a specific hazard whereby an appellant may incur great harm due to the operation of said NPP. An important indicator for the existence of specific hazards is whether the NPP in question meets the level of safety demanded by the Reactor Regulation Act.³ However, this does not preclude determining how much hazard is acceptable based on the standard of social common sense.⁴

In general, the burden of production lies with the appellant who must make a *prima facie* showing of specific hazards. However, in this case, because SEPCO has sufficient findings and materials relating to the NPP, the burden of production lies with SEPCO who must make a *prima facie* showing of the non-existence of specific hazards.⁵

In addition, to restart operation, NPPs must pass Nuclear Regulation Authority (NRA) inspection, whose standards and procedures are based on advanced scientific and specialised technical knowledge. In this case, SEPCO should make a *prima facie* showing that there were no unreasonable aspects of the NRA’s inspection standards or its decision that the Ikata NPP conforms to its standards.

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1. Preliminary injunctions are injunctions that allow for provisional measures that are necessary to preserve a claimant’s rights in cases where the need for the measures is high and waiting for the trial to stop the hazards could put them at a considerable disadvantage.
 2. More information about the 2017 ruling can be found in: NEA (2019), “Decision by the Hiroshima High Court on appeal regarding the operation of the Ikata nuclear power plant”, *Nuclear Law Bulletin*, No. 102, OECD Publishing, Paris, pp. 82-84.
 3. Act on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors, Act No. 166 of 10 June 1957 (Reactor Regulation Act).
 4. The Court also expresses this as “the way we interpret things in Japanese society”.
 5. This is the method of proceedings indicated in the 1992 Ikata Supreme Court decision (Supreme Court decision of 29 Oct. 1992, *Minsyu*, Vol. 46, No. 7, p. 1174).

2.2. Safety against earthquakes

Institutionally, an NPP must undergo more detailed assessments and an additional safety assessment if the earthquake hypocentre⁶ to consider could occur close to its site. According to a SEPCO-conducted survey, SEPCO determined that there were no active faults under the coastal part of the Ikata NPP site. Thus, it did not conduct the assessment necessary for plants whose sites are potentially and extremely close to an earthquake hypocentre. However, this survey was not adequate.

This means that SEPCO requested permission to operate the Ikata NPP without adequate assessments, which the NRA then granted. This decision by the NRA is unreasonable.

2.3. Safety against volcanoes

The guideline for safety against volcanic events created by the NRA, the Volcanic Effects Assessment Guide (“the Volcano Guide”), stipulates that an NPP must undergo a two-stage assessment consisting of the Site Assessment and the Impact Assessment.

2.3.a. Site assessment

The Volcano Guide stipulates the following assessment method when there is a not insignificant possibility that a volcano under consideration may erupt while the NPP is in operation. The plant’s safety is to be determined by whether or not there is a sufficiently low possibility that the site of the plant could be reached by the effects of a volcanic event that would impair its safe functioning. However, the possibility, the timing and the scale of volcanic eruptions cannot be predicted in advance with today’s science and technology. The part of the Volcano Guide that rests on the premise of such predictions is therefore unreasonable. Since the inability to make predictions means that we cannot say that the possibility or scale of an eruption will be sufficiently low or small, we must operate under the assumption of the scale of the largest previous eruption of the volcano under consideration. Therefore, in this case, the above decision should be made based on the fourth eruption of Mount Aso, as it is the largest among Mount Aso’s past eruptions (hereafter referred to as, “Aso4”).

However, the issue in this case is whether or not there is a specific hazard, rather than the appropriateness of the NRA’s disposition. Thus, there are situations where social common sense, i.e. how much hazard is acceptable, should be used to determine whether or not there is a specific hazard. Since social common sense to a certain extent accepts the risk of catastrophic eruptions like Aso4, it would violate social common sense to judge that the plant does not conform to the regulations based on that reason alone.

In this case, safety should be determined under the assumption of an eruption of a level just below that. Then there is a sufficiently low possibility that the site of the Ikata NPP could be reached by the effects of a volcanic event that would impair its safe functioning. The Volcano Guide can thus be partially modified to apply to this case, which ultimately makes the NRA’s decision not unreasonable.

6. “The hypocenter is the point within the earth where an earthquake rupture starts. The epicenter is the point directly above it at the surface of the Earth. Also commonly termed the focus.” United States Geological Survey Earthquake Hazards Program (n.d.), “Earthquake Glossary: hypocenter”, <https://earthquake.usgs.gov/learn/glossary/?term=hypocenter> (accessed 4 May 2020).

2.3.b. Impact assessment

The Volcano Guide stipulates that any volcanic events that might impact the plant's safety are to be examined and assessed to ensure they do not impair its safe functioning. As with the Site Assessment, the Impact Assessment of the Ikata NPP should be based on the assumption of an eruption of a level just below that of a catastrophic eruption. This means that SEPCO underestimated the appropriate eruption volume. SEPCO's application was based on this underestimation and the NRA permitted the operation of the Ikata NPP based on SEPCO's application. Thus, the NRA's decision is unreasonable.

3. Comparison to the 2017 decision

First, whether or not there was an active fault in extreme proximity to the site was not included in the points of contention in the 2017 decision. Second, in the 2017 decision, the Court ruled that Aso4 should be assumed in the Site Assessment, in accordance with the Volcano Guide. Furthermore, in operating under such an assumption, it recognised the existence of specific hazards based on the fact that there was not a sufficiently low possibility that the site of the Ikata NPP could be reached by a volcanic event that would impair its safe functioning.

On the other hand, in the 2020 decision, the Court pointed out that the Ikata NPP could not pass the Site Assessment in accordance with the Volcano Guide. However, since social common sense to a certain extent accepts the risk of catastrophic eruptions like Aso4, it would violate social common sense to judge that the plant does not recognise the existence of specific hazards based on that reason alone. Then, the Court partially modified the guideline in consideration of social common sense and determined that SEPCO should assume eruptions of a level just below that of a catastrophic eruption.

Social common sense was also mentioned in the 2017 decision. In the 2017 decision, the Court cast doubts on the Volcano Guide, maintaining that the risk of an eruption that occurs remarkably rarely and causes catastrophic damage, such as Aso4, could be disregarded as far as social common sense is concerned. However, the Court argued that it was not permissible to interpret the Volcano Guide in a limited way just because that guideline diverges from social common sense as recognised by the court; hence, it ruled that eruptions on the scale of Aso4 should be assumed.

United States

United States lawsuits related to the TEPCO Fukushima Daiichi NPP accident

There have been more developments since the last two reports on lawsuits pending in United States (US) federal courts related to the 2011 TEPCO Fukushima Daiichi nuclear power plant (NPP) accident.⁷ As previously reported and described in detail, these lawsuits were initiated beginning in 2012 even though Japan's nuclear liability law channels liability for nuclear damage exclusively to nuclear operators and provides for unlimited liability. They were allowed to proceed because the

7. The backgrounds of and details about the US lawsuits can be found in the following two earlier reports: NEA (2019), "Cooper v. Tokyo Electric Power Company, Imamura v. General Electric Company, and other US lawsuits related to the TEPCO Fukushima Daiichi NPP accident," Nuclear Law Bulletin, No. 102, OECD Publishing, Paris, pp. 84-87 and NEA (2017), "Cooper v. Tokyo Electric Power Company, No. 15-56426 (9th Cir. 2017)", Nuclear Law Bulletin, No. 99, OECD Publishing, Paris, pp. 73-74.

United States and Japan were not both parties to the Convention on Supplementary Compensation for Nuclear Damage⁸ at the time of the Fukushima NPP accident.

On 24 April 2020, the US Court of Appeals for the First Circuit affirmed the 9 April 2019 decision of the US District Court for the District of Massachusetts dismissing the Fukushima-related *Imamura v. General Electric Company (GE)* lawsuit⁹ on grounds of *forum non conveniens*.¹⁰ On 22 May 2020, a three-judge panel of the US Court of Appeals for Ninth Circuit affirmed the 4 March 2019 decision of the US District Court for the Southern District of California dismissing the separate Fukushima-related *Cooper v. TEPCO* and *GE* lawsuit¹¹ on grounds of international comity as to TEPCO and that Japanese law with its channelling provision should apply as to GE.¹² The First Circuit's oral argument in *Imamura* was held on 8 October 2019. Oral argument in the separate *Cooper* case was held by the Ninth Circuit on 10 March 2020.

The First Circuit Court said it affirmed the *Imamura* decision because the District Court did not abuse its discretion in finding that the judicial and administrative compensation schemes that are undisputedly available to plaintiffs rendered Japan an adequate alternative forum. The First Circuit's decision was limited to the issue of *forum non conveniens*. The Court of Appeals noted the District Court assumed *arguendo* that it had jurisdiction to hear the case despite the exclusive jurisdiction provision of the CSC. The decision says, "Because we agree with the district court's *forum non conveniens* ruling, we leave the issue of the CSC's exclusive jurisdiction provision for another day."¹³ (In the separate *Cooper v. TEPCO* lawsuit, the US Court of Appeals for the Ninth Circuit held in 2017 that the CSC did not strip the California District Court of jurisdiction over claims arising from the Fukushima disaster, i.e. it did not apply retroactively.¹⁴)

The First Circuit made note of the fact that all of the *Imamura* plaintiffs are Japanese, as opposed to the US citizens and servicemembers in *Cooper v. TEPCO*. The First Circuit Court of Appeals said:

As a threshold matter, the district court stated that, because Plaintiffs are citizens and businesses of Japan with no US connections who appear to be motivated at least in part by forum shopping (i.e., to evade the channeling provisions of the [Japanese] Compensation Act), it would entitle "Plaintiffs' choice to file their lawsuit in Massachusetts ... to some, but not great, deference."¹⁵

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- 8. Convention on Supplementary Compensation for Nuclear Damage (1997), IAEA Doc. INFCIRC/567, 36 ILM 1473, entered into force 15 Apr. 2015 (CSC).
 - 9. 371 F. Supp.3d 1 (D Mass. 2019).
 - 10. No. 19-1457 (1st Cir., 24 Apr. 2020). A judgment was entered the same day.
 - 11. No. 12CV3032-JLS(WMC) (SD Cal. 4 Mar. 2019).
 - 12. No. 19-55295 (9th Cir., 22 May 2020). A judgment was entered the same day.
 - 13. No. 19-1457, *supra* note 10.
 - 14. 860 F.3d 1193, 1205 (9th Cir. 2017). When the *Cooper* lawsuit previously was before the Ninth Circuit in 2017, conflicting amicus briefs were filed by the Japanese and US Governments. Japan argued the lawsuit should have been brought in Japan, while the US Government did not support that position. Because Japan was not a contracting party to the CSC at the time of the Fukushima disaster, the United States objected to the courts relying on arguments about its applicability from TEPCO and GE. The Ninth Circuit (in note 14 of its latest decision) noted that, otherwise, the United States argued that it had "no specific foreign policy interest necessitating dismissal in this particular case." Interestingly, the Ninth Circuit (at page 40) said, "The United States' measured response pales in comparison to Japan's unequivocal objection to the exercise of jurisdiction in U.S. courts. Recognizing Japan's interests under these circumstances was not illogical or implausible, particularly once the district court determined that Japanese law would apply to the claims."
 - 15. No. 19-1457, *supra* note 10.

The First Circuit further said it saw no abuse of discretion in this determination, especially because many members of the putative class have already obtained compensation by way of judgments against TEPCO in Japanese courts, and plaintiffs offered no basis for the District Court to conclude that such compensation is so “unsatisfactory that it is no remedy at all...”. The First Circuit also concluded that even if plaintiffs are allowed to litigate their claims against GE in Massachusetts, local choice of law rules likely dictate that Japanese law would apply.

Interestingly, the First Circuit referred to the findings of Japan’s Fukushima Nuclear Accident Independent Investigation Commission. The Court said,

After 900 hours of hearings and 1,167 interviews, the Commission concluded that the accident “was a disaster ‘Made in Japan’” and catalogued “a multitude of errors and willful negligence ... by TEPCO, regulators[,] and the [Japanese] government.” The Commission also concluded that TEPCO had overlooked new scientific information regarding tsunami risks, failed to implement severe-accident countermeasures consistent with international standards, and generally had inadequate emergency procedures and training.¹⁶

As to GE’s choice of law argument in Cooper, the Ninth Circuit held that Japan’s interests would be more impaired than California’s if its law were not applied. Noting that, because there was no dispute on appeal that application of Japanese law required dismissal of all claims against GE, the Ninth Circuit affirmed the dismissal of those claims with prejudice.

As to TEPCO, having decided that the District Court in Cooper correctly found Japanese law applies to the case and considering Japan’s strong interests in the case being litigated in Japan, the Ninth Circuit found the District Court did not abuse its discretion when it dismissed the claims against TEPCO on international comity grounds. The Ninth Circuit did not address other grounds for appeal raised by TEPCO and/or GE, including *forum non conveniens* or the applicability of the CSC.¹⁷

These US lawsuits were commenced starting in 2012 and remain unresolved. On 8 June 2020, Plaintiffs-Appellants filed a Petition for Rehearing and Rehearing-En-Banc of the 22 May 2020 decision of the three-judge panel of the Ninth Circuit, so the stays in the Holland lawsuit in Washington, DC¹⁸ and the Park lawsuit in San Diego, California remain in effect.¹⁹ Additionally, the US Supreme Court could be asked to review the Imamura decision by the First Circuit and eventually any further decision in Cooper by the full Ninth Circuit.²⁰ While there so far have been affirmances of the separate dismissals on discretionary grounds of *forum non conveniens* and international comity and findings about the applicability of Japanese law, the protracted nature of the US lawsuits confirm what can occur when there are not treaty relations mandating a single competent court in the territory where the nuclear incident occurred.

16. *Ibid.*, at 5-6.

17. No. 19-55295, *supra* note 12 at notes 2, 3, 8 and 15.

18. Holland et al. v. Tokyo Electric Power Company, Inc. et al., No. 18cv000573 (D DC).

19. Park et al. v. Tokyo Electric Power Company, Inc. and General Electric Company, No. 18cv2121 (SD Calif., San Diego Div.).

20. Writs of certiorari for review by the US Supreme Court must be applied for within ninety days after entry of the judgment of the court below. 28 US Code 2101(c).

National legislative and regulatory activities

France

Liability and compensation

Order of 22 October 2019 modifying the Annex of the Order of 19 August 2019 listing sites with a reduced liability amount pursuant to Decree 2016-333 of 21 March 2016 implementing Article L.597-28 of the Environmental Code and relating to third party liability in the field of nuclear energy¹

Article L. 597-28 of the Environmental Code sets the liability amount for the operator of a nuclear facility at EUR 700 million for a single nuclear incident, an amount that can be reduced to EUR 70 million for a single incident when only reduced-risk facilities are operated on a single site. The Decree of 21 March 2016 defines the features of reduced-risk facilities. Pursuant to Article 3 of said Decree, the Annex of the Order of 19 August 2016 draws the list of reduced-risk sites for which operators are entitled to a reduced liability amount. The list is as follows:

- the Aube Disposal Centre (Centre de stockage de l'Aube – CSA), operated by the National Agency for the Management of Radioactive Waste (l'Agence nationale pour la gestion des déchets radioactifs – Andra);
- the Manche Disposal Centre (Centre de stockage de la Manche – CSM), operated by Andra;
- the Grouping, Storage and Disposal Industrial Centre (Centre industriel de regroupement, d'entreposage et de stockage – CIRES) operated by Andra;
- the Facility for the Decontamination and Reconditioning of Radioactive Materials and Substances Using Diverse Treatment Applications (Installation de décontamination et de reconditionnement par divers traitements de matériels et de substances radioactives – TRIADE), operated by Orano DS;
- the Equipment Decontamination and Maintenance Centre (Centre d'entretien et de décontamination d'outillage – CEDOS), operated by Framatome;
- the Equipment Servicing Centre (Centre de maintenance des outillages – CEMO), operated by Framatome;
- the Low-Level Waste Treatment and Packaging Centre (Centre de traitement et de conditionnement de déchets de faible activité – CENTRACO) operated by Socodei, now Cyclife;
- the Nuclear Maintenance Workshop (Atelier de maintenance nucléaire), operated by the Société de Maintenance Nucléaire – SOMANU; and

1. *Journal officiel “Lois et Décrets” [Official Journal of Laws and Decrees] (J.O.L et D.), 25 October 2019, Text No. 6.*

- the Storage and Maintenance Base for Machines and Equipment of Nuclear Electricity Generation Centres (Base de maintenance et d'entreposage de machines et d'outillages provenant de Centres Nucléaires de Production d'Électricité – BAMAS), operated by SOCODEI.

This Order adds to the list of reduced-risk facilities (IRR):

- the Operational Hot Base of Tricastin (Base chaude opérationnelle du Tricastin – BCOT), operated by Électricité de France (EDF); and
- the DAHER NCS Very Low-Level Waste Sorting, Packaging and Treatment Site, operated by DAHER Nuclear Technologies.

In contrast, the site of the Uranium Clean-up and Recovery Facility operated by SOCATRI (Société auxiliaire du Tricastin) was stricken from the list.

Nuclear installations

Decree 2020-129 of 18 February 2020 repealing the operating licence for Fessenheim Nuclear Power Plant²

This decree repeals the operating licence for the Fessenheim Nuclear Power Plant granted to Électricité de France (EDF) as of the permanent shutdown dates mentioned in the operator's statement dated 27 September 2019 as follows:

- 22 February 2020 for Unit 1;
- 30 June 2020 for Unit 2.

Decree 2019-1040 of 10 October 2019 modifying Decree 2009-1219 of 12 October 2009 authorising the Atomic Energy Commission (CEA) to set up a nuclear installation called Jules Horowitz Reactor at Cadarache, a CEA site located in Saint-Paul-lez-Durance (Bouches du Rhône)³

Adopted with the favourable opinion of the Nuclear Safety Authority (Autorité de sûreté nucléaire – ASN), this Decree modifies the Decree Authorising the Construction (DAC) of the Basic Nuclear Installation (INB) No. 172 called Jules Horowitz Reactor in order to extend the commissioning deadline to 19 years, starting from the initial publication date of the DAC. The commissioning date is thus set at 14 October 2028 at the latest.

This installation will be operated by the CEA on its Cadarache site located in Saint-Paul-lez-Durance (Bouches du Rhône). The purpose of this installation is to:

- perform irradiation experiments on equipment and materials and fuel samples; and
- derive industrial, medical and research applications using the core of the reactor as a neutron source.

2. J.O.L et D., 19 February 2020, Text No. 4.
3. J.O.L et D., 12 October 2019, Text No. 3.

Germany

Nuclear safety and radiological protection (including nuclear emergency planning)

First amendment to the Radiation Protection Ordinance

The “First Ordinance to amend the Radiation Protection Ordinance” of 27 March 2020 was published in the *Federal Law Gazette* and entered into force on 2 April 2020.⁴ It aims at amending certain provisions of the 2018 Radiation Protection Ordinance, which came into force on 31 December 2018.⁵ The amendments relate to Sections 69; 103(4); 155(4)1; 172(3); and 184(1)23 and 24 of the Ordinance. In substance, they cover regulations concerning the protection of pregnant and nursing personnel, which, however, only clarify the already existing protection regulations (Section 69). The other amendments concern the levying of costs and expenses by the Federal Office for Radiation Protection.

Lithuania

Nuclear safety and radiological protection (including nuclear emergency planning)

Rules for free release criteria of buildings, engineering structures and site of nuclear facilities

A new version of nuclear safety rules on free release criteria was approved by the Head of State Nuclear Power Safety Inspectorate (VATESI). The new Nuclear Safety Rules BST-1.5.1-2020 “Evaluation of Compliance with Free Release Criteria of Buildings, Engineering Structures and Site of Nuclear Facilities”,⁶ specify compliance with free release criteria evaluation methodology for nuclear facilities buildings, engineering structures and site surfaces. The new version was adopted specifically to set provisions on free release criteria of engineering structures, which is particularly important while carrying out decommissioning activities. The new document came into force on 23 January 2020.

New requirements for lifting equipment

New Nuclear Safety Requirements BSR-1.8.8-2020 “Lifting Equipment and its Devices Important to Safety of Nuclear Facility”⁷ were approved by the Head of VATESI. These requirements are applicable in addition to general national industrial requirements for

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4. *Bundesgesetzblatt* [Federal Law Gazette] (BGBl.) 2020 I, p. 748. See also: *Bundesrats-Drucksache* 636/19 of 3 December 2019, available at: <http://dipbt.bundestag.de/dip21/brd/2019/0636-19.pdf> (in German).
 5. BGBl. 2018 I, p. 2034, 2036. In her 2019 study “New framework for radiation protection legislation in Germany” (Nuclear Law Bulletin No. 102, OECD Publishing, Paris, pp. 71-80), Goli-Schabnam Akbarian provides a detailed description of the new German radiation protection law.
 6. Order No. 22.3-26 (2020) of the Head of State Nuclear Power Safety Inspectorate, “On the amendment of Order No. 22.3-206, 20 December 2016, approved by the Head of State Nuclear Power Safety Inspectorate, ‘On the approval of Nuclear Safety Rules BST-1.5.1-2016 ‘Evaluation of Compliance with Free Release Criteria of Buildings and Nuclear Facility Sites’’”, available (in Lithuanian) at: www.e-tar.lt/portal/lit/legalAct/d80a7b303cee11ea829bc2bea81c1194.
 7. Order No. 22.3-7 (2020), approved by the Head of State Nuclear Power Safety Inspectorate, “On the approval of Nuclear Safety Requirements BSR-1.8.8-2020 ‘Lifting Equipment and its Devices Important to Safety of a Nuclear Facility’”, available (in Lithuanian) at: www.e-tar.lt/portal/lit/legalAct/87fe8a1035e511ea829bc2bea81c1194.

lifting and handling equipment. They regulate design, installation, commissioning, safe operation and maintenance of lifting and handling equipment and its devices, including special requirements for licensees' personnel, organising of work, supervising, operating and conducting maintenance of safety related lifting and handling equipment and its devices. Licensees are now required to classify all lifting and handling equipment into three groups according to their functions related to nuclear and radiation safety. The new requirements came into force on 1 May 2020.

Nuclear security

New version of physical security requirements

A new version of physical security requirements was approved by the Head of VATESI. Nuclear Safety Requirements BSR-1.6.1-2019 "Physical Security of Nuclear Facilities, Nuclear Facility Sites, Nuclear Material and Nuclear Fuel Cycle Material"⁸ were updated in order to incorporate new provisions on physical security, to harmonise the regulation with provisions of the International Atomic Energy Agency's (IAEA) Nuclear Security Series, as well as to implement recommendations and suggestions made as a result of the 2017 IAEA International Physical Protection Advisory Service (IP PAS) mission in Lithuania. The most important amendments are related to the identification of possible security subsystems and more detailed provisions on how particular security functions must be implemented. Additionally, in order to ensure the continuity of physical security during the entire life cycle of a nuclear facility, requirements on physical security at construction sites were introduced. The new requirements came into force on 1 May 2020.

