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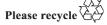
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# Technical paper on the implications of the modalities for expediting the continued issuance, transfer and acquisition of joint implementation emission reduction units for the processes and systems under the Kyoto Protocol

# Summary

This document provides a technical analysis by the secretariat of the possible technical implications for the processes and systems under the Kyoto Protocol, including but not limited to reporting and review requirements and the functions of the international transaction log, arising from the proposed draft modalities for expediting the continued issuance, transfer and acquisition of joint implementation emission reduction units (as currently presented in the annex to document FCCC/SBI/2014/L.9). The technical paper also contains information on budgetary implications, the status of ratification or provisional application of the Doha Amendment, and the status of joint implementation projects.







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# I. Introduction

## A. Mandate

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) by decision 1/CMP.8 adopted an amendment to the Kyoto Protocol (the Doha Amendment) establishing the second commitment period under the Protocol, from 2013 to 2020.

2. In accordance with the same decision, the CMP decided with respect to joint implementation (JI) under Article 6 of the Kyoto Protocol that, as of 1 January 2013, only a Party with a commitment inscribed in the third column of Annex B to the Kyoto Protocol, contained in annex I to decision 1/CMP.8, whose eligibility has been established in accordance with the provisions of paragraph 3 of the annex to decision 11/CMP.1 in the first commitment period, shall be eligible to transfer and acquire emission reduction units (ERUs) valid for the second commitment period, subject to the provisions of paragraph 3(b) of the annex to decision 11/CMP.1.

3. The provision above ensured the possibility for JI to continue in the second commitment period under the Kyoto Protocol. However, a Party can issue ERUs only after the assigned amount units (AAUs) associated with the second commitment period for the respective Party have been calculated and recorded. In view of the time required for calculating, reporting, reviewing and recording the AAUs of Parties for the second commitment period, the CMP anticipated a possible delay in issuing ERUs. This situation could have created uncertainty and cash flow constraints for new JI projects and a disincentive for continuing the existing ones.

4. Therefore, the CMP at the same session also requested the Subsidiary Body for Implementation (SBI) to consider modalities for expediting the continued issuance, transfer and acquisition of JI ERUs for the second commitment period.<sup>1</sup> At SBI 39 Parties initiated the consideration of these modalities and agreed to continue discussions at SBI 40.<sup>2</sup>

5. At SBI 40, Parties requested clarifications on the technical implications of adopting the proposed solution,<sup>3</sup> included in the draft decision text. The SBI agreed to continue its consideration of this matter at SBI 41 on the basis of the draft decision text proposed by the co-chairs of the informal consultations on this subject.<sup>4</sup>

6. In addition, the secretariat was requested to prepare a technical paper for SBI 41 on any possible technical implications for the processes and systems under the Kyoto Protocol, including but not limited to reporting and review requirements and the functions of the international transaction log (ITL), arising from the proposed solution. The Parties also requested that the technical paper contain information on budgetary implications, the current status of ratification or provisional application of the Doha Amendment and the

<sup>&</sup>lt;sup>1</sup> Decision 1/CMP.8, paragraph 16.

<sup>&</sup>lt;sup>2</sup> FCCC/SBI/2013/20, paragraphs 75 and 76.

<sup>&</sup>lt;sup>3</sup> The Joint Implementation Supervisory Committee proposed to allow interested Parties to issue a maximum of 1 per cent of the second commitment period AAUs in advance (before the issuance of the entire amount of AAUs) in order to convert them into ERUs valid for the second commitment period. The proposal is detailed in the draft CMP decision under negotiation (annex to document FCCC/SBI/2014/L.9).

<sup>&</sup>lt;sup>4</sup> FCCC/SBI/2014/8, paragraph 61.

status of JI projects (e.g. number of projects, emission reduction potential, validity of the letter of approval, ERUs issued, etc.).<sup>5</sup>

## **B.** Scope of the paper

7. Following the mandate from SBI 40 referred to in paragraphs 5 and 6 above, this technical paper presents an analysis by the secretariat of the technical implications for the processes and systems under the Kyoto Protocol arising from the proposed solution. The technical paper has two main parts covering:

(a) Implications for the reporting and review requirements under the Kyoto Protocol and the functions of the ITL; budgetary implications; and the current status of ratification or provisional application of the Doha Amendment;

(b) Status of JI projects, including an update on letters of approval and their validity; the number of projects; the annual and total ERUs issued; the annual and total ERU generation potential; and the remaining crediting periods of JI projects in the pipeline for Parties with quantified emission limitation and reduction commitments in the second commitment period.

