



## Independent assessment report of the national registry of Ukraine

|                          |                         |        |          |
|--------------------------|-------------------------|--------|----------|
| Reference                | Reg_IAR_UA_2007_1       |        |          |
| Security classification: | Public                  |        |          |
| Version number:          | v1.0                    | State: | Final    |
| Prepared by:             | Anthony Mak/UNFCCC      | Date:  | 10/12/07 |
| Reviewed by:             | Andrew Howard/UNFCCC    | Date:  | 10/12/07 |
| Approved by:             | Vitaly Matsarski/UNFCCC | Date:  | 10/12/07 |

### Circulation list

| Name/Role                          | Organization                 | Info/Action |
|------------------------------------|------------------------------|-------------|
| RSA                                | National registry of Ukraine | Info        |
| Expert Review Team for the Ukraine | UNFCCC                       | Action      |

### Document change record

| Version | Date     | Description | Affected sections |
|---------|----------|-------------|-------------------|
| v1.0a   | 5/12/07  | First draft | All               |
| v1.0    | 10/12/07 | Final       | Summary           |

### Decision

This Independent Assessment Report (IAR) has been prepared by the International Transaction Log (ITL) Administrator. This IAR includes the following Addenda:

- Addendum 1: Initialization 1
- Addendum 2: Glossary



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CONVENTION - CADRE SUR LES CHANGEMENTS CLIMATIQUES – Secrétariat

| IAR SUMMARY                        |   |  |   |   |   |                          |  |
|------------------------------------|---|--|---|---|---|--------------------------|--|
| General information                | Registry Name                           | National registry of Ukraine   |   |   |   |                          |  |
|                                    | Date of report                          | 10/12/07   | Reporting period  | N/A   |   |                          |  |
|                                    | IAR Type                                | Standard IAR <input checked="" type="checkbox"/>   | Initial IAR   | <input checked="" type="checkbox"/>   |   |                          |  |
|                                    | Components                              | Initialization Required <input checked="" type="checkbox"/>  | Operational Performance Required  | <input type="checkbox"/>  | Public Availability of Information Required | <input type="checkbox"/> |  |
|                                    | Registry URL                            | http://www.carbonunitsregistry.gov.ua  |   |   |   |                          |  |
|                                    | Consolidated system with other Parties? | Yes <input type="checkbox"/>   | No <input type="checkbox"/>   | Parties involved  |   |                          |  |
| Overall Registry Assessment        | Conclusion                              | Pass <input checked="" type="checkbox"/>   | Fail <input type="checkbox"/>   |   |   |                          |  |
|                                    | Comments / recommendations              | The registry has fulfilled all of its obligations regarding conformity with the Data Exchange Standards. These obligations include having adequate transaction procedures; adequate security measures to prevent and resolve unauthorized manipulations; and adequate measures for data storage and registry recovery. The registry is therefore deemed fully compliant with the registry requirements defined in decisions 13/CMP.1 and 5/CMP.1, noting that registries do not have obligations regarding Operational Performance or Public Availability of Information prior to the operational phase. |   |   |   |                          |  |
| Initialization                     | Conclusion                              | Pass <input checked="" type="checkbox"/>   | Fail <input type="checkbox"/>   | N/A <input type="checkbox"/>  |   |                          |  |
|                                    | Initializations during reporting period | 1  | 2   | 3   |   |                          |  |
|                                    | Initialization status                   | Pass <input checked="" type="checkbox"/><br>Fail <input type="checkbox"/><br>N/A <input type="checkbox"/>  | Pass <input checked="" type="checkbox"/><br>Fail <input type="checkbox"/><br>N/A <input type="checkbox"/> | Pass <input checked="" type="checkbox"/><br>Fail <input type="checkbox"/><br>N/A <input type="checkbox"/> |   |                          |  |
|                                    | Start Date                              | 15/8/07  |   |   |   |                          |  |
|                                    | End Date                                | 26/11/07   |   |   |   |                          |  |
|                                    | Comments / recommendations              |  |   |   |   |                          |  |
| Operational Performance            | Conclusion                              | Pass <input checked="" type="checkbox"/>   | Fail <input type="checkbox"/>   | N/A <input type="checkbox"/>  |   |                          |  |
|                                    | Comments / recommendations              |  |   |   |   |                          |  |
| Public Availability of Information | Conclusion                              | Complete <input checked="" type="checkbox"/>   | Incomplete <input type="checkbox"/>   | No data <input type="checkbox"/>  | N/A <input type="checkbox"/>                |                          |  |
|                                    | Main Web Address                        |  |   |   | Date last accessed                          |                          |  |
|                                    | Comments / recommendations              |  |   |   |   |                          |  |



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|                                  |                   |                     |          |                               |
|----------------------------------|-------------------|---------------------|----------|-------------------------------|
| RSA Consultation<br>on Draft IAR | Date of Review    | 7/12/07             |          |                               |
|                                  | Author            | Vladyslav Vsemirnov | Position | Registry System Administrator |
|                                  | Final<br>Comments | None                |          |                               |