Portugal

Nuclear safety and radiological protection (including nuclear emergency planning)

Specification of values, figures and criteria on safety standards for protection against the dangers arising from exposure to ionising radiation

- Minimum requirements of the Central Dosimetry Registry

Ministerial Order No. 136/2019 of 10 May⁹ specifies required elements to be included in the Central Dosimetry Registry [Registro Central de Doses] of Article 76/2 of Decree-Law 108/2018 of 3 December,¹⁰ in conformity with Annex X of Council Directive 2013/59/Euratom.¹¹ Article 76 establishes the conditions under which the Central

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8. Order No. 22.3-27 (2019), approved by the Head of State Nuclear Power Safety Inspectorate, "On the amendment of Order No. 22.3-37, 4 April, 2012, approved by the Head of State Nuclear Power Safety Inspectorate, 'On the approval of Nuclear Safety Requirements BSR-1.6.1-2012 'Physical Security of Nuclear Facilities, Nuclear Facility Sites, Nuclear Material and Nuclear Fuel Cycle Material'", available (in Lithuanian) at: www.e-tar.lt/portal/lt/legalAct/1d6692a0ffd111e99681cd81dcda52c.
 9. Portaria n.º 136/2019 [Ministerial Order No. 136/2019], Diário da República [Official Gazette] I, No. 90/2019 (10 May 2019), pp. 2390-2391.
 10. Decreto-Lei n.º 108/2018 [Decree-Law No. 108/2018], Diário da República [Official Gazette] I, No. 232/2018 (3 Dec. 2018), pp. 5490-5543.
 11. Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom, Official Journal of the European Union (OJ) L 13 (17 Jan. 2014) (Euratom Basic Safety Standards).

Dosimetry Registry for exposed workers is regulated, which the Portuguese Environment Agency is responsible for maintaining.

- Factors and values foreseen in Article 4(v), (x) and (cv) of Decree-Law 108/2018

Ministerial Order No. 137/2019 of 10 May¹² sets tissue weighting factors, values on radiation weighting factors, as well as normalised values and ratios foreseen in Article 4(v), (x) and (cv) of Decree-Law 108/2018, respectively. This Ministerial Order establishes these factors and values in accordance with Publications 116 and 119 of the International Commission on Radiological Protection (ICRP).

- Criteria for exemption and clearance

Ministerial Order No. 138/2019 of 10 May¹³ approves the exemption and clearance criteria for Article 23/1(a) and 3 and Article 28/7 of Decree-Law 108/2018. This Ministerial Order expands and consolidates in a single legal document the criteria of Ministerial Order 44/2015,¹⁴ which had only established clearance levels.

Slovak Republic

General legislation, regulations and instruments

Decree amending and supplementing Decree No. 52/2006 Coll. on professional competency, as amended by Decree No. 34/2012 Coll.

Decree No. 410/2019 Coll., on the amendment and supplementing of Decree No. 52/2006 Coll. on professional competency as amended by Decree No. 34/2012 Coll., was issued on 25 November 2019 and entered into the force on 1 January 2020. The aim of this Decree is to clarify details for ensuring an adequate number of personnel with special competences for justified and exceptional cases. Further, the amended Decree reflected new knowledge and practices in the field of verification of special professional competences of nuclear installations' employees as well as competence of lecturers.

Bilateral meeting with Polish supervisory authority

The bilateral meeting between the Slovak Republic and Poland was held in Warsaw, Poland, from 17 to 18 February 2020 on the basis of an intergovernmental agreement on information exchange and co-operation in the field of peaceful use of nuclear energy. Delegation members, led by the heads of both supervisory authorities (the President of the National Atomic Energy Agency – PAA of Poland and the Nuclear Regulatory Authority of the Slovak Republic [Úrad jadrového dozoru – UJD]), exchanged their information on:

- the current state in the field of nuclear energy in their countries, including information on plans for the development of the Polish nuclear programme;
- the activities of both authorities;

12. Portaria n.º 137/2019 [Ministerial Order No. 137/2019], Diário da República [Official Gazette] I, No. 90/2019 (10 May 2019), pp. 2391-2393.

13. Portaria n.º 138/2019 [Ministerial Order No. 138/2019], Diário da República [Official Gazette] I, No. 90/2019 (10 May 2019), pp. 2393-2400.

14. Portaria n.º 44/2015 [Ministerial Order No. 44/2015], Diário da República [Official Gazette] I, No. 36/2015 (20 Feb. 2015), pp. 997-1000.

- the results of periodic safety review of selected NPPs in the Slovak Republic and Poland;
- the system of personnel training (mainly inspectors) in the Slovak Republic; and
- the international activities of both authorities.

The next meeting will be held in the Slovak Republic in 2021.

Nuclear trade (including non-proliferation)

Draft Decree on special materials and equipment falling under the supervision of the Nuclear Regulatory Authority of the Slovak Republic

The Draft Decree on special materials and equipment falling under the supervision of the Nuclear Regulatory Authority of the Slovak Republic, revoking Decree No. 76/2018 Coll., was the subject of an approval procedure on 20 January 2020 by the Permanent Working Commission on technical legal provisions of the Legislative Council of the Government of the Slovak Republic. Subsequently, this Draft Decree was forwarded to the commenting phase according to Directive (EU) 2015/1535 of the European Parliament and of the Council¹⁵ and made available within Technical Regulation Information System (TRIS) database until 30 April 2020. After the finalisation of the notification procedure, the Draft Decree will be submitted for publication with a proposed entry into the force date of 15 May 2020. This Draft Decree was the result of Commission Delegated Regulation (EU) 2018/1922 of 10 October 2018.¹⁶

Slovenia

Nuclear safety and radiological protection (including nuclear emergency planning)

Act Amending the Protection against Ionising Radiation and Nuclear Safety Act

At its seventh session, held on 16 April 2019, the National Assembly of the Republic of Slovenia adopted the Act Amending the Protection against Ionising Radiation and Nuclear Safety Act (ZVISJV-1A). The need for amendments to the Protection against Ionising Radiation and Nuclear Safety Act (2017 Act) has been demonstrated for the security screening of foreign nationals. All persons who work in vital areas of a nuclear installation or participate in the transport of nuclear materials must be screened to establish statutory security concerns. The 2017 Act provided a security clearance procedure for foreign nationals comparable to the security clearance under the regulations on the protection of classified information, where the national security authority of the employer country performed it on the request of the employer. Such a security check has proven to be inappropriate in practice, both due to the lengthy procedures and the fact that persons working in nuclear facilities (as for example during the outage of the nuclear power plant) do not actually access classified information.

15. Directive (EU) 2015/1535 of the European Parliament and of the Council of 9 September 2015 laying down a procedure for the provision of information in the field of technical regulations and of rules on Information Society services (codification), OJ L 241 (17 Sept. 2015).

16. Commission Delegated Regulation (EU) 2018/1922 of 10 October 2018 amending Council Regulation (EC) No 428/2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items, OJ L 319 (14 Dec. 2018).

The adopted amendments to the 2017 Act regulate the procedure of security screening for foreign nationals in a substantially similar way, as it is defined for citizens of Slovenia. The employer with whom the person will be employed or for whom they will perform the work collects the prescribed certificates and submits them together with the proposal for security clearance to the Ministry of the Interior, which, based on the data from its records, data from the Slovenian Intelligence and Security Agency, Intelligence and Security Services of the Ministry of Defence and data of the Police, and after carrying out the verification, issues a decision determining whether or not the verified person poses a risk to Slovenian nuclear safety. Due to the amended Article 155, it was necessary to amend or supplement some other articles of the 2017 Act that are related to security clearance. The amendments to the 2017 Act also introduce some minor changes in other areas, which primarily involve nomotechnical adaptation of the text of individual provisions, elimination of inappropriate references and terminological harmonisation of the text of the act.

The amended 2017 Act (ZVISJV-1A) is published in the *Official Gazette of the Republic of Slovenia*, No. 26/19 and entered into force on 11 May 2019.

Decree on areas of restricted use due to nuclear facilities and on the conditions for construction in these areas

The Decree aims to ensure its consistency with other legislation in the field of construction and spatial planning, while ensuring the implementation of radiation and nuclear safety measures that restrict the use of space near a nuclear facility. By limiting the use of space near a nuclear facility, the possibility of an industrial or other disaster occurring outside such facility that could have an impact on nuclear safety is reduced. At the same time, population density limits and requirements regarding local infrastructure facilities are also set to reduce the potential for human health damage should an emergency occur in a nuclear facility. The provisions of the Decree are thus based on the principle of integrity, which means that the state, when issuing regulations, opinions and permits, and when deciding on other administrative matters, exercising control and other tasks within its competence, provides all possible and reasonable measures to prevent damage to human health and environment due to radioactive contamination.

The new Decree was published in the *Official Gazette of the Republic of Slovenia*, No. 78/19 and entered into force on 4 January 2020. Upon entry into force, the previous Decree published in the *Official Gazette* No. 36/04, 103/06, 92/14 in 76/17 – ZVISJV-1 ceased to apply.

Decree on the criteria for determining the compensation rate due to the restricted use of areas and intervention measures in nuclear facility areas

The amendments to the Decree on the criteria for determining the compensation rate due to the restricted use of areas and intervention measures in nuclear facility areas are mainly related to the establishment of a new basis for calculating compensation and the way in which it is revalued in relation to the annual inflation rate in the member states of the European Union. It therefore represents a priority measure in ensuring the long-term financial sustainability of the Krško Nuclear Power Plant Decommissioning Fund and for the disposal of radioactive waste from the Krško Nuclear Power Plant in accordance with the timetables set out in the Resolution on the National Programme for the Management of Radioactive Waste and Spent Fuel for 2016-2025 (ReNPRRO16-25).

The amendments to the Decree were published in the *Official Gazette of the Republic of Slovenia*, No. 8/20 and entered into force on 7 February 2020.

Spain

Radioactive waste management

Royal Decree 750/2019, of 27 December, modifying the fee that finances the service rendered by Empresa Nacional de Residuos Radiactivos, S.A., S.M.E (Enresa) to the operative nuclear power plants

Royal Decree 750/2019, of 27 December (Official State Gazette of 28 December 2019), has reviewed the fee paid to Enresa for the service of radioactive waste management and dismantling of nuclear power plants (NPPs) by the operators of operating NPP. Article 38 bis of the Nuclear Energy Act (Law 25/1964, of 29 April) establishes that the management of radioactive waste, including spent nuclear fuel, and the dismantling and decommissioning of nuclear facilities constitute an essential public service reserved to the state and entrusted such responsibility to Enresa, according to the General Radioactive Waste Plan (GRWP). The activities of the GRWP are financed by a Fund (named "Fund to Finance the Activities Planned in the GRWP") regulated by the sixth additional provision of the Law 54/1997, of 27 November, on the Electricity Sector, declared in force by Law 24/2013, of 26 December, on the Electricity Sector. The Fund, in application of an amendment of the said sixth additional provision made by Law 11/2009, is sourced by a system of four fees paid by the radioactive waste producers since 1 January 2010.

Those fees are covered by the licensees of the nuclear and radioactive installations, in application of the "polluter pays" principle. In particular, section 9(second) of the mentioned sixth additional provision regulates one of those fees, which finances the service of the management of the spent nuclear fuel and radioactive waste derived from the operation of the NPPs that were in operation on 1 January 2010, and their dismantling and decommissioning, as well as the allocations to municipalities affected by NPPs or nuclear fuel and radioactive waste storage facilities, and the taxes derived from the activities related to the storage of spent nuclear fuel or radioactive waste. This fee, which is paid by the licensees of the operating NPPs, is the result of multiplying the gross electricity produced by each plant by a unitary fixed tariff and by a coefficient that depends on the type of reactor and the gross power of the NPP. This unitary fixed tariff, according to the section 9(fifth) of the cited sixth additional provision, could be reviewed by the Government by Royal Decree, based on an updated economic-financial memory on the GRWP activities costs.

However, the mentioned tariff has not been reviewed since 1 January 2010, although the estimates of future costs prepared by Enresa have undergone significant changes since then. These cost estimates and the current value of the Fund is the basis for the calculation of the revenue needed for facing such costs. Additionally, the period of operation of the NPPs establishes the collection period of the fee, as well as the total gross energy to be generated, which is used for determining the fee to be paid. When the value of the tariff was established, the period of operation of the NPPs considered was 40 years, whereas currently, the draft of the Spanish National Integrated Energy and Climate Plan, which is being processed, foresees a longer operational period, based on a gradual cessation of operation of Spanish NPPs. Therefore, it is necessary to carry out a revision of the mentioned unitary fixed tariff, to contemplate both the updated cost estimations and the extension of the operating period of the NPPs, being its value modified by this Royal Decree to an unitary fixed tariff of EUR 7.98/MWh, which represents an increase of 19.28% with respect to the previous value.

7th General Radioactive Waste Plan

According to Article 38 bis of the Nuclear Energy Act (Law 25/1964, of 29 April), the Government shall establish the policy on radioactive waste management and the dismantling and decommissioning of nuclear facilities by means of the GRWP, which is raised by the Ministry for the Ecological Transition and the Demographic Challenge (MITERD), with the prior report of the Nuclear Safety Council (CSN), having heard the Autonomous Communities in matters of land use and environment. Once approved, the Government will report back to the Parliament.

The said plan must provide for, in accordance with Royal Decree 102/2014, of 21 February, the responsible and safe management of spent nuclear fuel and radioactive waste, the necessary solutions and strategies and technical solutions to be developed in Spain over the short-, medium- and long-term aimed at the responsible and safe management of spent nuclear fuel and radioactive waste, the decommissioning and closure of nuclear facilities and any other activities related to the foregoing, including the economic and financial forecasts and the measures and procedures necessary to implement them. Additionally, Royal Decree 102/2014 establishes that Enresa, the state owned company to whom the essential public service of radioactive waste management and the dismantling and decommissioning of nuclear facilities has been entrusted, must submit a review of the GRWP every four years, or when required by MITERD.

Currently, the 6th GRWP is in force and it was approved by the Council of Ministers in June 2006. Although the strategies and objectives established in the 6th GRWP are still valid, it is necessary to approve a new GRWP to review the technical solutions and financial estimates that it contains, as well as to comply with Council Directive 2011/70/Euratom¹⁷ and with Royal Decree 102/2014 that transposes it, in terms of some of the contents that a national programme should contain, according to the Waste Directive.

On 10 March 2020, Enresa submitted a proposal for the 7th GRWP to MITERD, which it has begun processing. This requires, among other procedures, a Strategic Environmental Assessment (SEA), in compliance with Law 21/2013, of 9 December, on Environmental Assessment. During the SEA, the draft of the 7th GRWP will be submitted to public participation, which is also enforced by Royal Decree 102/2014. The draft of the 7th GRWP establishes a reference scenario based in the following elements:

- a gradual cessation of NPP operation, which implies the definitive shutdown of the seven operating reactors between 2027 and 2035, as defined in the Protocol agreed to by Enresa and the owners of the NPPs, which is based on the draft of the Spanish National Integrated Energy and Climate Plan. This establishes that the average operational period NPPs will be around 45 years;
- an open fuel cycle (reprocessing of spent nuclear fuel is not considered);
- the need for a Centralised Storage Facility (CSF) for spent nuclear fuel and high-level waste, which is maintained with respect to the 6th GRWP. It is envisaged that the CSF will start its operation in 2028;
- the need to increase the capacity of the “El Cabril” waste disposal facility for low- and intermediate-level waste;

17. 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, OJ L 199 (2 Aug. 2011) (Waste Directive).

- immediate and total dismantling of NPPs, once they cease operation, initiating the preparatory works at least three years before the shutdown and the dismantling at least three years after. During this period, the spent fuel shall be removed from the pool and the authorisation for the dismantling and decommissioning shall be granted. The estimated duration of the dismantling is ten years; and
- the need for a deep geological repository, which is also maintained from the 6th GRWP as the most sustainable and safe option for the definitive disposal of spent nuclear fuel and high-level waste.

The estimated duration of the procedures for the approval of the 7th GRWP, according to the applicable legislation, is approximately 24 months.

Switzerland

Nuclear installations

Revision of the Order on the Decommissioning Fund and on the Management Fund (OFDG), entered into force on 1 January 2020¹⁸

In Switzerland, the costs associated with the decommissioning and dismantling of nuclear installations and the management of radioactive waste, as well as the costs incurred after the final shutdown of nuclear power plants (operational waste and spent fuel management) are borne according to the polluter pays principle. In order to ensure that appropriate funds will be available when needed, operators have been paying annual contributions to the decommissioning fund since 1985 and to the management fund since 2002 (STENFO). The amount of the operators' contributions is set according to cost studies and the funds are monitored by the Confederation. The calculation of costs, the obligation to contribute, the investment parameters and terms of payment for both funds are set by the Order on the Decommissioning Fund and on the Management Fund (OFDG). The governing body of STENFO is the Administrative Commission.

The Federal Council adopted the draft revision of the OFDG at its 6 November 2019 session. This revision implements changes regarding capital yield and the inflation rate used for the calculation of annual contributions to the funds. It also abolishes the 30% security supplement fee introduced in the OFDG in 2015 because the new methodology for the calculation of foreseeable decommissioning and management costs that was used for the first time in the 2016 cost study already sets a supplement for forecasts and risks uncertainties. Changes are also made to the membership of the

18. *Ordonnance sur le fonds de désaffection et sur le fonds de gestion des déchets radioactifs pour les installations nucléaires (Ordonnance sur le fonds de désaffection et sur le fonds de gestion, OFDG) [Order on the Decommissioning Fund and on the Management Fund for Radioactive Waste for Nuclear Installations (Order on the Decommissioning Fund and on the Management Fund, OFDG)], 6 November 2019, entry into force 1 January 2020, available at: www.news.admin.ch/newsd/message/attachments/58891.pdf. Additional information can be found in Rapport sur les résultats de la consultation relative à la révision partielle de l'ordonnance sur le fonds de désaffection et sur le fonds de gestion (OFDG) [Report on the results of the consultation on the partial revision of the Order on the Decommissioning Fund and on the Management Fund (OFDG)], 6 November 2019, available at: www.news.admin.ch/newsd/message/attachments/58893.pdf; Révision de l'ordonnance sur le fonds de désaffection et sur le fonds de gestion (OFDG), Rapport explicatif [Explanatory Report on the revision of the Order on the Decommissioning Fund and on the Management Fund (OFDG)], 6 November 2019 available at: www.news.admin.ch/newsd/message/attachments/58892.pdf.*

decommissioning and management funds bodies: at least two-thirds of the seats of the Administrative Commission, the Investment Committee and the Cost Committee are reserved for independent members, while the other one-third is reserved for operators, whose influence is thus mitigated. Moreover, the rules applicable in case of excess or insufficient coverage of the funds are strengthened. The changes to the Order result in an increase of the annual contributions of contributors to both funds from CHF 96 million to CHF 183.7 million.

The revised OFDG entered into force on 1 January 2020. Public consultation took place from 30 November 2018 to 18 March 2019 and resulted in 628 position statements.

Radioactive waste management

Authorisations to drill in potential areas for a deep geological repository identified by the Federal Department for Environment, Transports, Energy and Communication (DETEC)

The National Cooperative Society for the Disposal of Radioactive Waste (Nagra) filed 23 requests for authorisation to drill in the potential areas identified for a deep geological repository (DGR) before the Federal Office for Energy (OFEN): 8 for East-Jura, 8 for North-East Zurich and 7 for North Lägern.¹⁹ Two of these requests have since been withdrawn. All other requests were granted by the Federal Department for Environment, Transports, Energy and Communication (DETEC). Appeals are ongoing in two instances, and for three others, the deadline for appeal has not yet passed (as of May 2020).

The intention is not to actually drill on all sites. The exact number of drill holes necessary to have all the information required on the geological features of the sites will depend on the outcome of current operations. Drilling will take place over a period of six to nine months. For technical reasons, drilling will be done 24 hours a day, 7 days a week. Drilling will allow Nagra to examine the geological layers in depth. On all drilling sites, focus is on the opalinus clay host rock where the future disposal repository would be built. Nagra's aim is to examine the thickness, density and composition of the host rock. Based on this analysis, Nagra will announce in 2022 the areas for which it will be requesting licences to build DGRs (for the disposal of high-level radioactive waste and low- and intermediate-level radioactive waste or for combined disposal).

The sites where drilling is either forecasted, in progress or completed are as follows (as of beginning of May 2020):

- Bülach was the first drilling site in the North Lägern area (and the first of the present deep drilling campaign). Drilling there was completed at the end of 2019. Contrary to what was originally planned, the second drilling in this area will take place in Stadel during the second half of 2020. Nagra intends to start drilling a third hole, also in Stadel, probably at the end of 2020. Drilling in Bülach confirmed that the characteristics of North Lägern soil were also generally appropriate to host a DGR. The layer of opalinus clay where the DGR would be built has a thickness of more than 100 metres and is very dense.

19. More information on these studies can be found in NEA (2018), "Clearance for drilling in the potential siting areas for future deep geological repositories by the Federal Department of the Environment, Transport, Energy and Communications (DETEC)", Nuclear Law Bulletin, No. 101, OECD Publishing, Paris, p. 88; DETEC/OFEN (2020), "Geological investigations", www.bfe.admin.ch/bfe/en/home/supply/nuclear-energy/radioactive-waste/geological-investigations.html.

- Deep drilling in Trüllikon (North-East Zurich) was completed at the end of April 2020. Drilling in a second site in this area (Mathalen) has been ongoing since the beginning of February 2020. Drilling in Trüllikon showed that the opalinus clay layer is more than 100 metres thick and very dense; these features are appropriate to host a DGR.
- Two drilling sites have been identified in the East Jura area, in Bözberg. Drilling began on the first site at the end of April 2020 and is forecasted to start on the second site during the summer of 2020 at the earliest.

United States

General legislation, regulations and instruments

Proposed rule on emergency preparedness for small modular reactors and other new technologies

On 17 December 2019, the US Nuclear Regulatory Commission (NRC) approved for publication a proposed rule that would address emergency preparedness requirements for small modular reactors (SMRs) and other new technologies, such as non-light-water reactors and certain non-power production or utilisation facilities.²⁰ The proposed rulemaking package notes that the NRC's current emergency preparedness requirements were initially developed for large light-water reactors and non-power reactors and do not consider the advances in designs and safety research and their application to future operation of SMRs and other new technologies. The proposed rule would adopt an alternative risk-informed, performance-based, technology-inclusive, and consequence-oriented approach for emergency preparedness for SMRs and other new technologies. The proposed rule would also include an alternative scalable methodology for determining the size of the plume exposure pathway emergency planning zone for these types of facilities on a case-by-case basis. Additionally, the proposed rule would propose ingestion response planning requirements instead of an ingestion pathway emergency planning zone at a set distance. The scope of the proposed rule does not include emergency planning, preparation and response for large light-water reactors, fuel cycle facilities or currently operating non-power reactors.

