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Programme

Registry Procedures

Summary

This document summarises all procedures applicable to the Equitable Earth <u>Registry</u>. It sets out procedures related to registry operations, administration, governance, and measures implemented to ensure maximum transparency and compliance with carbon market requirements and regulations. It also outlines all security compliance elements provided by <u>APX</u>, the third-party host of the <u>Registry</u>.



Table of Contents

Table of Contents	2
1 Introduction	4
1.1 Normative References	4
2 Registry Principles	5
2.1 Transparency and Accessibility	5
2.2 Accuracy and Verification	5
2.3 Retirement and Double-Counting Prevention	5
3 Registry Administration	7
3.1 Equitable Earth Registry Hosting and Administration	7
3.2 Roles & Permissions in the Registry	7
3.3 Governance and Oversight	7
3.4 Compliance with Regulations	8
3.5 Continuous Improvement	8
4 Registry Operations	9
4.1 Account Creation	9
4.2 Project Creation	9
4.3 Project Lifecycle	9
4.4 Documentation	11
4.5 Issuance	14
4.6 Transfer	15
4.7 Cancellation	15
4.8 Retirement	17
4.9 VRU Status	18
4.10 Documentation Disclosure	18
4.11 Inter-Registries Operations	19
5 Labelling and Serialisation	20
5.1 Uniqueness	20
5.2 Serialisation	20
5.3 Public Information and Cross-Reference	21
5.4 Labelling	21
6 Conflicts of Interest	22
6.1 Certification and Secretariat Scopes	22
6.2 Conflicts of Interest Provisions	22
7 Security Compliance	23
7.1 SOC2	23
7.2 Maintenance of Software and Hardware	23

Registry Procedures 3



7.3 Disaster Recovery	24
7.4 Network Security	24
7.5 Server Security	25
7.6 Database Security	25
7.7 Application Security	26
7.8 End-User Security	26
7.9 Data Breach	27



1 Introduction

1.1 Normative References

- 1.1.1 This document must be read in conjunction with the following documents:
 - Anti-Fraud Policy
 - Code of Ethics and Business Conduct
 - Equitable Earth Governance
 - Programme Manual
 - Terms & Definitions
 - <u>Validation and Verification Procedure</u>



2 Registry Principles

In addition to the requirements laid out in the <u>Programme Manual</u>, the Equitable Earth Registry is operated in conformance with the following rules and procedures.

2.1 Transparency and Accessibility

Equitable Earth guarantees transparency and accessibility on the Equitable Earth Registry by:

- 2.1.1 Maintaining a publicly accessible online platform where participants can access documentation and data related to projects and assets (e.g., Verified Restoration Units [VRUs]).
- 2.1.2 Making public any disputes or challenges related to VRU issuance or retirement. More details can be found on the Equitable Earth website.
- 2.1.3 Ensuring that data privacy and security measures are in place to protect confidential information. More details can be found in the <u>Equitable Earth Privacy Policy</u>.

2.2 Accuracy and Verification

Equitable Earth ensures accurate and verifiable VRU issuance by:

- 2.2.1 Contracting independent validation and verification Bodies (VVBs) to conduct thorough third-party validation and verification audits. This process confirms the accuracy and legitimacy of projects submitted for registration and VRUs issued to Equitable Earth-certified projects. Refer to the <u>Validation and Verification Procedure</u> for more details.
- 2.2.2 Keeping a track record of every VRU issued, with unique serial numbers for all units.

2.3 Retirement and Double-Counting Prevention

Equitable Earth prevents double-counting (including double issuance, double claiming, double use, and double selling) by:



- 2.3.1 Maintaining a secure system for retiring VRUs.
- 2.3.2 Enabling mechanisms to track retired VRUs and ensure they are not reintroduced into the market.



3 Registry Administration

3.1 Equitable Earth Registry Hosting and Administration

- 3.1.1 The Equitable Earth Registry is hosted by APX.
- 3.1.2 The Equitable Earth Registry is administered by the Secretariat. Only the Secretariat is authorised to issue and cancel VRUs.

3.2 Roles & Permissions in the Registry

- 3.2.1 The Equitable Earth Registry offers four distinct user roles, each with specific permissions and responsibilities. These roles are built into the technical specifics of the Equitable Earth Registry and cannot be bypassed.
- 3.2.2 **Registry administrator.** The registry administrator has the highest level of permissions, including the management of VRUs, projects, and users. This role is held by the Director of the Secretariat.
- 3.2.3 **Secretariat.** The Secretariat can issue, manage, transfer, and cancel projects and VRUs.
- 3.2.4 **Certification**. The Certification team is responsible for creating and managing projects within the Registry. They can upload project-related files and update project statuses.
- 3.2.5 **Account holder.** Account holders (such as developers or buyers) have the authority to hold VRUs in their accounts and manage them (i.e., through transfers and retirements).

