United Nations

FCCC/KP/CMP/2012/8

Framework Convention on Climate Change

Distr.: General
8 November 2012

Original: English

Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol
Eighth session
Doha, 26 November to 7 December 2012

Item 11 of the provisional agenda
Issues relating to the international transaction log

Annual report of the administrator of the international transaction log under the Kyoto Protocol

Note by the secretariat*

Summary

>   This eighth annual report of the administrator of the international transaction log (ITL) provides information to the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) on the activities of the ITL administrator from November 2011 to October 2012. This report also contains information on transactions of Kyoto Protocol units, as requested by the CMP at its sixth session. The CMP, by decision 12/CMP.1, requested the Subsidiary Body for Implementation (SBI) to consider, at its future sessions, the annual reports of the ITL administrator. The SBI may wish to take note of the information contained in this report and provide guidance to the secretariat and Parties, as necessary, concerning the implementation of registry systems.

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* This document was submitted after the due date in order to include information on the latest progress in this work.

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Contents

I. Introduction

A. Mandate

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), by decision 13/CMP.1, requested the secretariat to establish and maintain an international transaction log (ITL) to verify the validity of transactions proposed by registries as established under decisions 3/CMP.1 and 13/CMP.1. The ITL is essential for the implementation of the mechanisms under Articles 6, 12 and 17 of the Kyoto Protocol.

2. The Conference of the Parties (COP), by decision 16/CP.10, requested the secretariat, as the ITL administrator, to report annually to the CMP on organizational arrangements, activities and resource requirements and to make any necessary recommendations to enhance the operation of registry systems.

3. The CMP, by decision 12/CMP.1, requested the Subsidiary Body for Implementation (SBI) to consider, at its future sessions, the annual reports of the ITL administrator, with a view to requesting the CMP to provide guidance, as necessary, in relation to the operation of registry systems.

B. Scope of the note

4. This eighth annual report of the ITL administrator provides information on the implementation of the ITL and its operational status, including the facilitation of cooperation with registry system administrators (RSAs) through the activities of the Registry System Administrators Forum (RSA Forum) and the independent assessment of registry systems. This annual report also contains information on transactions in the ITL.

5. This report covers the reporting period from 1 November 2011 to 31 October 2012.

C. Possible action by the Subsidiary Body for Implementation

6. The SBI may wish to take note of the information contained in this report and request the CMP to provide guidance to the secretariat and Parties, as necessary, concerning the implementation of registry systems.

II. Work undertaken since the publication of the seventh annual report of the administrator of the international transaction log under the Kyoto Protocol

A. Summary of work undertaken

7. The ITL administrator continued to convene the RSA Forum and coordinated the work of its working groups.

8. The activities related to the fourth annual assessment of national registries and accounting of Kyoto Protocol units were completed successfully.

9. The ITL administrator continued to support the 'business as usual' operations of the ITL. Detailed information on the operational activities and operational performance is provided in chapter II of this report.

10.   During the reporting period, the ITL administrator recertified and reconnected the 29 national registries which were involved in the consolidation of the European Union (EU) emissions trading scheme (ETS) registries hosted in EU member States.

11.   During the reporting period, the ITL administrator analysed the impact of the outcomes of the seventh session of the CMP on the system of registries and established a working group of registry administrators and developers to prepare for the true-up period of the first commitment period and the beginning of the second commitment period. Detailed information on the activities of this working group is provided in paragraphs 53–57 below.

B.   Implementation activities

1.   International transaction log releases

12.   During the reporting period, there was one release of the ITL software, which included a change in the database structure targeted at improving queries performance and a new mechanism for handling registry reconciliation processes that became blocked. The release also addressed all identified software defects.

2.   International transaction log service desk

13.   After the completion of the EU ETS registries consolidation, the ITL service desk provider and the European Union Transaction Log (EUTL) service desk representatives, in collaboration with the ITL administrator, initiated a review of the incident management procedure. This review is intended to clarify the areas of responsibilities of the respective service desks involved.

14.   During the reporting period there were some changes in service desks operational procedures. A total of 12 procedures were updated, two retired and one created. Of these, eight procedures were updated to replace references to the Community Independent Transaction Log (CITL) by references to EUTL, two to incorporate changes to the users contact management approach, one to integrate a new feature in the ITL reconciliation mechanism, and one to incorporate staff changes and update escalation lines. Two procedures that became obsolete as a result of the implementation of the storage area network technology in late 2011 and a change in the approach for change management were retired. Finally, one procedure was created to address a particular situation that resulted in a system incident in February 2012.

3.   Consolidated system of European registries

15.   The consolidation of European national registries was a significant change to the system of registries. An impact statement, developed in 2010 and mentioned in the 2011 annual report of the ITL administrator concluded that registry recertification is required for this change. In November 2011, the European Commission postponed the go-live of the consolidation of registries from January to early summer 2012. The following activities were executed during the reporting period to test and recertify the 29 registries involved in the consolidation, with the consolidation being finalized in June 2012:

        (a)   Initial testing; in December 2011 the consolidated registry software completed testing and evaluation against test suites and distinctness tests in accordance with annex H to the "Data exchange standards for registry systems under the Kyoto Protocol" (DES). Initial functional and distinctness tests were executed using an intermediate version of the consolidated system software. Prior to this test, connections between the ITL test environment and the EU ETS were established and tested;

        (b)   Reliability and regression testing; based on initial test results, connection reliability and functional tests were re-executed in April 2012. The results of these tests

proved to be within acceptance limits and the final version of the application proved to conform to the DES;

(c) Recertification; the consolidated European registries, including the European Community registry, were recertified by the ITL administrator in June 2012 for connecting to the ITL based on the results of:

(i) A review of readiness documentation, common or specific, for all registries involved;

(ii) Connectivity reliability testing;

(iii) Annex H and registry distinctness testing.

16. On 19 June 2012, 29 registries became operational under the Consolidated System of European Union Registries (CSEUR).

4. International transaction log technology refresh

17. The technology refresh work undertaken in the previous reporting period has led to the successful implementation of a storage area network technology in the ITL infrastructure.

5. Registry system administrators extranet

18. During the reporting period, the ITL administrator upgraded the RSA extranet using the new collaboration technology implemented in the secretariat, which went live for use on 1 March 2012.

19. The new features of the extranet include:

(a) A central calendar for all registry-related activities;

(b) Up-to-date information regarding all active working groups and projects affecting the registry systems;

(c) Up-to-date contact information of RSAs and ITL support organizations;

(d) ITL related user requirements and change requests;

(e) Up-to-date information regarding registry eligibility and operational status;

(f) Archived information of all closed working groups and meetings.

20. All extranet users have been reconnected to the upgraded system, which will be used for communicating relevant documentation and information regarding registry-related activities. The extranet is managed and maintained by the ITL administrator.

C. Operational activities

1. Registry testing

21. On 1 August 2012, the ITL administrator announced the opportunity for voluntary testing based on annex H to the DES for the second commitment period of the Kyoto Protocol. This testing activity will take place at the end of 2012. It is expected to help interested registries evaluate their preparedness for the second commitment period.

2. Transactions data and analysis

22. The number of transactions proposed to the ITL from November 2008 to October 2012 is shown for each month in figure 1.