Nuclear installations

Early site permit involving small modular reactors (SMRs)

On 19 December 2019, the NRC issued an early site permit (ESP) to the Tennessee Valley Authority, approving the Clinch River Nuclear Site, located in Oak Ridge, Tennessee, as suitable for the construction and operation of two or more SMRs. The purpose of an ESP is to provide for the early resolution of certain safety and environmental issues relating to the suitability of a proposed site. An ESP does not authorise any NRC-regulated construction activities. To construct and operate a reactor at the site, an applicant would need to apply for, and obtain, a separate authorisation (such as a combined licence) from the NRC.

20. Staff Requirements – SECY-18-0103 – Proposed Rule: Emergency Preparedness for Small Modular Reactors and Other New Technologies (RIN 3150 AJ68; NRC-2015-0225) (17 December 2019). The NRC staff is currently in the process of revising the proposed rulemaking package in response to the Commission's direction; after that process is complete, the proposed rule will be published in the *Federal Register*, the daily journal of the US Government, for public comment.

On 14 August 2019, the Commission conducted a mandatory hearing on the ESP application.²¹ The Atomic Energy Act of 1954, as amended (AEA), requires the NRC to hold a mandatory hearing on each application to construct a nuclear power plant.²² The purpose of a mandatory hearing is to determine whether the NRC staff's review of the application has been adequate to support the necessary regulatory findings (both safety and environmental). This was the first mandatory hearing on an ESP involving an SMR. The Commission found that the staff's review was sufficient to support the necessary regulatory findings and authorised issuance of the ESP.

In addition, this mandatory hearing presented the Commission with its first opportunity to consider how current emergency planning zone requirements should be applied to SMRs because the applicant requested exemptions from provisions in the NRC's regulations that generally establish a nominal ten-mile radius around a power reactor for the emergency planning zone. The applicant proposed a two-mile or site boundary emergency planning zone using a risk-informed, dose-based, consequence-oriented methodology. The Commission approved the NRC staff's proposal to grant the requested exemptions from the NRC's current ten-mile emergency planning zone requirements. The Commission agreed with the NRC staff's finding that the applicant's proposed methodology would result in an emergency planning zone that maintains the same level of protection as that which exists at the ten-mile plume exposure pathway emergency planning zone for large light-water reactors.

Subsequent licence renewal for operating commercial power reactors

The AEA authorises the NRC to issue licences for commercial power reactors to operate for up to 40 years.²³ The NRC's regulations allow these licences to be renewed for up to an additional 20 years at a time.²⁴ Thus, with licence renewal, a licensee can apply for a period of extended operation from 40 years to 60 years, and with subsequent licence renewal, the licensee can apply for another period of extended operation from 60 years to 80 years.²⁵

On 4 December 2019, the NRC issued subsequent renewed licences to Florida Power & Light Company for Turkey Point Nuclear Generating Units 3 and 4, located near Homestead, Florida. The NRC's action extended the authorised operating life of these pressurised water reactors from 60 years to 80 years. This action constituted the first time that the NRC issued subsequent renewed licences to an NRC-licensed nuclear power plant.

On 5 March 2020, the NRC issued subsequent renewed licences to Exelon Generation Company, LLC, and PSEG Nuclear, LLC, for Peach Bottom Atomic Power Station, Units 2 and 3, located near Delta, Pennsylvania. This action extended the authorised operating life of these power reactors from 60 years to 80 years. This action constituted the second time that the NRC issued subsequent renewed licences for an NRC-licensed nuclear power plant and the first time that the NRC issued a subsequent renewed licence for a boiling water reactor.

Administrative litigation on environmental issues is pending in both cases.

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21. Tennessee Valley Authority (Clinch River Nuclear Site Early Site Permit Application), CLI-19-10, 90 NRC __ (17 December 2019) (slip op.).
 22. AEA § 189a., 42 USC § 2239(a).
 23. AEA § 103c., 42 USC § 2133(c); 10 CFR § 50.51(a).
 24. 10 CFR § 54.31(b).
 25. 10 CFR § 54.31(b), (d); Final Guidance Documents for Subsequent License Renewal, 82 Fed. Reg. 32 588 (14 July 2017).

Intergovernmental organisation activity

European Atomic Energy Community

Published reports

Third report on member states' implementation of Council Directive 2006/117/Euratom on the supervision and control of shipments of radioactive waste and spent fuel¹

All member states finished transposing Council Directive 2006/117/Euratom² in 2013. By 25 December 2017, member states had to send to the Commission reports on the implementation of the Directive. On the basis of these reports, the Commission must establish a summary report for the European Parliament, the Council and the European Economic and Social Committee, paying particular attention to reshipment related to non-authorised shipments and undeclared radioactive waste. All member states have submitted their third national report covering the period 2015-2017.

This third Commission report provides an overview of shipments of spent fuel and radioactive waste in the Community, as well as an overview of the recent trends and challenges regarding the import, export and transit of spent fuel and radioactive waste, reported refusals and failed shipments, as well as proposed actions. Overall, the Commission concluded that the current European Union (EU) legal package consisting of Directive 2006/117/Euratom, Directive 2011/70/Euratom³ and Directive 2013/59/Euratom⁴ ensured high safety standards with respect to the risks of ionising radiation in the EU territory in the context of transboundary shipments. It is the objective of the Commission to have a common agreement with all member states about an improved reporting template to be provided to facilitate the supervision and control of shipments of radioactive waste and spent fuel for the upcoming reporting period (2018-2020).

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1. European Commission (2019), *Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee on Member States implementation of the Council Directive 2006/117/EURATOM on the supervision and control of shipments of radioactive waste and spent fuel, Third Report, SWD(2019) 437 final, COM(2019) 633 final*, available at: https://ec.europa.eu/energy/sites/ener/files/third_report_implementing_directive_on_transport_of_radioactive_waste_and_spent_fuel.pdf.
 2. Council Directive 2006/117/Euratom of 20 November 2006 on the supervision and control of shipments of radioactive waste and spent fuel, OJ L 337 (5 Dec. 2006), pp. 21-32.
 3. 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, Official Journal of the European Union (OJ) L 199 (2 Aug. 2011), pp. 48-56 (Waste Directive).
 4. Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation, and repealing Directives 89/618/Euratom, 90/641/Euratom, 96/29/Euratom, 97/43/Euratom and 2003/122/Euratom, OJ L 13 (17 Jan. 2014), pp. 1-73 (Euratom Basic Safety Standards).

The Commission report on the progress of implementation of Council Directive 2011/70/Euratom on radioactive waste and spent fuel present in the Community's territory and the future prospects⁵

On 17 December 2019, the Commission concluded that in the last three years, member states have made a number of steps towards demonstrating that they have been taking reasonable actions to ensure that no undue burden is passed to future generations and that radioactive waste and spent fuel is managed safely. Experience in decommissioning and waste management is progressively being gained, thus creating better conditions for setting effective policies to ensure safe and timely decommissioning and waste disposal. These are the conclusions presented in the second report on the implementation of the Waste Directive. However, more needs to be done. This second reporting cycle has confirmed the Commission's views, already presented to the Council and Parliament in 2017, that member states need to further accelerate transposition and implementation measures in addressing key challenges related to radioactive waste and spent fuel, as well decommissioning.

Primarily, the Commission encourages member states, which have not yet done so, to take a swift decision on their policies, concepts and plans for the disposal of radioactive waste, in particular intermediate-level waste and high-level waste. Member states that consider shared solutions should cluster up and take practical measures, including site-specific matters.

Another key challenge remains ensuring that adequate funds will be available for the costs of national programmes. In order to tackle it, member states must improve the cost assessment, make estimations/decisions on their timing, and review both elements periodically and consistently with their national programme.

EU-level action on radioactive waste classification schemes, criteria for pre-disposal management and qualification processes may help open cross border collaboration between member states on sharing technical and licensing practices on final disposal solutions and creating opportunities for the EU-wide market in equipment and services related to decommissioning and radioactive waste.

To ensure full compliance with the requirements of the Directive related to the national legislations and national programmes, the Commission has initiated several infringement procedures against member states in the past reporting cycle. It has also taken legal actions against three member states for the non-notification of their national programmes, which led, for one of these cases, to a judgment of the Court of Justice of the EU (CJEU) upholding the claims of the Commission. The Commission will follow up on these actions and pursue its work to support member states in fully applying the Euratom legislation on responsible and safe management of spent fuel and radioactive waste.

Special reports of the Court of Auditors about the European Commission's contribution to nuclear safety⁶

The European Court of Auditors has examined the European Commission's monitoring of the transposition of Euratom directives; how the Commission manages the EU early notification and exchange of information agreements; the Commission's

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5. European Commission (2019), *Report from the Commission to the Council and the European Parliament on progress of implementation of Council Directive 2011/70/EURATOM and an inventory of radioactive waste and spent fuel present in the Community's territory and the future prospects, Second Report*, SWD(2019) 435 final, COM(2019) 632 final, available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1581949250178&uri=CELEX:52019DC0632>.
 6. European Court of Auditors (2020), *Special Report: The Commission contributes to nuclear safety in the EU, but updates required*, Publications Office of the European Union, Luxembourg, available at: www.eca.europa.eu/Lists/ECADocuments/SR20_03/SR_Nuclear-safety_EN.pdf.

opinions on nuclear investment projects and how they contribute to enhancing nuclear safety, as well as the operation of radioactivity monitoring facilities. The Court of Auditors concludes that, overall, the Commission has contributed well to nuclear safety in the EU. However, “there is scope for the Commission to update the legal framework and its internal guidelines”. The Court of Auditors recommends updating the approach to monitoring transposition of Euratom directives, updating the legislative framework and updating the existing procedures. The Commission accepted all the recommendations.

Case law of the Court of Justice of the EU

In 2003, the Belgian legislature adopted a timetable for the phasing out of the production of electricity by nuclear energy. No new nuclear power stations were to be built, and the power stations in operation were to be gradually taken out of service after operating for 40 years, that is to say between 2015 and 2025. On that basis, the Doel 1 power station located on the Escout River (near Antwerp and the Netherlands border) ceased production of electricity in mid-February 2015 and the Doel 2 power station, located in the same place, was also to cease production of electricity in the same year.

At the end of 2015, however, the Belgian legislature extended the operating life of the industrial production of electricity at the Doel 1 nuclear power station for an additional ten years (until 15 February 2025) and also postponed the date of cessation of the industrial production of electricity at the Doel 2 station by almost ten years (to 1 December 2025). Those measures were accompanied by major works on the two power stations intended to modernise them and ensure compliance with safety standards, for a sum of EUR 700 million.

Two Belgian associations, Inter-Environnement Wallonie and Bond Beter Leefmilieu Vlaanderen, whose objective is the protection of the environment and living conditions, brought an action before the Cour Constitutionnelle (Constitutional Court, Belgium) for the annulment of that law in so far as the extension was adopted without an environmental assessment and without a procedure allowing for public participation.

On 29 July 2019, the CJEU ruled in case C-411/17, *Inter-Environnement Wallonie and Bond Beter Leefmilieu Vlaanderen v Council of Ministers*,⁷ that Directive 2011/92/EU⁸ must be interpreted in the sense that national measures, such as the ones described above, that have the effect of extending, by a significant period of ten years, the lifetime of both power stations in question, combined with major renovation works necessary due to the ageing of those power stations and the obligation to bring them into line with safety standards, must be found to be of a scale that is comparable, in terms of the risk of environmental effects, to that when those power stations were first put into service. Consequently, it is mandatory for such a project to be the subject of an environmental impact assessment. Moreover, since the Doel 1 and Doel 2 stations are situated near the border of Belgium and the Netherlands, such a project must also be subject to the transboundary assessment procedure laid down by the EIA Directive.

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- 7. The July 2019 judgment as well as the Opinion of Advocate General Kokott, delivered on 29 November 2018, can be found on the CJEU's website at: <http://curia.europa.eu/juris/documents.jsf?num=C-411/17>.
 - 8. Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, OJ L 26 (28 Jan. 2012) (EIA Directive).

The Court also held that a national court may – if the national law so permits – exceptionally maintain the effects of such measures, if that maintenance is justified by overriding considerations relating to the need to exclude a genuine and serious threat of interruption to the electricity supply in the member state concerned, which cannot be addressed by other means or alternatives, *inter alia* in the context of the internal market. That maintenance may only last for the amount of time strictly necessary in order to remedy that illegality. The Belgian Constitutional Court made use of the exception, in its Judgment No. 34/2020 of 5 March 2020, by setting aside the Belgian law of 28 June 2015 while maintaining its effects until 31 December 2022.

International Atomic Energy Agency

Nuclear safety

Meeting of Officers for the Eighth Review Meeting of Contracting Parties to the Convention on Nuclear Safety (CNS)⁹

Following the decision made by contracting parties to the CNS at the Seventh Review Meeting, an officers' meeting was held and hosted by the IAEA from 5 to 6 February 2020. At the meeting, officers discussed and agreed on the conduct of the upcoming Review Meeting and all related matters thereto.

Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention)¹⁰

In preparation for the Fourth Extraordinary Meeting of Joint Convention a working group was established by the contracting parties to the Joint Convention. During the reporting period, the IAEA facilitated a second meeting of this working group from 25 to 28 November 2019. At the meeting, participants *inter alia* discussed actions to improve the peer review process including measures in response to the increased number of contracting parties as well as possible amendments to the Joint Convention guidance documents.

Nuclear security

Second Meeting of Legal and Technical Experts in Preparation for the 2021 Conference of the Parties to the Amendment to the Convention on the Physical Protection of Nuclear Material (CPPNM)¹¹

From 12 to 14 November 2019, the IAEA convened a second meeting of legal and technical experts in preparation for the 2021 Conference of Parties to the Amendment to the CPPNM. Following from the first such meeting that took place from 22 to 26 July 2019, the aim of this meeting was to facilitate further review, at the 2021 Conference, of the implementation of the Amendment to the CPPNM and its adequacy as concerns the preamble, the whole of the operative part and the annexes in the light of the then prevailing situation, as foreseen in Article 16.1 thereof. The outcomes of the two

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9. Convention on Nuclear Safety (1994), IAEA Doc. INFCIRC/449, 1963 UNTS 293, entered into force 24 October 1996 (CNS).
 10. Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (1997), IAEA Doc. INFCIRC/546, 2153 UNTS 357, entered into force 18 June 2001 (Joint Convention).
 11. Amendment to the Convention on the Physical Protection of Nuclear Material (2005), IAEA Doc. INFCIRC/274/Rev.1/Mod.1, entered into force 8 May 2016 (Amendment to the CPPNM).

meetings of legal and technical experts will serve as input for the meeting of the Preparatory Committee for the 2021 Conference, which is scheduled to take place in 2020.

Technical Meeting of the Representatives of States Parties to the Convention on the Physical Protection of Nuclear Material (CPPNM)¹² and the CPPNM Amendment

The IAEA organised the fifth annual Technical Meeting of Representatives of States Parties to the CPPNM and the CPPNM Amendment on 11 November 2019. The purpose of the meeting was to discuss matters within the scope of the CPPNM and the Amendment to the CPPNM in order for the states parties to better understand their enhanced commitments and responsibilities under the Amendment to the CPPNM, as well as to share experiences and lessons learnt with respect to the implementation of those commitments and responsibilities. Participants discussed, among other topics, the role of national points of contact and competent authorities for matters within the scope of the CPPNM and the Amendment to the CPPNM as well as fulfilling the obligation to provide information on laws and regulations giving effect to the CPPNM pursuant to Article 14.1 thereof.

2020 International Conference on Nuclear Security: Sustaining and Strengthening Efforts (ICONS 2020)

The third International Conference on Nuclear Security was held at IAEA Headquarters from 10 to 14 February 2020. As part of the Ministerial Segment of ICONS 2020, the Agency organised a side event, opened by IAEA Director General Rafael Mariano Grossi, at which ministers discussed the importance of a strong international legal framework for nuclear security, including efforts to achieve universalisation of the Amendment to the CPPNM. In addition, a number of technical sessions during ICONS 2020 focused on aspects of the legal framework for nuclear security, including a high-level panel on “International Legally and Non-legally Binding Instruments for Nuclear Security”.

Nuclear liability

During the reporting period, the IAEA continued to assist member states, upon request, in their efforts to adhere to the relevant nuclear liability instruments in the context of its overall legislative assistance programme. A Workshop on Civil Liability for Nuclear Damage for Newcomer Countries, hosted by the Government of the United Arab Emirates in Abu Dhabi in March 2020, was attended by 74 participants from 25 member states.

Legislative assistance

The IAEA continued to provide legislative assistance to its member states to support the development of adequate national legal frameworks and to promote adherence to the relevant international legal instruments. Specific bilateral legislative assistance was provided to several member states through written comments and advice on drafting national nuclear legislation. Assistance in gaining more broadly a better understanding of the relevant international legal instruments was also provided to member states through awareness missions and workshops conducted in member states. In addition, the IAEA continued to organise a number of regional events in nuclear law, such as the Sub-regional Workshop on Nuclear Law held in Vienna, Austria for member states of Asia and the Pacific and the Regional Workshop on Harmonizing European Nuclear Law with International and European Law held in Sofia, Bulgaria.

12. Convention on the Physical Protection of Nuclear Material, (1980), IAEA Doc. INFCIRC/274 Rev. 1, 1456 UNTS 125, entered into force 8 February 1987 (CPPNM).

OECD Nuclear Energy Agency

10th mandate of the European Nuclear Energy Tribunal (ENET)

1 January 2020 marked the beginning of the 10th mandate of the European Nuclear Energy Tribunal. The Tribunal consists of seven independent judges appointed for five years by decision of the OECD Council. It has jurisdiction over disputes between states parties to the Paris Convention on Third Party Liability in the Field of Nuclear Energy¹³ or to the Brussels Convention Supplementary to the Paris Convention¹⁴ regarding the application or interpretation of these conventions. The OECD Council designated as judges for the 10th mandate of the Tribunal the following individuals: Ms Ulla-Maija Moisio (Finland), Ms Federica Porcellana (Italy), Mr Francis Delaporte (Luxembourg), Ms Ida Sørebø (Norway), Mr Miguel Sousa Ferro (Portugal), Mr Antonio Vercher Noguera (Spain) and Mr Khalil Bukhari (United Kingdom). The Inaugural Session of the 10th mandate of the ENET was held under NEA auspices on 7 February 2020.

Contracting Parties to the Paris Convention

The Contracting Parties to the Paris Convention met remotely on 20 March 2020 to discuss the interpretation and implementation of this Convention and the Brussels Supplementary Convention. The following documents listed below have been posted online:

- a bilingual version of the Unofficial consolidated text of the Paris Convention as amended by the 2004 Protocol in English and French;
- a bilingual version of the Unofficial consolidated text of the Brussels Supplementary Convention as amended by the 2004 Protocol in English and French;
- an update of the *Exposé des motifs* (explanatory text) of the revised Paris Convention in English and in French; and
- the *Exposé des motifs* (explanatory text) of the revised Brussels Supplementary Convention in English and in French (posted for the first time).

All of the above-listed documents can be found on the NEA website at: www.oecd-nea.org/law/paris-convention-protocol.html.

The NEA Steering Committee for Nuclear Energy Recommendation concerning the definition of “Radioisotopes Which Have Reached the Final Stage of Fabrication” in the Paris Convention is also now available. The purpose of this recommendation is to strengthen the common understanding with regard to the definition of the term “final stage of fabrication” in Article 1(a)(iv) of the Paris Convention and with regard to the temporal effect of the exclusion of radioisotopes that have reached the final stage of fabrication. The principle is that once the radioisotopes have reached the final stage of fabrication and have left the nuclear installation where they reached that stage (i.e. the “nuclear installation of origin”), they will no longer be covered by the Paris Convention. The English and French versions of this document are available at: www.oecd-nea.org/law/paris-convention.html?utm_source=mnb&utm_medium=email&utm_campaign=april2020.

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13. Convention on Third Party Liability in the Field of Nuclear Energy of 29th July 1960, as amended by the Additional Protocol of 28th January 1964 and by the Protocol of 16th November 1982 (1960), 1519 UNTS 329 (Paris Convention).
 14. Convention of 31st January 1963 Supplementary to the Paris Convention of 29th July 1960, as amended by the Additional Protocol of 28th January 1964 and by the Protocol of 16th November 1982 (1963), 1041 UNTS 358 (Brussels Supplementary Convention).

2020 International Nuclear Law Essentials (INLE)

The ninth session of the NEA International Nuclear Law Essentials (INLE) course was held on 17 to 21 February 2020 in Paris, France, with a diverse international group of 35 professionals from 17 NEA member and non-member countries. During the one-week programme, the participants learnt about the international nuclear law framework and major issues affecting the peaceful uses of nuclear energy. A total of 18 lecturers from the NEA, the International Atomic Energy Agency (IAEA), nuclear regulatory authorities and the private sector gave lectures on topics related to nuclear safety, security, non-proliferation and liability.

2020 International School of Nuclear Law (ISNL)

In light of the considerable uncertainty surrounding the evolution of the COVID-19 pandemic and potential government-imposed control measures in France, the NEA, in co-ordination with the University of Montpellier, determined to cancel the 2020 edition of the International School of Nuclear Law (ISNL). The 2020 ISNL would have marked the 20th anniversary of our programme, which has been held every year since 2001. The NEA and the University of Montpellier look forward to delivering an exceptional programme next year, from 23 August to 3 September 2021. The application will be available on the ISNL website in January 2021.

Exposé des motifs of the Paris Convention as amended by the Protocols of 1964, 1982 and 2004

The Paris Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964 and by the Protocol of 16 November 1982, is currently in force and has an Exposé des Motifs adopted in 1982, which is available on the OECD Nuclear Energy Agency website.

On 12 February 2004, the Contracting Parties to the Paris Convention signed the Protocol to Amend the Paris Convention, which has not yet entered into force.

On 18 November 2016, the Contracting Parties to the Paris Convention adopted this Exposé des Motifs of the Paris Convention as amended by the 2004 Protocol, which is of an explanatory nature.

INTRODUCTION

1. The production and use of nuclear energy for peaceful purposes involve hazards of a special character and potentially far-reaching consequences. Despite the high level of safety achieved in this field, the possibility remains that incidents capable of causing considerable damage can occur. The magnitude of that damage, the fact that an incident occurring in one country can cause significant damage in several neighbouring countries, and the recognition that damage caused by ionising radiation may not manifest itself until many years after the incident which caused it, have led many States to conclude that general tort law is not well suited to deal with the particular risks involved in nuclear energy production and use.

2. These States believe that a special regime for nuclear third party liability is both necessary and desirable because in the event of a nuclear incident, several different persons could be responsible for causing the damage and victims would, in all likelihood, have great difficulty in establishing which of those persons was, in fact, legally liable for that damage. Moreover, it was felt necessary to ensure that adequate financial security would be available to cover that liability.