## C. Possible action by the Subsidiary Body for Implementation

8. In accordance with decision 1/CMP.8 and as mandated at SBI 40, Parties may wish to take into consideration the analysis contained in this technical paper in their deliberations at SBI 41 under the relevant agenda item.

# II. Possible technical implications of the modalities for expediting the continued issuance, transfer and acquisition of joint implementation emission reduction units

## A. Reporting and review requirements

### 1. General considerations

9. The draft text contained in the annex to document FCCC/SBI/2014/L.9 anticipates the possibility for a Party with a commitment inscribed in the third column of Annex B to the Kyoto Protocol, contained in annex I to decision 1/CMP.8, to proceed with an advanced issuance of its assigned amount for the second commitment period established as a percentage of the value of its assigned amount in the first commitment period.

10. The analysis presented in this technical paper is based on the following assumptions:

(a) That the timelines set out in decision 2/CMP.8 for the submission of a report to facilitate the calculation of the assigned amount pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, of the Kyoto Protocol for the second commitment period are observed;

(b) That the Doha Amendment will enter into force at the latest before the end of the second commitment period.

11. At the outset, it must be noted that the expedited issuance of AAUs and ERUs in this approach would be limited to those Parties that meet the requirements of paragraph 15(a) of

<sup>&</sup>lt;sup>5</sup> FCCC/SBI/2014/8, paragraphs 62 and 63.

decision 1/CMP.8 and paragraph 1 of the proposed draft modalities for expediting the continued issuance, transfer and acquisition of JI ERUs included in the annex to document FCCC/SBI/2014/L.9. This essentially means that the proposed early issuance of AAUs would not be allowed for Parties that are not meeting the following three conditions:

(a) The Party has a commitment inscribed in the third column of Annex B to the Kyoto Protocol, contained in annex I to decision 1/CMP.8;

(b) The Party has deposited its instrument of acceptance of the Doha Amendment;

(c) The eligibility of the respective Party is not suspended in accordance with decision 27/CMP.1, annex, section XV.

12. If the above-mentioned modalities would be adopted as presented in the draft decision included in annex to document FCCC/SBI/2014/L.9, the secretariat would need to monitor the fulfilment of these conditions by the interested Parties through the recording of these in the compilation and accounting database pursuant to decision 13/CMP.1. This also means that the respective information from the compilation and accounting database would need to be forwarded to the ITL in order for the ITL to allow the early issuance of AAUs.

13. The information forwarded by the compilation and accounting database to the ITL would need to contain the maximum amount of AAUs that can be issued in advance for the second commitment period by the respective Party. The amount would need to be calculated based on the percentage agreed to by Parties for the advance issuance and the respective Party's assigned amount in the first commitment period.

14. Paragraph 15(b) of decision 1/CMP.8 states that "paragraph 2(b) of the annex to decision 11/CMP.1 shall apply to such Party only upon calculation and recording of its assigned amount for the second commitment period", which means that the commitment period reserve validation by the ITL and registry systems does not apply up to and until the point when the assigned amount for the second commitment period is calculated and recorded.

15. Hence, if a Party only held an amount of units (advance issuance) valid for the second commitment period that is below its commitment period reserve, it would not appear to create a problem with the application of the commitment period reserve.

16. Paragraph 21 of decision 1/CMP.8 states that a levy of 2 per cent shall be applied to the issuance of ERUs. This provision would apply to the advance issuance mechanism proposed. A Party that proceeded with an advance issuance based on the proposed modalities would also have to be ready to implement the requirements regarding the share of proceeds in its national registry.