Figure 1
Number of transactions proposed to the international transaction log since November 2008
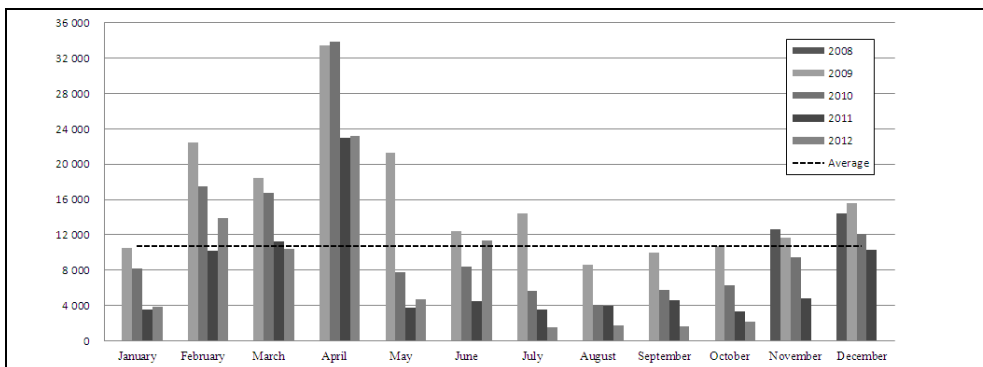
23. The consolidation of the EU ETS registries has had an impact on the volume of transactions proposed to the ITL since it was finalized in June 2012. Figure 2 shows a comparison of the volume of transactions for the period of June to September 2011 and June to September 2012.

Figure 2
Comparative report on the volume of international transaction log transactions following the go-live of the Consolidated System of European Union Registries in June 2012
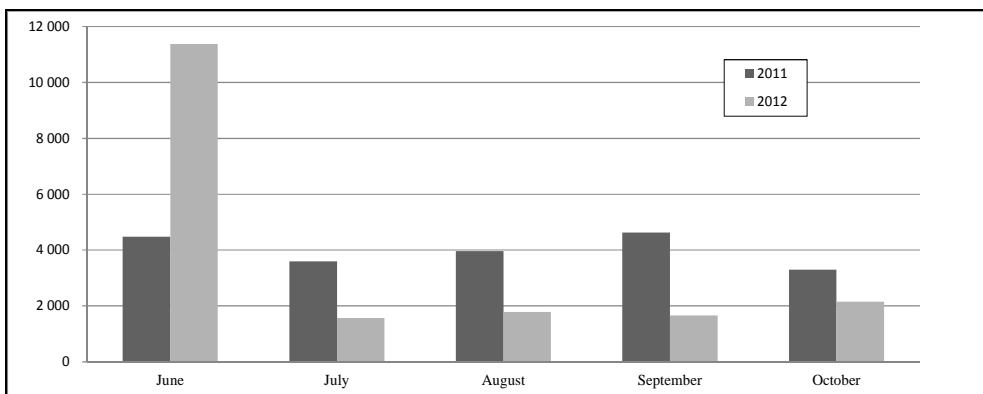
24. The high number of transactions in June 2012 was due to the migration of the EU ETS registries into the CSEUR.

25. The transactions proposed to the ITL eventually end in a status that belongs to one of the three categories: terminated, cancelled or completed.

26. The transaction termination ratio is the number of terminated transactions divided by the number of transactions proposed in a given time frame. This ratio can be used as an indicator of the level of internal checking performed by a registry to ensure that the transactions it proposes and its data records are accurate. The changes in this ratio since November 2008 are shown in figure 3.

27. The transaction cancellation ratio is the number of cancelled transactions, that is, transactions that are not finalized within 24 hours, divided by the number of proposed transactions in a given time frame. This ratio can be used as an indicator of the extent of communication problems within registry systems. Changes in this ratio since November 2008 are also shown in figure 3.

Figure 3
Changes in international transaction log transaction cancellation and termination ratios over time
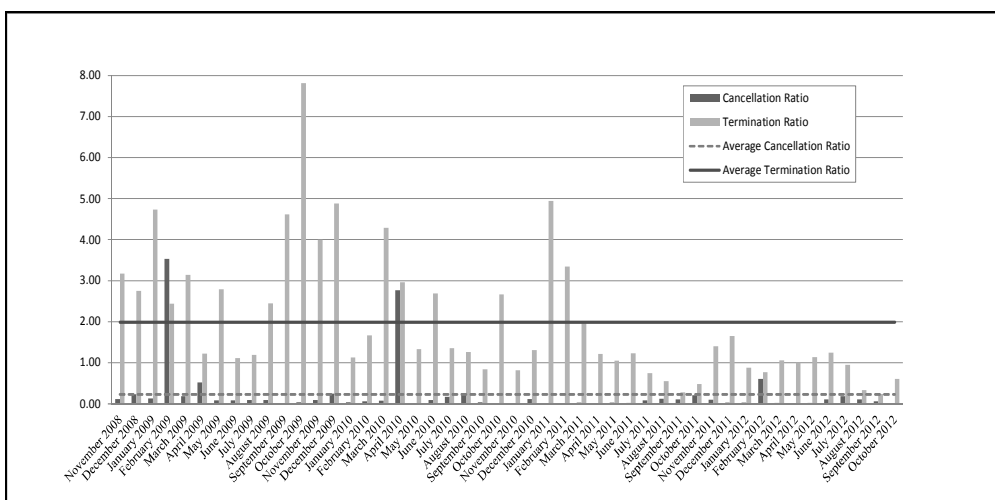
28.   The high cancellation ratio that can be noticed for February 2012 is due to the cancellation of a batch of more than 80 internal transfer transactions that were performed by a single registry. These transactions were all proposed within a short time frame of two minutes. The acknowledgement that the proposed transactions had been processed was not received from the CITL, which led to cancellation of the transactions.

29.   The go-live of the CSEUR has led to a significant decrease of transactions performed in the ITL. It is also interesting to have a closer look at the termination and cancellation data for the period June to September 2012. Figure 4 shows the evolution of these numbers over that period.

Figure 4
Comparative report on international transaction log transactions cancellation and termination ratios (in per cent) following the go-live of the Consolidated European Union Registries in June 2012
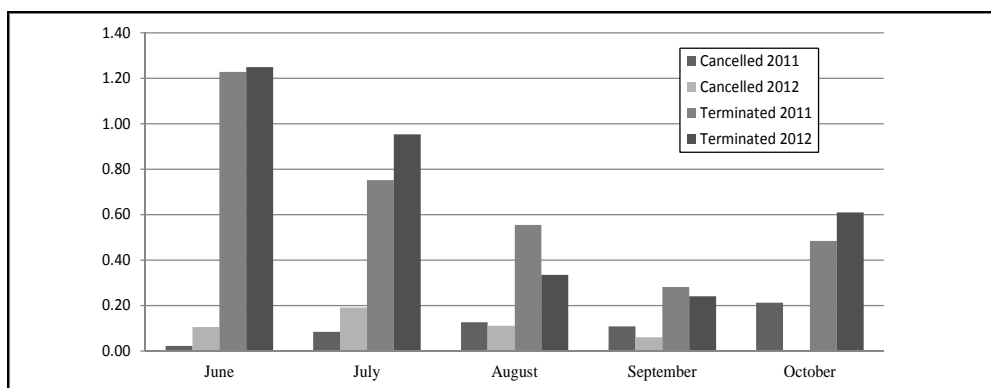
30.   The completed transactions in the ITL reached that status within the time frames displayed in figure 5. The transaction completion time includes the latency incurred by the travel time of messages through the registry network and the processing time within registries, the ITL and the EUTL if an EU ETS registry is involved in the transaction.

