Economic Commission for Europe

Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context

Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context serving as the Meeting of the Parties to the Protocol on Strategic Environmental Assessment

Working Group on Environmental Impact Assessment and Strategic Environmental Assessment

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Update on the progress in drafting guidance on the applicability of the Convention to the lifetime extension of nuclear power plants

Note by the Co-Chairs of the ad hoc working group¹

I. Introduction

- 1. This report provides an update on the work of the ad hoc working group on the applicability of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention) to the lifetime extension of nuclear power plants. It outlines the steps that have been taken since the establishment of the group at the seventh session of the Meeting of the Parties to the Convention (Minsk, 13–16 June 2017) and presents the group's next steps leading up to the eighth session of the Meeting of the Parties in December 2020.
- 2. The report also provides a summary of the discussions and early findings of the drafting groups that have been established for the following topics:
 - (a) Is lifetime extension an activity or rather a major change to an activity?
 - (b) Lifetime extension of nuclear power plants subject to a decision of a competent authority in accordance with an applicable national procedure.
 - (c) The likelihood of lifetime extension to cause significant adverse transboundary impact.
- 3. These early findings of the group are not intended to provide preliminary guidance to the Implementation Committee for the purposes of dealing with those cases currently before it.

¹ The views expressed in the note are those of the authors and do not necessarily reflect the opinion of the UNECE secretariat.

II. Background

- 4. At its sixth session (Geneva, 2–5 June 2014), the Meeting of the Parties to the Convention discussed whether the extension of the lifetime of a nuclear power plant was within the scope of the Espoo Convention. The Implementation Committee, in its recommendations to the Meeting of the Parties concerning compliance with the Convention, took the general view that the extension of the lifetime of a nuclear power plant after expiration of the original licence, even in absence of any works, was to be considered as a major change to an activity and consequently subject to the provisions of the Convention.² However, considering the various positions of the Parties on the topic, the compliance decision (VI/2) adopted by the Meeting of the Parties at that session did not include a general statement on the extension of the lifetime of a nuclear power plant, limiting itself to a finding of non-compliance in relation to the Rivne nuclear power plant.³
- 5. As Rivne was an atypical case with a time-limited licence, the issue of whether and in what circumstances lifetime extensions of nuclear power plants trigger the application of the Espoo Convention and hence require a transboundary environmental impact assessment still raises questions. There are currently several cases on this topic pending before the Implementation Committee, with a significant number of further cases envisaged in the coming years.
- 6. Consequently, at its seventh session, the Meeting of the Parties agreed on the establishment of an ad hoc group to draft terms of reference for possible guidance on addressing the applicability of the Espoo Convention with regard to decisions on the lifetime extension of nuclear power plants. The group met twice prior to the seventh meeting of the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment (Geneva, 28–30 May 2018) and organized a dedicated workshop to discuss and recommend the adoption of the terms of reference at that meeting.

III. Extension of the mandate of the ad hoc group

- 7. In line with decision VII/3-III/3 on the adoption of the workplan, the Co-Chairs of the ad hoc group held a workshop in the framework of the seventh meeting of the Working Group to discuss the terms of reference and seek views from a range of governmental and non-governmental perspectives. Following the workshop, the Co-Chairs reviewed the terms of reference to take into account, among other things, comments from the Compliance Committee under the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). The revised terms of reference were subsequently adopted by the Working Group (ECE/MP.EIA/WG.2/2018/2, annex IV).
- 8. The Working Group extended the mandate of the ad hoc group under the continued leadership of Germany and the United Kingdom of Great Britain and Northern Ireland and invited it to work on the draft guidance, based on the adopted terms of reference and taking into account the workshop's outcomes. The Working Group also asked the ad hoc group to submit a written progress report to the Meeting of the Parties to the Convention at its

² See ECE/MP.EIA/2014/L.3, draft decision VI/2, para. 5 (f); see also the Committee's findings and recommendations further to a Committee initiative concerning Ukraine with regard to the Rivne nuclear power plant (ECE/MP.EIA/IC/2014/2, annex, para. 65).

