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### COMMISSION STAFF WORKING DOCUMENT

on the application of Article 37 of the Euratom Treaty January 2004 – December 2012

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#### 1. Introduction

This Commission Staff Working Document (hereafter CSWD) presents the procedure routinely carried out under the terms of Article 37 of the Euratom Treaty and summarises its implementation during the period January 2004 to December 2012.

Article 37, in its first hyphen, enforces the following obligation on the Member States:

"Each Member State shall provide the Commission with such General Data relating to any plan for the disposal of radioactive waste in whatever form as will make it possible to determine whether the implementation of such plan is liable to result in the radioactive contamination of the water, soil or airspace of another Member State.

Conversely, in its second hyphen, it lays down the Commission's responsibility:

The Commission shall deliver its Opinion within six months, after consulting the Group of Experts referred to in Article 31."

The practical implementation of Article 37 is based, since the 1960s, on dedicated Commission Recommendations. This CSWD also discusses the amendments that were introduced by Commission Recommendation of 11 October 2010 on the application of Article 37<sup>1</sup>.

The Commission takes the point of view that, within the meaning of Article 37, a plan for the disposal of radioactive waste covers any planned discharge or accidental release of radioactive substances, in gaseous, liquid or solid form into the environment.

#### 2. THE ARTICLE 37 PROCEDURE

#### 2.1. The revised Commission Recommendation

Some ten years of experience gained in the implementation of the Commission Recommendation of 6 December 1999<sup>2</sup> on the application of Article 37 revealed a number of issues to be addressed, such as improving the terminology to ensure consistency and clarity of the provisions and limiting the General Data to be provided by Member States to only cover information necessary for the Commission to issue its Opinion. It was further considered that a limited number of trivial operations and modifications of existing plans, having a priori no or negligible radiological impact in other Member States, should either not be submitted to the Commission or an assessment of doses in other Member States was not needed where doses to the population in the vicinity of the plant were found to be extremely low.

A revised Commission Recommendation was therefore adopted on 11 October 2010, as Commission Recommendation 2010/635/Euratom.

The most relevant modifications are as follows:

- (1) Where it concerns the information to be presented in the General Data
  - i. The introduction of a "dose threshold" to the effect that, if it is demonstrated that the calculated dose to the population living in the vicinity of an operation does not exceed  $10 \, \mu \text{Sv/year}$  (under normal operating conditions) or  $1 \, \text{mSv/year}$  (in

<sup>&</sup>lt;sup>1</sup> 2010/635/Euratom, OJ L 279, 23.10.2010, p. 36

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:279:0036:0067:EN:PDF

<sup>&</sup>lt;sup>2</sup> 1999/829/Euratom, OJ L 324, 16.12.1999, p. 23

accidental situations) and that there are no exceptional exposure pathways (e.g. the export of foodstuffs), then a dose calculation for the population in other affected Member States is not required.

This exemption does however not apply to reactor and reprocessing operations.

ii. The European Court of Justice judgement in case C-29/99<sup>3</sup> sanctioned the scope of the Article 37 procedure to also address safety-related information in the context of the assessment of accidental situations. As a result of this, the revised Recommendation also requests that information on unplanned releases from reactors and reprocessing plants is extended beyond the reference accidents to also address the accident upon which the national competent authorities base the site-related national emergency plans.

This allows an assessment of the radiological impact on the population of another Member State with a similar level of precaution as for the population of the submitting Member State.

- iii. Extended request for information on clearance criteria (compliance with the Basic Safety Standards Directive 96/29/Euratom), in particular with respect to national strategy, national criteria and release procedures.
- iv. Simplification of General Data related to the dismantling of installations for which an Opinion had already been given: the descriptive parts (the site and its surroundings, emergency plans, environmental monitoring, etc.) can refer to the initial General Data on which the Opinion was delivered, on condition that appropriate information be provided that reflects any changes that took place in the meantime.
- v. In 2004 the United Kingdom submitted General Data related to the Dounreay Site Restoration Plan. This site-related plan presented, in one single document, fourteen new waste management facilities intended to be built over an extended period of time. For some of these only tentative information could be provided, leaving a significant degree of uncertainty as to the potential radiological impact of the plan (and the future evolution of the site in terms of its compliance with Article 37 matters)<sup>4</sup>. In order to avoid recurrence of the above situation, the Commission amended the Recommendation with a section providing guidance on the submission procedure for complex sites where major changes are scheduled to be carried out (section 7 of the Recommendation).
- (2) Where it concerns the definition of operations that require a submission of General Data
  - i. The introduction of a reactor "power threshold" below which no submission is required: the operation of research reactors whose maximum power do not exceed 1 MW continuous thermal load; the dismantling of reactors whose maximum power did not exceed 50 MW continuous thermal load.
  - ii. No submission is required for the operation of storage facilities (on existing nuclear sites) for irradiated nuclear fuel in casks that are licensed for transport or storage.