3. The primary objectives of this special regime are threefold: first, to ensure adequate compensation of damage caused to persons, property and the environment by a nuclear incident; secondly, to make sure that nuclear operators, who are in the best position to ensure the safety of their nuclear installations and their transport activities, assume full responsibility for any breach of that safety while not being exposed to an excessive liability burden; and thirdly, to ensure that those associated with the construction, operation or decommissioning of nuclear installations (such as builders or suppliers) are exempt from that liability.

4. A special regime for third party liability should, as far as possible, provide a uniform system for all countries that could be affected by a nuclear incident occurring in a neighbouring territory. The effects of such an incident will not stop at national borders and persons on both sides of those borders should be equally protected. For these reasons, an international agreement setting up such a regime is desirable. Such an agreement would supplement measures applied in the important fields of public health and safety and accident prevention, and may also facilitate the solution of third party liability problems at a national level.

5. Furthermore, the potential magnitude of a nuclear incident will usually require international collaboration between national insurers. For the most part, marshalling the resources of the international insurance market through coinsurance and reinsurance is necessary for sufficient financial security to be made available to meet possible compensation claims. The establishment, at an international level, of uniform third party liability regulations is essential if this collaboration is to be achieved.

6. The core of the nuclear third party liability issue is upon whom, in what proportions and under what conditions should legal liability for nuclear damage caused by nuclear incidents be imposed. The solution to this problem requires reconciling the various interests described in paragraphs 2, 3 and 4 which has led to a system of liability for nuclear damage based on the following principles:

- strict liability of the operator, that is, liability without fault;
- exclusive liability of the operator;
- establishing a minimum amount of liability for the operator;
- limitation upon the operator's liability in time;
- an obligation on the operator to cover its liability by insurance or other financial security.

Article 2	GEOGRAPHICAL APPLICATION OF THE CONVENTION
Article 2(a)	<p>7. (a) The Convention applies to nuclear damage suffered in the territory or in any maritime zones of a Contracting Party or, subject to the exception referred to in paragraph 11, on board a ship or aircraft registered by a Contracting Party regardless of where the damage is suffered including on the high seas. The Convention equally applies, subject to the same exception, to nuclear damage suffered in the territory or in any maritime zones of a non-Contracting State or on board a ship or aircraft registered by a non-Contracting State regardless of where the damage is suffered including on the high seas, provided that at the time of the nuclear incident, the non-Contracting State meets the requirements of any one of three different cases [Article 2(a)(ii),(iii) and (iv)] [see paragraphs 8, 9 and 10]. The term "damage suffered on board a ship or aircraft" is understood to include damage suffered by a ship or aircraft other than that which is transporting the nuclear substances which are involved in the nuclear incident.</p>
Article 2(b)	<p>7. (b) A Contracting Party may always provide, under its national legislation, for a broader scope of geographical coverage of the Convention with respect to its own nuclear operators.</p>
Article 2(a)(ii)	<p>8. The first case stipulates that the non-Contracting State be a Contracting Party to the 1963 Vienna Convention on Civil Liability for Nuclear Damage and any amendment thereto which is in force for that Party and that both the non-Contracting State and the Paris Convention State in whose territory the nuclear installation of the operator liable for the nuclear damage is located be Contracting Parties to the 1988 Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention. Since the Joint Protocol creates a bridge between the Paris and Vienna Conventions, generally extending to States adhering to it the coverage that is provided under the Convention to which it is not a Contracting Party, the application of the Paris Convention to Vienna Convention/Joint Protocol States merely confirms what the Joint Protocol aims to achieve.</p>
Article 2(a)(iii)	<p>9. The second case requires that the non-Contracting State have no nuclear installations in its territory or in any maritime zones. The application of the Convention to victims in non-nuclear States is warranted since such States do not create any nuclear risks themselves, and victims in such States are in need of protection from nuclear incidents occurring in other States. In keeping with the provisions on jurisdiction contained in Article 13, it is up to the competent court to determine whether or not a particular non-Contracting State meets the requirements of this second case.</p>

Article 2(a)(iv)	<p>10. The third case specifies that any other non-Contracting State must have nuclear liability legislation in force that affords equivalent reciprocal benefits and that is based upon principles identical to those contained in the Paris Convention. Since such States pose a risk of nuclear damage in Paris Convention States, it is only logical that the benefits under the Paris Convention should accrue to victims in such States only if those States extend the benefits of their own legislation to victims in Paris Convention States. The additional requirement that such legislation be based upon principles identical to those contained in the Paris Convention is designed to ensure that victims in Paris Convention States who suffer damage as a result of a nuclear incident occurring in such a non-Contracting State will have the same basic rights with respect to claiming compensation against the liable operator in the non-Contracting State as will victims in the non-Contracting State when bringing their claims for compensation against the liable operator under the Paris Convention. The inclusion of this additional requirement thus transforms the principle of reciprocity into concrete terms. It may also act as an incentive for non-Contracting States to apply the Paris Convention principles at national level [see paragraph 67]. In keeping with the provisions on jurisdiction contained in Article 13, it is up to the competent court to determine whether or not a particular non-Contracting State meets the requirements of this third case.</p> <p>11. The exception referred to in paragraph 7(a) is that the Convention does not apply to nuclear damage suffered on board a ship or aircraft, registered either by a Contracting Party or by a non-Contracting State described in Article 2(a) (ii), (iii) or (iv), where that ship or aircraft is in the territory of a non-Contracting State that is not described in Article 2(a) (ii), (iii) or (iv). This exception would apply, for example, to nuclear damage suffered on board a ship that is registered in a Paris Convention State but that is sailing in the territorial waters of a non-Contracting State not described in either Article 2(a) (ii), (iii) or (iv), at the time the nuclear damage occurs.</p> <p>12. The term “maritime zones” as used in the Convention means maritime zones that are established in accordance with international law. Such zones are understood to include the territorial sea, a contiguous zone, an exclusive economic zone and the continental shelf.¹</p>
Articles 1(a)(i), (ii), (v), (vii), (ix), 1(b), 3(b)	<p><u>SCOPE OF THE CONVENTION</u></p> <p>13. The Convention provides an exceptional regime and its scope is limited to risks of an exceptional character for which general tort law rules and practice are not suitable. Whenever risks, even those associated with nuclear activities, can properly be dealt with through existing legal processes, they are left outside the scope of the Convention</p>

1. On 25 April 1968, the Steering Committee for Nuclear Energy adopted a Recommendation [NE/M(68)1] according to which the Paris Convention should be understood to apply to nuclear incidents occurring on the high seas and to damage suffered on the high seas. On 22 April 1971, that same Committee adopted a Recommendation [NE/M(71)1] providing that: “The scope of application of the Paris Convention should be extended by national legislation to damage suffered in a Contracting State, or on the high seas on board a ship registered in the territory of a Contracting State, even if the nuclear incident causing the damage has occurred in a non-Contracting State.” The first of these Recommendations should be amended; the second will become obsolete and should be revoked once the Protocol to amend the Paris Convention of 12 February 2004 is in force for all Contracting Parties.

	<p>14. The special regime of the Convention applies to nuclear incidents occurring at or in connection with nuclear installations, or in the course of transport of nuclear substances all of which terms are defined in the Convention itself. States remain free, of course, to take additional measures outside the Convention to apply its provisions to nuclear incidents not covered thereby, but this must be done through funds other than those made available under the Convention.</p>
Article 1(a)(i)	<p>15. (a) A “nuclear incident” is defined as any occurrence or series of occurrences having the same origin which causes nuclear damage. This definition does not only base the notion of nuclear incident on accidental or other extraordinary occurrences but on any occurrence causing nuclear damage. It also covers nuclear damage caused by a series of occurrences of the same origin. A series is understood as occurrences which happen within a certain period of time. Thus, for example, an uncontrolled release of radiation extending over a certain period of time which causes nuclear damage is considered to be a nuclear incident if its origin lies in one single phenomenon even though there has been an interruption in the emission of radioactivity.</p>
Article 1(a)(i), (ix)	<p>15. (b) The definition of nuclear incident contained in the Paris Convention makes no reference to “...any occurrence which creates a grave and imminent threat of causing such (nuclear) damage”. That reference is found, instead, in the Paris Convention’s definition of “preventive measures” in order to avoid any possible interpretation of the term nuclear incident as assimilating a nuclear incident and a threat of nuclear damage.²</p>
Article 3(b)	<p>16. The situation may arise, however, where both a nuclear incident and a conventional occurrence are so closely interrelated that the resulting nuclear damage may be said to have been caused jointly by the nuclear incident and such other occurrence. In such a case, to the extent that the nuclear damage caused by the conventional occurrence is not reasonably separable from the nuclear damage caused by the nuclear incident, it is considered to be nuclear damage caused by the nuclear incident for which compensation may be claimed under the Convention.</p>
Article 3(b)	<p>17. Where, however, nuclear damage has been caused jointly by a nuclear incident and by an emission of ionizing radiation that is not addressed by the Convention, such as that coming from a source which is outside a nuclear installation,³ the Convention does not limit or otherwise affect the liability of any person with respect to that emission</p>
Article 1(a)(ii), (v), 1(b)	<p>18. (a) Nuclear installations are defined as reactors,⁴ other than those which are used or incorporated for use in a means of transport as a source</p>

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2. The difference between the definitions of “nuclear incident” as contained in the 1997 Protocol to Amend the Vienna Convention and the Paris Convention is purely a drafting matter and not an issue of substance.
 3. This is not the only case where an emission of ionising radiation is not addressed by the Convention.
 4. On 8 June 1967, the Steering Committee for Nuclear Energy adopted an Interpretation [NE/M(67)1] according to which the term “reactors” in the sense of Article 1(a)(ii) of the Convention does not include sub-critical assemblies, that is to say assemblies which are not capable of maintaining a self-sustaining chain process of nuclear fission. This Interpretation will remain valid after the Protocol to amend the Paris Convention of 12 February 2004 comes into force for all Contracting Parties.

of power for any purpose,⁵ factories for the manufacture or processing of nuclear substances, factories for the separation of isotopes of nuclear fuel and factories for the reprocessing of irradiated nuclear fuel. They are also defined to include installations for the disposal of nuclear substances.⁶ Should a Contracting Party wish to exclude a nuclear installation, including a disposal facility, from the application of the Convention on the grounds that it no longer poses a significant risk, it may make application therefore to the Steering Committee for Nuclear Energy under Article 1(b) of the Convention.⁷

18. (b) In addition, a nuclear installation is defined to encompass facilities for the storage of nuclear substances, unless that storage is only incidental to the carriage of those substances, in which case the storage facilities will normally not be considered a nuclear installation because of the transitory and temporary nature of the storage.

18. (c) Finally, a nuclear installation is defined to comprise any reactor, factory, installation or facility described in Article 1(a)(ii) of the Convention that is in the course of being decommissioned.⁸ However, a Contracting Party may cease to apply the Convention to a nuclear installation that is in the course of being decommissioned if it complies with certain provisions and conditions.⁹

18. (d) The Convention contains no specific provision regarding its application to nuclear installations used for military purposes, apart from a reference in the preamble to the Convention to the development of the production and uses of nuclear energy for peaceful purposes.

5. It should be noted that a Convention on the Liability of Operators of Nuclear Ships was adopted in Brussels on 25 May 1962. This Convention has not entered into force.
6. On 11 April 1984, the Steering Committee for Nuclear Energy adopted a Decision [NE/M(84)1] pursuant to which installations used for the disposal of nuclear substances are to be considered as nuclear installations within the meaning of Article 1(a)(ii) of the Convention in their pre-closure phase only. Since both pre-closure and post-closure phases are covered by the Convention, this Decision will become obsolete and should be revoked once the Protocol to amend the Paris Convention of 12 February 2004 is in force for all Contracting Parties. Moreover, on 3 November 2016, the Steering Committee for Nuclear Energy adopted a Decision and Recommendation [NEA/NE(2016)7/FINAL] pursuant to which any Contracting Party may cease to apply the Paris Convention to a nuclear installation for the disposal of low-level radioactive waste, provided that the provisions set out in the Appendix to the Decision and Recommendation and any additional conditions which the Contracting Party may judge appropriate to establish are met. This Decision will also remain valid even after the Protocol to amend the Paris Convention of 12 February 2004 comes into force for all Contracting Parties.
7. Article 1(b) of the Convention empowers the Steering Committee for Nuclear Energy to exclude any nuclear installation from the application of the Convention where, in the Committee's view, the small extent of the risks involved so warrants.
8. On 28 April 1987, the Steering Committee for Nuclear Energy adopted an Interpretation [NE/M(87)1] calling for the Paris Convention to apply to nuclear installations in the process of being decommissioned. This Interpretation will become obsolete and should be revoked when the Protocol to amend the Paris Convention of 12 February 2004 comes into force for all Contracting Parties.
9. On 30 October 2014, the Steering Committee for Nuclear Energy adopted a Decision [NEA/SUM(2014)2] pursuant to which a Contracting Party could cease to apply the Convention to a nuclear installation in the process of being decommissioned provided that the provisions set out in the Annex to the Decision are complied with together with any additional conditions which the Contracting Party itself may deem appropriate to impose. This Decision will remain valid even after the Protocol to amend the Paris Convention of 12 February 2004 comes into force for all Contracting Parties.

Article 1(a)(iii), (iv), (v)	<p>18. (e) Neither does the Paris Convention make any reference to its application to nuclear installations that produce energy by nuclear fusion. Based upon available technical information concerning the development of such installations, the application of the Convention's special nuclear liability regime to such installations does not seem to be warranted for the time being. However, in view of the evolution of research in this field, the Steering Committee for Nuclear Energy could extend the scope of application of the Convention to such installations in accordance with the provisions of Article 1(a)(ii) and 16.</p> <p>18. (f) Factories for the manufacture or processing of natural or depleted uranium, facilities for the storage of natural or depleted uranium, and the transport of natural or depleted uranium are also excluded since the level of radioactivity is low and there are no criticality risks. Under Article 1(a)(v) of the Convention, natural uranium and depleted uranium are excluded from the definition of "nuclear substances". Installations where small amounts of fissionable materials are found, such as research laboratories, are likewise outside the Convention, and particle accelerators are also excluded. Finally, where materials such as uranium salts are used incidentally in various industrial activities not related to the nuclear industry, such usage does not bring the plant concerned within the scope of the Convention.</p> <p>19. Nuclear fuel is defined as fissionable material, that is, uranium, including natural uranium in all its forms, and plutonium in all its forms. Nuclear substances are defined as nuclear fuel, other than natural uranium and depleted uranium, and radioactive products or waste. Depleted uranium means uranium which contains a smaller proportion of the isotope U-235 than is contained in natural uranium.¹⁰</p> <p>20. Risks which arise in respect of radioisotopes usable for any industrial, commercial, agricultural, medical, scientific or educational purposes are excluded from the scope of the Convention, provided the radioisotopes have reached their final stage of manufacture and are outside a nuclear installation.¹¹ Such risks are not of an exceptional nature and, indeed, are covered by the insurance industry in the ordinary course of business. Despite the widespread use of radioisotopes in many fields, which requires continual and careful observance of health protection precautions, there is little possibility of catastrophe. Hence no special third party liability problems are posed and the matter is left to be determined by ordinary legal regimes.</p>
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- 10. On 27 October 1977, the Steering Committee for Nuclear Energy adopted two Decisions [NE/M(77)2] on the basis of Article 1(b) of the Convention. The first concerns the exclusion from the scope of the Convention of certain categories of nuclear substances (in particular reprocessed uranium) which fulfil the conditions established by the Decision (see paragraph 22). The second (replaced at first by a Decision of the same Committee of 18 October 2007 [NEA/NE/M(2007)2], and then by a Decision of 3 November 2016 [NEA/NE(2016)8/FINAL]) deals with the exclusion from the scope of the Convention of small defined quantities of nuclear substances transported or used outside a nuclear installation. These Decisions (as amended) will remain valid after the Protocol to amend the Paris Convention of 12 February 2004 has come into force.
 - 11. On 19 April 2018, the Steering Committee for Nuclear Energy adopted a Recommendation [NEA/NE(2018)3/FINAL] clarifying that the radioisotopes reach the final stage of fabrication, under Article 1(a)(iv) of the Paris Convention, when they may be used for any industrial, commercial, agricultural, medical, scientific or educational purpose. The radioisotopes which have reached the final stage of fabrication are excluded from the scope of application of the Paris Convention and shall not be made subject to it at a later stage.

Articles 1(a)(ii), (iii), 1(b), 16	<p>21. In addition, some activities, such as mining, milling and the physical concentration of uranium ores, do not involve high levels of radioactivity and such hazards as there are, concern persons immediately involved in those activities rather than the public at large. Hence, these activities do not fall within the scope of the special regime of the Convention.</p> <p>22. In order to take account of future developments and new activities which may involve risks of an exceptional nature, the Steering Committee for Nuclear Energy, the governing body of the OECD Nuclear Energy Agency (NEA), may extend the scope of the Convention to include other installations in which there is nuclear fuel or radioactive products or waste. It may also include other fissionable material in the definition of nuclear fuel. Finally, the Steering Committee may exclude any nuclear installation, nuclear fuel or nuclear substances which are currently included, by reason of the small risks involved. Decisions of the Steering Committee in all these matters are taken by mutual agreement of the members of the Steering Committee representing the Contracting Parties.</p>
Articles 3, 4	<p><u>NATURE OF LIABILITY</u></p> <p>23. There is a long-standing tradition, established by legislation or judicial interpretation, to the effect that when a person engages in a dangerous activity, that person is presumed to be liable for the hazards thereby created. Because of the special dangers involved in the activities covered by the Convention and the difficulty of establishing negligence given the technical complexity of nuclear energy production and use, the rule of strict liability has been adopted and liability for nuclear damage will thus be imposed regardless of fault. Proof of fault is not required.</p>
Articles 1(a)(vi), 6(b), (c), (f), 9, 16bis	<p><u>PERSON LIABLE – NUCLEAR INSTALLATIONS</u></p>
Articles 1(a)(vi), 6(b)	<p>24. All third party liability is channelled onto the operator of the nuclear installation where the nuclear incident occurs. Under the Convention, the operator – and only the operator – is liable for nuclear incidents at nuclear installations and for those caused by nuclear substances originating in nuclear installations. The operator of a nuclear installation is defined as the person designated or recognized as the operator of that nuclear installation by the competent public authority. Where there is a system of licensing or authorization, normally the holder of the licence or authorisation will be designated or recognized as the operator. In the majority of cases the licensee will also be the operator under the Paris Convention. However, a State may designate or recognise another entity as the operator. Where an action for compensation for nuclear damage is brought, the court is bound to consider the person deemed to be the operator by the competent public authority of the country where the relevant nuclear installation is situated as the operator of that installation.</p> <p>25. Two primary factors have motivated in favour of channelling all liability onto the operator. First, channelling obviates the necessity for all those associated with the supply to, or construction, operation or decommissioning of a nuclear installation, other than the operator himself, to take out insurance against third party liability risks which would, in any event, be difficult to achieve, thus allowing for a concentration of the insurance capacity available in favour of the operator alone. Secondly, it is desirable to avoid complicated and lengthy actions and counter-actions in an effort to establish who is legally liable.</p>

Article 1(a)(ii)	<p>26. A Contracting Party may decide that, where one operator operates a number of nuclear installations at the same site, these installations are to be treated as a single nuclear installation. This decision may be extended to other premises on the same site where nuclear fuel or radioactive products or waste is held but which are not nuclear installations as defined in the Convention. Such a decision would be advantageous from the insurance point of view, in that all installations on the same site are grouped together, as well as from the victims' point of view, in that they would not have to establish in which installation on that site the nuclear incident originated.</p>
Articles 3(a), 4(a)(iii), 4(b)(iii), 6(c)(i)1, 2, 9	<p>27. (a) An individual other than the operator may be liable for nuclear damage caused by a nuclear incident:</p> <ul style="list-style-type: none"> (i) where the operator is not liable under the Convention for nuclear damage to the nuclear installation itself, to any other nuclear installation on the same site (including one under construction) or to any property on the same site used or to be used in connection with any such installation, the Convention leaves it to the ordinary rules of law to determine the liability of that individual for such damage [see paragraph 80(b)];
Articles 3(a), 6(c)(i)1, 9	<ul style="list-style-type: none"> (ii) where the operator is not liable under the Convention for nuclear damage because the nuclear incident which has caused that damage is directly due to an act of armed conflict, hostilities, civil war or insurrection, the Convention leaves it to the ordinary rules of law to determine liability for such damage [see paragraph 80(a)].
Article 6(c)(i)2	<p>27. (b) The Convention also leaves it to the ordinary rules of law to determine the liability of a person, duly authorized to operate a reactor comprised in a means of transport, for nuclear damage caused by nuclear substances coming from or going to that reactor, where there is no operator liable under the Convention for such damage.</p>
Article 3, 6(c)(ii)	<p>27. (c) The third party liability regime established by the Convention is intended to be exclusive and exhaustive in nature compared to general tort law. Thus, an operator incurs no liability outside the Convention and under general tort law, for nuclear damage caused by a nuclear incident, including damage to on-site property belonging to others (but excluding the personal property of any person employed on the site) for which the operator is not liable under the Convention. However, where a right to compensation for damage to such property exists by virtue of contractual arrangements, such right remains unaffected by the Convention. Article 6(c)(ii) is also designed to ensure that no nuclear operator will be held liable outside the Convention and under general tort law for damage which is not included in the Convention's definition of "nuclear damage", but which could have been included in that definition if the relevant Contracting Party had so provided in its national legislation. In such a case, general tort law will not apply and the operator will not be liable for such loss or damage.¹²</p>

12. See, by comparison, Article II.6 of the 1963 Vienna Convention on Civil Liability for Nuclear Damage as amended by the 1997 Protocol to Amend the Vienna Convention, which reads as follows: "No person shall be liable for any loss or damage which is not nuclear damage pursuant to sub-paragraph (k) of paragraph 1 of Article I but which could have been determined as such pursuant to the provisions of that sub-paragraph."