Figure 5
Transaction completion time monthly averages since the launch of the international transaction log
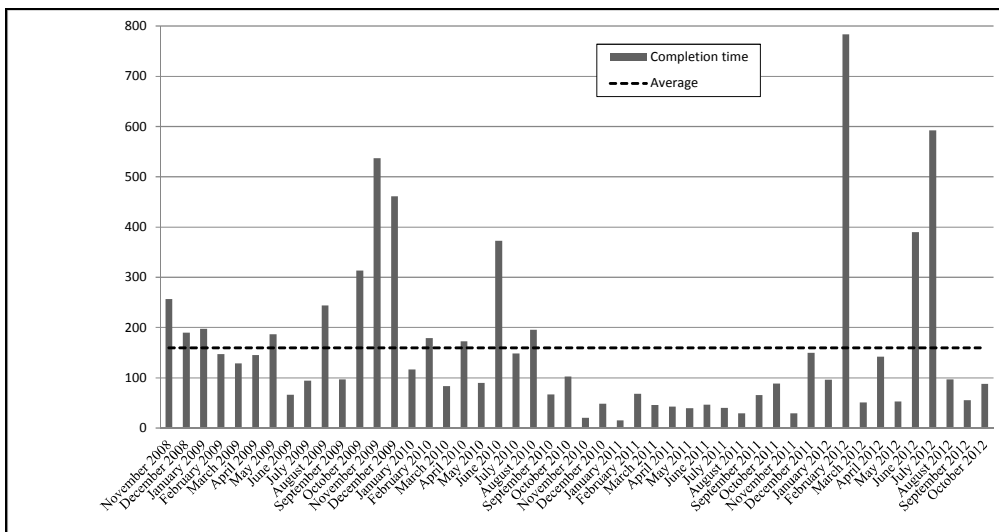
31.   The abnormally high completion time reported in February 2012 was due to several big batches of transactions related to EU ETS specific processes for which the processing was stuck. The acknowledgement of the transaction processing from the CITL was either not received by the ITL or was received after long delays.

32.   The high completion time value for June to July 2012 is a side effect of the consolidation of the EU ETS registries into the CSEUR. During the go-live phase, several transactions originating from these registries were slow to complete.

33.   The reconciliation process in the ITL ensures that registries keep an accurate record of their Kyoto Protocol unit holdings. The occurrence of an inconsistency for a nightly reconciliation signals a discrepancy between the ITL amounts and the records of that specific registry. The inconsistent reconciliation ratio is the number of inconsistent reconciliations divided by the number of reconciliations initiated in a given time frame. It is an indicator of the capacity of registries to maintain accurate records of their Kyoto Protocol unit holdings. The evolution of this ratio is shown in figure 6.

Figure 6
Changes in the international transaction log inconsistent reconciliation ratio
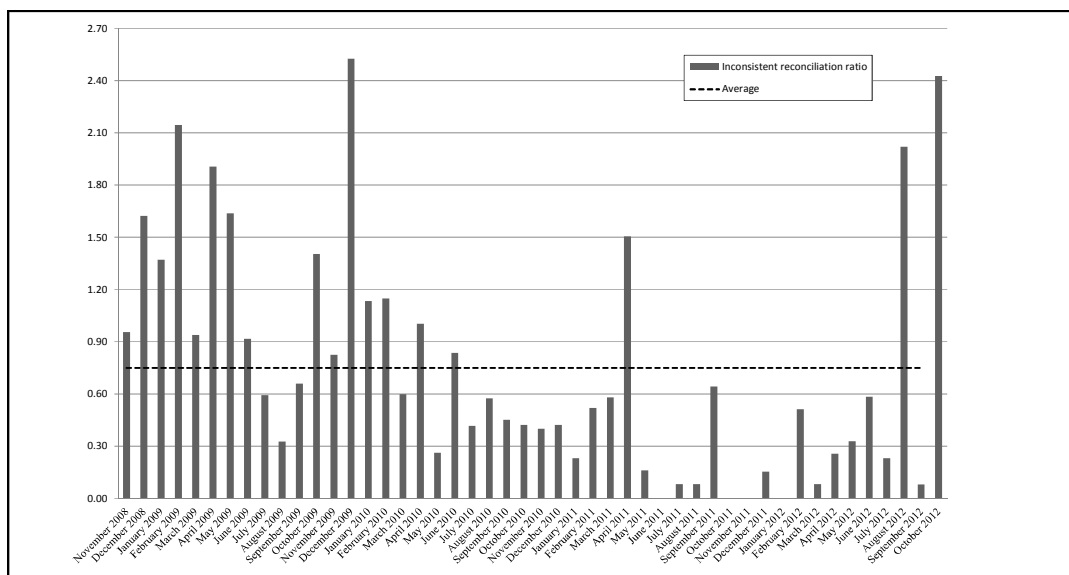
34. The extremely high ratios of inconsistency in August and October 2012 are due to similar incidents which caused reconciliation inconsistencies for 29 registries during two single nightly reconciliation runs.

35. The high ratio of inconsistency in February 2012 is due to coincidental factors that made several registries encounter inconsistencies in the same month. These were isolated incidents with no underlying common root cause.

36. The reconciliation inconsistencies in June 2012 affected only EU ETS registries. All except two cases happened during the consolidation of the EU ETS registries.

37. Unavailability of the ITL prevents registries from performing their transactions and should be kept to a minimum. The unavailability of the ITL occurs during its planned outages, where RSAs are informed in advance of any downtime, and unplanned outages due to operational incidents. The ITL availability for the period of November 2011 to August 2012 was 99.89 per cent.

3. International transaction log service desk

38. The ITL service desk is the focal point for all support provided to RSAs regarding the operation and testing of registries. The ITL service desk also carries out the technical activities related to the initialization and go-live processes under the supervision of the ITL administrator. The ITL service desk provides continuous support to RSAs from 8 p.m. on Sunday until midnight on Friday based on Coordinated Universal Time.

39. Figure 7 shows the changes in the number of support requests handled by the ITL service desk during the reporting period by priority. High-priority support requests are raised when the processing of transactions from one or more registries cannot be performed. Medium-priority support requests are related to the performance or the stability of the ITL, which may affect transaction processing. Low-priority support requests relate to information items or performance issues where transaction processing is not directly affected.

Figure 7
Number of support requests handled by the international transaction log service desk
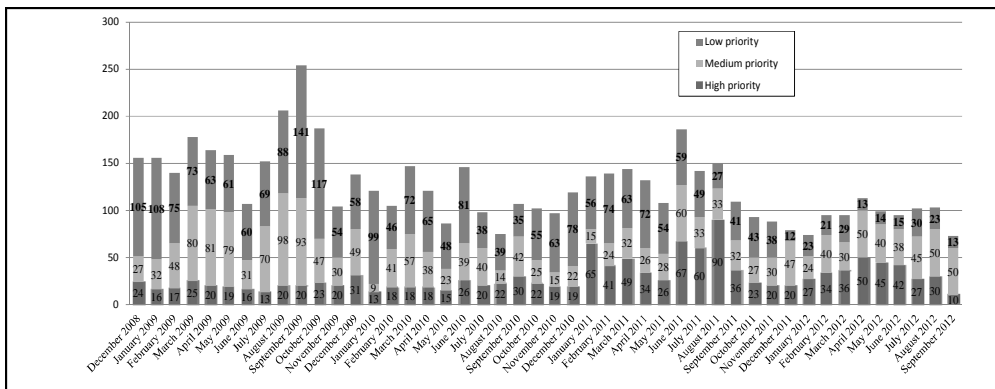
4. National registries connectivity and eligibility

40.   The ITL administrator, in its role in supporting the enforcement branch of the Compliance Committee, provided input to the branch to confirm the changes made with regard to the trading eligibility of four national registries.

