



UNFCCC ITL Administrator

**Standard Independent Assessment Report  
Assessment Report  
Part 2 - Substance**

<b>Reference:</b>	SIAR/2016/LU/2/1	<b>State:</b>	Final
<b>Version number:</b>	1.0	<b>Date:</b>	10/07/2017
<b>Prepared by:</b>	Sharmin Chian/The Swedish Energy Agency		
<b>Reviewed by:</b>	Tomislav Glušac/Croatian Agency for Energy and Nature		
<b>Approved by:</b>	M. Pieters /UNFCCC		

**Circulation list**

<b>Name/Role</b>	<b>Organization</b>	<b>Info/Action</b>
Sharmin Chian	The Swedish Energy Agency	Action
Assessor Coordinator: M. Pieters	UNFCCC	Info
RSA: M. Kemmer	Administration de l'Environnement Luxembourg	Action

**Document change record**

<b>Version</b>	<b>Date</b>	<b>Description</b>
0.1	31/05/2017	Initial version
1.0	10/07/2017	Final report

## Summary

Ref Nr.	Description	
P2.0.1	Party name	Luxembourg
P2.0.2	Reporting period	2017
P2.0.3	Submission under review	<p>Files submitted:</p> <p>[SEF] RREG1_LU_2016_2_4</p> <p>[NIR] LU-NIR_2017_170406 FINAL</p> <p>[RESPONSE]</p> <p>[ANNEX]</p> <ul style="list-style-type: none"> <li>• Annex A – CSEUR</li> <li>• Annex B - Changes from EUCR v7.0.1-v8.0.7</li> <li>• Test Report - ITL Annex H tests for EUCR software</li> </ul>
		<p>Information from the ITL Administrator:</p> <p>[SEFCR] CR_RITL1_LU_2016_2_1_RREG1_LU_2016_2_4</p> <p>[RITL]</p> <ul style="list-style-type: none"> <li>• RITL2_LU_2016</li> <li>• RITL3_LU_2016</li> <li>• RITL4_LU_2016</li> <li>• RITL5_LU_2016</li> </ul>
P2.0.4	Previous annual review report reference	<a href="#">FCCC/ARR/2014/LUX</a>

# Table of Contents

- 1. Introduction ..... 4
  - 1.1. Overall assessment ..... 4
  - 1.2. Summary of findings ..... 5
- 2. Identification of Problems ..... 6
- 3. Identification of Significant Changes ..... 11
- 4. Recommendations..... 14
  - 4.1. Previous Expert Review Team recommendations..... 14
  - 4.2. Recommendations to address identified problems ..... 14

## 1. Introduction

The SIAR Part 2 report assesses the substance of a Party's annual submission with regard to its national registry. Each section contains questions related to the specific items to be assessed.

### 1.1. Overall assessment

Ref Nr	Requirement	Assessment
P2.1.1	Is the information submitted by Party, in relation to its national registry, complete?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
P2.1.2	Problem found with Party's national registry?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
P2.1.3	Any unresolved problem with Party's national registry?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
P2.1.4	Problems identified with the significant changes to the Party's national registry?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
P2.1.5	National registry related recommendations from previous annual review were fully addressed?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
P2.1.6	Is there any recommendation that needs to be addressed by the Party?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

## 1.2. Summary of findings

Ref Nr	Summary of findings
P2.2.1	<ol style="list-style-type: none"><li data-bbox="336 331 1410 483">1. The information on Kyoto Protocol units has been reported in accordance with section I.E of the annex to decision 15/CMP.1 and is accurate. The national registry continues to fulfil all requirements related to its reporting and accounting of information on Kyoto Protocol units, transaction procedures, conformance to the technical standards, public availability of information, security, data integrity and recovery measures.</li><li data-bbox="336 517 1410 669">2. Party has reported information on its accounting of Kyoto Protocol units in the required SEF tables, as required by decisions 15/CMP.1 and 14/CMP.1. The SIAR assessor reviewed the findings included in the SIAR on the SEF and the SEF comparison report. The SIAR was forwarded to the ERT prior to the review, pursuant to decision 16/CP.10.</li><li data-bbox="336 703 1410 790">3. Information on the accounting of Kyoto units has been prepared and reported in accordance with section I E of the annex to decision 15/CMP.1, and reported in accordance with decision 14/CMP.1 using the SEF tables.</li><li data-bbox="336 824 1410 976">4. The SIAR assessor finds that the national registry continues to perform the functions set out in the annex to decision 13/CMP.1 and the annex to decision 5/CMP.1, and continues to adhere to the technical standards for data exchange between registry systems in accordance with relevant Conference of the Parties serving as the meeting of the Parties (CMP) to the Kyoto Protocol decisions.</li><li data-bbox="336 1010 1410 1041">5. Party has reported its commitment period reserve in its 2017 annual submission.</li><li data-bbox="336 1075 1410 1128">6. The national registry has fulfilled all requirements regarding the public availability of information in accordance with section II.E of the annex to decision 13/CMP.1.</li></ol>