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Judgment of the Court of Justice of 10 December 2002, Commission v Council, Case C-29/99.

The comments made in the Commission Opinion on the Dounreay Site Restoration Plan are presented in section 3.3 below.

- iii. Submissions are now also required for the dismantling of mixed oxide fuel fabrication plants (besides the already required submissions for the dismantling of reactors and fuel reprocessing plants).
- (3) Two additional annexes were included pertaining respectively to the predisposal management of radioactive waste and to modifications of a plan on which no Opinion has been given yet. These annexes clarify and limit the amount of information requested by the Commission.

#### 2.2. The different stages of the procedure

In chronological order, the different stages leading to the delivery of an Opinion by the Commission are as follows:

- (1) General Data are submitted by the Member State concerned to the Secretariat-General of the Commission.
- (2) The competent Commission service that holds the Secretariat of the Group of Experts carries out an initial examination of the General Data, with the aim to verify whether the information as listed in the Recommendation is indeed submitted and whether it provides a sound basis for an in-depth examination of the plan.
- (3) The Secretariat sends the original version as well as the English translation of the General Data to the members of the Group of Experts for examination. Details on the composition of the Group of Experts are presented in section 2.3 below. The experts are invited to inform the Secretariat about any request for additional information they believe is necessary to enable an examination within the meaning of Article 37.
- (4) Depending on the type of consultation (see below), the Secretariat draws up a working document or a draft expert report (in English) that is based on the General Data and, would this be necessary, compiles a list of missing information and points that require clarification. This list is then formally sent to the submitting Member State.
- (5) The consultation procedure depends on the category of operations under which the submissions falls (as per paragraph 1 of the Recommendation):
  - i. The oral procedure. For the first two categories of operations (nuclear reactors and spent fuel reprocessing facilities), the Secretariat sends the working document it has prepared (in English) to the experts and summons them to a two-day plenary meeting. The first day is allocated to examining and discussing the General Data, the working document and the list of questions. The submitting Member State is invited to send a delegation to attend the morning session of the second day to provide and discuss the replies to the questions as well as any supplementary questions the experts may have tabled. The Member State delegation having left, the experts, assisted by the Secretariat, amend the working document as appropriate and add the experts' conclusions and Opinion in a dedicated paragraph. The experts then approve the document as the "Report to the European Commission from the Group of Experts".
  - ii. The written procedure. For all other categories of operations, the Secretariat draws up and sends the draft expert report to the members of the Group of Experts for approval and validation. The draft expert report already incorporates the Member State's reply to the Secretariat's questions. In the event that the experts require significant amendments affecting the conclusions, this will lead to a new

draft and a second consultation round. Finally, the experts approve the document as the "Report to the European Commission from the Group of Experts".

- (6) The Secretariat, on the basis of the experts' conclusions and Opinion as laid down in the experts' report to the Commission, draws up a draft Commission Opinion and initiates an inter-service consultation procedure on this draft Opinion (to which, for information, is joined the experts' report to the Commission).
- (7) After inter-service consultation, the Secretariat summarises the experts' report to the Commission and the summary is translated into the two other working languages of the Commission, French and German. The full report is translated into the language of the submitting Member State.
- (8) The Secretariat then initiates the Written Procedure for the adoption of the Commission's Opinion by the College.
- (9) After adoption, the Commission delivers its Opinion, by notification through letter to the Minister of Foreign Affairs of the submitting Member State. Enclosed with this notification letter is a copy of the experts' report to the Commission. The Opinion is translated into all languages of the Union and published in the Official Journal.

#### 2.3. The Group of Experts

The Group of Experts referred to in Article 37 and created pursuant to Article 31 was, originally, the same as the group participating in the development of basic standards and therefore comprised mainly public health experts. However, given the technical problems inherent in examining general data relating to the disposal of radioactive waste from fuel cycle facilities, the Commission decided, very early on, to ask the Scientific and Technical Committee (STC) to appoint another group of scientific experts that would have the necessary expertise to handle matters related to Article 37.

The accession of new Member States resulted in a reshuffling of the number of experts per Member State. In order to free posts, the number of French, German and United Kingdom experts was reduced from four to three; the number of Italian and Spanish experts from four to two; the number of Belgian, Dutch and Portuguese experts from three to two; the number of Luxemburgish experts from two to one (the other nationalities remaining unvaried in number).

As a result, the Group of Experts evolved in its nominal capacity from 43 to 52 members.

It is worth noting the positive evolution in gender balance with currently some 20% of members being female. The composition of the Group of Experts is reviewed in appendix 1 to this CSWD.