17. The data exchange standards for registry systems has incorporated the latest developments from the discussions taking place in the Subsidiary Body for Scientific and Technological Advice (SBSTA) under the agenda item "Implications of the implementation of decisions 2/CMP.7 to 4/CMP.7 and 1/CMP.8 on the previous decisions on methodological issues related to the Kyoto Protocol, including those relating to Articles 5, 7 and 8 of the Kyoto Protocol",<sup>6</sup> including the latest developments related to the share of proceeds. However, at this stage, it is not possible to finalize the data exchange standards for registry systems owing to the fact that the above-mentioned negotiations under the SBSTA have not yet been concluded. Should the proposed modalities presented in the draft decision text be adopted, there would be a need to further update the data exchange standards for registry systems.

<sup>&</sup>lt;sup>6</sup> FCCC/SBSTA/2014/L.15.

18. The in-session discussion text relating to agenda item 12(a) of SBSTA 39 and agenda item 3(a) of CMP 9 contains two elements that may be relevant to the proposed draft modalities. These elements include the following and are discussed in the paragraphs that follow:

- (a) Revised standard electronic format (SEF) tables;
- (b) Amendment to paragraph 23 of the annex to decision 13/CMP.1.

19. The revised SEF tables contained in the in-session discussion text appear to have placeholders for reporting the amount of AAUs and the amount of ERUs issued to date. However, minor modifications to the reporting instructions and/or labels may be required in order to achieve full clarity in the event that the early issuance of AAUs took place. For example, the quantity of AAUs to be reported by Parties is described as follows: "The total quantity of AAUs issued on the basis of its assigned amount under Article 3, paragraphs 7 bis, 8 and 8 bis".

20. Although the reporting and review modalities for accounting of Kyoto Protocol units in the second commitment period are yet to be discussed and finalized, these modalities would likely need to cover the early issuance of AAUs in order for expert review teams to ensure that the threshold set (i.e. x per cent of the assigned amount of the first commitment period) is not exceeded.

21. The amendment to paragraph 23 of the annex to decision 13/CMP.1, as contained in the in-session text referred to in paragraph 18 above, reads as follows:

"Paragraph 23 of the annex to decision 13/CMP.1 shall not apply for the second commitment period and the following paragraph shall be inserted after paragraph 23 of the annex to decision 13/CMP.1: 23 bis. For the purpose of the second commitment period, each Party included in Annex I shall issue in its national registry a quantity of AAUs equivalent to the assigned amount of that Party pursuant to Article 3, paragraphs 7 bis, 8 and 8 bis, calculated and reported in accordance with paragraph 5 bis of the annex to decision13/CMP.1, as revised in accordance with the provisions of the present annex, and paragraph 3 of decision 2/CMP.8."

22. Although the revised text does not appear to specify a timing for the issuance of the assigned amount nor an explicit requirement that the assigned amount be issued in full and 'in one go', should Parties opt for the advance issuance of AAUs, it will be important to further clarify that only the remainder of the AAUs (i.e. total assigned amount minus early issuance) needs to be issued once the assigned amount is reviewed and recorded, similarly to what has been specified in paragraph 2 of the proposed draft modalities included in document FCCC/SBI/2014/L.9.

#### 2. Implementation timeline, assumptions and resource requirements

23. The changes to the internal secretariat processes and systems that would be required as a consequence of adopting the proposed draft modalities for expediting the continued issuance, transfer and acquisition of JI ERUs would appear to be minor and would fit in the existing budgets. An estimated implementation time of several months can be anticipated on the compilation and accounting database and ITL systems in case of an agreement by Parties on the relevant issues presented in paragraphs 16–20 above.

24. The secretariat is not in a position to estimate the resource requirements and/or implementation time required to ensure the full readiness of the national registries of Parties with respect to the functionality required.

#### 3. Current status of ratification or provisional application of the Doha Amendment

25. As stipulated in Articles 20 and 21 of the Kyoto Protocol, the Doha Amendment shall enter into force for the Parties that have accepted it on the ninetieth day after the date of receipt by the Depositary (the Secretary-General of the United Nations) of an instrument of acceptance by at least three fourths of the Parties to the Kyoto Protocol. An instrument of acceptance can be deposited by a Party to the Kyoto Protocol only after completion of its domestic ratification process.