41.   In the light of Canada's withdrawal from the Kyoto Protocol effective 15 December 2012, the Canadian national registry will be disconnected from the ITL before the end of 2012.

D. Independent assessment of national registries and go-live activities

1. Initial assessment activities

42.   Initialization is the formal process by which the ITL administrator verifies that a registry has fulfilled the technical requirements set out in the DES. Initialization is a prerequisite for a registry to commence operations with the production environment of the ITL. The ITL administrator did not support any initialization activities during the reporting period since there were no new registries. As at 31 October 2012, 38 initial independent assessment reports had been issued, as shown in table 6 in annex I.

2. Annual assessment activities

43.   The standardized testing and independent assessment reporting process in accordance with decision 16/CP.10, paragraph 5(a) (hereinafter referred to as the standard independent assessment report (SIAR) process) expands on the initial independent assessment of national registries by defining the process to be followed by RSAs when reporting annually on changes in the national registry, providing information on accounting of Kyoto Protocol units and defining the activities to be carried out by assessors when reviewing reported changes and accounting information. The outcome of the SIAR process is forwarded to expert review teams (ERTs) for consideration as part of the review of national registries as described in decision 22/CMP.1, "Guidelines for review under Article 8 of the Kyoto Protocol", in accordance with decision 16/CP.10, paragraph 6(k).

44.   In accordance with decision 16/CP.10, paragraphs 5(a) and 6(c), the ITL administrator has continued to encourage and promote the engagement of RSAs in the SIAR process, with a view to stimulating the sharing of information on national registry reporting and review, thus improving the quality of national registry information in annual submissions and optimizing the ITL costs. In January 2012, the ITL administrator reissued

its invitation to all RSAs to participate in the SIAR process as assessors. As a result, 28 RSAs contributed to the SIAR process.

45.   Before the SIAR assessors can start the registry assessment, the Party submits a national inventory report (NIR) and a report in the standard electronic format (SEF). In 2012, 38 Parties submitted the annual SEF report, providing information on Kyoto Protocol units for 2011. Three submissions of SEF tables were initially found to be inconsistent with the ITL records. The Parties concerned corrected their submissions and the resubmissions were found to be consistent with the ITL records. Thirty-eight NIRs, which include the information on changes to the national registry and Kyoto Protocol units assessed under the SIAR process, were submitted during 2012.

46.   The SIAR process in 2012 was executed successfully. During the 2012 assessment cycle, the following issues regarding the assessed registries were identified:

        (a)   Some Parties did not provide information pursuant to the publicly accessible information as defined in the "Modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol", paragraphs 44 to 48, in the annex to decision 13/CMP.1;

        (b)   Some Parties did not provide information pursuant to the "Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol", paragraphs 11 to 18, in chapter I.E of the annex to decision 15/CMP.1;

        (c)   Some Parties did not provide sufficient explanation of how the previous annual review recommendations have been addressed.

47.   Issues were addressed by consulting the Party concerned after providing the draft assessment or by recommendations provided by the assessor in the final report.

3. Go-live activities

48.   During the reporting period, the ITL administrator did not support any go-live processes of registries. As at 31 October 2012, 38 registries are connected to the ITL.

E. Registry System Administrators Forum and activities of the working groups

1. Registry System Administrators Forum

49.   The ITL administrator convenes the RSA Forum to coordinate the technical and management activities of RSAs and to provide a platform for RSAs to cooperate with each other and to provide input to the development of common operational procedures, recommended practices and information-sharing measures for registry systems, in accordance with decision 16/CP.10.

50.   Participation in the RSA Forum is open to all administrators of national and consolidated registries, administrators of the clean development mechanism (CDM) registry, the administrator of the supplementary transaction log and ITL vendors. The ITL administrator invited a number of participants from Parties not included in Annex I to the Convention that are Parties to the Kyoto Protocol to participate.

51.   The 14th meeting of RSAs was held on 4 and 5 October 2012. The key objectives of the meeting were the following:

        (a)   To provide RSAs with an update of operational status and issues;

        (b)   To discuss service desk operations following the consolidation of the EU ETS registries;

(c)   To provide feedback on the independent assessment report process for 2012;

(d)   To discuss reporting requirements for the end of the first commitment period (true-up period);

(e)   To introduce the new registries extranet;

(f)   To discuss lessons learned during the first commitment period;

(g)   To discuss preparations for the second commitment period.

2.   Activities of the working groups under the Registry System Administrators Forum

52.   During the reporting period, the ITL administrator and RSAs continued to work with the working groups consisting of RSAs and representatives of ITL support organizations. The work performed by the working groups and the Change Advisory Board (CAB) of the ITL is outlined below.

53.   During the reporting period, the ITL administrator convened a second commitment period and end of first commitment period working group (CP2eoCP1 working group). This working group focused on the impact of the true-up period and CMP 7 outcomes on registry systems and the ITL.

54.   The working group defined the scope of its work by listing the potential impacts on registries and the ITL. These include the following:

(a)   There will be a second commitment period and it will begin on 1 January 2013, in accordance with decision 1/CMP.7;

(b)   In accordance with decision 2/CMP.7, the land use, land-use change and forestry activity wetland drainage and rewetting has been added to the various activities and forest management accounting has been revised. This also influences SEF and reporting requirements;

(c)   In accordance with decision 10/CMP.7, the CDM will include a new carbon dioxide capture and storage project activity type which prescribes a way to address non-permanence;

(d)   New guidance on the implementation of Article 6 of the Kyoto Protocol in accordance with decision 11/CMP.7, which may affect which transactions could be allowed and not allowed under joint implementation;

(e)   Previous outcomes have an impact on reporting and assessment requirements beyond 1 January 2013 and into the true-up period;

(f)   The working group focuses on the transition of the first commitment period into the second commitment period. In this regard, the working group also focused on producing a 'lessons learned' document which collects experiences and recommendations from the first commitment period with the aim of improving the system of registries in the second commitment period.

55.   The working group met six times during the reporting period and addressed reporting and assessment requirements and supporting documentation for the true-up period:

(a)   The working group developed guidance on the procedures related to the requirements of the true-up period. This guidance focuses on specifying the procedures, timelines and responsibilities of the various actors (Parties, RSAs, ERTs and the UNFCCC secretariat) for the period beginning on 1 January 2013 and continuing until all the required activities related to the first commitment period are completed in full. This includes activities that must take place during the true-up period, the final compilation and

accounting report and first commitment period compliance assessment, possible carry-over transactions, cancellation of outstanding units and verification of these activities via the annual assessment and review process;

(b)   The working group agreed that, during the true-up period, there may be both first and second commitment period units in registries and that the SEF reporting must be kept separate to facilitate ERT reviews and the assessment of compliance. The working group assumes that Parties will submit two sets of SEF tables, one for each commitment period. The working group decided that this would necessitate the retesting of SEF reporting in 2013. The ITL administrator is developing an updated specification for SEF tables addressing the second commitment period requirements.