Articles 6(b), 16bis Article 6(f)(i), (ii) Article 6(g)	<p>28. The rule contained in Article 6(b) regarding the exclusive liability of the operator does not affect certain existing international agreements in the field of transport (see paragraph 48) nor is it intended to affect the rules of public international law with regard to any possible responsibility of States towards each other.</p> <p>29. It is essential to the notion of channelling liability onto the operator that no action may lie against any other person and in particular, any person who has supplied any services, materials or equipment in connection with the planning, construction, modification, maintenance, repair, operation or decommissioning of a nuclear installation. In the ordinary course of law, on the contrary, should an incident arise due to a defect in design or in material supplied, a person suffering damage may well have a right of action against the supplier, for example on the basis of latent defect under product liability law.</p> <p>30. Furthermore, the operator might well have a right of recourse to recover compensation which it has paid for nuclear damage to third parties. A corollary to the notion of channelling is, therefore, that the operator's rights of recourse (and, by way of subrogation, the rights of recourse of the operator's insurer or other financial guarantor) against suppliers in respect of any sums which the operator has paid as compensation are barred. If they were not, each supplier would have to insure itself against the same risk already covered by the operator's insurance and this would involve a duplication of costly financial security with no additional benefit to victims.</p> <p>31. (a) There are, however, two exceptions to the rule barring a right of recourse. <i>The first exception:</i> where the nuclear damage caused by a nuclear incident results from an act or omission done by an individual with the intention of causing such damage, the liable operator's normal right of recourse against that individual is specifically retained. This right of recourse lies only against that individual, not against that individual's employer. The principle of <i>respondeat superior</i> is thus excluded, for to do otherwise would be contrary to the purpose of the Convention. <i>The second exception:</i> rights of recourse may be exercised by the liable operator to the extent that they are expressly provided for by contract. Rights of recourse may also be exercised by the liable operator's insurer or other financial guarantor by way of subrogation where provided for in the contract of insurance or other financial guarantee.</p> <p>31. (b) The provisions of Article 6(f) relating to the operator's right of recourse do not affect its rights to recover from joint tortfeasors in the case where more than one operator is liable [see paragraph 33]. Furthermore, whenever an operator has a right of recourse to any extent against any person by virtue of Article 6(f), that person shall not, to that extent, have a right of recourse against that operator by virtue of rights of subrogation acquired by that person pursuant to Article 6(d).</p> <p>32. In the event of a nuclear incident involving nuclear fuel or radioactive products or waste which have been stolen, lost, jettisoned or abandoned, liability is imposed either on the operator from whose nuclear installation the materials came immediately before such an event or on any other operator who has assumed liability for them in accordance with the Convention.</p>
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Article 5(d)	<u>LIABILITY OF MORE THAN ONE OPERATOR</u>¹³
	<p>33. (a) Where nuclear damage gives rise to the liability of more than one operator, the liability of the different operators involved is joint and several. Joint liability means that claims for damage suffered may be made against all persons who are liable for the damage, whereas several liability means that such claims may be made against any one or more of those persons who are liable for the damage. The joint and several liability of the different operators involved allows victims to make their claims for compensation either jointly against all of the liable operators up to the total amount of their liability, or severally against any one or more of the liable operators up to the total amount of liability of all liable operators combined. Victims are thus given the convenience of being able to sue one operator for the total amount of liability of all liable operators.</p> <p>33. (b) This rule, however, does not apply to a nuclear incident involving nuclear substances in the course of carriage in one and the same means of transport, or involving such substances where they are stored incidental to the carriage in one and the same nuclear installation. In such cases, rather than adding up the liability amounts of all liable operators, the total amount of liability is limited to the highest liability amount applicable to any one of them.</p> <p>34. (a) Regardless of whether victims make their claims for compensation jointly or severally, in no case will a liable operator be required to pay more than the amount of liability imposed upon it pursuant to Article 7. In practice, where claims for compensation are made against only one liable operator, that operator will invoke the ordinary rules of law regarding contributions between persons jointly and severally liable to recover from the other liable operators any compensation which that operator has paid in excess of the liability amount imposed upon it.</p> <p>34. (b) In the event of a nuclear accident involving nuclear substances which have been successively in more than one nuclear installation, (i) if those substances are in a nuclear installation at the time the nuclear damage is caused, only the operator of that installation is liable for that damage to the exclusion of all operators having previously had possession of those substances; and (ii) if those substances are not in a nuclear installation at the time the nuclear damage is caused, only the operator of the nuclear installation in which those substances last were before the nuclear damage was caused, or the operator which last took charge of those substances or assumed liability therefore under the terms of a written contract, is liable for the damage.</p>
Articles 4, 5(b), 6(b), (d), (g), 7(e), (f)	<u>PERSON LIABLE – TRANSPORT</u>
Article 4(a)	<p>35. The following rules relating to transport apply to all the different means of transport.</p> <p>36. In principle, liability is imposed on the operator sending the nuclear substances since it will be responsible for the packing and containment and for ensuring that these comply with the health and safety regulations laid down for transport.</p>

13. It is to be noted that in the French version of the revised Exposé des Motifs, the English concepts of "joint and several liability" are combined into one single concept, known as "responsabilité solidaire". Whichever concept is used, the consequences are the same.

Articles 4(a)(i)(ii)(iii), 4(b)(i)(ii)(iii)	<p>37. The liability of the sending operator ends when the operator of another nuclear installation has assumed liability for the substances pursuant to the express terms of a written contract. However, if the contract contains no such express terms, the sending operator's liability ends when the operator of another nuclear installation has taken charge of the substances. It also ends when the substances have been taken in charge by a person duly authorized to operate a reactor comprised in a means of transport, if the substances are intended to be used in that reactor. Thus, from the point of view of the person suffering damage, the burden of proof will be on the sending operator to show that the operator of some other nuclear installation has assumed liability either under contract or by taking charge of the substances, or that a person operating a reactor comprised in a means of transport has taken charge of the nuclear substances. Similarly, if the substances are sent to the operator from a person operating a reactor comprised in a means of transport, the liability of the receiving operator begins when it has taken charge of them. The precise moment of the taking charge will normally be determined by the competent court [but see also paragraph 44].</p>
Article 4(a)(iv)	<p>38. (a) The Convention clearly cannot impose liability upon persons not subject to the jurisdiction of the Contracting Parties. If the substances are consigned to a destination in a non-Contracting State, it is therefore the sending operator who is liable until the substances have been unloaded from the means of transport by which they arrived in the territory of the non-Contracting State.</p>
Article 4(b)(iv)	<p>38. (b) In the converse situation, where substances are being carried from a non-Contracting State to a Contracting Party, that is, where there is no sender in the territory of the Contracting Parties it is vital for victims that there should always be somebody liable within the territory of the Contracting Parties. In this case, liability is imposed upon the operator to whom the substances are destined, and with whose written consent they have been sent, from the moment that they have been loaded on the means of transport by which they are to be carried from the territory of the non-Contracting State.</p>
Articles 4(a)(i)(ii), 4(b)(i)(ii), 4(c), 10(c)	<p>39. Only an operator with a direct economic interest in nuclear substances being transported may assume liability for nuclear damage caused by a nuclear incident occurring during that transport. A direct economic interest does not necessarily mean that the operator assuming liability must be the sender or the receiver of the nuclear substances; it may be the owner of nuclear substances which, in the course of their treatment, are transported between several nuclear installations, each with its own operator. One operator may only assume such liability from another operator pursuant to the express terms of a written contract or because it has taken charge of the nuclear substances. The purpose of Article 4(c) is to prevent an operator in a Paris Convention State which imposes a comparatively low liability amount for transport activities¹⁴ from assuming liability for damage occurring during the transport of nuclear substances between two other nuclear operators, for the sole purpose of reducing the cost of the transport by virtue of that operator's less expensive liability insurance premiums. Otherwise, in the event of a nuclear incident causing damage in excess of that comparatively low</p>

14. A comparatively low liability amount means a low liability amount compared to that imposed by other Paris Convention States.

	<p>liability amount, that Paris Convention State would be required to provide compensation for nuclear damage, up to the amount required under Articles 7(a) or 21(c), in circumstances where neither it nor the operator derives any real benefit at all from the substances being transported.</p>
Article 5(b)	<p>40. In addition, since nuclear substances may be stored temporarily in the course of their carriage, it is necessary to establish a clear rule as to which operator would be liable if such storage took place in a nuclear installation. Although facilities where nuclear substances are stored only incidentally to their carriage are normally excluded from the definition of "nuclear installation" [see paragraph 18(b)], such facility may itself be a nuclear installation within the meaning of Article 1(a)(ii). However, the operator of a nuclear installation will not be liable for damage caused by a nuclear incident involving only nuclear substances which are stored at its installation incidental to their carriage where another operator or person is liable pursuant to Article 4.</p>
Article 4(e)	<p>41. There is one exception to the basic principle that only the operator is liable under the Convention. A Contracting Party may, by legislation, on condition that the requirements of Article 10(a) with regard to financial security are fulfilled, provide that a carrier be liable under the Convention in substitution for an operator of a nuclear installation in its territory. Such substitution will be in accordance with the terms laid down in the legislation and by decision of the competent public authority. Moreover, the substitution must be requested by the carrier and have the consent of the operator of the nuclear installation situated in the territory of the Contracting Party in question. Once the decision has been taken, the carrier will be liable in accordance with the Convention in place of that operator. For all the purposes of the Convention, the carrier is then considered, in respect of nuclear incidents occurring in the course of carriage of nuclear substances, as an operator of a nuclear installation in the territory of the Contracting Party whose legislation has provided for the substitution.¹⁵</p> <p>42. Where, in respect of the carriage of nuclear substances coming from or destined for different operators, the carrier has assumed, by substitution, the liability of each of those operators, the rules relating to the liability of more than one operator will apply in the same way as if there had been no substitution and the carrier will be treated as if it were each and every one of those operators.</p>
Article 4(d)	<p>43. In order to facilitate the transport of nuclear substances, especially in the event of transit through a number of countries, it is provided that in respect of each carriage the operator liable in accordance with the Convention must provide the carrier with a certificate issued by or on behalf of the insurer or other person providing the financial security required pursuant to Article 10. However, this general obligation operates in the case of international carriage only, each Contracting Party being free to dispense with it in relation to carriage which takes place wholly within its territory. The certificate must contain the name and address of</p>

15. On 22 April 1971 the Steering Committee for Nuclear Energy adopted two Interpretations [NE/M(71)1], the first based on Article 4(d) of the Convention and concerning the substitution of a carrier for the operator, and the second based on Article 6(d) of the Convention and concerning the rights of subrogation of a carrier which has accepted the obligations of an operator. These Interpretations will remain valid after the Protocol to amend the Paris Convention of 12 February 2004 has come into force for all Contracting Parties.

	<p>the operator liable and the details of the financial security. This information may not be subsequently contested by the person by whom or on whose behalf the certificate was issued. The certificate must also include an indication of the nuclear substances involved and the carriage in respect of which the security applies, as well as a statement by the competent public authority that the person named is an operator within the meaning of the Convention.¹⁶</p> <p>44. For transport of nuclear substances to installations situated in its territory, a Contracting Party may require the operators of the installations for whom the substances are carried from abroad to take the substances in charge the moment the substances reach its territory or even earlier. Similarly, in the case of nuclear substances sent by operators of nuclear installations in its territory to a foreign destination, a Contracting Party may require that the nuclear substances shall remain in the charge of such operators until they have left its territory or even longer.</p>
Article 7(e)	<p>45. The possession of a certificate by a carrier does not imply any right to enter the territory of a Contracting Party. Moreover, a Contracting Party may subject the transit of nuclear substances through its territory to the condition that the required amount of liability of the foreign operator concerned is increased if it considers, taking account of the special dangers of the nuclear substances in the particular transit in question, that such amount does not adequately cover the risks. Nevertheless, the amount thus increased, which applies only to incidents occurring on the territory of the State being transited, cannot exceed the required amount of liability of operators of nuclear installations situated in its own territory.</p>
Article 7(f)	<p>46. It was recognized, however, that a right of entry in case of urgent distress into the ports of States and a right of innocent passage through territorial seas is granted under international law and that by agreement or under international law there may be a right to fly over or land on the territory of States. Thus the provisions of Article 7(e) do not apply to a transit by sea or by air in these cases.</p> <p>47. Where, and this may well be a normal case, the carriage involves nuclear substances sent by a number of different operators, the maximum total amount for which such operators are jointly and severally liable is the highest amount established with respect to any of them pursuant to Article 7. This rule applies, however, only where the nuclear substances involved are in one and the same means of transport or are stored incidentally to the transport, in one and the same nuclear installation [see paragraph 33(b)].</p>
Article 6(b)	<p>48. The channelling of liability to the nuclear operator under the Convention is not intended to interfere with existing international agreements in the field of transport in force or open for signature, ratification or accession at the date of the adoption of the Convention (29th July 1960). This intention is clearly reflected in Article 6(b) which states that the channelling principle does not affect the application of</p>

16. On 8 June 1967, the Steering Committee for Nuclear Energy recommended a model financial security certificate to the Signatory countries of the Convention [NE/M(67)1]. This Recommendation will remain in effect after the Protocol to amend the Paris Convention of 12 February 2004 has entered into force for all Contracting Parties.

	<p>such agreements. Most international agreements in the field of transport which have been adopted since this date contain express provisions designed to avoid any conflict with the channelling principle but where such provisions are not included, Parties to the Convention may be faced with uncertain or even conflicting liability obligations. International agreements in the field of transport are understood to mean international agreements dealing with third party liability for damage involving a means of transport and international agreements dealing with bills of lading.</p> <p>49. Thus, a person suffering damage caused by a nuclear incident occurring in the course of transport may have two rights of action: one against the operator liable under the Convention and another against the carrier liable under existing international agreements in the field of transport.¹⁷</p> <p>50. Where the liable operator is at the same time the carrier, for example, where it transports nuclear substances on its own means of transport, these two possible actions may be brought against one person. In this case, however, the operator cannot take advantage of the provisions of international agreements in the field of transport to reduce or alter its liability under the Convention.</p>
Article 6(d), (g)	<p>51. A person who has paid compensation for damage caused by a nuclear incident, whether under any international agreement in the field of transport or under any legislation of a non-Contracting State acquires, by subrogation, the rights under the Paris Convention of the victim whom that person has compensated. This concept is used in other international conventions. However, these rights can only be exercised by a person against the operator to the extent that the operator does not have a right of recourse against that person pursuant to Article 6(f).</p> <p>52. The rules relating to damage or loss caused jointly by a nuclear incident and by an incident other than a nuclear incident or caused jointly by a nuclear incident and by an emission of ionizing radiation not covered by the Convention [see paragraph 17] apply equally to nuclear incidents occurring in the course of transport.</p>
Article 6(a)	<p><u>ACTIONS FOR COMPENSATION</u></p> <p>53. Although actions for compensation under the Convention, whether arising out of nuclear incidents occurring at or in connection with nuclear installations or in the course of transport, can in principle only be brought against the operator, the right to bring actions against the insurer or other person providing the financial security, either as an alternative to the operator or in addition to him, is maintained where the national law of the court having jurisdiction grants a direct right of action in such a case.</p>

17. This situation has caused practical difficulties in the field of carriage by sea of nuclear substances. To ensure that only the operator of a nuclear installation is liable for damage caused by a nuclear incident during such carriage, a Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material was adopted in Brussels on 17 December 1971.

Articles 1(a)(vii)-(x), 3(a), 6(c)(ii)	<u>NUCLEAR DAMAGE GIVING THE RIGHT TO COMPENSATION</u>
Article 1(a)(vii)	<p>54. The Convention contains a detailed definition of “nuclear damage” which comprises six different categories of injury, loss, costs or damage that will be compensated under the Convention.¹⁸ The first two are the traditional categories of loss of life or personal injury, and loss of or damage to property, both of which are generally provided for under national law and with the scope of both being decided by the law of the competent court.</p>
Article 3(a)	<p>55. With respect to damage to property, there is no right to compensation under the Convention for damage to the nuclear installation itself, to any other nuclear installation, including one under construction, on that same site, or to any property on that same site which is used or to be used in connection with any such installation. The purpose of this exclusion is to avoid the financial security constituted by the operator from being used principally to compensate damage to such installations or such property to the detriment of third parties. Owners of nuclear installations which are either operating or under construction are obliged to assume the risks of loss of or damage to their property since they are able to include the cost of this risk in the cost of operating or building the installation. Similarly, contractors whose property is on the site of a nuclear installation are obliged to assume the risks of loss or damage thereto, as they are able to include the cost of this risk in the price of their supply contract. The exoneration does not apply, however, to the personal property of any person employed on the site.¹⁹</p> <p>56. (a) The remaining four categories of nuclear damage encompass two types of economic loss, the costs of restoring an impaired environment and the costs of measures taken to prevent or minimise nuclear damage [see paragraphs 58 to 62(b)]. Such losses and costs constitute nuclear damage however, only to the extent determined by the relevant provisions of national law of the competent court [see paragraph 97]. A Contracting Party is not free to exclude any of these four categories of damage under its national law; rather, its body of national law and legislation must address all of those heads of damage, although it has discretion to determine the nature, form and extent of compensation to be granted under those heads.</p>

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18. The definition of “nuclear damage” contained in the Paris Convention has been inspired by similar definitions adopted under other international liability conventions, such as the definition of “pollution damage” in the 1992 Civil Liability Convention (formerly the International Convention on Civil Liability for Oil Pollution Damage) and the definition of “damage” contained in the 1996 International Convention on Liability and Compensation for Damage in Connection with the Carriage of Hazardous and Noxious Substances (HNS). In addition, it is almost identical to the definition of “nuclear damage” found in the 1997 Protocol to Amend the Vienna Convention and the 1997 Convention on Supplementary Compensation for Nuclear Damage and any differences between them are of a drafting nature only.
19. On 8 April 1981, the Steering Committee for Nuclear Energy adopted a Recommendation [NE/M(81)1] that a nuclear operator should not be held liable, within the meaning of the Paris Convention, for damage caused by a nuclear incident to nuclear substances in course of carriage belonging to other operators but for which he has assumed third party liability pursuant to a contract in writing or of which he has taken charge in accordance with Article 4 of the Convention. This Recommendation will remain in effect after the Protocol to amend the Paris Convention of 12 February 2004 has entered into force for all Contracting Parties.

	<p>56. (b) The definition of "nuclear damage" does not include a head of damage referred to in certain other international nuclear liability conventions²⁰ as "any other economic loss, other than any caused by the impairment of the environment, if permitted by the general law on civil liability of the competent court". This head of damage is generally considered to be covered by other heads of damage already included in the definition. This difference of definitions does not touch upon possible obligations which a Contracting Party may have under other international liability conventions to which it may also be a Party, such as e.g. the Convention on Supplementary Compensation for Nuclear Damage.</p>
Article 3(a)	<p>57. In all cases, the claimant must prove that the nuclear damage is caused by the nuclear incident.</p> <p>58. The first of the remaining four categories is economic loss which results from one or other of the first two categories of nuclear damage [see paragraph 54] and which is incurred by a person who has the right to claim compensation for it. In other words, the economic loss suffered by a person must arise from the personal injury, death, loss of or damage to property of that same person. Moreover, it must be a loss which is not already covered by either of the first two categories of nuclear damage. An example of this category of nuclear damage would be a factory owner's loss of income resulting from a production stoppage in that factory which is directly linked to the factory building having been damaged by a nuclear incident.</p>
Article 1(a)(viii)	<p>59. (a) The second of the remaining four categories of nuclear damage is the cost of measures taken, or to be taken, in order to reinstate a significantly impaired environment. The extent of the nuclear damage suffered can be assessed in monetary terms because reinstatement measures cost money. It is up to the competent court to decide whether the environmental impairment is significant.</p>
Article 1(a)(x)	<p>59. (b) To be compensable, reinstatement measures must fall within the definition of reasonable measures, they must have been approved by the authorities of the State where they are taken and they must aim to either restore damaged components of the environment or, where reasonable, introduce the equivalent of those components into the environment. Reasonable measures are defined under the Convention as those which, according to the law of the competent court, are appropriate and proportionate, having regard to all the circumstances, including the nuclear damage suffered or the risk of such damage, to their likely degree of success, and to relevant scientific and technical expertise. Thus, measures of reinstatement include such activities as the removal or diminishing of contaminants from land so that it no longer poses any significant risk in terms of its future use.</p> <p>59. (c) The law of the State where the nuclear damage is suffered will determine which persons are entitled to take these measures. However, since measures of reinstatement mostly cover components of the environment which are not owned by anyone, but rather are available for the benefit of the general public, it will normally be the competent public authorities who are entitled to take such measures and claim compensation therefor.</p>

20. The 1997 Protocol to Amend the Vienna Convention on Civil Liability for Nuclear Damage and the Convention on Supplementary Compensation for Nuclear Damage.

60. (a) The third of the remaining four categories of nuclear damage comprises loss of income arising from a direct, economic interest in any use or enjoyment of the environment which has been significantly impaired and which loss is not related to loss of or damage to property. For example, fishermen may suffer economic loss because fish in the sea are contaminated by radiation and may no longer be sold in the marketplace. Since the fishermen do not own the fish until after they have been caught, the fact that the fish are contaminated does not constitute a loss of or damage to property of the fishermen.²¹ To take another example, tourists may stay away from a particular holiday resort because the public beach used by the resort is contaminated by radiation. Once again, since the proprietor of the resort is not the owner of the beach, the fact that the beach is contaminated does not constitute a loss of or damage to the resort owner's property. Yet it will almost certainly result in a loss of income to the resort owner who will be entitled to compensation if it can show a sufficient direct, economic interest in the use or enjoyment of the damaged environment.

60. (b) The scope of this provision is not broad, however. Use of the term "direct" economic interest is intended to ensure that compensation will not be awarded for nuclear damage that is too remote. Since the loss being claimed must derive from a direct economic interest in the use or enjoyment of the impaired environment, the fishermen in the example cited in paragraph 60(a) may be compensated for their loss of income, but a supplier of goods to those fishermen who loses business because they are no longer fishing will receive no compensation for that business loss because it is too remote in the chain of causation. Similarly, the holiday resort owner in the example cited in paragraph 60(a) will only be compensated if it can be shown that there is a geographical proximity between the resort and the impaired environment (the contaminated beach) and that the business of the hotel depends upon guests being able to use that beach.

61. For each of the above-noted categories of nuclear damage, the loss or damage must arise out of or result from ionizing radiation emitted by any source of radiation inside a nuclear installation, or emitted from nuclear fuel or radioactive products or waste in a nuclear installation or emitted from²² nuclear substances that originate in, come from, or are sent to a nuclear installation. It makes no difference whether the loss or damage arises from the radioactive properties of such matter (source of radiation, nuclear fuel or radioactive products or waste, or nuclear substances) or from a combination of radioactive properties with toxic, explosive or other hazardous properties of such matter. If there is no emission of radiation then there cannot be any nuclear damage. Thus, no compensation will be awarded for damage resulting from a "rumor". For example, a ship transporting nuclear substances may run aground near a holiday resort area, and while there is no actual emission of ionizing

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- 21. It will be up to the law of the competent court to determine if the fishermen have a sufficient direct economic interest in the use or enjoyment of the impaired environment to warrant compensation for their economic loss.
 - 22. The actual text of Article 1(a)(vii) of the Convention refers to "... ionising radiation emitted ... from nuclear fuel ... or of nuclear substances ...". In the English and French versions of this text there is a drafting anomaly: the word "of" should be read as "from" in the English version and the word "de" should be read as "par des" in the French version. This anomaly does not appear in the other linguistic versions of the Protocol.