26. As at 15 September 2014, the Depositary has received instruments of acceptance from 18 Parties, as follows, in chronological order: United Arab Emirates, Barbados, Mauritius, Bangladesh, Monaco, Sudan, Federated States of Micronesia, Kenya, Honduras, China, Norway, Morocco, Solomon Islands, Mexico, Singapore, Djibouti, Peru and Indonesia. No Party has yet chosen to provisionally apply the Amendment in accordance with paragraph 5 of decision 1/CMP.8.

### **B.** Status of joint implementation projects

#### 1. General considerations

27. The essence of JI is to provide a common basis for Parties with quantified emission reduction or limitation targets to collaborate in the mitigation of climate change. Specifically, this approach enables Parties included in Annex I to the Convention (Annex I Parties) or legal entities authorized by them to support projects that reduce or offset the emissions of other Annex I Parties, thereby allowing for greater cost-effectiveness in the overall mitigation actions taken by these Parties to meet their emission targets under the Kyoto Protocol.

28. JI, under the current guidelines, is divided into two 'tracks'. Commonly known as "JI Track 1", the first method represents the basic model as originally envisaged for JI during the preparation of the JI guidelines. Under this track, the host Parties assume responsibility for the approval of projects, the verification of the resulting emission reduction and removals, and the issuance of ERUs. In order to ensure the integrity of the ERUs issued within the overall accounting framework of the Kyoto Protocol, host Parties need to meet a set of eligibility requirements relating to the accounting systems and processes at a national level, to measure annual emissions and removals and demonstrate compliance with commitments.

29. This integration of JI within the accounting framework of the Kyoto Protocol means that, in effect, JI projects redistribute mitigation effort among Annex I Parties without impacting the overall magnitude of the mitigation undertaken. A reduction or removal of emissions in the host Party is compensated by the transfer of the assigned amount, in the form of ERUs, to the investing Party. As a result, although the additionality of emission reductions and removals remains a core requirement of JI projects, JI is not contributing to an increase in the overall level of emissions allowed from Annex I Parties as a whole.

30. The second approach, commonly known as "JI Track 2", was originally conceived as a system of international oversight for projects hosted by Annex I Parties that had not yet met all the eligibility requirements for JI. Track 2 sets out a verification procedure for JI projects under the Joint Implementation Supervisory Committee (JISC). Once emission reductions and removals are deemed final under Track 2, ERUs may be issued and transferred by the host Party if it had its assigned amount calculated and recorded and has a national registry in operation.

31. After the end of the first commitment period of the Kyoto Protocol, the evolution of the JI mechanism could be presented in three stages: (1) slow start-up, for a variety of

reasons, such as delays in the establishment of the JISC and the necessary domestic regulations in host Parties; (2) a period of steady development, implementation and improvement, accompanied by a growing interest and participation in the mechanism; and (3) the present stage of uncertainty, where activity is focused on reviewing and improving the initial JI guidelines and securing a future for the JI mechanism.

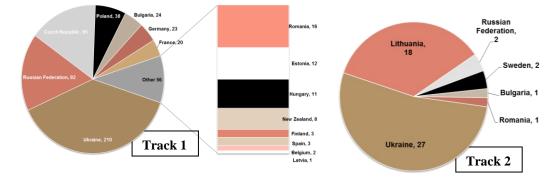
32. As mentioned by the JISC in its latest annual report to the CMP,<sup>7</sup> a decade has now been spent developing, strengthening and improving the JI mechanism. The mechanism showed its value in the first commitment period of the Kyoto Protocol, mobilizing investment, delivering emission reductions on a scale that exceeded expectations and reducing costs for Parties in complying with their emission reduction targets.

33. The JISC also considers that despite being a successful and mature mitigation tool, few Parties and private sector entities are currently taking advantage of JI. Activity has been in severe decline since the end of the first commitment period of the Kyoto Protocol and the knowledge and institutional capacity that were built over the years by Parties and the private sector are rapidly being lost. Prevailing levels of mitigation ambition, combined with slow progress in the ratification of the Doha Amendment and especially the inability to issue ERUs in the second commitment period, all threaten the existence of JI.