56.   Further, the working group addressed reporting and assessment requirements and supporting documentation for the 2013 and 2014 reporting years, which are as follows:

(a)   The working group agreed on the assumption that the first transactions in the second commitment period would probably be the issuance and subsequent forwarding of certified emission reductions from the CDM registry and that this could occur in 2013. This implies that systems need to be ready to accept transactions of second commitment period units from 2013 onward and that, as of 2014, Parties must submit a SEF table for the second commitment period which is updated according to new reporting requirements;

(b)   Further, the working group recognized a general need for testing for the second commitment period, which should take place as a matter of priority before the start of that period. The ITL administrator has developed second commitment period related test documentation based on the revised DES annex H tests applied for the consolidation of EU registries during the reporting period. Second commitment period related tests are expected to be completed before the end of 2012 and will be reported on in the 2013 report of the ITL administrator.

57.   In addition, the working group captured lessons learned from the entire first commitment period experience related to the registry system and ITL model, security, common operational procedures and overall support to the Kyoto Protocol mechanisms and categorized these into:

(a)   Lessons learned which may be brought to the attention of the CMP through the ITL administrator report (see para. 58 below);

(b)   Lessons learned which require a CAB decision, through the change management process or discussion at the RSA Forum.

58.   The recommendations based on lessons learned during the first commitment period which the CP2eoCP1 working group wishes to bring to the attention of the CMP are:

(a)   The CMP may wish to consider reviewing the requirements for the information to be made public by RSAs as described in paragraphs 44 to 48 in the annex to decision 13/CMP.1;

(b)   The CMP may wish to consider increasing security by mandating external registry security audits based on ISO/IEC 27001;[1]

(c)   The CMP may wish to consider requesting the ITL administrator to disconnect rogue or malfunctioning registries or registries that are under security attacks.

59.   The activities of the Registries extranet working group during the reporting period are as follows:

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[1] ISO/IEC 27001:2005 – Information technology – Security techniques – Information security management systems – Requirements. Available at <www.iso.org>.

(a)   The Registries extranet working group met three times during the reporting period. The working group focused on discussing, developing and reviewing new features to be implemented in the new RSA extranet and served as a user acceptance group of this new platform;

(b)   The working group reviewed the RSA extranet before implementation and delivered feedback to the developer. After acceptance, access was provided to all RSAs and the working group developed: further requirements to be entered in the common calendar to inform registries about generic and maintenance events; collaboration pages to share documents and make announcements; and pages to inform registries about common issues and solutions as encountered by the ITL service desk. These features were implemented by the ITL administrator.

60.   The CAB, established in accordance with the change management procedure, did not meet during the reporting period.

Table 1
Changes considered by the Change Manager of the international transaction log during the reporting period

Change title	Date proposed	Status as at 31 October 2012
RSNCM 36 CDM Multiple cancellation accounts	27 September 2012	Approved
RSNCM 37 DES Annex H Revision	14 September 2012	Approved

61.   The change requests in table 1 have been approved by the ITL Change Manager.

III.   Organizational arrangements and resources

62.   The functions of the ITL administrator have been assumed by the Information Technology Services (ITS) programme of the secretariat. The ITS programme is also responsible for the software delivery and information technology infrastructure support for the secretariat.

A.   Resource requirements and expenditure

63.   The resource requirements for activities relating to the ITL and the ITL administrator, to be funded from supplementary sources for the bienniums 2006–2007,[2] 2008–2009,[3] 2010–2011[4] and 2012–2013,[5] were identified in the proposed programme budget for each of these bienniums.

64.   The budget for the ITL for the biennium 2012–2013,[6] not including the deduction of fees paid by Parties which were not listed in annex II to decision 11/CMP.3, is EUR 5,770,020. This budget includes a working capital reserve equal to EUR 239,680.

65.   The CMP, by decision 11/CMP.3, requested the Executive Secretary to provide a breakdown of the expenditures on the development and operation of the ITL with a view to

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[2] FCCC/SBI/2005/8/Add.2.
[3] FCCC/SBI/2007/8/Add.2.
[4] FCCC/SBI/2009/2/Add.3.
[5] FCCC/SBI/2011/2/Add.3.
[6] Decision 17/CMP.7.

optimizing the cost structure. Table 2 shows the expenditure of the ITL in the biennium 2012–2013, by object of expenditure.

Table 2
Expenditure of the international transaction log for the biennium 2012–2013
(Euros)

Object of expenditure	As at 30 June 2012
Staff costs	291 855
Contractual services[a]	1 261 008
Expert groups	–
Travel of staff	1 422
General operating expenses	4 200
Contributions to common services	11 780
Programme support costs	166 107
Total expenditure	**1 736 372**

[a] The amount for contractual services includes EUR 970,593 obligated for contractual services until the end of 2012 but not spent in the first six months of 2012.

66.   Table 3 shows the breakdown of expenditure as expected for contractors and consultants for the ITL in 2011–2012. Operation services are activities performed by the developer and operator of the ITL to sustain all operations of the ITL such as maintaining the infrastructure and operating the ITL service desk. Software maintenance services are services performed by the developer of the ITL to support the software implementation activities outlined in this report. Operational procedure services cover the expenditure required to deliver services related to the elaboration and execution of the common operational procedures pursuant to decision 16/CP.10. Consultancies expenditures are incurred when the secretariat needs to consult experts in specific fields.

Table 3
Breakdown of expenditure for contractors and consultants for the international transaction log in 2011–2012

Object of expenditure	Percentage of expenditures for contractors and consultants
Operation services	69
Production and disaster recovery environments	46
Service desk	14
Registry developer support	6
Security and disaster recovery testing	3
Software maintenance services	21
Operational procedure services	5
Consultancies	4
Legal support	1

67.   The CMP, at its fourth session, requested the ITL administrator to report on planned activities and the related resource requirements with a view to ensuring that adequate means are available to perform these activities.[7]

68.   In 2011–2012, the focus of activities shifted from the development and establishment of registry systems to ensuring that registry systems continue to operate reliably.

69.   The staffing level was lower than projected in ITL budget and variable due to natural staff attrition and recruitment activities. The projected level of staffing will stay unchanged in 2013 and the secretariat is making efforts to complete all outstanding recruitment activities in the beginning of the year.

70.   The members of staff mentioned in paragraph 69 above perform the following development activities:

(a)   Initializing and performing go-live events for the national registries not yet connected to the ITL or potential new national registries;

(b)   Continuing to support future changes to the DES and releases of the ITL software as a result of operational experience and changes adopted under the common operational procedures for change management;

(c)   Steering the work of a working group to deal with technical issues related to the end of the first commitment period under the Kyoto Protocol and the true-up period, with a view to adopting a common operational procedure and agreed formats for data exchange;

(d)   Upgrading the hardware and software in the ITL infrastructure, as necessary;

(e)   Completing the migration of the RSA extranet to a new platform;

(f)   Supporting and completing the work arising from the change request related to the consolidation of EU national registries.