## 2. Identification of Problems

The purpose of this section is to identify any problems with the national registry based on the Party's annual submission and transaction log records that may affect the performance of the functions of the national registry pursuant to paragraph 88 of the annex to decision 22/CMP.1.

Ref Nr	Requirement	Assessment	Comment
	22/CMP.1 paragraph 88.(a) The information is complete and submitted in accordance with section I.E of the annex to decision 15/CMP.1 and relevant decisions of the COP/MOP;	Assessed in SIAR Part 1. Kept here for completeness	
P2.2.2	22/CMP.1 paragraph 88.(b) The information relating to issuance, cancellations, retirement, transfers, acquisitions, replacement and carry-over is consistent with information contained in the national registry of the Party concerned and with the records of the transactions log;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Party submitted a SEF which is consistent with the ITL records.
P2.2.3	22/CMP.1 paragraph 88.(c) The information relating to transfers and acquisitions between national registries is consistent with the information contained in the national registry of the Party concerned and with the records of the transaction log, and with information reported by the other Parties involved in the transactions;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Party submitted a SEF which is consistent with the ITL records.
P2.2.4	22/CMP.1 paragraph 88.(d) The information relating to acquisitions of CERs, tCERs, and ICERs from the CDM registry is consistent with the information contained in the national registry of the Party concerned and with the records of the transaction log, and with the clean development mechanism (CDM) registry;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Party submitted a SEF which is consistent with the ITL records.

Ref Nr	Requirement	Assessment	Comment
P2.2.5	22/CMP.1 paragraph 88.(e) ERUs, CERs, AAUs and RMUs have been issued, acquired, transferred, cancelled, retired, or carried over to the subsequent or from the previous commitment period in accordance with the annex to decision 13/CMP.1;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No discrepancies occurred for the Party and no problem has been identified with regard to its transaction procedures related to ERUs, CERs, AAUs and RMUs.
P2.2.6	22/CMP.1 paragraph 88.(f) tCERs and ICERs have been issued, acquired, transferred, cancelled, retired and replaced, in accordance with the annex to decision 13/CMP.1 and the annex to decision 5/CMP.1;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No discrepancies occurred for the Party and no problem has been identified with regard to its transaction procedures related to tCERs and ICERS.
P2.2.7	22/CMP.1 paragraph 88.(g) The information reported under paragraph 11 (a) of section I.E. in the annex to decision 15/CMP.1 on the quantities of units in accounts at the beginning of the year is consistent with information submitted the previous year, taking into account any corrections made to such information, on the quantities of units in accounts at the end of the previous year;	Problem Identified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Party submitted a SEF which is consistent with the ITL records and with information submitted in the year prior to the reported year.
P2.2.8	22/CMP.1 paragraph 88.(h) The required level of the commitment period reserve, as reported, is calculated in accordance with paragraph 6 of the annex to decision 18/CP.7;	Only assessed by the Expert Review Team. Kept here for completeness	
P2.2.9	22/CMP.1 paragraph 88.(i) The assigned amount is calculated to avoid double accounting in accordance with paragraph 9 of the annex to decision 16/CMP.1;	Only assessed by the Expert Review Team. Kept here for completeness	
P2.2.10	22/CMP.1 paragraph 88.(j) A discrepancy has been identified by the transaction log relating to transactions initiated by the Party, and if so the expert review team shall:	Has the discrepancy been identified by the transaction log? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No discrepancies occurred for the Party