### 2. Number of joint implementation projects (15 October 2014)

34. According to the official UNFCCC JI database, 332 project design documents (PDDs) and one programme of activity design document have been submitted under JI Track 2 and made publicly available on the UNFCCC JI website in accordance with paragraph 32 of the JI guidelines since September 2006 (official launch of the Track 2 process).

35. From the PDDs submitted under Track 2, 52 determinations of a PDD have been published on the UNFCCC JI website in accordance with paragraph 34 of the JI guidelines, of which 51 were deemed final by the JISC in accordance with paragraph 35 of the JI guidelines and 1 was rejected. Currently 51 projects are thus officially considered as JI Track 2 projects, in six host Parties, as shown in figure 1.



# Joint implementation Track 1 and Track 2 projects, by host Party

36. For 42 of the 51 JI Track 2 projects, project participants have submitted for publication on the UNFCCC JI website 130 verifications of emission reductions, of which 129 were deemed final by the JISC in accordance with paragraph 39 of the JI guidelines and one was withdrawn. The total quantity of ERUs issued by all host Parties under JI

Figure 1

<sup>&</sup>lt;sup>7</sup> FCCC/KP/CMP/2014/4.

Track 2, based on the above-mentioned verifications, amounts to over 25 million units, as shown in the table.

37. Regarding the other approach to JI, Track 1, 597 projects have been published by 15 host Parties on the UNFCCC JI website, of which 548 have received unique project identifiers that were registered in the ITL, as shown in figure 1. Currently 548 projects are thus officially considered as JI Track 1 projects. The total volume of ERUs issued by all host Parties under Track 1 amounts to over 831 million units, as shown in the table.

38. Considering the information in figure 1 above, currently there are a total of 599 projects under JI Track 1 and Track 2, which are officially registered in the JI information system and for which the respective information has been provided to the ITL to allow host Parties to issue ERUs for emission reductions generated by these projects. Out of the 599 JI projects, host Parties have initiated ERU issuance for around 530 projects in the period 2008–2014, amounting to more than 850 million ERUs issued, as shown in the table.

### 3. Update on letters of approval and their validity, and remaining crediting period

39. The information on JI projects requested by Parties for inclusion in this technical paper includes aspects associated with national policies of host Parties involved in JI, such as an update on the letter of approval and their validity for the second commitment period, and the remaining crediting periods of the JI projects in the pipeline. In this context, the secretariat contacted the focal points of all Parties with a commitment inscribed in the third column of Annex B to the Kyoto Protocol, contained in annex I to decision 1/CMP.8, requesting detailed information on the existing and planned JI activities and the existing and planned projects in the second commitment period, to support this comprehensive analysis.

40. The survey ran in the period July–September 2014. The secretariat received responses from 50 per cent of the Parties to which the questions were sent (18 out of 36 Parties provided detailed answers to the questionnaire). Some Parties currently hosting many JI projects (e.g. Ukraine, Poland) or with JI potential in the future (e.g. Belarus, Kazakhstan) did not respond to the questionnaire, which limits the ability of the secretariat to prepare a consistent and wide-ranging analysis.

41. In the responses received on the question relating to the current approach regarding the use of JI in the second commitment period, many Parties voiced their support for the continuation of JI considering the past positive experiences. Some Parties admitted that no plans are currently in place in relation to the use of JI in the second commitment period, notwithstanding the possibility of using JI in the future. Other Parties mentioned the lack of interest in hosting JI projects due to domestic conditions, but expressed however their potential interest in approving projects received from project developers, as investor Parties.

42. In response to the question relating to the continuation of the existing projects in the second commitment period and their associated internal approval, some Parties currently hosting projects (e.g. Czech Republic, Hungary, Germany and Sweden) mentioned that the existing Track 1 and Track 2 projects have either been terminated by the project participants or the host Parties decided not to continue their crediting period under the JI mechanism. Other Parties hosting projects (e.g. France, Romania and Bulgaria) acknowledged that several projects will continue to be operational in the second commitment period. This will require a new internal approval process for renewing the letter of approval, which has not yet been established.