# Independent Assessment Report of the national registry of Ukraine





## Addendum 1

### Initialization 1

|                            |                              |   |
|----------------------------|------------------------------|---|
| Registry Name              | National registry of Ukraine | Pass <input checked="" type="checkbox"/><br>Fail <input type="checkbox"/><br>N/A <input type="checkbox"/> |
| Date of report             | 10/12/07                     |   |
| Reporting Period           | N/A                          |   |
| Start Date                 | 15/8/07                      |   |
| End Date                   | 26/11/07                     |   |
| Comments / recommendations |                              |   |

## 1 Documentation Evaluation

This evaluation was carried out by the ITL Operator under the initialization process and aggregated results have been transcribed here in full.

|                               |  |
|-------------------------------|--|
| Status                        | Green <br>Amber <br>Red <br>N/A  |
| Total Score<br>(max. 100)     | 88%  |
| Comments /<br>recommendations |  |

The scoring approach used to evaluate the registry documentation is to assess the confidence level associated with each document, based on quality (completeness / accuracy / consistency of information supplied) and evidence (actual results supporting information supplied, if appropriate). The approach is set out below (see the ITL Initialization Process documentation for further information).




| <b>Status</b> | <b>Description</b>  | <b>Score</b> |
|---------------|---|--------------|
| Green         | No significant concerns about the state of registry readiness are identified. | > 80         |
| Amber         | Minor limitations in the state of registry readiness are identified.          | 50 - 80      |
| Red           | Significant concerns about the state of registry readiness are identified.    | < 50         |










| <b>Ref.</b> | <b>Test Description</b>   | <b>Quality</b> | <b>Evidence</b> | <b>Confidence<sup>1</sup></b> |
|-------------|---|----------------|-----------------|-------------------------------|
| 1.1         | <b>Database and Application Backup</b><br>Detailed plan describing backup procedures for the production database and software.  | 100%           | 100%            | 100%                          |
| 1.2         | <b>Disaster Recovery Plan</b><br>Plan designed to enable Registry to survive in the event of catastrophic failure or disruption of the host environment and to re-establish normal business operations as quickly as possible.  | 86%            | 89%             | 87%                           |
| 1.3         | <b>Security Plan</b><br>Plan defined in order to protect the application and data from unrestricted and unsolicited use.  | 90%            | 89%             | 90%                           |
| 1.4         | <b>Application Logging Documentation</b><br>Documentation describing registry capability to maintain database logs and activity logs, provided to demonstrate conformance with Section 7 of the Data Exchange Standards.  | 100%           | 90%             | 93%                           |
| 1.5         | <b>Time Validation Plan</b><br>Specific procedures for validating server time on a periodic basis to allow successful data exchange.  | 90%            | 56%             | 80%                           |
| 1.6         | <b>Version Change Management</b><br>Procedure providing a clear migration path to upgrade from version to version of registry software and database schemas.  | 90%            | 67%             | 83%                           |
| 1.7         | <b>Test Plan</b><br>Plan ensuring a registry has performed basic testing and is capable of participating in the tests outlined in Annex H of the DES, which are required of a registry prior to being authorized to submit production transactions to the ITL.                    | 95%            | 100%            | 97%                           |
| 1.8         | <b>Test Report</b><br>Report providing evidence that a registry has performed basic testing and is capable of participating in the tests outlined in Annex H of the DES, which are required of a registry prior to being authorized to submit production transactions to the ITL. | 89%            | 95%             | 93%                           |
| 1.9         | <b>Operational Plan</b><br>Plan ensuring that the Registry has appropriately planned and staffed their operational requirements, so that the initial standards and requirements will be addressed on an ongoing basis.  | 74%            | 86%             | 78%                           |

<sup>1</sup> Figures in this column were calculated using weighted averages for quality and evidence.

## 2 Connectivity Evaluation




This evaluation was carried out by the ITL Operator under the initialization process and the results have been transcribed here in full.





















































































|                            |   |
|----------------------------|---|
| Status                     | Pass <br>Fail <br>N/A  |
| Comments / recommendations |   |

| <b>Ref.</b> | <b>Test Description</b>                             | <b>Pass</b>   | <b>Fail</b>   | <b>N/A</b>  |
|-------------|---|---|---|---|
| 2.1         | Establish VPN connectivity between registry and ITL |  |  |  |
| 2.2         | Establish SSL connection                            |  |  |  |
| 2.3         | Establish basic Web service communication           |  |  |  |

### 3 Interoperability Evaluation

This evaluation was carried out by the ITL Operator under the initialization process and aggregated results have been transcribed here in full. In the below table, Reference 5 applies only to EU ETS member registries, and Reference 6 applies only to the CDM registry.