#### 2.4. The structure of the experts' report

For any new plan, or any modification of an existing plan on which no Opinion has already been given, the experts' report contains a brief description of the site, the installations, the envisaged regulatory discharge authorisation, the monitoring and safety provisions, the emergency plans, the environmental monitoring programmes and an analysis of the radiological consequences on the population of other Member States of:

- (1) The discharges of gaseous and liquid radioactive effluents in normal operating conditions.
- (2) The disposal of solid radioactive waste in normal operating conditions.

(3) Unplanned releases of radioactive effluents which could occur in the event of a reference accident.

The experts' report concludes by stating whether or not the implementation of the (modified) plan for the disposal of radioactive waste in whatever form, in normal operating conditions or in the event of an accident of the type and magnitude considered in the General Data, is liable to result in a radioactive contamination of the territory of another Member State that is significant from the point of view of health.

#### 2.5. Modifications to existing plans

Any modification of an existing plan on which an Opinion has already been given allows a simplified submission of General Data as per paragraph 5(a) of the Recommendation. The experts' report will then refer to both the initial experts' report and the existing Opinion and provide a brief description of the planned modification, the authorised annual discharge limits in the existing plan, the new discharge limits proposed as a result of the modification. The report then provides an analysis of the radiological consequences on the population of other Member States the modification entails, both for normal operating conditions as well as in the event of the reference accident occurring. The report also examines the consequence the modification may have on the emergency planning and on the environmental monitoring programmes.

The conclusions of the stress test performed in the European nuclear power plants in the follow-up to the Fukushima accident, *inter alia* recommend the conduct of a ten-yearly review of the external events taken into account in the plants' safety assessments. Such reviews may lead to re-evaluations of the potential radiological impact of existing nuclear power plants on other Member States, and thus to possible adjustments of the plants' General Data. The latter will then have to be submitted pursuant to Article 37 to allow the Commission to deliver updated Opinions.

#### 2.6. Time constraints

The data which Member States must send to the Commission are set out in Annexes I-VI of the Recommendation. These must be submitted "after the plan for the disposal of radioactive waste is firmly established, and whenever possible one year but not less than six months before any authorisation for the discharge of radioactive waste is granted by the competent authorities [or] before the start-up of those operations for which no authorisation for the discharge of radioactive waste is foreseen".

The General Data are usually sent to the Commission in the language of the submitting Member State. The translation of the General Data and ensuing documents (experts' reports, requests for additional information, replies given by the Member States, the Commission's Opinion) uses a very significant part of the tight six-months period allowed by the Treaty to deliver a Commission Opinion.

When formally sending a request for additional information to the submitting Member State, the Secretariat will ask that "replies preferably be given within three weeks (in order to adhere to the six-month timetable of the Article 37 procedure)". The official dates of request and reply are systematically mentioned in the Opinion, and the Commission takes the point of view that the time span between both dates adds to the six-month deadline laid down in the Treaty. In the event that a Member State would encounter significant delays in providing the requested additional information, the Secretariat may, after discussing the matter with the

Member State, temporarily suspend the Article 37 procedure until such a date that the information is made available. Suspensions are only exceptionally put into effect.

#### 3. THE IMPLEMENTATION OF THE PROCEDURE 2004-2012

#### 3.1 Opinions delivered

Between 1 January 2004 and 31 December 2012, the Commission delivered ninety Opinions on plans that had been submitted by twelve Member States<sup>5</sup>. The chronology of the Opinions is presented in appendix 2 to this CSWD.

Regarding the Opinions that have been delivered during the period under scrutiny, the sixmonth deadline has generally been adhered to. Occasional delays mostly resulted from the amount of time taken by the Member State's competent authorities to reply to the Secretariat's requests for additional information. It has to be stressed that such requests are in their great majority the consequence of the General Data not containing the information as straightforwardly described in the Annexes to the Recommendation (or the information leaving too much room for interpretation). It is the Secretariat's task to ensure that eventually such information is available that provides a sound basis for a well-founded Commission Opinion.

#### 3.2 Transparency

Until the end of 1984, an Article 37 Opinion delivered by the Commission was only notified to the submitting Member State. From 1985 onwards the Opinions are not only notified but also systematically published in the Official Journal. Since 1990, with the advent of internet, the Commission provided public access to its Opinions via the EUR-Lex web site. Eventually, the Commission's Radiation Protection Unit decided to significantly enhance the ease of public access to Article 37 Opinions by adding a dedicated portal<sup>6</sup> on its EUROPA web site. This portal was implemented in 2010 and provides quick links to Opinions as of the beginning of 2004, the year when fifteen new Member States accessed.

The publication of other documents related to the Article 37 procedure is a delicate matter. Indeed, the General Data provided by the Member States are their intellectual property and often contain information that is commercially sensitive. Therefore, the Commission does not make these General Data public. The same goes for the technical reports to the Commission that the consulted independent Group of Experts provides on every single submission of General Data. The publication of such reports falls under the group's sole collegial responsibility. Since the Commission bases its own Article 37 Opinions on these expert reports, it believes that the independence and the quality of the work of the Group of Experts could be affected if such reports were made public.