3.3 Governance and Oversight

- 3.3.1 Equitable Earth guarantees strong governance and oversight of the Registry by clearly defining and managing roles, rights, responsibilities, and accountabilities for Registry administrators, users, and account holders. To maintain integrity and transparency within the Registry:
- 3.3.2 The Secretariat is responsible for enforcing all Registry procedures.



- 3.3.3 Teams with potential conflicts of interest are clearly separated, allowing for independent oversight and random internal auditing. Refer to Equitable Earth Governance for more details.
- 3.3.4 Procedures are in place to handle conflicts of interest among Registry administrators, users, and account holders. Refer to the Anti-Fraud Policy for more details.
- 3.3.5 Annual reviews of user permissions and roles are conducted to prevent unauthorised access.
- 3.3.6 A third-party auditor performs regular audits of the Secretariat, the Certification team, and the Equitable Earth Registry.

3.4 Compliance with Regulations

- 3.4.1 The Equitable Earth Registry must adhere to all relevant regulations and standards governing carbon markets, including but not limited to the following accreditation schemes: CORSIA, ICROA, and ICVCM.
- 3.4.2 The Equitable Earth Registry publicly commits to supporting initiatives working to enable transparency in the carbon market, including <u>CADTrust</u> and Carbon Data Open Protocol (CDOP).

3.5 Continuous Improvement

- 3.5.1 Equitable Earth strives to continuously improve its processes, procedures, and user experience regarding the Equitable Earth Registry to ensure alignment with evolving best practices and market developments by:
 - 3.5.1.1 Regularly reviewing and updating the <u>Programme Manual</u>, <u>Equitable Earth Standard</u>, and methodologies.
 - 3.5.1.2 Seeking feedback from stakeholders and experts to improve Registry operations and transparency. Refer to the <u>Standard Setting and Methodology Development Procedure</u> for more details.



4 Registry Operations

4.1 Account Creation

- 4.1.1 All account holders must:
 - 4.1.1.1 Accept the Equitable Earth Registry Terms and Conditions.
 - 4.1.1.2 Go through KYC/AML assessment. Refer to the <u>Anti-Fraud Policy</u> for more details.

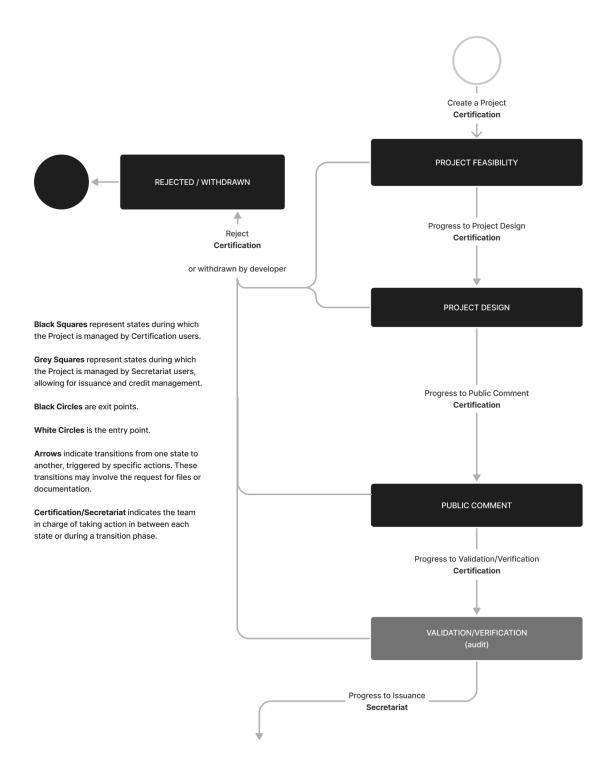
4.2 Project Creation

- 4.2.1 Projects are published on the Equitable Earth Registry by the Certification team.
- 4.2.2 All projects undergoing certification have a dedicated 'Project Page' on the Equitable Earth Registry.
- 4.2.3 The initial status of a project is 'Project Feasibility'.