71.   The members of staff mentioned in paragraph 69 above perform the following operational activities:

(a)   Continuing to support the live operations and test activities of the ITL system and the registry systems in all supported environments;

(b)   Performing an annual disaster recovery test and security audit on the ITL and taking into account the results of this test and audit to enhance the reliability and security of the ITL;

(c)   Maintaining the ITL data warehouse;

(d)   Performing all required activities to support the common operational procedures, including change management, and the implementation of the common operational procedure for security and problem management for registries;

(e)   Continuing to facilitate cooperation among RSAs through the RSA Forum, its working groups and registry developers;

(f)   Continuing to support the obligations of the ITL administrator in accordance with all relevant decisions of the COP and the CMP.

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[7] FCCC/KP/CMP/2008/11, paragraph 72.

B. Income to support the activities of the administrator of the international transaction log

72.   As at 31 October 2012, USD 1,963,788 in ITL fees had been received from Parties for 2007,[8] USD 4,518,060 for 2008, USD 4,745,041 for 2009, EUR 3,014,423 for 2010, EUR 3,014,423 for 2011 and EUR 2,858,558 for 2012, with EUR 26,451 outstanding. Six Parties have already paid their 2013 ITL fees, which amount to EUR 154 441. The secretariat would like to express its gratitude to Parties that have paid their fees. The status of fees as at 31 October 2012 is shown in tables 4 and 5.

Table 4
Fees for international transaction log activities in the period 2007–2009 and cumulative shortfall as at 31 October 2012
(United States dollars)

	2007	*2008*	*2009*
Fees budgeted	2 500 000	4 518 060	4 745 741
Fees received	1 963 788	4 518 060	4 745 041
Shortfall	536 212	0	0
Cumulative shortfall	536 212	536 212	536 212

Table 5
Fees for international transaction log activities in the period 2010–2012 and cumulative shortfall as at 31 October 2012
(Euros)

	2010	*2011*	*2012*	*2013*
Fees budgeted	3 014 423	3 014 423	2 885 010	2 885 010
Fees received	3 014 423	3 014 423	2 858 558	154 441
Shortfall	0	0	26 452	N/A
Cumulative shortfall	0	0	26 452	N/A

73.   Delays in receiving ITL fees from Parties have already been noted in previous annual reports of the ITL. The situation has not improved in 2012, as EUR 488,386 (17 per cent of the fees budgeted for 2012) was still due as at 15 August 2012. Figure 8 shows the ITL fees received for 2012 in 2011 and 2012 as at 31 October 2012 and the cumulative percentage of resource requirements, by month.

74.   It is not expected that the ITL connection fee contribution will be received from Canada for 2013 owing to Canada's withdrawal from the Kyoto Protocol and the resulting disconnection of its registry from the ITL. As a result, a shortfall of EUR 125,527 is expected in the 2013 contributions.

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[8] This figure differs from that in the previous annual report of the ITL administrator because USD 48,693 in user fees for 2007 was received in July 2011.

Figure 8
International transaction log user fees for 2012 received in 2011 and 2012
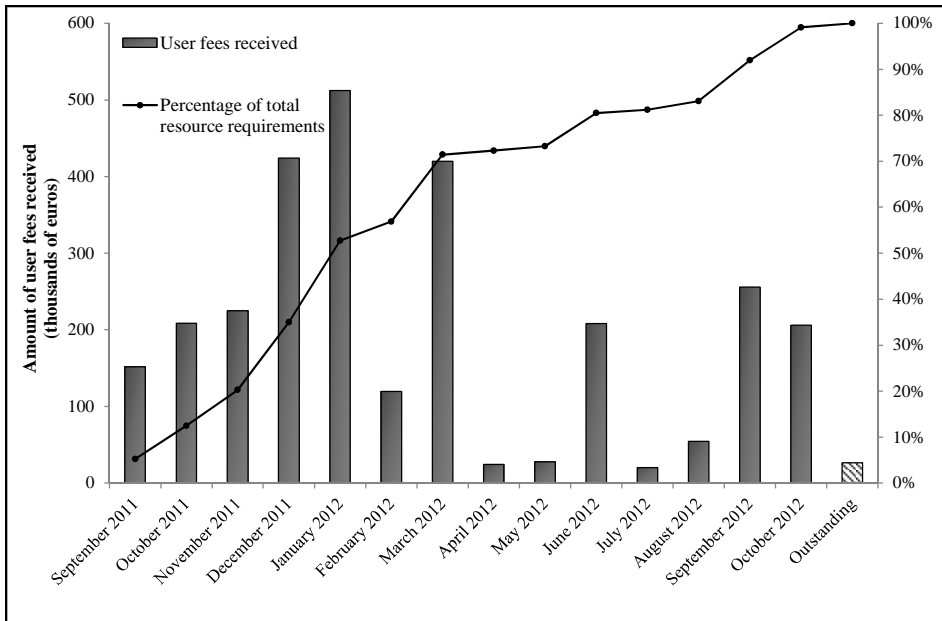
C. Actions and proposals to optimize the cost structure of the international transaction log

75. The secretariat is seeking ways to further optimize the ITL cost structure and is currently considering the following measures:

(a) Technology refresh and licence cost optimization synchronized with the natural end of the life cycle of the software and hardware used to run the ITL;

(b) Continuous vendor contract reviews;

(c) Harmonization of the ITL technology stack with other information technology activities managed by the secretariat;

(d) Systematization, documentation and addressing of typical incident, user error and user problem scenarios in order to minimize their reoccurrence and associated remedy costs.

76. A request to recover the cost of individual incidents caused by malfunctioning registries and user errors from the registry concerned was received during the RSA Forum. The CMP may wish to consider the practicality of this proposal and request the elaboration of the modalities and methodology of such a cost recovery.

Annex I

Registry status as at 31 October 2012

Table 6
Registry status as at 31 October 2012

Registry	Date independent assessment report was issued	Date of live connection to the international transaction log
Australia	19 December 2008	19 December 2008
Austria	12 July 2007	16 October 2008
Belgium	7 December 2007	16 October 2008
Bulgaria	10 April 2008	16 October 2008
Canada	12 June 2008	12 February 2010
Croatia	30 April 2008	11 December 2009
Clean development mechanism	Not applicable	14 November 2007
Czech Republic	1 August 2007	16 October 2008
Denmark	16 October 2008	16 October 2008
Estonia	12 November 2007	16 October 2008
European Community	1 February 2008	16 October 2008
Finland	16 November 2007	16 October 2008
France	9 November 2007	16 October 2008
Germany	23 November 2007	16 October 2008
Greece	27 September 2007	16 October 2008
Hungary	8 August 2007	11 July 2008
Iceland	3 January 2008	6 May 2010
Ireland	19 September 2007	16 October 2008
Italy	5 December 2007	16 October 2008
Japan	9 July 2007	14 November 2007
Latvia	13 November 2007	16 October 2008
Liechtenstein	7 December 2007	21 October 2008
Lithuania	29 October 2007	16 October 2008
Luxembourg	7 December 2007	16 October 2008
Monaco	9 April 2008	Not available
Netherlands	19 September 2007	16 October 2008
New Zealand	27 July 2007	3 December 2007
Norway	27 September 2007	21 October 2008
Poland	5 December 2007	16 October 2008
Portugal	24 October 2007	16 October 2008
Romania	30 April 2008	16 October 2008
Russian Federation	12 November 2007	4 March 2008
Slovakia	13 September 2007	16 October 2008
Slovenia	25 October 2007	16 October 2008
Spain	8 October 2007	16 October 2008
Sweden	9 November 2007	16 October 2008
Switzerland	8 August 2007	4 December 2007
Ukraine	10 December 2007	28 October 2008
United Kingdom	16 August 2007	16 October 2008