Nevertheless, should a Member State make its own General Data public after having obtained the Commission Opinion thereon, then the Commission would not oppose such a decision and would be ready to facilitate public access to the General Data through its website. In addition, after discussion with the Group of Experts, the Commission is examining the possibility to take responsibility for the content of the executive summaries of the expert reports, since these documents are part of the Written Procedure for adoption of the Opinion, and to put these summaries into the public domain via its website.

These Member States are BE, BG, CZ, DE, ES, FI, FR, HU, IT, LT, SK and the UK.

<sup>6</sup> http://ec.europa.eu/energy/nuclear/radiation\_protection/article37/article\_37\_en.htm

The Commission follows a transparency policy (through publications, dedicated websites) on the information obtained on the basis of Article 36 of the Euratom Treaty as regards the levels of radioactivity in the environment and the quantities of radioactive effluents discharged by the major nuclear licensed sites within the Union.

#### 3.3 Opinion specifics

#### (1) Integration of a disclaimer

During the second half of 2011, the Commission decided to add a leading paragraph to the Article 37 Opinion, disclaiming that:

"The assessment below is carried out under the provisions of the Euratom Treaty, without prejudice to any additional assessment to be carried out under the Treaty of the Functioning of the European Union and the obligations stemming from it and from secondary legislation."

All Opinions delivered on General Data submitted from July 2011 onwards contain this opening paragraph, that is since November 2012 completed with an explanatory footnote to the effect that:

"For instance, under the Treaty on the Functioning of the European Union, environmental aspects should be further assessed. Indicatively, the Commission would like to draw attention to the provisions of Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment, 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment, as well as to the Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora and directive 2000/60/EC establishing a framework for Community action in the field of water policy."

#### (2) Recommendations and observations made in Opinions

All the General Data examined in the period under scrutiny resulted in a favourable Commission Opinion.

A small number of Opinions do, however, contain recommendations regarding both normal operating conditions and reference accidents. The cases where a recommendation (or an observation) was deemed indicated, concerned three distinctive topics: clearance of solid radioactive waste during decommissioning operations, intergovernmental cooperation in the event of radiological emergencies and discharge authorisation management. In all cases, the recommendations or observation made were without prejudice to the conclusion in the Opinion.

In addition, the General Data submitted by the United Kingdom on the Dounreay Site Restoration Plan, the first site-related submission addressing multiple facilities ever filed, elicited the Commission to formulate extensive comments in its Opinion.

#### i. Where it concerns the clearance of radioactive waste:

When examining General Data pertaining to decommissioning operations, in particular of reactors, the Commission pays particular attention to the statutory activity clearance levels put in place, below which solid waste can be released from regulatory control for disposal as conventional waste or for reuse or

recycling. These clearance levels must be in compliance with the criteria laid down in the Basic Safety Standards (Council Directive 96/29/Euratom<sup>7</sup>). Such criteria have been further expanded upon and quantified in Commission guidance documents<sup>8</sup>.

For the sake of completeness, the recommendations are here given ad verbatim.

The Commission recommends that the residual activity concentration checks, carried out to confirm the conventional nature of the solid waste after decontamination, be such that compliance with the clearance criteria laid down in the Basic Safety Standards (Directive 96/29/Euratom) is ensured.

In the period under scrutiny this recommendation was part of the Commission Opinions on the dismantling of the Chooz-A, Brennilis and Chinon-A3 nuclear reactors in France.

The Commission recommends the Slovak authorities to review the activity levels for release of such materials to the environment in the light of Community guidance, so as to ensure that the criteria for exemption laid down in Directive 96/29/Euratom are complied with.

In the period under scrutiny this recommendation was part of the Commission Opinions on the dismantling of the Bohunice-A1 and the Bohunice V1 nuclear reactors in Slovakia.

#### ii. Where it concerns intergovernmental cooperation:

Whenever it transpires from the General Data that a bilateral agreement between Member States for the early exchange of information in the event of a radiological emergency is not in place, the Commission will include a recommendation in its Opinion to the effect that such an agreement be concluded within a reasonable delay.

For the sake of completeness, the recommendations are here given ad verbatim.

#### In August 2004:

The Commission notes that while the UK has entered bilateral agreements with a number of States with respect to emergency planning, such an agreement has not yet been concluded with the nearest neighbour Member State under consideration in the current submission namely Ireland. This was also noted by the Commission in a previous submission made by the UK authorities under Article 37 in relation to the THORP facility. It is further noted that such an agreement is currently being pursued and it is recommended that efforts in this direction be continued and brought to a successful and timely conclusion.