³ ECE/MP.EIA/20/Add.1-ECE/MP.EIA/SEA/4/Add.1, decision VI/2, paras. 68–71.

⁴ The presentations given at the workshop can be found under "Presentations and statements" at www.unece.org/index.php?id=47337.

intermediary session in 2019 as an official document so that the Meeting of the Parties could decide how to proceed, with a view to adopting the guidance at its eighth session in 2020.

9. In its intermediary session (Geneva, 5–7 February 2019), the Meeting of the Parties approved the progress report⁵ and confirmed that the work should continue to be carried out by the ad hoc working group, ensuring that the views of the civil society and other stakeholders are taken into account in the process.

IV. Membership

- 10. The following States Parties to the Convention are members of the ad hoc group: Armenia, Austria, Belarus, Belgium, Bulgaria, Canada, Czechia, Finland, France, Germany, Greece, Italy, Lithuania, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom and Ukraine.
- 11. Meetings have also been attended by members of the United Nations Economic Commission for Europe (ECE) secretariat to the Espoo Convention, the Chair of the Working Group on Environmental Impact Assessment and Strategic Environmental Assessment (Slovenia), the Chair of the Implementation Committee (Lithuania) and representatives of the European Commission Directorate-Generals for the Environment and for Energy.
- 12. Germany and the United Kingdom co-chair the ad hoc group.

V. The work of the ad hoc group

- 13. The group has met on seven occasions: in Luxembourg (27–28 November 2017); Brussels (20–21 February 2018); Berlin (20–21 June 2018); London (2–3 October 2018); Geneva (25–26 March 2019); Lisbon (3–4 June 2019); and Rotterdam (8–9 October 2019).
- 14. Since the adoption of the group's terms of reference by the Working Group at its seventh meeting, work has concentrated on the preparation of the guidance itself. Summaries of the meetings can be found on the ECE website.⁶
- 15. Following the workshop held at the seventh meeting of the Working Group, at which a range of non-governmental perspectives were presented, the Co-Chairs have met four times with representatives of non-governmental organizations (NGO): in Brussels (8 August 2018 and 18 December 2018) and in Bonn (17 June 2019 and 16 October 2019).

VI. The work of the drafting groups

- 16. At its sixth meeting, the group set up three drafting groups to concentrate on the drafting of the three key chapters of the guidance which focus on the following issues:
 - (a) Is lifetime extension an activity or rather a major change to an activity?
 - (b) Lifetime extension of nuclear power plants subject to a decision of a competent authority in accordance with an applicable national procedure.

London: https://www.unece.org/index.php?id=50054; Geneva: https://www.unece.org/index.php?id=50471; Lisbon: https://www.unece.org/index.php?id=51622.

https://www.unece.org/index.php?id=51622 The seventh report for the meeting in Rotterdam will be published here:

https://www.unece.org/index.php?id=51791.

⁵ Progress report on the development of guidance on the application of the Convention to the lifetime extension of nuclear power plants, 16 November 2018, ECE/MP.EIA/2019/10.

⁶ See Luxembourg: https://www.unece.org/index.php?id=47703; Brussels: https://www.unece.org/index.php?id=48202; Berlin: https://www.unece.org/index.php?id=48974;

- (c) The likelihood of lifetime extension to cause significant adverse transboundary impact.
- 17. A status report for each of the drafting groups is provided in the annex.
- 18. The group has also agreed that the guidance should include an introductory section in which questions of a general or cross-cutting nature can be addressed. One of these questions is the group's understanding of the term lifetime extension in the absence of a generally agreed definition. The introductory section could also include a glossary of terms and outline examples or scenarios that determine the scope of the guidance and could be applied in each chapter.