43. For most of the host Parties that provided responses to the questionnaire, the letters of approval given to project participants for both Track 1 and Track 2 projects had expired at the end of 2012. In the case of Ukraine, an analysis of the letters of approval uploaded on

the JI web page on the UNFCCC website revealed that these documents have no expiration date, but contain a clear provision concerning the possible transfer of ERUs for the emission reductions generated by the respective projects only in the period 2008–2012. However, most of the PDDs uploaded for Track 1 and Track 2 projects hosted by Ukraine envisage a longer crediting period, ending either in 2017 or 2020 (based on estimates of the length of the second commitment period of the Kyoto Protocol). It would appear that, in the absence of other official information, the project participants in any existing project in Ukraine wishing to continue in the second commitment period will have to apply for a renewal of the letter of approval.

#### 4. Annual/total ERUs issued to date and annual/total ERU generation potential

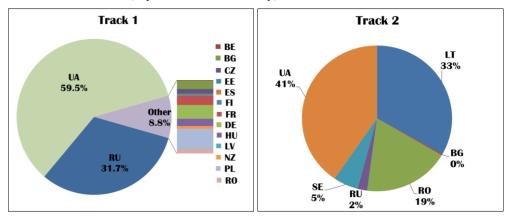
44. In response to a request by Parties at CMP 8, the secretariat has published on the JI web page monthly updates of ERU issuance, aggregating official information recorded in the ITL. The table shows the issuance of ERUs by track and year from the beginning of issuance in 2008 until 30 September 2014. Figure 2 shows the distribution of ERU issuance by host Party and track in the same period.

	Track 1	Track 2	Total
2008	120 000	_	120 000
2009	4 670 641	1 324 448	5 995 089
2010	28 033 010	2 921 570	30 954 580
2011	86 702 918	6 818 250	93 521 168
2012	517 108 849	9 083 486	526 192 335
2013	179 116 529	4 599 135	183 715 664
2014	15 916 562	273 343	16 189 905
Total	831 668 509	25 020 232	856 688 741

<sup>*a*</sup> Until 15 October 2014.

#### Figure 2

ERUs issued under JI, by track and host Party, 2008–2014<sup>a</sup>



*Abbreviations*: BE = Belgium, BG = Bulgaria, CZ = Czech Republic, DE = Germany, EE = Estonia, ES = Spain, FI = Finland, FR = France, HU = Hungary, LT = Lithuania, LV = Latvia, NZ = New Zealand, PL = Poland, RO = Romania, RU = Russian Federation, SE = Sweden, UA = Ukraine. <sup>*a*</sup> Until 15 October 2014. 45. As shown in the table, host Parties have issued over 25 million ERUs under Track 2, based on the emission reductions generated by the majority of the 51 Track 2 projects deemed final by the JISC. During the first commitment period of the Kyoto Protocol, these projects could have generated emission reductions of up to a maximum of 50 million tonnes of carbon dioxide ( $CO_2$ ) equivalent if all anticipated reductions (based on PDDs) had been achieved.

46. Considering the information from the responses received from several Track 2 host Parties to the survey administered by the secretariat, it appears that only some Track 2 projects, especially the ones hosted by Ukraine, would be able to continue in the second commitment period. The maximum ERU generation potential of all the existing Track 2 projects hosted by Ukraine is 61 million tonnes of  $CO_2$  equivalent during the entire second commitment period. Fulfilling that potential would require that all those projects be implemented and that they deliver all their expected emission reductions.

47. In contrast to Track 2, host Parties have issued over 830 million ERUs under Track 1, based on the emission reductions generated by the majority of the 548 Track 1 projects that have been registered in the ITL. During the first commitment period of the Kyoto Protocol, these projects could have generated emission reductions of around 950 million tonnes of  $CO_2$  equivalent if all anticipated reductions (as shown in the project documentation) had been achieved.

48. Considering the information from the responses received from several Track 1 host Parties to the survey administered by the secretariat, it appears that only some Track 1 projects, especially the ones hosted by Ukraine, would be able to continue in the second commitment period. The maximum ERU generation potential of all the existing Track 1 projects hosted by Ukraine is about 1 billion tonnes of  $CO_2$  equivalent during the second commitment period. Fulfilling that potential would require that all those projects be implemented and that they deliver all their expected emission reductions.