Ref Nr	Requirement	Assessment	Comment	
Repeat for each discrepancy type (include Type Number)	P2.2.10.1	22/CMP.1 paragraph 88.(j)(i) Verify that the discrepancy has occurred and been correctly identified by the transaction log;	Has the discrepancy been identified by the transaction log? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No discrepancies occurred for the Party
	P2.2.10.2	22/CMP.1 paragraph 88.(j)(ii) Assess whether the same type of discrepancy has occurred previously for that Party;	Has the same type of discrepancy occurred previously for that Party? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No discrepancies occurred for the Party
	P2.2.10.3	22/CMP.1 paragraph 88.(j)(iii) Assess whether the transaction was completed or terminated;	Was the transaction completed or terminated? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No discrepancies occurred for the Party
	P2.2.10.4	22/CMP.1 paragraph 88.(j)(iv) Has the Party corrected the problem that caused the discrepancy?	Problem that caused the discrepancy corrected? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No discrepancies occurred for the Party
	P2.2.10.5	22/CMP.1 paragraph 88.(j)(v) Assess whether the problem that caused the discrepancy relates to the capacity of the national registry to ensure the accurate accounting of Kyoto Protocol units, issuance, holding, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERS, ICERs, AAUs and RMUs, the replacement of tCERS and ICERs, and the carry-over of ERUs, CERs and AAUs	Discrepancy relates to the capacity of the national registry to ensure the accurate accounting? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No discrepancies occurred for the Party



Ref Nr	Requirement	Assessment	Comment	
P2.2.11	22/CMP.1 paragraph 88.(k) Any record of non-replacement has been sent to the Party by the transaction log in relation to tCERs or ICERs held by the Party, and if so the expert review team shall:	Any tCERs or ICERs subject to non-replacement held by Party?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No non-replacements occurred for the Party.	
Repeat for each non-replacement type (incl Type number)	P2.2.11.1	22/CMP.1 paragraph 88.(k)(i) Verify that the non-replacement has occurred and been correctly identified by the transaction log;	Has the transaction log identified the non-replacement?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No non-replacements occurred for the Party.
	P2.2.11.2	22/CMP.1 paragraph 88.(k)(ii) Assess whether non-replacement has occurred previously for that Party;	Has this type of non-replacement previously occurred for that Party?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No non-replacements occurred for the Party.
	P2.2.11.3	22/CMP.1 paragraph 88.(k)(iii) Assess whether the replacement was subsequently undertaken;	Was the replacement subsequently undertaken?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No non-replacements occurred for the Party.
	P2.2.11.4	22/CMP.1 paragraph 88.(k)(iv) Examine the cause of the non-replacement and whether the Party has corrected the problem that caused the non-replacement;	Has the Party corrected the problem that caused the non-replacement?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	No non-replacements occurred for the Party.

Ref Nr	Requirement	Assessment	Comment
P2.2.11.5	<p>22/CMP.1 paragraph 88.(k)(v)</p> <p>Assess whether the problem that caused the non-replacement relates to the capacity of the national registry to ensure the accurate accounting of Kyoto Protocol units, holding, transfer, acquisition, cancellation, and retirement of ERUs, CERs, tCERs, ICERs, AAUs and RMUs, and the replacement of tCERs and ICERs, and if so, initiate a thorough review of the registry system in accordance with part V of these guidelines.</p>	<p>Non-replacement relates to the capacity of the national registry to ensure the accurate accounting?</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA</p>	<p>No non-replacements occurred for the Party.</p>

### 3. Identification of Significant Changes

The purpose of this section is to identify any **significant changes** in the national registry reported by the Party that may affect the performance of the functions contained in the annex to decision 13/CMP.1, the annex to decision 15/CMP.1 and the adherence to the technical standards for data exchange between registry systems in accordance with relevant COP/MOP decisions.

If a change to a Party's national registry has been identified under paragraph 22 of the annex to decision 15/CMP.1 then information relating to this change should be submitted by the Party in accordance with paragraph 32 of the annex to decision 15/CMP.1. This section assesses the submitted changes reported by Party in accordance with paragraph 32 of decision 15/CMP.1, and the further guidance elaborated in the Independent Assessment Report common operational procedure.