Annex II

Scale of fees and status of international transaction log fee payments for the biennium 2012–2013 as at 31 October 2012

Table 7
Scale of fees and status of international transaction log fee payments in euros for the biennium 2012–2013 as at 31 October 2012

Party	Scale of fees	2012			2013		
		Budgeted	Received	Outstanding	Budgeted[a]	Received	Outstanding
Australia	2.717	78 386	78 386	0	78 386	0	78 386
Austria	1.519	43 823	43 823	0	43 823	0	43 823
Belgium	1.887	54 440	54 440	0	54 440	0	54 440
Bulgaria	0.034	981	981	0	981	0	981
Canada	4.351	125 527	125 527	0	125 527	0	125 527
Croatia	0.076	2 193	2 193	0	2 193	0	2 193
Czech Republic	0.481	13 877	13 877	0	13 877	0	13 877
Denmark	1.256	36 495	36 495	0	36 495	0	36 495
Estonia	0.027	779	779	0	779	0	779
European Community	2.568	74 087	74 087	0	74 087	0	74 087
Finland	0.965	27 840	27 840	0	27 840	0	27 840
France	10.203	294 358	294 358	0	294 358	0	294 358
Germany	14.682	423 577	423 577	0	423 577	0	423 577
Greece	1.019	29 398	2 946	26 452	29 398	0	29 398
Hungary	0.418	12 059	12 059	0	12 059	0	12 059
Iceland	0.705	20 339	20 339	0	20 339	0	20 339
Ireland	0.762	21 984	21 984	0	21 984	21 984	0
Italy	8.694	250 823	250 823	0	250 823	0	250 823
Japan	14.289	412 239	412 239	0	412 239	0	412 239
Latvia	0.031	894	894	0	894	894	0
Liechtenstein	0.180	5 193	5 193	0	5 193	0	5 193
Lithuania	0.053	1 529	1 529	0	1 529	0	1 529
Luxembourg	0.146	4 212	4 212	0	4 212	4 212	0
Monaco	0.173	4 991	4 991	0	4 991	0	4 991
Netherlands	3.206	92 493	92 493	0	92 493	0	92 493
New Zealand	0.919	26 513	26 513	0	26 513	26 480	33
Norway	2.218	63 990	63 990	0	63 990	0	63 990
Poland	0.857	24 725	24 725	0	24 725	24 707	18
Portugal	0.902	26 023	26 023	0	26 023	0	26 023
Romania	0.120	3 462	3 462	0	3 462	0	3 462
Russian Federation	2.624	75 703	75 703	0	75 703	0	75 703
Slovakia	0.108	3 116	3 116	0	3 116	0	3 116
Slovenia	0.164	4 731	4 731	0	4 731	0	4 731
Spain	5.080	146 559	146 559	0	146 559	0	146 559
Sweden	1.834	52 911	52 911	0	52 911	0	52 911
Switzerland	2.640	76 164	76 164	0	76 164	76 164	0
Ukraine	0.713	20 570	20 570	0	20 570	0	20 570
United Kingdom	11.370	328 026	328 026	0	328 026	0	328 026
Total	**100.000**	**2 885 010**	**2 858 558**	**26 452**	**2 885 010**	**154 441**	**2 730 570**

[a] See paragraph 74 of this document on the Canadian contribution.

Annex III

Number of transactions proposed to the international transaction log from 1 November 2011 to 31 October 2012[a]

Table 8
Number of transactions proposed to the international transaction log from 1 November 2011 to 31 October 2012

Registry	Acquisition[b]	Transfer[c]	Forwarding[d]	Internal transfer[e]	Issuance[f]	Retirement[g]	Cancellation[h]	Total
Australia	10	8	0	0	0	0	3	21
Austria	245	271	0	1 223	0	1	0	1 740
Belgium	253	234	0	1 071	0	1	0	1 559
Bulgaria	301	250	0	507	15	1	1	1 075
Canada	0	0	0	0	0	0	0	0
Clean development mechanism	0	22	2 312	0	1 755	0	5	4 094
Croatia	0	0	0	0	1	0	0	1
Czech Republic	307	459	0	1 557	95	1	0	2 419
Denmark	93	152	0	1 499	0	22	10	1 776
Estonia	74	78	0	260	13	1	0	426
European Community	1 892	600	0	33	1	0	31	2 557
Finland	253	203	0	2 287	4	1	1	2 749
France	1 501	2 101	0	10 570	23	2	35	14 232
Germany	1 925	1 948	0	9 564	22	20	66	13 545
Greece	84	219	0	727	0	1	0	1 031
Hungary	160	136	0	781	2	1	0	1 080
Iceland	0	0	0	0	0	0	0	0
Ireland	198	192	0	356	0	1	0	747
Italy	1 041	718	0	4 891	0	0	0	6 650
Japan	348	241	0	0	0	0	0	589
Latvia	18	32	0	533	0	1	0	584
Liechtenstein	55	90	0	7	0	0	1	153
Lithuania	7	39	0	329	9	14	0	398
Luxembourg	48	18	0	47	0	1	0	114
Netherlands	1 765	1 543	0	1 705	0	2	37	5 052
New Zealand	259	42	0	0	6	0	43	350
Norway	231	109	0	423	0	1	8	772
Poland	743	866	0	4 658	24	0	0	6 291

Registry	Acquisition[b]	Transfer[c]	Forwarding[d]	Internal transfer[e]	Issuance[f]	Retirement[g]	Cancellation[h]	Total
Portugal	102	99	0	603	0	1	0	805
Romania	13	8	0	918	5	1	0	945
Russian Federation	0	68	0	238	94	0	0	400
Slovakia	374	474	0	735	0	1	0	1 584
Slovenia	76	118	0	353	0	1	0	548
Spain	811	927	0	6 217	3	6	0	7 964
Sweden	219	178	0	1 953	2	1	148	2 501
Switzerland	1 167	2 718	0	688	1	0	147	4 721
Ukraine	2	103	0	0	98	0	0	203
United Kingdom	4 983	4 316	0	7 406	0	13	44	16 762
Total	**19 558**	**19 580**	**2 312**	**62 139**	**2 173**	**96**	**580**	**106 438**

[a] Completed transactions of assigned amount units (AAUs), emission reduction units (ERUs), removal units (RMUs), certified emission reductions, long-term emission reductions and temporary emission reductions have been accounted for.

[b] Acquisition from another national registry. See paragraph 30 of the annex to decision 13/CMP.1.

[c] Transfer to another national registry. See paragraph 30 of the annex to decision 13/CMP.1.

[d] Forwarding from the clean development mechanism (CDM) registry to a national registry. See paragraph 66(a) of the annex to decision 3/CMP.1. Note that this excludes transfers from the CDM registry to a national registry in support of the Adaptation Fund.

[e] Transfer within the registry. See paragraph 30 of the annex to decision 13/CMP.1.