VII. Next steps

- 19. At its remaining meetings, the group will continue to prepare the three chapters. It will also prepare the introductory section on questions of a general or cross-cutting nature.
- 20. At present, the group considers that it will need to meet four more times in order to finalize draft guidance for submission to the Meeting of the Parties at its eighth session, scheduled to be held in December 2020. The following schedule is proposed for the group's further meetings. This schedule is flexible and subject to change if necessary.
 - (a) Eighth meeting of the ad hoc group: December 2019;
 - (b) Ninth meeting: March 2020;
 - (c) Tenth meeting: April 2020;
 - (d) Submission of draft guidance to the June 2020 meeting of the Working Group for comment: May 2020;
 - (e) Final meeting: June 2020;
 - (f) Submission of draft guidance to the Meeting of the Parties: September 2020.
- 21. A Stakeholder Workshop will be held in Vienna on 2 December 2019 prior to the eighth meeting of the group. The workshop will provide a forum for sharing and discussing the work of the group, seeking views from a range of non-governmental perspectives. The workshop will begin with a series of short presentations by the group. This will be followed by a focused panel discussion with invited stakeholders on the key points outlined in this report. After this there will be an opportunity for additional remarks from the audience.

Annex

A. Chapter: Is lifetime extension an activity or rather a major change to an activity?

Background

- 1. The Espoo Convention provides for the Parties to take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities.
- 2. Article 1, subparagraph (v) of the Convention describes activity as "any activity or any major change to an activity subject to a decision of a competent authority in accordance with an applicable national procedure".
- 3. The Convention lists several activities in its Appendix I which are understood to have significant adverse environmental impacts. Nuclear power plants are listed among these activities, namely under point 2 of Appendix I: "(...) nuclear power stations and other nuclear reactors (except research installations for the production and conversion of fissionable and fertile materials, whose maximum power does not exceed 1 kilowatt continuous thermal load)."
- 4. However, the Convention will only apply to the lifetime extension of nuclear power plants if a lifetime extension meets the criteria of a "proposed activity" established by article 1, subparagraph (v) of the Convention. According to this definition a "proposed activity" is either an activity ("any activity") or "any major change to an activity".

Topics in focus

- 5. Against this background, it is important to determine whether a lifetime extension can be classed as a new activity or a major change to an activity or neither. As a lifetime extension generally allows the continued operation of an existing activity for a longer period of time, the activity will usually not be regarded to be "new" because the main facilities and infrastructures have already been built and the nuclear power plant is already in operation. The drafting group has therefore decided that a lifetime extension would **normally be classed** as a change to an existing activity rather than as a new activity. There may, however, be different situations which may justify the classification as a new activity, e.g. where a time limited licence has expired before being prolonged.
- 6. Subsequently, the drafting group has discussed the definition of a "major" change and has decided that this should be determined using a range of factors on a case-by-case basis. One factor to be considered is associated **physical works**, if they amount to an extent which implies significant environmental impacts. The integration of new technical solutions, the construction of new facilities or the undertaking of major upgrading works could also indicate a major change.
- 7. Another factor which might lead to the classification of a lifetime extension as a major change are changes in the operation of the nuclear power plant that result in a **changed intervention in the environment**, e.g. an increased use of natural resources.
- 8. Furthermore, the **length of the lifetime extension** may be a factor when deciding whether to classify a change as a major change. While a short-term extension of one or two years may be regarded as minor change, a longer extension of ten years or more may be considered major.
- 9. Other factors, such as the handling of **multiple minor changes** at the nuclear power plant or the relevance of a **changed surrounding environment**, still need to be discussed by the group.

Open questions

- 10. The drafting group will discuss the following open questions during the next meetings:
- a. Under which conditions can a lifetime extension be qualified as a new activity?
- b. What length of lifetime extension should be classified as a major change?
- c. Should previous multiple minor changes, changes in the environment, the existence or absence of a former environmental impact assessment and new scientific findings be additional factors to be considered in the screening process?