|                            |   |
|----------------------------|---|
| Status                     | Pass <br>Fail <br>N/A  |
| Comments / recommendations |   |

| <b>Ref.</b> | <b>Test Description</b>                  | <b>Pass</b>   | <b>Fail</b>   | <b>N/A</b>  |
|-------------|--|---|---|---|
| <b>3.</b>   | <b>Discrete Transaction Tests</b>        |    |    |    |
| 3.1         | Issuance                                 |    |    |    |
| 3.2         | Conversion                               |    |    |    |
| 3.3         | External Transfer                        |    |    |    |
| 3.4         | Cancellation                             |    |    |    |
| 3.5         | Retirement                               |    |    |    |
| 3.6         | Replacement                              |   |   |   |
| 3.7         | Carry-over                               |  |  |  |
| 3.8         | Expiry Date Change                       |  |  |  |
| <b>4.</b>   | <b>Test Cases (National Registry)</b>    |  |  |  |
| 4.1         | Issuance Transaction Tests               |  |  |  |
| 4.2         | Conversion Transaction Tests             |  |  |  |
| 4.3         | External Transfer Transaction Tests      |  |  |  |
| 4.4         | Cancellation Transaction Tests           |  |  |  |
| 4.5         | Expiry Date Change Transaction Tests     |  |  |  |
| 4.6         | Retirement Transaction Tests             |  |  |  |
| 4.7         | Replacement Transaction Tests            |  |  |  |
| 4.8         | Carry-Over Transaction Tests             |  |  |  |
| <b>5.</b>   | <b>EU ETS Member Registry Test Cases</b> |  |  |  |
| 5.1         | Account Management Web Services          |  |  |  |
| 5.2         | Internal Transfer Transaction Tests      |  |  |  |
| <b>6.</b>   | <b>Test Cases (CDM Registry)</b>         |  |  |  |
| 6.1         | Issuance Transaction Tests               |  |  |  |
| 6.2         | Internal Transfer Transaction Tests      |  |  |  |
| 6.3         | External Transfer Transaction Tests      |  |  |  |
| 6.4         | Cancellation Transaction Tests           |  |  |  |
| 6.5         | Expiry Date Change Transaction Tests     |  |  |  |
| 6.6         | Additional Tests                         |  |  |  |



**4 Initialization Recommendation (by ITL Operator)**

|                |   |
|----------------|---|
| Recommendation | Yes <input type="checkbox"/><br>No <input type="checkbox"/> |
| Comments       |   |

**5 Initialization Authorisation (by ITL Administrator)**

|               |   |
|---------------|---|
| Authorization | Yes <input type="checkbox"/><br>No <input type="checkbox"/> |
| Comments      |   |

# Independent Assessment Report of the national registry of Ukraine

## Addendum 2

### Glossary

| GLOSSARY                            |  |
|-------------------------------------|--|
| TERM                                | DEFINITION   |
| Annex H of the DES                  | The annex of the DES defining the initialization tests that a registry must pass as part of the initialization process                                   |
| CDM Registry                        | The registry established by the Executive Board of the Clean Development Mechanism and implemented by the UNFCCC secretariat                             |
| CITL                                | Community Independent Transaction Log. The STL operated by the European Commission for the European Union Emissions Trading Scheme                       |
| Connectivity Evaluation             | Part of the initialization process that tests whether a registry can connect successfully with the ITL   |
| Consolidated Systems                | Registry systems which share system infrastructure   |
| DES                                 | Data Exchange Standards  |
| Document Evaluation                 | Part of the initialization process that assesses the documentation submitted to the ITL Administrator  |
| ERT                                 | Expert Review Team under Article 8 of the Kyoto Protocol   |
| Final Comments                      | The final comments made by a RSA on the draft IAR after having received responses from the ITL Administrator on earlier comments                         |
| IAR                                 | Independent Assessment Report  |
| Initial IAR                         | The first IAR carried out for a registry when it initialises for the first time. Subsequent initializations are reported in Standard IARs.               |
| Initialization                      | The process by which a registry is formally tested by the ITL Administrator for conformity with the DES  |
| International Transaction Log (ITL) | The system established under the Kyoto Protocol to monitor the validity of transactions between Parties. It is implemented by the UNFCCC secretariat     |
| ITL Administrator                   | The Administrator of the ITL. It is a role assigned to the UNFCCC secretariat  |
| ITL Operator                        | The service provider that operates the ITL on behalf of the ITL Administrator  |
| N/A                                 | Not Applicable   |
| National Registry                   | A registry established by an Annex I Party   |
| Operational Performance             | The performance of a registry during its operation   |
| Reporting Period                    | The period of time covered by an IAR   |
| RSA                                 | Registry System Administrator  |
| SEF                                 | Standard Electronic Format, defined for the reporting by Annex B Parties to the Kyoto Protocol of their assigned amount holdings and transactions        |
| SSL                                 | Secure Socket Layer. A standard used to establish encrypted communications   |
| Standard IAR                        | All IARs subsequent to a successful Initial IAR  |
| Supplementary Transaction Log (STL) | An electronic database established for a Supplementary Trading Programme to monitor the validity of transactions between registries under that programme |