#### In December 2004:

The Commission noted in previous Opinions that a bilateral agreement between the United Kingdom and Ireland concerning emergency preparedness was not in place. The statement that an Early Notification Bilateral Agreement between the

Council Directive 96/29/Euratom of 13 May 1996 laying down basic safety standards for the protection of the health of workers and the general public against the dangers arising from ionising radiation, OJ L 159, 29 June 1996.

RP-122: Practical Use of the Concepts of Clearance and Exemption, part 1 - published in 2000.

two Member States is nearing a positive conclusion is acknowledged. It is recommended that this work be continued and brought to a successful and timely conclusion.

#### iii. Where it concerns discharge authorisation management:

Concerning discharge authorisation management, only one single occurrence, the submission of General Data on the "modification of the Liquid Radioactive Waste System at the Ignalina Nuclear Power Plant", led the Commission to include a recommendation in its Opinion:

[However], the Commission notes that a new discharge authorisation was granted on 1 January 2006 in anticipation of the decommissioning of the Ignalina Nuclear Power Plant. Taking into consideration that the decommissioning of the Ignalina Nuclear Power Plant will be subject to a specific submission of General Data, the Commission recommends that in the meantime actual discharges of the Ignalina Nuclear Power Plant should not exceed the limits set in the previous discharge authorisation.

#### iv. Where it concerns site-related submissions addressing multiple facilities:

The case of the Dounreay Site Restoration Plan prompted the Commission to amend its latest version of the Recommendation on the application of Article 37 (see also Part 2 above).

The comments formulated in the Opinion were at the origin of the amendment made in the new Recommendation; hence, for the sake of clarity, these are here reproduced ad verbatim:

[...], the Commission notes that fourteen new installations will be constructed to address specific waste management requirements in the course of implementation of the DSRP and that for these installations incomplete data was presented to the Commission. The Commission confirms the necessity to obtain further detailed and comprehensive information, as soon as available, for these installations in order to be able to check if the current radiological impact assessments in normal and accidental conditions are still valid. The Commission further notes that for unplanned releases of radioactive effluents, the General Data include a categorisation procedure of the facilities, based on hazard potential and corresponding radiological consequences, and that only those facilities with the identified potential to cause a significant threat to members of the public (off-site dose exceeding 5 mSv) are examined in detail. While for a complex nuclear site there is merit in introducing a categorisation of the facilities as regards the accident scenarios, the Commission is not satisfied that as a matter of simplification the General Data submitted did not include information on estimated amounts and physico-chemical forms of the radionuclides present in each of the facilities on the site nor on the quantities assumed to be released in the event of the accident considered for each of those facilities.

#### 4. Infringements

In the period under scrutiny the Commission was not faced with cases that required the initiation of infringement procedures.

#### 5. CASE LAW

The court case here mentioned had been initiated before 2004 and concerns military issues when enforcing the Euratom Treaty.

The Court of Justice has ruled in case C-61/03 of 12 April 2005 (the Commission vs. the United Kingdom) that Article 37 of the Euratom Treaty does not impose an obligation on the United Kingdom to provide the Commission with General Data relating to the plan for the disposal of radioactive waste associated with the decommissioning of the military JASON reactor.

In this context it should be noted that in case C-65/04 of 9 March 2006 (the Commission vs. the United Kingdom) the Court of Justice confirmed that the Euratom Treaty (in its entirety) and the secondary legislation therefrom do not apply to activities or practices that are military in nature.

#### 6. CONCLUSION

In the period under scrutiny the Commission delivered ninety Opinions concerning plans submitted by twelve Member States and covering almost the entire nuclear fuel cycle.

The Article 37 procedures in particular addressed the decommissioning of some 34 power reactors and 8 research reactors as well as the new build of 7 power reactors (of which 5 third-generation EPR reactors in France, Finland and the United Kingdom) and 2 research reactors (of which the ITER fusion research reactor at Cadarache in France).

Since 2004, the number of submissions for radioactive waste treatment, storage and disposal facilities (of which one deep geological repository in Hungary) increased significantly.

In all its Opinions, the Commission concluded that the planned disposal of radioactive waste was not likely to result in a radioactive contamination, significant from the point of view of health, of the territory of another Member State.

Finally, the conclusions of the stress test performed on the European nuclear power plants, following the Fukushima accident, may lead to re-evaluations of the potential radiological impact of existing nuclear power plants on other Member States, and thus to possible adjustments of the plants' General Data. The latter will have then to be submitted pursuant to Article 37 to allow the Commission to deliver updated Opinions.