	<p>radiation, there is, nevertheless, widespread public fear of such an emission. The result is a significant decrease in tourism with the owners of hotels and restaurants in that area suffering a loss of income. Those losses will not be subject to compensation because there was no emission of ionizing radiation.</p>
Article 1(a)(ix)	<p>62. (a) The fourth remaining category of nuclear damage covers the costs of preventive measures and further loss or damage caused by such measures. Under the Convention, preventive measures are defined as any reasonable measures taken after a nuclear incident has occurred, or after an event creating a grave and imminent threat of nuclear damage has occurred, to prevent or minimize nuclear damage. In most legal systems, victims are obliged to mitigate or avoid their losses, if possible. If they fail to do so, the amount of compensation awarded to them may be reduced. It is appropriate that the costs incurred by victims in trying to mitigate their losses should be compensated.</p>
Article 1(a)(x)	<p>62. (b) Preventive measures may range anywhere from taking iodine pills to the evacuation of the population of a city. They are often taken by public authorities. To be compensable, preventive measures must qualify as reasonable measures and reasonable measures are defined as those which, according to the law of the competent court, are appropriate and proportionate having regard to all the circumstances, such as the nuclear damage suffered or to the risk of such damage, to the likely degree of success of such measures and to relevant scientific and technical expertise. The test of "reasonableness" is designed to discourage speculative claims. In addition, if the law of the State where the measures are taken requires the approval of that State's authorities for such measures, they will only be compensable if, in fact, that approval has been obtained.</p>
Articles 3, 6(h)	<u>INDUSTRIAL ACCIDENTS AND OCCUPATIONAL DISEASES</u>
	<p>63. Any third party who suffers nuclear damage caused by a nuclear incident, whether that third party is inside or outside the installation, is covered by Article 3. This includes employees of the operator of the nuclear installation in question, although in most countries employees who suffer nuclear damage may also be entitled to compensation under a system of public health insurance, social security, workers compensation or occupational disease compensation. In principle it is felt that benefits under such systems should be retained for employees of the installation in question and for those of other establishments, but the law establishing such systems will determine this issue, as well as whether employees are also entitled to compensation under the Convention. That same law will also decide whether those who have paid out compensation under those systems have a right of indemnity against the operator. Where such systems have been established by an intergovernmental organisation these questions are left to be decided by the regulations of the organisation.</p>
Articles 7, 10(c), 21(c)	<u>LIABILITY AMOUNT</u>
	<p>64. The Convention expresses the amount of the operator's liability as a minimum. In fact, some Contracting Parties have even adopted national legislation which provides that the liability of their nuclear operators is not limited in amount, while at the same time requiring those operators to maintain a limited amount of insurance or other financial security in respect of that liability. It is for this reason that the operator's liability is expressed as a minimum rather than a maximum amount.</p>

Articles 7(a)	65. The liability of a nuclear operator in respect of any single nuclear incident, whether occurring at or in connection with a nuclear installation or in the course of carriage of nuclear substances, is fixed at not less than 700 million EUR. ²³
Article 21(c)	66. There may, however, be States wishing to accede to the Convention whose operators are not able to furnish financial security up to the minimum amount of liability of 700 million EUR required by the Convention immediately upon joining. In order not to discourage such States from becoming party to the Convention, a phasing-in provision allows them to limit their operators' liability amount for any one nuclear incident to 350 million EUR for no more than five years from the date of adoption of the 2004 Protocol, that is, five years from 12 February 2004. This provision only applies to States acceding to the Convention after 1 January 1999 (see paragraph 109).
Article 7(g)	67. As noted previously [see paragraph 10], by virtue of Article 2(a)(iv) the Convention applies to nuclear damage suffered in a non-Contracting State which has nuclear liability legislation in force that affords equivalent reciprocal benefits to those provided under the Convention and that is based on principles identical to those of the Convention. It may be the case, however, that the non-Contracting State's legislation provides for reciprocal benefits which are globally equivalent to those provided under the Convention without actually providing for liability amounts identical to those fixed by the Convention. In these cases, the Contracting Parties are permitted to establish liability amounts that are lower than those established by the Convention and equal to those offered by that non-Contracting State.
Article 7(b)	68. Nevertheless, a Contracting Party may establish a lower amount of liability when the nuclear installation or, in the case of carriage, the nuclear substances involved are not considered by that Contracting Party as likely to cause significant damage compared to other nuclear installations and transports referred to in the Convention (e.g. certain small research reactors or laboratories). The aim of this option is to avoid burdening the nuclear operators concerned with unjustified insurance or financial security costs. The establishment of such lower amounts, however, is subject to the condition that the reduced amount must not be less than 70 million EUR in the case of a nuclear installation and 80 million EUR in the case of carriage of nuclear substances.

23. The Protocol to amend the Paris Convention of 12 February 2004 changed the Convention's unit of account from the Special Drawing Right of the International Monetary Fund to the euro, the currency of twelve European Union countries at the time of the Protocol's adoption, namely Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Spain. The Recommendation of the OECD Council of 16 November 1982 [C(82)128] relative to the unit of account of the Convention became obsolete with the entry into force for all Contracting Parties of the Protocol of 16 November 1982 to amend the Paris Convention, and it should therefore be revoked. In addition, the Recommendation of the Steering Committee for Nuclear Energy of 20 April 1990 [NE/M(90)1] calling for an increase and a harmonisation in the liability amounts of the Contracting Parties will become obsolete and should be revoked once the Protocol of 12 February 2004 to amend the Paris Convention of 12 February 2004 enters into force for all Contracting Parties.

Article 10(c)	<p>69. If a Contracting Party establishes a lower amount of liability for a nuclear operator under Article 7(b), that Contracting Party will be obliged to provide compensation for any nuclear damage incurred as a result of a nuclear incident that is in excess of that lower amount, but only up to a certain limit. This limit is an amount not less than that set forth in Article 7(a) or Article 21(c) whichever is applicable. Thus, if a Contracting Party fixes an operator's liability amount at 70 million EUR for a small research reactor and the nuclear damage resulting from an incident at such an installation exceeds that amount, the Contracting Party is required to provide compensation for the nuclear damage actually incurred, but only up to an amount that is not less than 700 million EUR or 350 million EUR as the case may be.²⁴</p>
Article 7(c)	<p>70. Furthermore, the nuclear operator must compensate nuclear damage to the means of transport upon which the nuclear substances involved were at the time of a nuclear incident occurring in the course of carriage and outside a nuclear installation. However, the amount of this compensation must not have the effect of reducing the liability of that operator in respect of other nuclear damage to less than either 80 million EUR or such higher amount as is established by the legislation of the Contracting Party in whose territory the installation of the nuclear operator is situated. In practice, if such other nuclear damage is less than this amount, the difference between the two amounts may be used to compensate nuclear damage to the means of transport. On the other hand, if such other nuclear damage is more than 80 million EUR, there may need to be a proportional distribution of the total compensation available to cover all the nuclear damage, including nuclear damage to the means of transport. This might involve paying compensation of more than 80 million EUR for such other nuclear damage, but it cannot result in reducing the amount of that compensation to less than 80 million EUR.</p>
Article 7(i)	<p>71. (a) Since the majority of Contracting Parties have adopted the euro as their currency, it has been selected as the unit of account for the Convention. For these Contracting Parties at least, fluctuations in the value of international units of account, such as the Special Drawing Right, which are due to fluctuations in the value of their component non-European currencies, such as the United States dollar or the Japanese Yen, will have no effect upon the amount of compensation to be provided to victims under the Convention. Reducing or eliminating the risk of such fluctuations also means that insurance coverage or other financial security may be more easily obtained for higher operator liability amounts. Those Contracting Parties who have not adopted the euro as their national currency may wish to include a "margin of safety" in their national liability amounts to ensure that those amounts do not fall below the liability amount expressed in the Convention in euros. There would seem to be no reason why Contracting Parties who have not adopted the euro as their national currency should be precluded from expressing nuclear operator liability amounts under the Convention in national currency equivalents to the specified euro amounts.</p>

24. The OECD Council Recommendation of 16 November 1982 [C(82)181] concerning the fixing of a reduced amount of liability will become obsolete and should be revoked once the Protocol to amend the Paris Convention of 12 February 2004 enters into force for all Contracting Parties.

Article 7(j)	71. (b) Persons suffering nuclear damage will be able to enforce their rights to compensation without having to bring separate proceedings according to the origin of the funds being provided. This will enable victims to overcome obstacles they might face where, for example, they suffer damage from an incident occurring during the transport of nuclear substances and the operator's liability amount is reduced, thereby forcing them to bring one claim against the operator and another against the Contracting Party in whose territory the operator's installation is situated for damages in excess of the operator's liability amount. ²⁵
Article 7(d)	72. Subject to the provisions of Article 7(e) [see paragraph 45], the liability amount will, in the same way as for nuclear incidents occurring at or in connection with nuclear installations, be determined by the national legislation of the liable operator.
Article 7(h)	73. The amount of liability fixed in accordance with Article 7 does not include interest and costs awarded by a court in actions for compensation. Such interest and costs are payable by the operator in addition to any sum for which it is liable under Article 7.
Article 8	<u>LIMITATION OF LIABILITY IN TIME</u>
	74. Bodily injury caused by radioactive contamination may not become manifest for some time after the exposure to radiation has actually occurred. The legal period during which an action may be brought is therefore a matter of great importance. Operators and their financial guarantors will naturally be concerned if they have to maintain, over long periods of time, reserves against outstanding or expired policies for possibly large but unascertainable amounts of liability. It is reasonable for victims whose injuries may not manifest themselves until much later to have a longer prescription period for personal injury claims than for property damage claims. A further complication is the difficulty of proof involved in establishing or denying that delayed damage was, in fact, caused by the nuclear incident. A compromise has necessarily been reached between the interests of those suffering damage and the interests of operators.
Article 8(a)	75. The Convention provides for a period of thirty years running from the date of the nuclear incident for actions for personal injury or loss of life and ten years running from the date of the nuclear incident for actions for all other nuclear damage suffered. After these periods, the right to compensation is subject to prescription or extinction if no action has been brought before a competent court.
Article 8(d)	76. States may, however, establish a shorter period for the prescription or extinction of rights to compensation provided that such period is not less than three years from the time when the damage and the liable operator have become known to the victim or ought reasonably to have become known, and further provided that the ten and thirty year periods established under Article 8(a) are not exceeded. This shorter

25. An OECD Council Recommendation of 16 November 1982 [C(82)181] recommends that where a Contracting Party sets an operator liability amount in respect of transport or lowrisk installations lower than the reference liability amount, it should make available public funds to satisfy any claims for compensation in excess of that lower amount up to the reference amount. Once the Protocol to amend the Paris Convention of 12 February 2004 enters into force for all Contracting Parties, this Recommendation will become obsolete and should be revoked.

	<p>period may constitute a conventional period of prescription which may be suspended or interrupted even, where this is recognized, by a mere extra judiciary demand, provided always that such suspension or interruption does not have the effect of prolonging the period beyond ten or thirty years, as the case may be. On the other hand, the shorter period may be an absolute period after which no right to compensation exists.</p> <p>Article 8(b), (c), (f)</p> <p>77. Proceedings may also be brought after the ten and thirty year periods in two cases: first, where the national legislation of the liable operator establishes a longer period and the Contracting Party in whose territory the operator's installation is situated has taken measures to cover that operator's liability for such longer period. Any proceedings brought within such longer period, however, may not affect the rights to compensation under the Convention of any person who, within the thirty year period has brought an action against the operator for personal injury or death, or who, within the ten year period has brought an action against the operator for any other nuclear damage. Secondly, unless the applicable national law provides otherwise, victims who suffer an aggravation of the nuclear damage for which they have already brought an action for compensation within the prescribed time limit, may amend their claims after the expiry of that time limit provided that no final judgement has yet been entered by the competent court.</p> <p>Articles 13(f)(ii), 8(e)</p> <p>78. The rules governing the choice of the competent court are laid down in Article 13 [see paragraphs 92-101]. Where the courts of more than one Contracting Party might be competent, the choice of competent court is, under certain circumstances, determined by the European Nuclear Energy Tribunal established by the Convention of 20th December 1957 on the Establishment of a Security Control in the Field of Nuclear Energy, and in such cases, a victim cannot bring his action until the Tribunal has made its determination. However, to avoid risking the prescription or extinction of a victim's right to compensation before the Tribunal has made its determination, it is provided that such right shall not be prescribed or extinguished if within the time limits provided for by the Convention, either one of two conditions exist; first, a victim brings his action before any of the courts from which the Tribunal can choose and where the Tribunal subsequently determines that the competent court is not the one before which the victim has already brought his action, the victim must bring his action before the selected competent court within the time limit, if any, fixed by the Tribunal; or secondly, where a request has been made to a Contracting Party to institute a determination by the Tribunal pursuant to Article 13(f)(ii), a victim brings his action subsequent to such determination and within the time, if any, fixed by the Tribunal.</p>
Articles 3(a), 6(c), 9	<p><u>EXONERATIONS</u></p>
Article 9	<p>79. The strict liability of the operator is not subject to the classic exonerations such as force majeure, Acts of God or intervening acts of third persons, whether or not such acts were reasonably foreseeable and avoidable. Insofar as any precautions can be taken, those in charge of a nuclear installation are in a position to take them, whereas potential victims have no way of protecting themselves. There are, however, two situations in which the operator will be exonerated from liability.</p> <p>80. (a) First, an operator will be exonerated from liability for damage caused by a nuclear incident directly due to certain disturbances of an international character, namely acts of armed conflict and hostilities, or of a political nature, namely civil war and insurrection, on the grounds</p>

	<p>that all such matters are the responsibility of the State as a whole. An operator is not, however, exonerated from nuclear damage caused by a nuclear incident directly due to an act of terrorism, whatever its scale, since terrorist acts are not covered by the events enumerated in Article 9.</p> <p>80. (b) Secondly, if the national law so provides, the competent court may relieve the operator wholly or partly from liability for nuclear damage suffered by a person if the operator can prove that such damage resulted wholly or partly from the gross negligence of that person, or from an act or omission of that person done with intent to cause damage. As has been pointed out earlier [see paragraph 31(a)], where the operator is exonerated, if the applicable law so provides an individual may be liable for nuclear damage caused by a nuclear incident resulting from that individual's act or omission done with intent to cause damage.</p>
Article 10	<u>FINANCIAL SECURITY</u>
Article 10(a), (b)	<p>81. To meet its liability obligations towards victims, the operator is required to have and maintain financial security equal to either (i) the liability amount established pursuant to Article 7(a) or Article 7(b), (ii) the financial security limit established under Article 10(b) for operators whose liability is not limited in amount, or (iii) the phasing-in liability amount permitted pursuant to Article 21(c), whichever is applicable. Where the liability of the operator is not limited in amount, the Contracting Party in whose territory that operator's installation is situated shall establish that operator's financial security at either not less than 700 million EUR as provided for under Article 7(a) or not less than 70 million EUR or 80 million EUR as provided for under Article 7(b), whichever amount is applicable.</p> <p>82. Financial security may be in various forms: insurance coverage, conventional financial guarantees or ordinary liquid assets. A combination of insurance, other financial security and State guarantee may be accepted. An operator may change the insurance or other financial security, provided that the required amount is always maintained. Although the operator must have financial security available for each nuclear incident, in practice insurance coverage will, it seems, only be available per installation for a fixed period of time rather than in respect of a single incident. There is nothing in the Convention which prevents this, provided that the required amount of financial security is not reduced or exhausted as a result of a first nuclear incident without appropriate measures being taken to ensure that required amount is available for subsequent nuclear incidents.</p> <p>83. It is for the competent public authority to determine the type and terms of the insurance or other financial security which the operator will be required to hold. The type and terms envisaged do not imply the establishment of a supervisory authority to control insurance activities in those countries where such an authority does not already exist, but only the control necessary to ensure compliance with the Convention. Thus the competent public authority must ensure that insurance policies are satisfactory in that they do not contain clauses which might render them ineffective, such as those permitting the insurer or other financial guarantor to invalidate the financial security for non-payment of premiums.</p> <p>84. Whatever conditions are laid down by the competent public authority, it may happen that the financial security maintained by the operator is not available or is insufficient to satisfy nuclear damage claims arising from a nuclear incident. This might occur, for example, where the</p>
Article 10(c)	

	<p>financial guarantor is bankrupt, or where the financial security corresponding to a reduced liability amount for a low-risk installation is insufficient to satisfy all nuclear damage claims resulting from an incident at that installation, or where the insurance is on a per installation basis for a fixed period and after a first nuclear incident it is impossible to reinstate the financial security up to the required amount. In these circumstances, the Contracting Party in whose territory the liable operator's installation is situated shall provide the necessary funds to ensure the payment of compensation for nuclear damage, but only up to the reference liability amount under Article 7(a) or the phasing-in amount established under Article 21(c), whichever is applicable. The guiding principle is that financial security must be available in the amount established in accordance with the Convention for each nuclear incident, whatever system is adopted by the competent public authority in regard to licensing and insuring nuclear installations.</p> <p>85. Where one operator operates two or more nuclear installations on a site, and the Contracting Party concerned has not determined that they shall be treated as a single nuclear installation pursuant to Article 1(a)(ii), that operator must maintain insurance or other financial security for each of the nuclear installations which it operates.</p> <p>86. Relations between the operator and its insurer or other financial guarantor, including rights of recourse by the latter against the former, are left to be determined by each State.</p> <p>87. To ensure, as far as possible, that there will never be a period in which less than the required amount of financial security is available, it is provided that such financial security can only be suspended or cancelled, that is, brought to an end before the expiry of the period provided for in the policy, after at least two months' notice has been given to the competent public authority. The competent public authority may, of course, fix a longer period of notice. Where the financial security covers the operator's liability for nuclear damage arising from nuclear incidents occurring during transport, it shall not be suspended or cancelled during the period of the transport in question.</p>
Article 10(d)	
Article 10(e)	<p>88. All sums provided as financial security can only be drawn upon to pay compensation for nuclear damage caused by a nuclear incident; they need not be segregated but they must not be used to meet any other claims.</p>
Article 11	<p><u>NATURE, FORM AND EXTENT OF COMPENSATION</u></p> <p>89. Claims for compensation following a nuclear incident may differ greatly in nature, in amounts and in the dates upon which they are brought, and measures may be necessary to ensure an equitable distribution of the amount of compensation available if this amount is or may be exceeded. It will be for the competent court, in accordance with national law, to decide the nature, form and extent of the compensation, within the limits of the Convention, as well as its equitable distribution. Thus, the granting of annuities and their amounts will be determined by national law; so will the effect of a person's contributory gross negligence or intentional act or omission on his claim for compensation for nuclear damage [see paragraph 80(b)].</p> <p>90. It is for each State to decide whether measures for equitable distribution should be taken in advance or at the time when actions are brought. Measures may involve providing a limit on the amount of compensation paid to each person suffering nuclear damage or limits</p>

	upon the amounts of compensation paid for injury or death of persons and all other types of nuclear damage. Similarly, where the nuclear damage to be compensated exceeds or is likely to exceed the amount available under Article 7 of the Convention, it is for each State to decide whether or not priority will be given to claims for loss of life or personal injury in the distribution of compensation. Nevertheless, the Contracting Parties agree that the concept of equitable distribution of compensation allows for the setting of priorities for compensating claims.
Article 12	<u>TRANSFER OF COMPENSATION</u>
	91. If the recognition of a single competent forum to deal with all actions arising out of the same nuclear incident and the enforceability of its judgements in all Contracting Parties, is to be effective, there must be no impediments to the transfer of amounts under the Convention. Thus, insurance and reinsurance premiums, sums paid out as proceeds of insurance, reinsurance or other financial security, and sums due as compensation, interest and costs, shall all be freely transferable among the monetary areas of the Contracting Parties. This freedom to transfer is not intended, however, to affect national laws governing insurance activities such as, the establishment of financial reserves.
Article 13	<u>JURISDICTION AND ENFORCEMENT OF JUDGEMENTS</u>
	92. There are many factors motivating in favour of a single competent forum to deal with all actions for compensation arising out of the same nuclear incident, including direct actions against operators, insurers or other financial guarantors and actions to establish rights to claim compensation. Most important is the need for a single legal mechanism to ensure that the amount of liability established with respect to the liable operator is not exceeded. Moreover, if suits arising out of the same nuclear incident were to be tried and judgements rendered in the courts of several different countries, the problem of assuring equitable distribution of compensation might be insoluble.
Article 13(a), (h)	93. The general rule is that only the courts of the Contracting Party in whose territory the nuclear incident occurs have jurisdiction to hear nuclear damage compensation claims. Furthermore, the Contracting Party whose courts have jurisdiction must ensure that only one of its courts will rule on nuclear damage compensation claims from any one nuclear incident and that such Contracting Party's national law will determine the criteria by which that one court is selected. ²⁶
Article 13(b)	94. (a) A special rule has been established to determine which courts have jurisdiction where a nuclear incident occurs in a Contracting Party's exclusive economic zone, or, where no zone has been established, then in an area not greater than an exclusive economic zone if one were to be established. In such cases, jurisdiction lies only with the courts of that Contracting Party as long as it has notified the Convention's depositary, the Secretary-General of the OECD, of such zone or area prior to the

26. On 3 October 1990, the Steering Committee for Nuclear Energy adopted Recommendation [NE/M(90)2] recommending that "Contracting Parties, when revising their national legislation, provide for a single court to be competent to rule on compensation under the Paris Convention for nuclear damage arising from any one nuclear incident; the criteria for this determination shall be decided by national legislation". This Recommendation will become obsolete and should be revoked when the Protocol to amend the Paris Convention of 12 February 2004 comes into force for all Contracting Parties.