[f] See paragraphs 23–29 of the annex to decision 13/CMP.1, paragraphs 64–66 of the annex to decision 3/CMP.1 and paragraphs 36 and 37 of the annex to decision 5/CMP.1. Issuance of ERUs by converting AAUs or RMUs is included.

[g] See paragraph 34 of the annex to decision 13/CMP.1.

[h] See paragraph 33 of the annex to decision 13/CMP.1.

Annex IV

Number of Kyoto Protocol units subject to transactions proposed to the international transaction log[a] from 1 November 2011 to 31 October 2012

Table 9
Number of Kyoto Protocol units subject to transactions proposed to the international transaction log

Registry	Acquisition[b]	Transfer[c]	Net Transfer[d]	Forwarding[e]	Internal transfer[f]	Issuance[g]	Retirement[h]	Cancellation[i]
Australia	171 509	103 217	–68 292	0	0	0	0	44 175 057
Austria	30 468 826	6 943 218	–23 525 608	0	143 096 835	0	30 661 684	0
Belgium	45 778 369	42 927 697	–2 850 672	0	235 772 953	0	46 168 337	0
Bulgaria	47 305 679	24 223 043	–23 082 636	0	149 315 831	1 407 324	398 785 219	60 329
Canada	0	0	0	0	0	0	0	0
Clean development mechanism	0	4 640 000	4 640 000	245 914 156	0	276 489 582	0	25 588
Croatia	0	0	0	0	0	148 778 503	0	0
Czech Republic	19 485 641	39 508 292	20 022 651	0	456 385 622	1 137 288	73 993 138	0
Denmark	9 874 395	7 976 817	–1 897 578	0	106 490 731	0	59 065 498	48 999
Estonia	3 614 550	14 415 151	10 800 601	0	87 203 906	281 739	15 229 972	0
European Community	161 902 978	62 787 682	–99 115 296	0	14 413 352	496 101	0	23 438 256
Finland	17 976 577	11 064 931	–6 911 646	0	173 179 440	237 397	35 082 951	50
France	300 169 564	283 519 757	–16 649 807	0	1 478 573 010	17 004 171	104 374 149	18 650 866
Germany	350 116 832	287 062 051	–63 054 781	0	2 532 007 573	6 400 344	982 162 533	171 833
Greece	9 288 126	16 658 074	7 369 948	0	218 974 094	0	54 460 965	0
Hungary	7 841 389	12 439 141	4 597 752	0	88 594 179	1 116 726	22 503 443	0
Iceland	0	0	0	0	0	0	0	0
Ireland	17 923 810	22 994 301	5 070 491	0	74 924 585	0	15 786 531	0
Italy	95 569 275	97 225 518	1 656 243	0	775 783 544	0	0	0
Japan	34 855 348	55 120 927	20 265 579	0	0	0	0	0
Latvia	367 100	1 262 053	894 953	0	34 661 351	0	2 923 455	0
Liechtenstein	2 624 644	22 667 689	20 043 045	0	54 906	0	0	5 448
Lithuania	3 102 000	13 360 625	10 258 625	0	39 534 694	3 120 832	5 605 273	0
Luxembourg	1 145 780	1 416 720	270 940	0	9 214 692	0	2 052 211	0

Netherlands	224 080 349	201 934 554	–22 145 795	0	567 250 533	0	196 019 550	59 876
New Zealand	29 575 844	5 748 070	–23 827 774	0	0	203 823	0	5 787
Norway	19 649 488	11 507 461	–8 142 027	0	81 291 046	0	19 132 757	39 526
Poland	46 311 415	106 219 063	59 907 648	0	716 997 080	3 990 512	0	0
Portugal	10 700 420	12 176 294	1 475 874	0	126 829 924	0	24 973 290	0
Romania	2 251 119	3 159 530	908 411	0	266 490 235	3 359 134	51 238 935	0
Russian Federation	0	82 101 066	82 101 066	0	526 080 132	628 582 150	0	0
Slovakia	13 650 184	17 997 816	4 347 632	0	122 121 536	0	22 372 534	0
Slovenia	2 969 768	7 327 928	4 358 160	0	33 519 532	0	8 000 757	0
Spain	179 653 679	104 112 238	–75 541 441	0	827 115 182	268 739	132 627 061	0
Sweden	9 673 348	16 191 726	6 518 378	0	121 221 652	483 350	20 207 834	76 869
Switzerland	232 235 808	241 503 796	9 267 988	0	96 984 767	979 764	0	564 698
Ukraine	720 248	101 330 335	100 610 087	0	0	101 109 044	0	0
United Kingdom	785 901 806	781 969 087	–3 932 719	0	3 688 120 870	0	690 281 542	333 636
Total	**2 716 955 868**	**2 721 595 868**	**4 640 000**	**245 914 156**	**13 792 203 787**	**1 195 446 523**	**3 013 709 619**	**87 656 818**

[a] Completed transactions of assigned amount units (AAUs), emission reduction units (ERUs), removal units (RMUs), certified emission reductions, long-term emission reductions and temporary emission reductions have been accounted for.

[b] Acquisition from another national registry. See paragraph 30 of the annex to decision 13/CMP.1.

[c] Transfer to another national registry. See paragraph 30 of the annex to decision 13/CMP.1.

[d] Net transfer is equal to transfer minus acquisition.

[e] Forwarding from the clean development mechanism (CDM) registry to a national registry. See paragraph 66(a) of the annex to decision 3/CMP.1. Note that this excludes transfers from the CDM registry to a national registry in support of the Adaptation Fund.

[f] See paragraph 30 of the annex to decision 13/CMP.1.

[g] See paragraphs 23–29 of the annex to decision 13/CMP.1, paragraphs 64–66 of the annex to decision 3/CMP.1 and paragraphs 36 and 37 of the annex to decision 5/CMP.1. Issuance of ERUs by converting AAUs or RMUs is included.

[h] See paragraph 34 of the annex to decision 13/CMP.1.

[i] See paragraph 33 of the annex to decision 13/CMP.1.

Annex V

Glossary and abbreviations

Annex H	Annex H to the DES, version 1.1.9, containing functional test suites covering modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol
CAB	Change Advisory Board of the international transaction log
CITL	Community Independent Transaction Log
CSEUR	Consolidated System of European Union Registries: the registry system that became operational in June 2012, through the consolidation of the 29 registries of the EU ETS
DES	Data exchange standards for registry systems under the Kyoto Protocol
EU ETS	European Union emissions trading scheme
EUTL	European Union Transaction Log: the system that replaced the CITL, following the consolidation of EU ETS registries in June 2012
EU ETS registries	Registries of Parties to the Convention that are also Parties to the Kyoto Protocol with commitments inscribed in Annex B to the Kyoto Protocol which also have commitments under the EU ETS
ITL	International transaction log
ITL administrator	The role of the administrator of the ITL is executed by the UNFCCC secretariat
ITL production environment	The live system of the ITL used to support emissions trading under the Kyoto Protocol
ITL non-production environment	The ITL system relies on a secondary environment which is used for development and testing purposes
RSA	Registry system administrator
SLA	Service level agreement: contract between the UNFCCC secretariat, represented by the ITL administrator and the ITL service providers
True-up period	A 100-day period after final emissions have been reported for the commitment period during which Parties have the opportunity to undertake final decisions necessary to achieve compliance with their Article 3, paragraph 1, commitment