### Appendix 1 THE GROUP OF ARTICLE 37 EXPERTS

(	Composition by	Member State of	the Group of A	rticle 37 Experts	
2000-2004	Nr of experts	2005-2010	Nr of experts	Current	Nr of experts
Austria	2	Austria	2	Austria	2
Belgium	3	Belgium	2	Belgium	2
		Bulgaria	1 (9)	Bulgaria	1
		Cyprus		Cyprus	1
		Czech Republic	2	Czech Republic	2
Denmark	2	Denmark	2	Denmark	2
		Estonia	1	Estonia	2
Finland	2	Finland	2	Finland	2
France	4	France	3	France	3
Germany	4	Germany	3	Germany	3
Greece	2	Greece	2	Greece	2
		Hungary	2	Hungary	2
Ireland	2	Ireland	2	Ireland	2
Italy	4	Italy	2	Italy	2
		Latvia	1	Latvia	2
		Lithuania	1	Lithuania	1
Luxembourg	2	Luxembourg	1	Luxembourg	1
		Malta		Malta	( <sup>10</sup> )
		Poland	2	Poland	2
Portugal	3	Portugal	2	Portugal	2
		Romania	2 (11)	Romania	$2   (^{12})$
		Slovakia	1	Slovakia	2
		Slovenia	1	Slovenia	1
Spain	4	Spain	2	Spain	2
Sweden	2	Sweden	2	Sweden	2
The Netherlands	3	The Netherlands	2	The Netherlands	2
United Kingdom	4	United Kingdom	3	United Kingdom	3
Total	43		(2005-2006) (2007-2010)	Total (of which 5	52 0 active)

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<sup>&</sup>lt;sup>9</sup> Since 2007.

The Member State never proposed an expert for nomination by the STC.

<sup>11</sup> Since 2007

One Romanian member resigned without the Member State proposing a replacing expert for nomination by the STC.

### Appendix 2

### **CHRONOLOGY OF DELIVERED ARTICLE 37 OPINIONS**

Year 2012 (14 Opinions)

Site		Distance Membe		Type of operation	Plan	Date Opinion	OJ reference
Lingen	DE	13 km	NL	Lingen NPS	Dismantling	18/12/2012	C 394
Bugey	FR	117 km	IT	Bugey-2 NPS (4 PWR reactors)	Modification	19/11/2012	C 377
Bugey	FR	117 km	IT	Bugey-1 NPS	Dismantling	11/10/2012	C 308
Piacenza	IT	200 km	FR	Caorso NPS	Decommissioning	25/9/2012	C 290
Essex	UK	110 km	FR	Decommissioning of the Bradwell NPS (2 Magnox reactors)	Modification	20/6/2012	C 183
Cadarache	FR	170 km	IT	ITER (International Thermonuclear Experimental Reactor)	New build	11/6/2012	C 166
Talvivaara	FI	230 km	SE	Uranium extraction facility	New build	31/5/2012	C 158
Mochovce	SK	37 km	HU	Units 3 and 4 (VVER reactors) of the Mochovce NPS	New build	31/5/2012	C 158
Somerset	UK	185 km	FR	Hinkley Point C site: SF and ILW interim storage facilities	New build	30/5/2012	C 154
Aube	FR	138 km	BE	Two new waste handling facilities at the CSTFA	New build	30/3/2012	C 099
Caen	FR	170 km	UK	The Spiral-2 linear accelerator on the GANIL site	New build	7/3/2012	C 071
Ignalina	LT	3 km	LV	Interim spent fuel storage facility (dry)	New build	2/3/2012	C 066
Somerset	UK	185 km	FR	2 EPR reactors (units 1 and 2) on the Hinkley Point C site	New build	3/2/2012	C 033
Blayais	FR	226 km	ES	Use of MOx fuel in units 3 and 4 of the Blayais NPS	Modification	20/1/2012	C 018

# Year 2011 (9 Opinions)

Site		Distance to next Member State		Type of operation	Plan	Date Opinion	OJ reference
Dounreay	UK	645 km	IE	The Dounreay new low-level waste facilities	New build	21/12/2011	C 374
Penly	FR	106 km	UK	EPR reactor (unit 3) on the Penly NPS	New build	21/12/2011	C 374

Ignalina	LT	3 km	LV	Very low-level waste repository	New build	20/12/2011	C 373
Chinon	FR	384 km	UK	The A3 gas-cooled reactor of the Chinon NPS	Dismantling	20/12/2011	C 373
Aberdeenshire	UK	398 km	IE	Stoney Hill NORM descaling and disposal facility	New build	15/7/2011	C 212
Bohunice	SK	38 km	CZ	Units 1 and 2 (VVER reactors) of the Bohunice V-1 NPS	Decommissioning (1 <sup>st</sup> stage)	15/7/2011	C 210
Lancashire	UK	213 km	IE	Clifton Marsh low-level waste disposal facility	New build	10/3/2011	C 077
Cumbria	UK	180 km	IE	Lillyhall very low-level waste disposal facility	New build	10/3/2011	C 077
Northamptonshir	e UK	220 km	FR	East Northants low-level waste disposal facility	New build	10/1/2011	C 006