B. Chapter: Lifetime extension of nuclear power plants subject to a decision of a competent authority in accordance with an applicable national procedure

Background

11. According to the definition in article 1, subparagraph (v), of the Convention, only a "proposed activity" which is "subject to a decision of a competent authority in accordance with an applicable national procedure" is an activity for the purposes of the Convention. The Convention does not provide a definition for "decision" but by referring to a "competent authority" and a "national procedure" in the same subparagraph, it seems to place the focus primarily on administrative decisions. According to article 2, paragraph 3, of the Convention only "decisions to authorize or undertake a proposed activity" may trigger an environmental impact procedure.

Topics in focus

- 12. In determining what constitutes a decision, the starting point is not the title (e.g. "license" or "permit") but the **authorizing function**, which should be equivalent to that of a license or permit. **Internal procedures** or considerations of a competent authority which are not followed by a subsequent authorization would therefore not be sufficient to meet the criteria of a "decision" as laid down in the Convention.
- 13. Analysing the Court of Justice of the European Union ruling of 29 July 2019 in case C-411/17 the drafting group considered that the criteria developed to determine whether a **specific domestic law** qualifies as a decision could also be applied within the framework of the Convention. The question of whether the criteria of the CJEU for the timing of an environmental impact assessment in a **multi-tier decision making process** could also be applied within the framework of the Convention requires further discussion.
- 14. The drafting group also considered the decision criterion in regard to **unlimited licences**. It acknowledged that the analysis, whether there is a decision or not, is complex and may require difficult considerations taking account of the particular national legal framework. One aspect to be considered is whether States Parties carry out the same sort of assessment required in an initial licensing process again when the design lifetime of the nuclear power plant is reached.
- 15. The decision criterion has also been discussed with regard to those nuclear power plants whose **environmental impact has never been assessed**, due to lack of legal requirements at the time when the facility was originally constructed and authorized for operation. No conclusion has yet been reached on this issue.
- 16. The drafting group has also discussed procedural situations, in which no "decision" can be identified. These include recommendations and measures closely related to **daily operational routines** of the facility, decided upon by the competent authority as part of its regulatory mission. Also, a **periodic safety review**, as such, is not considered a decision according to the Espoo Convention. However, findings and recommendations of a periodic safety review may trigger a decision, in cases where they are followed by a subsequent

authorization issued to transpose these findings and recommendations. Further discussions will be required on this topic to provide guidance.

17. Due to the lack of a general definition of "lifetime extension", the group considers it useful to work with a set of **examples or scenarios**, which reflect the various situations of the States Parties to the Convention, e.g. whether the license was time limited or not, whether the design lifetime has been reached, whether a safety review has been a continuous one or a specific one, and whether the specific safety review has been followed by a subsequent authorization or not. The examples will also take into account the cases currently pending at the Implementation Committee.

Open questions

- 18. The drafting group will discuss the following open questions during the next meetings:
- a. Should the criteria developed by the CJEU for multi-tier decision making be applied in the Espoo context?
- b. Which statements of a competent authority related to findings and recommendations of a safety review carried out on the occasion of a possible lifetime extension should be qualified as a decision and under which conditions?
- c. How should cases, in which the nuclear power plant has never been subject of an environmental impact assessment or the environmental impact assessment has been limited in time, be treated under the Espoo Convention in light of the criterion "decision"?

C. Chapter: Likelihood of lifetime extension to cause significant adverse transboundary impact

Background

19. The Espoo Convention applies to the activities listed in Appendix I of the Convention that are likely to cause a significant adverse transboundary impact. The transboundary environmental impact assessment procedure, as provided for in the Convention, is preceded by defining and establishing the likelihood of the significant adverse transboundary impact of Annex I activities, or any major change of these activities. The determination of the likelihood of a lifetime extension to cause a significant transboundary effect for the sake of the proposed guidance document rests on a step wise approach. It maintains the principles agreed in documents that have been adopted under the Convention.⁷

Topics in the focus

20. The application of the Espoo Convention to a lifetime extension of a nuclear power plant is triggered after examining the following three conditions:

- If the lifetime extension is likely to cause adverse impacts;
- If these impacts are **significant**;
- If these impacts are **transboundary**?
- 21. Our approach firstly identifies and examines the criteria that should be applied to identify the significant adverse impact. Secondly, it examines the criteria for defining such an impact as a transboundary one.
- 22. At the outset, it should be noted that a physical change to the environment resulting from a lifetime extension does not necessarily change the state of the environment as substantially