	<p>occurrence of the nuclear incident. However, these provisions are not to be interpreted so as to permit the exercise of jurisdiction or the delimitation of a maritime zone in a manner which is contrary to the international law of the sea.</p>
Article 13(e)	<p>94. (b) Article 13 is intended to deal only with jurisdiction over nuclear damage claims arising from a nuclear incident. The notification by a Contracting Party to the Convention's depositary of the establishment of an exclusive economic zone, or area not greater than an exclusive economic zone, does not create any right or obligation or set a precedent regarding the delimitation of maritime zones between States with opposite or adjacent coasts. Similarly, no such right is created merely because the courts of the Contracting Party who have jurisdiction pursuant to Article 13(b) exercise that jurisdiction.</p>
Article 13(d)	<p>94. (c) Another special rule has been established to address the situation where a nuclear incident occurs in an area in respect of which there is a dispute concerning the delimitation of maritime boundaries. In such a case, a concerned Contracting Party may request that jurisdiction be determined by the European Nuclear Energy Tribunal referred to in Article 17 and in such case jurisdiction shall lie with the courts determined by the Tribunal as being those of the Contracting Party which is most clearly related to and affected by the consequences of the accident.</p>
Article 13(c)	<p>95. Special arrangements are necessary in the case of a nuclear incident which occurs outside the territory of a Contracting Party or where it occurs within an area for which no notification has been given under Article 13(b), or where it is not possible to determine with certainty the place of the nuclear incident. For example, an incident may occur on the high seas or, where an incident is due to continuous radioactive contamination in the course of transport, it may not be possible to determine the place of such incident. In such cases, the competent courts are the courts of the place where the liable operator's installation is situated. While there may be some practical disadvantages for victims having to resort to the jurisdiction of the operator as a result of the distance involved, it has not been possible to find another solution which would both enable victims to refer to their national courts and at the same time secure unity of jurisdiction.</p>
Article 13(f)(i), (ii)	<p>96. Special arrangements have also been put in place to ensure unity of jurisdiction where the courts of more than one Contracting Party are competent to hear nuclear damage compensation claims. Where the nuclear incident occurs partly outside the territory of any Contracting Party and partly within the territory of one of them, the court of that one Contracting Party has jurisdiction. In any other case jurisdiction will lie with the courts which are determined by the European Nuclear Energy Tribunal, at the request of a Contracting Party concerned, as being the courts of the Contracting Party most closely related to and affected by the consequences of the nuclear incident.</p> <p>97. The competent court in all cases is intended to deal with all actions which might be brought against an operator or against the insurer or other person providing the financial security either as an alternative to the operator or in addition to him, where the national law of the court having jurisdiction grants a right of direct action in such a case [Article 6(a)], either directly by persons suffering damage [Article 3] or by persons who have paid compensation for nuclear damage under international agreements in the field of transport or under the legislation</p>

	<p>of a non-Contracting State and who have thus acquired by subrogation the rights of the person so compensated [Article 6(d)]. The forum for actions of recourse by an operator under Article 6(f) or for actions for contribution by an operator against other operators in the case of joint and several liability is not fixed in the Convention and will be decided by national law [see paragraph 34(a)].</p>
Article 13(g)(i), (ii)	<p>98. An obligation is imposed upon the Contracting Party whose courts have jurisdiction to hear and determine nuclear damage compensation claims to ensure that any State may bring an action for compensation on behalf of persons who are its nationals or who are domiciled or resident in that State, as long as those persons have agreed to be represented by that State. In addition, that same Contracting Party is obliged to ensure that for nuclear damage compensation actions, any person can institute an action to enforce rights under the Convention which that person has acquired either by subrogation or by assignment.</p>
Article 13(i)	<p>99. The concept of a single forum carries with it the need to ensure that final judgements rendered in that forum will be recognized by, and can be enforceable in the territories of the other Contracting Parties without re-examination of the merits. Such final judgements are enforceable in any of the other Contracting Parties as soon as the formalities required have been complied with.</p>
	<p>100. Final judgements enforceable under Article 13(i) do not include judgements rendered against persons other than the liable operator under Article 6(b) except for insurers or other persons providing financial security where the national law of the court having jurisdiction permits such direct actions, judgements rendered in actions of recourse by the liable operator under Article 6(f), actions against the liable operator under Article 6(h) or actions for contribution between persons jointly and severally liable.</p>
Article 13(j)	<p>101. Where a Contracting Party is sued for compensation under the Convention, it is provided that such Party may not invoke any jurisdictional immunity which it might otherwise have, except in respect of measures of execution.</p>
Article 14	<u>APPLICABLE LAW</u>
Article 14(a), (c)	<p>102. The law of the competent court is the national law of the court having jurisdiction to hear nuclear damage compensation claims arising from a nuclear incident, and in most cases this will be the law of the Contracting Party in whose territory the nuclear incident takes place. The competent court must apply the provisions of the Convention without any discrimination based upon nationality, domicile or residence. Similarly, national law and national legislation, which apply to all substantive and procedural matters not specifically governed by the Convention, must be applied without any discrimination based upon nationality, domicile or residence.</p>
Article 14(b)	<p>103. National law and national legislation are terms which are defined in the Convention to mean, respectively, the law and the legislation of the court having jurisdiction over nuclear damage compensation claims, excluding the rules of conflict of laws relating to such claims. The exclusion of the rules on conflict of laws does not deprive the competent court of the right to determine questions of private international law. However, the exclusion clearly confirms and emphasizes that the court is only entitled to apply its rules of private international law to questions which are not governed by the provisions of the Convention.</p>

Article 15	<u>ADDITIONAL COMPENSATION</u>
Article 15(a),(b)	<p>104. It is recognised that in the event of a catastrophe, the amount of compensation to be made available under the Convention may well be inadequate to meet all nuclear damage compensation claims. In such circumstances, a Contracting Party may take such measures as it deems necessary to provide for an increase in the amount of compensation specified in the Convention, whether by increasing the amount of the operator's liability or by some other means. Where a Contracting Party takes measures to provide for compensation in excess of the 700 million EUR referred to in Article 7(a), such measures may be applied under special conditions which derogate from the provisions of the Convention, and in particular, need not be applied without discrimination to all victims.</p> <p>105. Article 15(b) allows for deviation from the non-discrimination rule contained in Article 14 where additional funds are used to compensate nuclear damage in excess of the 700 million EUR liability amount provided for under Article 7. For Contracting Parties with unlimited liability regimes or States with limited liability in excess of 700 million EUR, these additional funds are, effectively, operator funds and would therefore be subject to distribution in accordance with the non-discrimination rule of Article 14, rather than in accordance with the provisions of Article 15(b). To remedy this situation, and to ensure that the same rules apply to the distribution of these additional funds regardless of their source, deviation from the non-discrimination rule is permitted regardless of whether public or private funds are used to compensate nuclear damage in excess of the liability amount established under Article 7.²⁷</p> <p>106. On 12 February 2004, the Conference on the Revision of the Paris Convention and of the Brussels Convention Supplementary to the Paris Convention adopted a Recommendation, in Annex III to the Final Act of the Conference, on the Application of the Reciprocity Principle to Nuclear Damage Compensation Funds which reflects their agreement in respect of deviations from the non-discrimination rule. Although not legally binding, the Recommendation is considered as a strong policy commitment on the part of those States.</p>
Articles 17-24	<u>FINAL CLAUSES</u>
	<p>107. The final clauses of the Convention deal with disputes, reservations, ratification, amendments, accession, duration, revision and withdrawal, notification of the application of the Convention to territories for whose international relations the Contracting Party is responsible, and notice to the Signatories of receipt of the various instruments deposited pursuant to the final clauses.</p>

27. For Paris Convention States that are Party to the 1963 Brussels Convention Supplementary to the Paris Convention (the "Brussels Supplementary Convention"), the rules for distributing compensation under that latter Convention take precedence over those contained in the former with regard to the 2nd and 3rd tiers of compensation provided for there under, and therefore deviation from the non-discrimination rule is only allowed for the distribution of public or private funds in excess of the total compensation provided for under Article 3 of the Brussels Supplementary Convention.

Article 17	108. (a) In the case of a dispute as to the interpretation or application of the Convention, the disputing Contracting Parties will attempt to settle the matter by negotiation or other amicable means, but if they cannot do so within six months of the beginning of the dispute, then all of the Contracting Parties will meet to help them settle the matter on a cordial basis. If the dispute is still unresolved three months after that meeting, the matter may be submitted, upon the request of a Contracting Party which is party to the dispute, to the European Nuclear Energy Tribunal. The Tribunal will act in accordance with the rules governing its organisation and functioning, which are set out in the Protocol annexed to the Security Control Convention and in its Rules of Procedure.
Article 17(d)	108. (b) To ensure that the resolution of disputes concerning the delimitation of maritime boundaries is clearly outside the scope of the Convention, a provision to that effect is included in the Convention.
Article 21(c)	109. Where a Government which has not already signed the Convention accedes to it after 1 January 1999, that Government may take advantage of the “phasing-in” provision contained in Article 21(c) with regard to fixing the liability amount for its operators. Thereafter, the Government in question must raise its operators’ liability amount to that which is required under Article 7 of the Convention [see paragraph 66].
Article 22(c)	110. With regard to amendments to the Convention, the Contracting Parties have agreed to consult each other every five years on matters raised by the application of the Convention in which they have a common interest. In particular, they will consider whether or not it is desirable to increase the operator liability amounts and the corresponding financial security amounts under the Convention.

Exposé des Motifs of the Brussels Supplementary Convention as amended by the Protocols of 1964, 1982 and 2004

INTRODUCTION¹

1. The Paris Convention on Third Party Liability in the Field of Nuclear Energy² (hereinafter called the “Paris Convention”) establishes a special regime assigning civil liability for damage incurred as a result of a nuclear incident and providing for the compensation of third parties who suffer damage as a result of such an incident.
2. While the Paris Convention imposes a fairly high minimum liability amount upon the operator of a nuclear installation situated in the territory of a Contracting Party, it does not address the case where an incident may result in damages exceeding the amount of compensation available from the liable operator.
3. Many Paris Convention States recognised that operator funds under the Paris Convention might not be adequate to compensate the damage suffered and that a supplementary system for compensating victims of a nuclear incident should be created. They favoured the establishment of an international system by which States would commit public funds in addition to those to be provided under the Paris Convention and the result was that on 31 January 1963, the Brussels Supplementary Convention was adopted.
4. As its name implies, the Brussels Supplementary Convention is “supplementary” to the Paris Convention. It establishes a system whereby compensation additional to that provided for under the Paris Convention is to be made available to victims who suffer nuclear damage as a result of a nuclear incident for which a Paris Convention nuclear operator is liable. The Brussels Supplementary Convention is subject to the provisions contained in the Paris Convention, including those which define the concepts of “nuclear incident”, “nuclear installation” and “nuclear damage”, and no State may become or remain a Contracting Party to the Brussels Supplementary Convention unless it is a Contracting Party to the Paris Convention. Similarly, the Brussels Supplementary Convention will only remain in force for as long as the Paris Convention remains in force.
5. The Brussels Supplementary Convention increases the amount of compensation to be made available to victims where the amount called for under the Paris Convention is insufficient. It does so, first, by requiring the Contracting Party in whose territory the liable operator’s nuclear installation is located to provide funds over and above those which the operator must make available under the Paris Convention, and secondly, by requiring all Contracting Parties collectively to make available an additional amount of compensation from public funds. In the first instance, the amount of funds to be provided by the Contracting Party in whose territory the liable operator’s nuclear installation is located is the difference between the amount of the operator’s liability under its national legislation and EUR 1 200 million,³ and in the second instance the additional compensation

1. A comprehensive commentary on the system created by the Brussels Supplementary Convention was authored by Messrs. Bette, Didier, Fornasier and Stein and published in Brussels in 1965.

2. The full title of this Convention is: *Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960*. It was amended by the Additional Protocol of 28 January 1964, the Protocol of 16 November 1982 and the Protocol of 12 February 2004.

3. If the operator’s liability is fixed at the minimum amount of EUR 700 million under the Paris Convention, for example, the difference will be EUR 500 million.

to be provided by the Contracting Parties collectively is EUR 300 million. Under the combined Paris-Brussels international nuclear liability regime therefore, a total of EUR 1 500 million is available to compensate victims of a nuclear accident.

Articles 2, 13, 20(a) and Annex	<u>SCOPE OF THE CONVENTION</u>
	<p>6. Since public funds are being made available to compensate nuclear damage and given the nature and origin of those funds, they should only be allocated to victims in States which have agreed to participate in the supplementary funding system.</p> <p>7. It is equally a requirement that the nuclear installation of the operator liable under the Paris Convention be used for peaceful purposes.</p> <p>8. (a) Where nuclear damage is caused by a nuclear incident that is not covered by the Convention solely because the relevant nuclear installation is not used for peaceful purposes and is thus not on the list referred to in Article 13(a), the Contracting Parties declare that compensation shall, in any event, be provided without discrimination among nationals of the Convention's Contracting Parties, up to not less than EUR 1 500 million. This declaration does not establish a parallel system of compensation for the damage to which it refers; it does, however, oblige the Contracting Party in whose territory the nuclear installation in question is located to pay compensation in accordance with the law in force in that Contracting Party, subject to the non-discrimination and minimum amount provisions contained in the declaration itself.⁴</p> <p>(b) The declaration applies to nuclear incidents where the relevant nuclear installation (not used for peaceful purposes and not on the list) is considered by one or more, but not necessarily all, of the Contracting Parties to fall outside the definition of "nuclear installation" contained in the Paris Convention.</p> <p>(c) Contracting Parties, are, in addition, to try to establish compensation rules for such incidents that are as close as possible to those established for incidents to which the Convention does apply.</p> <p>9. The geographical scope of application of the Brussels Supplementary Convention is more limited than that of the Paris Convention. The Brussels Supplementary Convention will apply to nuclear damage only if it is suffered in any one of the following three situations and subject to the Court of a Contracting Party having jurisdiction according to the Paris Convention:</p> <p>(a) first, it will apply to damage that is suffered in the territory of a Contracting Party;</p> <p>(b) secondly, it will apply to damage that is suffered in or above maritime areas beyond the territorial sea of a Contracting Party,⁵ as long as it is suffered (i) by a national of a Contracting Party, (ii) on board or by a ship flying the flag of Contracting Party, (iii) on board or by an aircraft registered</p>

4. The Declaration is contained in the Annex to the Convention and Article 20(a) of the Convention deems the Annex to be an integral part thereof.

5. The "territorial sea" of a Contracting Party is a maritime zone extending 12 nautical miles from the territorial sea baseline of that Contracting Party, in accordance with Article 3 of the United Nations Convention on the Law of the Sea.

	<p>in the territory of a Contracting Party or (iv) on or by an artificial island, installation or structure under the jurisdiction of a Contracting Party, excluding damage suffered in or above the territorial sea of a State not Party to this Convention;</p> <p>(c) finally, it will apply to damage that is suffered in or above the exclusive economic zone (EEZ) of a Contracting Party⁶ or on the continental shelf of a Contracting Party⁷ in connection with the exploitation or exploration of natural resources of that zone or shelf.⁸</p> <p>Article 2(b), (c)</p> <p>10. According to the Convention, "a national of a Contracting Party" includes a Contracting Party itself and any of its constituent sub-divisions, a partnership, and any public or private body, whether corporate or not, that is established in the territory of a Contracting Party. Furthermore, any Signatory or acceding Government may declare that individuals or categories of individuals who are considered under its law as having their habitual residence in its territory, are assimilated to its own nationals. In such case, it may be necessary to refer to the national law of the State concerned to determine "habitual residence" since national provisions on this subject vary greatly.</p>
Articles 3, 11, 12, 12bis, 14(a), 14(b) and 15(b)	<p>SUPPLEMENTARY COMPENSATION SYSTEM</p>
	<p>11. Subject to the limits on its scope described above, the Convention ensures that the Contracting Parties themselves, both individually and collectively, will assume responsibility for providing additional compensation in the event that the amount required to compensate nuclear damage caused by a particular incident exceeds the amount of compensation that can be made available by a nuclear operator and its insurers or other financial guarantors under the Paris Convention.</p> <p>12. As with the Paris Convention, the majority of Contracting Parties to the Brussels Supplementary Convention have adopted the euro as their common currency and consequently it has been selected as the unit of account for that Convention. Those Contracting Parties who do not use the euro will have to provide equivalent amounts in their national currency. Besides, the amounts mentioned in this Convention shall be converted into the national currency of the Contracting Party whose courts have jurisdiction in accordance with the value of that currency at the date of the incident, unless another date is fixed for a given incident by agreement between the Contracting Parties.</p>

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- 6. The "exclusive economic zone" of a Contracting Party shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, in accordance with Article 57 of the United Nations Convention on the Law of the Sea.
 - 7. The "continental shelf" of a coastal Contracting Party comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance, in accordance with Article 76 of the United Nations Convention on the Law of the Sea.
 - 8. For example, nuclear damage suffered by a ship, regardless of the flag which it is flying, will be compensated if incurred while that ship is sailing in the EEZ of a Contracting Party in connection with the exploitation of resources of that EEZ.

Article 3(b)	13. The Convention ensures that compensation for nuclear damage falling within its scope will be provided, up to EUR 1 500 million ⁹ per nuclear incident, by means of a 3 tier system.
Article 3(b)(i)	<p>14. (a) The amount of the first tier will be equal to the amount of the nuclear operator's liability, established under the legislation of the Contracting Party in whose territory the liable operator's nuclear installation is located. Under the Paris Convention that amount must not be less than EUR 700 million except where reduced liability amounts have been established for low-risk installations (not less than EUR 70 million) or transport activities (not less than EUR 80 million). The established liability amount may, of course, be greater than EUR 700 million; it may even be unlimited, in which case there must be an associated minimum financial security requirement. That first tier is to come from private funds furnished by the nuclear operator's insurance or other financial security. Where, however, such insurance or other financial security is unavailable or insufficient to compensate nuclear damage claims, the Contracting Party in whose territory the liable operator's nuclear installation is located must provide the necessary funds up to the amount of the operator's liability (not less than EUR 700 million).</p> <p>(b) That first tier is also to be distributed in accordance with the provisions of the Paris Convention. Because the Paris Convention has a broader geographical scope of application than does the Brussels Supplementary Convention, more claimants may be compensated under it than under the latter Convention.</p>
Article 3(e)	15. The Paris Convention contains a "phasing-in" provision [Article 21(c)] which allows States wishing to accede to that Convention after 1 January 1999 to fix their nuclear operators' liability amount at not less than EUR 350 million for a maximum period of five years from 12 February 2004, the date of adoption of the Protocol to Amend the Paris Convention. To ensure that equivalent obligations are imposed upon all Contracting Parties to the Brussels Supplementary Convention in connection with the provision of supplementary compensation, any State using that phasing-in provision and wishing to join the Brussels Supplementary Convention must ensure that funds will be available to cover the difference between the phasing-in amount applicable to its operators and the EUR 700 million minimum compensation amount required under the first tier of the Brussels Supplementary Convention. As a practical matter, this provision is no longer applicable because the "phasing-in" period has expired.
Article 3(b)(ii)	16. Generally, the amount of the second tier, being the difference between the first tier and EUR 1 200 million, is to be furnished from public funds made available by the Contracting Party in whose territory the liable operator's nuclear installation is located. However, the Convention allows for a certain amount of flexibility in the manner by which this second tier may be provided to accommodate Contracting Parties whose national legislation has fixed the operator's liability amount or its financial security limit (in the case of unlimited liability) at more than EUR 700 million. Where that liability amount or financial security limit is greater than EUR 700 million but less than EUR 1 200 million, the second tier will be furnished by the operator's insurance or other financial security up to the fixed amount, with the Contracting Party concerned providing the remainder from public funds.

9. Subject to the application of Article 12bis, which provides for the increase of this amount with the accession of new Contracting Parties.

	<p>Where that liability amount or financial security limit is equal to or greater than EUR 1 200 million, the second tier will be furnished entirely by the operator's insurance or other financial security.</p> <p>Article 11(a)</p> <p>17. As jurisdiction to hear and determine claims for compensation lies, in principle, with the courts of the Contracting Party in whose territory the nuclear incident occurs, in most cases jurisdiction will lie with the courts of the Contracting Party in whose territory the liable operator's nuclear installation is located. However, where the nuclear incident occurs during the transport of nuclear substances, it may happen that the Contracting Party in whose territory the incident occurs is not the Contracting Party in whose territory the liable operator's nuclear installation is located. In such a case, the onus is upon the Contracting Party whose courts have jurisdiction to initially make available the public funds required under the second tier (including corresponding amounts for interest and costs), while the Contracting Party in whose territory the liable operator's nuclear installation is located is obliged to reimburse that other Contracting Party the sums paid out according to an agreed upon procedure for reimbursement. Such an arrangement obviously simplifies matters and allows for a more rapid payment of compensation to victims.</p> <p>Article 11(b)</p> <p>18. Where nuclear operators from two or more different Contracting Parties are held jointly and severally liable for nuclear damage arising from a nuclear incident,¹⁰ but where none of those Contracting Parties is the one whose courts have jurisdiction to hear and determine claims for compensation under the Convention, the situation is the same as that described in paragraph 17. While it is not likely that two or more operators from different Contracting Parties will be liable for such damage, such a case could occur.¹¹</p> <p>19. As a result, the Contracting Parties whose operators are liable will be required to reimburse the Contracting Party whose courts do have jurisdiction the amount which the latter has initially paid out under the second tier (including corresponding amounts for interest and costs) in accordance with an agreed upon procedure for reimbursement. The amount of the reimbursement will be based upon the extent to which each liable operator has contributed to the nuclear incident.</p> <p>Article 11(c)</p> <p>20. Where the Contracting Party in whose territory the liable operator's nuclear installation is located is not the Contracting Party whose courts have jurisdiction, the former will have a real interest in the procedures established by the latter for making those funds available and for distributing them to victims. To ensure that this interest is respected, the Contracting Party whose courts have jurisdiction is obliged to consult with the Contracting Party in whose territory the liable operator's nuclear installation is located, when adopting, after the accident, provisions relating to the nature, form and extent of compensation, the procedure for making second tier funds available and, if necessary, the criteria for apportioning those funds to victims. In addition, the Contracting Party whose courts have jurisdiction must take all steps necessary to enable that Contracting Party in whose</p>
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10. Article 5(d) of the Paris Convention provides that where two or more nuclear operators are liable for nuclear damage arising from the same nuclear incident, liability is joint and several.

11. This might happen, for example, where nuclear substances originating with two different nuclear operators whose installations are located in two different Contracting Parties are being transported on one and the same means of transport.

	<p>territory the liable operator's nuclear installation is located to intervene in legal proceedings and to participate in any settlement negotiations concerning the payment of compensation.</p> <p>Articles 3(b)(iii), 9(c), 12 and 12bis</p> <p>21. The third tier, consisting of an additional EUR 300 million (the difference between EUR 1 200 million and EUR 1 500 million) is to be furnished from public funds to be provided by all Contracting Parties¹² with the amount of each Party's contribution being determined in accordance with a specific formula that is set out in Article 12. A Contracting Party is obliged to make available its contribution to the third tier once the amount of compensation under the Convention has reached EUR 1 200 million.</p> <p>Article 14(a),(b)</p> <p>22. As noted above, the Convention applies only to nuclear damage for which an operator of a nuclear installation used for peaceful purposes and located in the territory of a Contracting Party is liable under the Paris Convention. In general, each Contracting Party may exercise the powers vested in it by that Convention and may invoke any provisions made under that Convention in order to obtain the public funds to be provided for under Article 3(b)(ii) and (iii) of the Brussels Supplementary Convention. There are, however, certain exceptions to this rule. For example, while the Paris Convention clearly delineates its own geographic scope of application in Article 2(a), it also permits a Contracting Party in whose territory the liable operator's nuclear installation is located to extend the geographical scope of application of the Convention under its national legislation [Article 2(b)]. Where a Contracting Party does so, and where a nuclear incident occurs which results in nuclear damage occurring in that extended territorial field, no other Contracting Party to the Brussels Supplementary Convention is required to contribute second or third tier public funds to compensate that nuclear damage unless it has actually consented to that particular extension. The reason for this rule is straightforward. An extension of the geographical scope of application of the Paris Convention would normally entitle more victims to compensation, thus exhausting the funds available under that Convention earlier than otherwise, and thus allowing the Contracting Party in whose territory the liable operator's nuclear installation is located to call upon third tier funds under the Brussels Supplementary Convention at a correspondingly earlier date, than would otherwise be the case.</p> <p>Article 3(c)</p> <p>23. This three tier supplementary compensation system may be implemented by a Contracting Party in one of two ways. The first method is to provide that the amount of its nuclear operator's liability is at least EUR 1 500 million and that this amount will be covered by the 3 sources of funds referred to in Article 3(b), that is, the operator's financial security, public funds provided by the Contracting Party in whose territory the liable operator's nuclear installation is located, and public funds provided collectively by all Contracting Parties. The second method is to fix the amount of its nuclear operator's liability at the minimum amount provided by the Paris Convention of not less than EUR 700 million or at not less than EUR 70 or 80 million (for low risk installations and for transport respectively) and provide that the difference between that fixed amount and EUR 1 500 million will be made available through public funds, but not as cover for the operator's liability [Article 3(c)], as long as the rules of substance and procedure are not affected.¹³</p>
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12. In accordance with Article 12bis, the amount of the third tier may increase with the accession of new Contracting Parties. See paragraphs 32 and 33.