# Year 2010 (11 Opinions)

Site		Distance Membe		Type of operation	Plan	Date Opinion	OJ reference
Ignalina	LT	3 km	LV	Buffer store for very low-level waste	New build	21/12/2010	C 349
Malvési	FR	80 km	ES	COMURHEX II uranium conversion facility	Modification	23/11/2010	C 319
Pierrelatte	FR	170 km	IT	George Besse II uranium enrichment facility	Modification	27/09/2010	C 261
Munich	DE	70 km	AT	FRM research reactor	Dismantling	27/09/2010	C 261
Olkiluoto	FI	200 km	SE	EPR reactor (unit 3) on the Olkiluoto NPS	New build	28/7/2010	C 211
Pierrelatte	FR	170 km	IT	COMURHEX II uranium conversion facility	Modification	15/7/2010	C 192
Brennilis	FR	207 km	UK	Brennilis NPS (1 HWGCR reactor)	Dismantling	4/5/2010	C 116
Harwell	UK	225 km	FR	Dismantling of the Ex-Amersham isotope production facility	Modification	14/4/2010	C 095
Cardiff	UK	210 km	FR	Quotient Bio-research (radiochemicals)	New build	13/4/2010	C 094
Sellafield	UK	180 km	IE	Magnox Fuel Handling Plant	Modification	19/3/2010	C 072
Le Bugey	FR	117 km	IT	ICEDA waste conditioning and storage facility	New build	14/01/2010	C 067

Year 2009 (11 Opinions)

Site		Distance Member		Type of operation	Plan	Date Opinion	OJ reference
Cadarache	FR	110 km	IT	PEGASE-CASCAD spent fuel storage facilities	Modification	14/12/2009	C 303
Cadarache	FR	110 km	IT	CABRI research reactor	Modification	8/12/2009	C 301
Cadarache	FR	110 km	IT	STED liquid effluent and waste treatment facility	Modification	30/11/2009	C 295
Chooz	FR	3 km	BE	Chooz-A NPS (1 PWR)	Dismantling	12/11/2009	C 275
Obrigheim	DE	80 km	FR	Decommissioning and dismantling of the Obrigheim NPS (site modification: the construction of a dry storage facility for spent fuel)	Modification	10/11/2009	C 275
Chooz	FR	3 km	BE	Chooz-B NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	20/10/2009	C 251
Bátaapáti	HU	130 km	RO	The deep geological National Radioactive Waste Repository	New build	2/9/2009	C 208
Bohunice	SK	40 km	CZ	Bohunice A-1 NPS (1 HWGCR reactor)	Decommissioning (2 <sup>nd</sup> stage)	9/6/2009	C 131
Zorita	ES	315 km	PT	"José Cabrera" NPS (1 PWR)	Dismantling	6/6/2009	C 154
Wylfa	UK	120 km	IE	Wylfa NPS (2 Magnox reactors)	Decommissioning	27/4/2009	C 097
Civaux	FR	400 km	ES	Civaux NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	21/4/2009	C 093

# Year 2008 (9 Opinions)

Site		Distance to next Member State		Type of operation	Plan	Date of Opinion	OJ reference
Cadarache	FR	110 km	IT	"Jules Horowitz" research reactor	New build	22/12/2008	C 002 (*)
Cadarache	FR	110 km	IT	MAGENTA storage facility for fissile materials	New build	22/12/2008	C 002 (*)
Cadarache	FR	110 km	IT	AGATE liquid radioactive effluent treatment plant	New build	11/12/2008	C 322

Flamanville	FR	120 km	UK	Flamanville NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	19/9/2008	C 241
Flamanville	FR	120 km	UK	EPR reactor (unit 3) on the Flamanville NPS	New build	19/9/2008	C 241
Capenhurst	UK	195 km	ΙE	URENCO uranium enrichment plant	New build	1/8/2008	C 196
Jülich	DE	25 km	NL	FRJ-2 research reactor	Dismantling	18/7/2008	C 187
Mol	BE	10 km	NL	BR-3 (1 PWR)	Dismantling	7/5/2008	C 114
Oldbury	UK	220 km	FR	Oldbury NPS (2 Magnox reactors)	Decommissioning	11/1/2008	C 007

<sup>(\*)</sup> OJ C 002 published in 2009.