Ref Nr	Requirement	Has the Party reported a change?	Problem Identified with the Change?	Comment
P2.3.1	15/CMP.1 paragraph 32.(a) The name and contact information of the registry administrator designated by the Party to maintain the national registry	Not a significant change, left here for completeness		
P2.3.2	15/CMP.1 paragraph 32.(b) The names of the other Parties with which the Party cooperates by maintaining their national registries in a consolidated system	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	No changes occurred for the Party for this item.
P2.3.3	15/CMP.1 paragraph 32.(c) A description of the database structure and capacity of the national registry.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Minor changes occurred for the Party for this item. New tables were added to the CSEUR database for the implementation of the CP2 SEF functionality. Versions of the CSEUR released after 6.7.3 (the production version at the time of the last Chapter 14 submission) introduced other minor changes in the structure of the database. These changes were limited and only affected EU ETS functionality. No change was required to the database and application backup plan or to the disaster recovery plan. The database model, including the new tables, is provided in Annex A. No change to the capacity of the national registry occurred during the reported period.

Ref Nr	Requirement	Has the Party reported a change?	Problem Identified with the Change?	Comment
P2.3.4	15/CMP.1 paragraph 32.(d) A description of how the national registry conforms to the technical standards for data exchange between registry systems for the purpose of ensuring the accurate, transparent and efficient exchange of data between national registries, the clean development mechanism registry and the transaction log (decision 19/CP.7, paragraph 1)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	No changes occurred for the Party for this item.
P2.3.5	15/CMP.1 paragraph 32.(e) A description of the procedures employed in the national registry to minimize discrepancies in the issuance, transfer, acquisition, cancellation and retirement of ERUs, CERs, tCERs, ICERs, AAUs and/or RMUs, and replacement of tCERs and ICERs, and of the steps taken to terminate transactions where a discrepancy is notified and to correct problems in the event of a failure to terminate the transactions	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	No changes occurred for the Party for this item.
P2.3.6	15/CMP.1 paragraph 32.(f) An overview of security measures employed in the national registry to prevent unauthorized manipulations and to prevent operator error and of how these measures are kept up to date	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The mandatory use of hard tokens for authentication and signature was introduced for registry administrators.
P2.3.7	15/CMP.1 paragraph 32.(g) A list of the information publicly accessible by means of the user interface to the national registry	Not a significant change, left here for completeness		

Ref Nr	Requirement	Has the Party reported a change?	Problem Identified with the Change?	Comment
P2.3.8	15/CMP.1 paragraph 32.(h) The Internet address of the interface to its national registry	Not a significant change, left here for completeness		
P2.3.9	15/CMP.1 paragraph 32.(i) A description of measures taken to safeguard, maintain and recover data in order to ensure the integrity of data storage and the recovery of registry services in the event of a disaster	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	No changes occurred for the Party for this item.
P2.3.10	15/CMP.1 paragraph 32.(j) The results of any test procedures that might be available or developed with the aim of testing the performance, procedures and security measures of the national registry undertaken pursuant to the provisions of decision 19/CP.7 relating to the technical standards for data exchange between registry systems.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Changes introduced since version 6.7.3 of the national registry are listed in Annex B. Both regression testing and tests on the new functionality were successfully carried out prior to release of the version to Production. The site acceptance test was carried out by quality assurance consultants on behalf of and assisted by the European Commission; the report is attached as Annex B. Annex H testing was carried out in January 2017 and the test report is submitted as Annex H.

## 4. Recommendations

### 4.1. Previous Expert Review Team recommendations

This section assesses Party's response to the previous annual review recommendations.

Ref Nr	Recommendation from previous Annual Review report (with ref)	Has Party acted on recommendation?	Comment
P2.4.1.1	Use the correct calculation process for the commitment period reserve and provide details in the NIR.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	The party has covered the recommendation in their National Inventory Report [NIR].
P2.4.1.2		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
P2.4.1.3		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
P2.4.1.4		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	
P2.4.1.5		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA	

### 4.2. Recommendations to address identified problems

If a problem has been identified earlier in section 2 and 3 or a previous recommendation listed in section 4.1 has not been taken into account, then this section of the report lists a recommendation for each problem to be brought to the attention to the Expert Review Team.

Ref Nr	Recommendation Ref	Recommendation description	Comment
P2.4.2.1			
P2.4.2.2			
P2.4.2.3			
P2.4.2.x			