⁷ Guidance on the Practical Application of the Espoo Convention ECE/MP.EIA/8, 2006, p. 11, para 24; Good Practice Recommendations on the Application of the Convention to Nuclear Energy-related Activities ECE/MP.EIA/24, 2017, p. 11, para 9; and Background note on the application of the Convention to nuclear energy-related activities (ECE/MP:EIA/2011/5) in paras 6-15.

as building a new nuclear power plant does, but might present a similar risk. ⁸ To be able to identify if a lifetime extension is likely to cause adverse impacts and whether these impacts are significant, it is necessary to have sufficient knowledge of two main issues. Firstly, to ascertain that the lifetime extension in question is an activity or a major change to an activity. Secondly, to establish the current state of the environment.

- 23. The **impacts** of a nuclear power plant are divided here into three sources: 1) impacts deriving from normal operation, 2) impacts arising from events 9 that are design-based and 3) impacts arising from events beyond the design base. The group took the view that all three types of impacts are relevant to the Convention.
- 24. When determining the likelihood of a lifetime extension to cause an impact, various criteria, principles and factors, including the endorsed positions of the Meeting of the Parties, must be taken into account
- The Good Practice Recommendations on the Application of the Convention to Nuclear Energy-related Activities is recommending in connection with screening: "Consideration of the risk of major accidents. Parties of origin are invited to consider the risk of major accidents and/or disasters which are relevant to the project when determining the likelihood of significant transboundary impacts".
- Additionally the Meeting of the Parties in its decision IS/1 (para 4.(b))¹⁰ considered that "Although the likelihood of a major accident, accident beyond design basis or disaster occurring for nuclear activities listed in appendix I to the Convention is very low, the likelihood of a significant adverse transboundary environmental impact can be very high, if the accident occurs. Consequently, when assessing, for the purpose of notification, which Parties are likely to be affected by a proposed nuclear activity listed in appendix I, the Party of origin should make the most careful consideration on the basis of the precautionary principle and available scientific evidence".
- 25. Establishing the significance of a project's impact could rely on the criteria set out in Appendix III of the Espoo Convention. The Parties to the Convention could use these criteria to determine whether lifetime extension is likely to cause significant environmental impact.
- 26. Determining the transboundary impact of a lifetime extension of a nuclear power plant would depend on its location. There is a link between the likelihood to cause transboundary impact and the obligation to notify under the Espoo Convention. Some of the impacts potentially caused by a lifetime extension may only be relevant for neighbouring countries whereas other impacts, such as those deriving from accidents beyond the design base, may have a more extensive reach.
- The Meeting of the Parties in its decision IS/1 (para 4.(a)) considered, among other things, that "Early and appropriately wide notification in accordance with the Convention, regardless of the number of the affected Parties, plays an essential role in the transboundary procedure, in keeping with the precautionary approach and the principle of prevention enshrined in the Convention and with the Convention's objective of enhancing international cooperation in assessing environmental impact, in particular in a transboundary context, as mentioned in its preamble".

⁸ Judgment of 29 July 2019, *Inter-Environnement Wallonie ASBL and Bond Beter Leefmilieu Vlaanderen ASBL v Conseil des ministres*, C-411/17, ECLI:EU:C:2019:622, para. 78.

⁹ The term "events" is read as one that includes incidents and accidents (reference INES event scale by IAEA).

¹⁰ ECE/MP.EIA/27/Add.1-ECE/MP.EIA/SEA/11/Add.1.

ECE/MP.EIA/WG.2/2019/INF.6

Open questions

- 27. The drafting group will discuss the following open questions during the next meetings:
- a. How to further develop the criteria of Appendix III of the Convention when assessing significance and what kind of criteria would be relevant in assessing transboundary

b. What is regarded as "appropriately wide" when defining the extent of notification?