# Year 2007 (12 Opinions)

Site		Distance Membe		Type of operation	Plan	Date of Opinion	OJ reference
Penly	FR	105 km	UK	Penly NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	20/12/2007	C 311
Garigliano	IT	340 km	FR	Garigliano NPS (1 BWR)	Dismantling	24/10/2007	C 251
Trino	IT	190 km	FR	Trino NPS (1 PWR)	Dismantling	24/10/2007	C 251
Workington	UK	160 km	IE	Studsvik UK – metal recycling facility	New build	1/8/2007	C 180
Ignalina	LT	3 km	LV	Liquid radioactive waste cementation facility	New build	1/8/2007	C 180
Dampierre	FR	275 km	BE	Dampierre NPS (increased fuel enrichment and burn-up – 4 PWR)	Modification	19/7/2007	C 169
Hanau	DE	150 km	FR	NCS radioactive waste storage facility	New build	9/7/2007	C 157
Tricastin	FR	175 km	IT	Socatri IARU uranium recovery facility	Modification	21/6/2007	C 138
Obrigheim	DE	80 km	FR	Obrigheim NPS (1 BWR)	Dismantling	21/6/2007	C 138
Malville	FR	95 km	IT	Dismantling of the Creys-Malville NPS (1 FBR)	Modification	21/6/2007	C 138
Jülich	DE	25 km	NL	AVR experimental pebble bed reactor	Dismantling	22/3/2007	C 067
Marcoule	FR	180 km	IT	CENTRACO low-level waste treatment and conditioning facility	Modification	31/1/2007	C 022

# Year 2006 (4 Opinions)

Site		Distance to next Member State		Type of operation	Plan	Date of Opinion	OJ reference
Tricastin	FR	175 km	IT	George Besse II uranium enrichment facility	New build	7/11/2006	C 271
Tricastin	FR	175 km	IT	Tricastin NPS (increased fuel enrichment and burn-up – 4 PWR)	Modification	7/11/2006	C 271
Mol	BE	10 km	NL	Eurochemic reprocessing plant	Dismantling	5/10/2006	C 241
Pierrelatte	FR	170 km	IT	COMURHEX uranium conversion facility	Modification	23/5/2006	C 123

# Year 2005 (10 Opinions)

Site		Distance Member		Type of operation	Plan	Date of Opinion	OJ reference
Temelín	CZ	45 km	AT	Temelín NPS (site modification: the construction of a dry storage facility for spent fuel)	Modification	24/11/2005	C 293
Golfech	FR	150 km	ES	Golfech NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	15/11/2005	C 283
Winfrith	UK	100 km	FR	Winfrith NPS (1 SGHWR reactor) + the DRAGON test reactor and the ZEBRA experimental reactor	Decommissioning Dismantling	14/11/2005	C 282
Sizewell	UK	135 km	FR	Sizewell-A NPS (2 Magnox reactors)	Decommissioning	4/11/2005	C 274
Hannover	DE	180 km	NL	TRIGA Mk-1 research reactor	Dismantling	13/9/2005	C 225
Aube	FR	145 km	BE	CSFMA low- and intermediate-level waste repository	Modification	3/8/2005	C 190
Pierrelatte	FR	170 km	IT	TU-5 uranium conversion facility	Modification	3/8/2005	C 190
Dessel	BE	10 km	NL	Belgoprocess building 131X (PAMELA – radioactive waste conditioning plant)	Modification	1/7/2005	C 168
Dungeness	UK	50 km	FR	Dungeness-A NPS (2 Magnox reactors)	Decommissioning	25/4/2005	C 101
Dounreay	UK	645 km	IE	Dounreay Site Restoration Plan (DSRP)	Decommissioning	25/4/2005	C 101

Year 2004 (10 Opinions)

Site		Distance Member		Type of operation	Plan	Date of Opinion	OJ reference
Nogent	FR	200 km	LU	Nogent NPS (increased fuel enrichment and burn-up – 2 PWR)	Modification	29/12/2004	C 030 (*)
Harwell	UK	225 km	FR	Amersham plc isotope production facility	Decommissioning	29/12/2004	(**)
Sellafield	UK	180 km	ΙE	Windscale Pile Reactor Chimneys	Dismantling	22/12/2004	C 036 (*)
Sellafield	UK	180 km	IE	Calder Hall NPS (4 Magnox reactors)	Decommissioning	12/8/2004	C 026 (*)
Frankfurt	DE	120 km	FR	FRF-2 research reactor	Dismantling	26/7/2004	C 030 (*)
Cattenom	FR	10 km	LU	Cattenom NPS (increased fuel enrichment and burn-up – 4 PWR)	Modification	22/6/2004	C 256
Madrid	ES	265 km	PT	CIEMAT JEN-1 research reactor	Dismantling	29/4/2004	C 115
Stade	DE	150 km	DK	Stade NPS (1 PWR)	Decommissioning	20/4/2004	C 100
Dessel	BE	10 km	NL	Belgoprocess building 155X (interim storage facility for low-level radioactive waste)	Modification	5/2/2004	C 034
Bradwell	UK	110 km	FR	Bradwell NPS (2 Magnox reactors)	Decommissioning	22/1/2004	C 018

<sup>(\*)</sup> OJ C 026, C 030 and C 036 published in 2005. (\*\*) The Opinion was inadvertently not published in the OJ.