13. This means essentially that the same rules of substance and procedure will apply to all claims for damage regardless of whether the compensation is paid out of the first, second or third tier provided by the Convention.

Article 3(g)	24. In addition to the amounts of compensation payable under the three tiers, interest and costs that are awarded by the court in an action for compensation under the Paris Convention are also payable. To the extent that interest and costs relate to the first tier of compensation, they are borne by the operator liable in accordance with the Paris Convention; to the extent that they relate to the second tier of compensation, they are borne by the Contracting Party in whose territory the liable operator's nuclear installation is located; and to the extent that they relate to the third tier of compensation, they are borne by the Contracting Parties collectively.
Article 3(d)	25. Where a nuclear operator is obliged to provide compensation, interest or costs out of public funds that are to be made available to it for that purpose, the obligation is only enforceable to the extent that those public funds have, in fact, been made available. This provision has special relevance for the first method of implementation referred to in paragraph 23. Where an operator is held liable up to the amount of EUR 1 500 million and where the third tier to be provided by the Contracting Parties is not yet available, claims for compensation can only be enforced against the operator up to the amount of the second tier, namely EUR 1 200 million.
Article 3(f)	26. Under Article 15(b) of the Paris Convention, the Contracting Parties to that Convention may derogate from its provisions with regard to the payment of compensation for nuclear damage in excess of EUR 700 million. Thus, they may discriminate on the basis of nationality, domicile, residence or any other factor in the payment of those excess funds. The Contracting Parties to the Brussels Supplementary Convention also undertake not to derogate from the provisions of the Paris Convention with regard to the payment of compensation for nuclear damage up to the amount of the first tier (not less than EUR 700 million), but they equally undertake not to apply any special conditions to the payment of compensation for nuclear damage furnished from public funds under the second and third tiers (between not less than EUR 700 million and EUR 1 500 million), other than the special conditions laid down in the Brussels Supplementary Convention itself. Thus, the Brussels Supplementary Convention restricts, to some degree, the right of derogation permitted by Article 15(b) of the Paris Convention.
Article 12	27. The formula for calculating each Contracting Party's contribution to the third tier of compensation under the Convention comprises two factors: 35% of the amount of the contribution is based upon the ratio between the gross domestic product ("GDP") of that Contracting Party and the total of the GDPs of all Contracting Parties; the remaining 65% of the amount of the contribution is based upon the ratio between the thermal power of the reactors situated in the territory of that Contracting Party and the total thermal power of all reactors situated in the territories of all Contracting Parties. The allocation of a much larger percentage of the calculation to the thermal power of the reactors situated in territories of the Contracting Parties rather than to the Contracting Parties' GDPs reflects the "polluter pays" principle <i>mutatis mutandis</i> . Nevertheless, it must be recognised that the formula is the result of a compromise and the fact that those Contracting Parties which do not generate nuclear power contribute to the system at all is an acknowledgement of their solidarity with those Contracting Parties which do generate such power. 28. GDP was selected because it is the preferred choice of international statistics for "national income" and the official GDP statistics to be used in calculating each Contracting Party's contribution are those published by the Organisation for Economic Co-operation and Development for the year preceding the year in which the nuclear incident takes place.

Article 12(b)	29. Thermal power was selected because it is considered an appropriate factor for measuring the risks presented by all the nuclear installations situated in the territory of a particular Contracting Party. If a final operating licence for a reactor has not been issued, then the "thermal power" for that reactor is its planned thermal power, whereas if a final operating licence has been issued for that reactor then its "thermal power" is that which is authorised by the competent authorities.
Article 13	30. The thermal power of the reactors situated in the territory of a Contracting Party is that shown on the list referred to in Article 13 at the date of the nuclear incident. A list is prepared by each Contracting Party to cover all nuclear installations situated within its territory which are used for peaceful purposes. Each list is to be deposited with the Belgian Government, as depositary of the Convention, at the time of that Contracting Party's ratification, acceptance, approval or accession to the Convention. Each Contracting Party is equally obliged to notify the Belgian Government of any modification to the list, including the addition or deletion of nuclear installations and changes to the particulars ¹⁴ of such installations.
Article 12(a)(ii)	31. The Paris Convention defines the term "nuclear installation" to include a reactor other than that comprised in any means of transport and the Brussels Supplementary Convention incorporates by reference the definition of "nuclear installation" contained in the Paris Convention [Article 1]. However, neither Convention actually defines the term "nuclear reactor" for the purpose of calculating a Contracting Party's contribution to the third tier of the Brussels Supplementary Convention. Nevertheless, the Convention does specify that reactors which have not yet reached criticality are not counted for the purpose of the formula for working out contributions to the third tier, nor are reactors from the core of which all nuclear fuel has been permanently removed and stored safely in accordance with approved procedures. 32. The amount of the third tier of compensation is partially "open", in that it will vary according to the increase in the number of Contracting Parties to the Convention. While it is true that a "closed" tier ¹⁵ has the advantage of simplicity, a partially "open" tier allows for new states acceding to the Convention to make their own contributions to the third tier without reducing the amount of contributions to be made by existing Contracting Parties. In the end, more compensation will thus be made available to victims in the event of a nuclear incident.
Article 12bis	33. The formula for determining the contribution to be made by acceding States is almost identical to that used for calculating the contributions of the existing Contracting Parties. An acceding State will be required to contribute an amount which is composed of the total of two components: the first component is 35% of the amount obtained by applying to the third tier of EUR 300 million the ratio between the acceding State's GDP

14. "Particulars" of a nuclear installation, as set out in Articles 13(c) and (d) include the expected date upon which the risk of a nuclear incident will exist for installations which have not yet been commissioned, or the exact date of the existence of such risk, and the expected date upon which reactors will first reach criticality or the exact date upon which they first reach criticality, as well as the thermal power of reactors.

15. With a "closed" tier, the amount of the tier does not vary with the number of Contracting Parties to the Convention. When new States wish to accede to the Convention, the tier remains constant and the amount of each Contracting Party's contribution to that tier is reduced accordingly.

	at current prices and the total GDPs at current prices of all Contracting Parties excluding that of the acceding State; the second component is 65% of the amount obtained by applying to EUR 300 million the ratio between the thermal power of the acceding State's nuclear reactors and the total thermal power of all Contracting Parties' nuclear reactors excluding that of the acceding State. The acceding State's contribution, as so calculated, would be made available in addition to the EUR 300 million which is to be contributed by the existing Contracting Parties.
Articles 5 and 10(c)	<u>CONTRACTING PARTY'S RIGHTS OF RE COURSE</u>
	<p>34. Where the liable operator under the Paris Convention has a right of recourse pursuant to Article 6(f) of that Convention¹⁶ the Contracting Parties to the Brussels Supplementary Convention have the same right of recourse, to the extent that they have made public funds available under either the second or third tiers of the supplementary compensation system. The rationale behind this provision is to give Contracting Parties which have contributed public funds under the Convention the same rights as are given to a liable operator under the Paris Convention with respect to the payment of private funds.</p> <p>35. Where such a right of recourse exists and where the legislation of a Contracting Party so provides, as it may do under Article 3(c)(i), the operator may exercise its right of recourse up to EUR 700 million (first tier), the Contracting Party in whose territory the liable operator's nuclear installation is located may exercise its right of recourse up to EUR 500 million (the second tier), and each of the Contracting Parties may exercise its right of recourse up to the amount of its contribution to the third tier of EUR 300 million. In actual fact, each Contracting Party which has furnished compensation would have the same rights of recourse as the operator but in respect of amounts the Contracting Party has contributed over and above the operator's liability of not less than EUR 700 million. Similarly, the Contracting Party whose courts have jurisdiction shall exercise the rights of recourse on behalf of the other Contracting Parties who have contributed public funds.</p>
Articles 6 and 7	<u>TIME LIMITS UPON RIGHTS TO COMPENSATION</u>
	<p>36. The time limits within which rights to claim compensation under the second and third tiers of the Convention's compensation system may be exercised are integrally linked to the prescription and extinction periods set out in Article 8 of the Paris Convention. That Article provides that rights to compensation shall be subject to prescription or extinction if an action is not brought within 30 years from the date of the nuclear incident for actions in respect of personal injury or loss of life, and within 10 years from the date of the nuclear incident for all other actions for damages. Upon the expiry of these periods, any rights to compensation under the second tier of the supplementary compensation system can no longer be enforced against the Contracting Party in whose territory the installation of the liable operator is situated, and any contribution under the third tier cannot be claimed from any Contracting Party to the Convention.</p>

16. The liable operator under the Paris Convention has a right of recourse against an individual where the damage caused by a nuclear incident results from an act or omission of that individual done with the intent to cause damage. Such a right also exists if it is expressly provided for by contract, but the contract may limit the amount which the operator may recover in the exercise of its right.

Article 7	37. Under Article 8(b) of the Paris Convention, longer periods may be established under national legislation as long as the Contracting Party in whose territory the liable operator's nuclear installation is located ensures that insurance or other financial security is available to cover the operator's liability for actions begun after the 30 and 10 year periods respectively and during that longer period. However, under the Brussels Supplementary Convention, an extension of the time limit(s) for making claims is only valid where Article 8(e) or 8(f) of the Paris Convention applies. In addition, under Article 8(d) of the Paris Convention, a Contracting Party may establish, by national legislation, a period of not less than 3 years from the date at which the victim had knowledge or ought reasonably to have known of both the nuclear damage and the operator liable, for the prescription or extinction of rights of compensation under the Convention, provided that the periods established pursuant to paragraphs (a) and (b) of Article 8 are not exceeded. Where a Contracting Party establishes such a period, that same period shall apply to actions under this Convention.
Article 8	<p>FULL OR APPORTIONED COMPENSATION</p> <p>38. Under the Convention, a victim who is entitled to compensation generally has the right to full compensation, in accordance with national law, for the nuclear damage which it has suffered. It will be the law of the court with jurisdiction to determine what "full compensation" is and this determination may vary from one Contracting Party to another.</p> <p>39. However, the Contracting Parties recognise that the amount of damage suffered by victims may be greater than the total amount of compensation to be made available under the Convention. If this should happen, the Contracting Parties are free to establish equitable criteria for apportioning the amount of compensation available under the Convention, such as the setting of priorities or determining whether compensation for the same type of damage should be made on a fixed amount or pro-rata basis. While there is no obligation to establish such criteria, they would likely be very useful in the distribution of compensation should the need arise. If no such criteria are established, then the court having jurisdiction to hear and determine compensation claims would determine the apportionment among victims according to its national law.¹⁷</p> <p>40. Where criteria are established, they are to be applied regardless of whether the compensation is made available under the first, second or third tier. They must also be applied without any discrimination on the basis of the nationality, domicile or residence of the person suffering damage, subject to the provisions of Article 2 concerning the geographic scope of application of the Convention. It should be noted that the distribution of first tier funds will be made according to the geographic scope provisions contained in the Paris Convention [Article 3(b)(i)].</p>
Article 9	<p>AVAILABILITY OF PUBLIC FUNDS</p> <p>41. Article 9 provides that the system for paying out the public funds made available under the Convention is that of the Contracting Party whose courts have jurisdiction. In order to effectively implement this provision, it may be preferable for each Contracting Party to establish a procedure by which those funds are to be distributed, such as by giving them directly to the victims concerned, providing them to the liable operator or providing</p>

17. See the Exposé des Motifs of the Paris Convention (revised), paragraphs 89-90.

	<p>them to the liable operator's insurer [Article 9(a)]. Such a procedure should, in any event, take account of the choice made by that Contracting Party under Article 3(c)(i) or (ii) with respect to establishing the amount of the operator's liability.</p> <p>Article 9(b)</p> <p>42. Notwithstanding that compensation funds under the Convention are provided by three different sources according to the three compensation tiers (the operator's financial security, public funds from the Contracting Party in whose territory the liable operator's nuclear installation is located and public funds from all Contracting Parties collectively), Contracting Parties shall ensure that victims are not required to institute separate actions for compensation according to the source of the funds. Such a requirement, if imposed, would result in expensive and time consuming procedures both for victims and for those against whom the claims are instituted. It would also be inconsistent with the principles of exclusive liability and unity of jurisdiction laid down under the Paris Convention, principles which are designed to ease a victim's ability to claim compensation for nuclear damage.</p> <p>Article 9(c)</p> <p>43. In keeping with the Convention's objective of making additional compensation available on a "tier by tier" basis, the Contracting Parties must make available their contributions to the third tier once the amount of compensation paid or payable under the Convention reaches the total amount of the first two tiers, being EUR 1 200 million. This obligation applies in all cases, even where an operator is required, under its national law, to maintain financial security that exceeds the total amount of the first two tiers under the Convention and those excess funds remain available to compensate nuclear damage. The rationale for this obligation is to avoid "penalising" Contracting Parties which impose financial security limits greater than EUR 700 million, the minimum required under the first tier of the Convention and Article 10 of the Paris Convention, as compared to those which do not. All Contracting Parties are thus required to make available only EUR 1 200 million under the first two tiers before the third tier may be called upon with the result that the third tier is mobilised at the same time for all Contracting Parties.</p>
Articles 2, 10 and 13	<p>JURISDICTION</p> <p>44. The Convention will only apply if the courts of one of its Contracting Parties has jurisdiction to hear and determine nuclear damage claims pursuant to Article 13 of the Paris Convention. Under Article 13 of that Convention, jurisdiction normally lies with the courts of the Contracting Party in whose territory the nuclear incident has occurred. Although highly unlikely, it may happen that jurisdiction will lie with the courts of a State which is Party to the Paris Convention but not to the Brussels Supplementary Convention. This could occur, for example, where a nuclear incident takes place in country X (a Paris Convention State), and causes damage in country Y (a Paris-Brussels Convention State). The courts of country X will have jurisdiction to hear and determine nuclear damage claims under Article 13 of the Paris Convention, but because country X is not a Party to the Brussels Supplementary Convention, that latter Convention will not apply. The requirement that jurisdiction lie with the courts of a Contracting Party to the Brussels Supplementary Convention is essential in order to prevent courts in States not party to that Convention from rendering judgements which could require compensation to be paid from the Contracting Parties' public funds under the second and third tiers of the Convention.</p>

Article 10(a),(b),(c)	45. A number of special obligations are imposed upon the Contracting Party whose courts have jurisdiction under the Convention. First, it is required to inform the other Contracting Parties of a nuclear incident as soon as it appears that the amount of nuclear damage will exceed the total of the first and second tiers. In this way, the Contracting Parties can, between themselves, make the arrangements necessary for the remittance of their collective contributions under the third tier. Secondly, it is only that Contracting Party who may request from the other Contracting Parties their respective contributions under the third tier, including any interest and costs associated therewith. It is that same Contracting Party which must exercise the right of recourse granted by Article 5 on behalf of all other Contracting Parties, with regard to the collective contributions which they have paid under the third tier, including any interest and costs associated therewith.
Article 10(d)	46. Finally, where a settlement involving public funds from either the second or third tier is effected in accordance with conditions established by the national legislation of a Contracting Party, that settlement shall be recognised by the other Contracting Parties. Judgements by the competent courts in respect of compensation are enforceable in the territory of the other Contracting Parties in accordance with paragraph 13(i) of the Paris Convention.
Articles 14(c), (d) and 15	<u>OTHER COMPENSATION ARRANGEMENTS</u>
Article 14(c)	47. A Contracting Party remains free at all times to take additional measures to compensate nuclear damage, over and above those required by the Paris Convention and the Brussels Supplementary Convention. Such measures may be taken on a national basis, or on an international basis such as through bilateral or multilateral agreements. Where such additional measures are taken, they shall not impose any obligation upon the other Contracting Parties with respect to their public funds.
Article 15	48. Article 15 allows a Contracting Party to conclude an agreement with a non-Contracting State pursuant to which public funds will be used to compensate nuclear damage suffered by victims in that State. This provision has never been used.
Article 16	<u>DISPUTE RESOLUTION PROCEDURE</u>
Article 17	49. It is recognised that consultations amongst the Contracting Parties may be necessary or desirable from time to time to attempt to resolve problems of common interest that may arise in connection with the application of either the Brussels Supplementary Convention or the Paris Convention. In particular, it is anticipated that where amendments are made to the Paris Convention, there will more than likely be a need to amend this Convention in order that the two instruments remain consistent. In addition, the Contracting Parties are to consult each other on the desirability of revising the Convention at any time on the request of a Contracting Party. 50. The Brussels Supplementary Convention contains the same basic dispute resolution procedure as that contained in the Paris Convention. In the case of a dispute as to the interpretation or application of the Convention, the disputing Contracting Parties will attempt to settle the matter by negotiation or other amicable means, but if they cannot do so within six months of the beginning of the dispute, then all of the Contracting Parties will meet to help them settle the matter on a cordial basis. If the dispute is still unresolved three months after that meeting, the matter may be submitted, upon the request of a Contracting Party concerned, to the European Nuclear Energy Tribunal set up by the Security Control Convention

Articles 18, 19, 20, 21, 22, 23, 24 and 25	<p>of 20th December 1957. The Tribunal will act in accordance with the rules governing its organisation and functioning, which are set out in the Protocol annexed to the Security Control Convention and in its Rules of Procedure. However, where there is a dispute concerning the application or interpretation of both the Paris Convention and the Brussels Supplementary Convention, only the dispute resolution procedure under Article 17 of the Paris Convention will apply.</p> <p>51. The final clauses of the Convention deal with reservations, adherence to the Paris Convention, ratification and entry into force, amendments, accession, duration and withdrawal, application of the Convention to territories to which the Paris Convention applies, and notice to Signatories and acceding Governments of receipt of various instruments deposited pursuant to the final clauses.</p>
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Recommendation on the application of the reciprocity principle to nuclear damage compensation funds

This Recommendation was adopted on 12 February 2004 by the Diplomatic Conference convened to adopt and sign the 2004 Protocols to amend the Paris and Brussels Supplementary Convention (Annex III of the Final Act of the Conference, which is available at www.oecd-nea.org/law/final-act-conference-revision-pc-bc.pdf).

THE CONFERENCE,

CONSIDERING that, pursuant to Article 15(b) of the Convention on Third Party Liability in the Field of Nuclear Energy of 29 July 1960, as amended by the Additional Protocol of 28 January 1964, by the Protocol of 16 November 1982 and by the Protocol of 12 February 2004 (hereinafter referred to as the "Paris Convention"), a Contracting Party may derogate from the provisions of that Convention insofar as compensation for nuclear damage is in excess of 700 million euro;

CONSIDERING that, pursuant to Article 3(f) of the Convention of 31 January 1963 Supplementary to the Paris Convention of 29 July 1960, as amended by the Additional Protocol of 28 January 1964, by the Protocol of 16 November 1982 and by the Protocol of 12 February 2004 (hereinafter referred to as the "Brussels Supplementary Convention"), a Contracting Party may not, in carrying out that Convention, make use of the right provided for in Article 15(b) of the Paris Convention to apply special conditions, other than those laid down in the Brussels Supplementary Convention itself, to the compensation of nuclear damage using funds referred to in that latter Convention;

DESIROUS of clarifying the right of a Contracting Party to establish conditions of reciprocity for the compensation of nuclear damage using funds which remain available under the Paris Convention after having satisfied its obligations under the Brussels Supplementary Convention;

RECOMMENDS that if a Contracting Party to the Brussels Supplementary Convention has satisfied its obligations under that Convention up to the amount referred to in Article 3(a) thereof, if the amount of nuclear damage to be compensated exceeds the aforementioned amount and if funds remain available, whether provided by insurance or other financial security pursuant to Article 10 of the Paris Convention or by public funds pursuant to national legislation enacted prior to the nuclear incident which requires that a specified amount of public funds will be provided to compensate nuclear damage, it should not make use of the right provided for in Article 15(b) of the Paris Convention to apply special conditions to the compensation of nuclear damage using such remaining funds in respect of:

- a) a State referred to in Article 2(a)(i), (ii) or (iv) of the Paris Convention which, at the time of the nuclear incident, has a nuclear installation in its territory or in any maritime zone established by it in accordance with international law and which affords reciprocal benefits of an equivalent amount;
- b) any other State which, at the time of the nuclear incident, has no nuclear installation in its territory or in any maritime zone established by it in accordance with international law;

RECOMMENDS that the Contracting Parties to the Brussels Supplementary Convention should notify the Secretary-General of the OECD of the steps that they have taken to implement this Recommendation;

INVITES the Secretary-General of the OECD to communicate any such notification to all Contracting Parties.

News briefs

24th Nuclear Inter Jura Congress, Washington, DC

In view of the ongoing global pandemic, the 24th Nuclear Inter Jura Congress has been postponed until next year. The implications of the pandemic spread, coupled with the uncertainty with which it continues to impact the globe, has left the International Nuclear Law Association (INLA) – United States Chapter with no practical choice but to postpone the Congress. The impacts on travel restrictions, the broad reaching financial and policy impacts on INLA members and member organisations, and the impossibility of predicting the resolution path of the pandemic or its timing preclude prudent planning options.

The INLA-US Chapter will be working with the hotel and other involved organisations to move the Congress to a point in calendar year 2021. Very initial discussions among the INLA-US Chapter board members have focused on a similar time of year in 2021 as was planned for the 2020 Congress.

The INLA-US Chapter fully intends to include the current proposals for speaking and for their abstracts in the library for the 2021 Congress. New abstracts or updated abstracts in light of relevant developments will also be welcome. In addition, there may be some additional topics for that Congress not originally anticipated when 2020 began. A new deadline for submittal will be set when the schedule is more clear. If you have any questions, please contact the Congress managers at: INLA.us.2020@gmail.com.

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