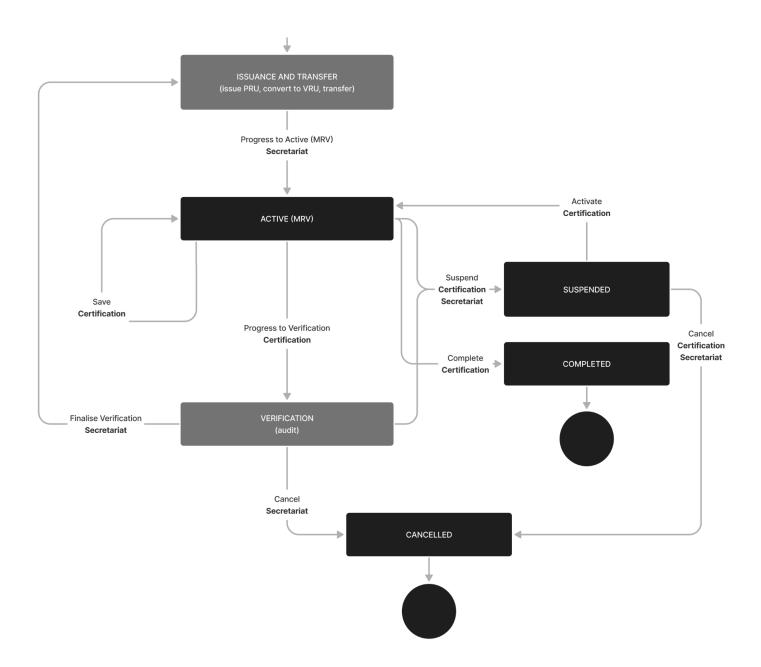
4.3 Project Lifecycle

4.3.1 The project lifecycle is represented by a state machine, which illustrates the evolution of a project through various states and the user(s) responsible for managing each state. The state machine ensures clarity and consistency in managing projects within the Equitable Earth Registry.









4.4 Documentation

This section outlines the documentation requirements on the Equitable Earth Registry, detailing when and which documents must be uploaded throughout the certification process. This ensures the transparency and accountability of the certification process and supports the ongoing monitoring, reporting, and verification (MRV) of projects.



Feasibility Phase

- 4.4.1 Once the developer has completed the feasibility phase, Equitable Earth uploads the following documents to the Registry:
 - 4.4.1.1 **Feasibility Study Report**: A comprehensive report detailing the feasibility study's findings and outcomes.
 - 4.4.1.2 **Due Diligence Report**: A summary of the KYC analysis of the developer.
 - 4.4.1.3 **Preliminary Zonation**: A first version of the geographic information system (GIS) shapefiles, providing spatial data related to the project.

Design Phase

- 4.4.2 Once the developer has completed the design phase, Equitable Earth uploads the following documents to the registry:
 - 4.4.2.1 **Preliminary Project Design Document (PDD):** A first version of the PDD outlining the project's design elements, including planned activities across Equitable Earth's three pillars, SDG contributions, risk management, safeguards, monitoring plan, MRV schedule, and appendices. This version of the PDD is published for public comment.
 - 4.4.2.2 **Risk Assessment Matrix:** A thorough assessment of project risks and potential impacts.
 - 4.4.2.3 **Safeguards Declaration:** The developer's declaration of environmental and social safeguards in place during the project's lifetime.
 - 4.4.2.4 **Final Zonation:** The final version of the GIS shapefiles of the project.
 - 4.4.2.5 **Project Budget:** A simplified overview of planned and project expenses.

Validation

- 4.4.3 Once the VVB has completed the validation of the project's Preliminary Project Design Document, Equitable Earth uploads the following documents to the Registry:
 - 4.4.3.1 **Validation Report:** A report summarising the project's validation and its results.
 - 4.4.3.2 **Final PDD:** The finalised PDD, including any updates and changes made by the developer during validation.



Annual Requirements

- 4.4.4 On an annual basis, Equitable Earth uploads the following documents to the Registry:
 - 4.4.4.1 **Annual Report:** a yearly report providing an update on the project's progress, performance, including any significant changes
 - 4.4.4.2 **Grievance Report(s) (if applicable):** a report of any grievance(s) filed against the project or any of the project's stakeholders, consisting of the claim, investigation findings, and conclusion(s)

Verification

- 4.4.5 Every two or four years, at the end of the verification period and once verification is complete, Equitable Earth uploads the following documents:
 - 4.4.5.1 **Verification Report:** a report summarising the project's verification, including findings and results
 - 4.4.5.2 **Final Annual Report:** the finalised Annual Report(s), including any updates and changes made by the developer during verification

Adaptive Management

- 4.4.6 Every four years, at the end of the verification period, Equitable Earth uploads the following documents to the Registry:
 - 4.4.6.1 **Verification Report:** a report summarising the project's verification, including findings and results. This report may also describe validation activities
 - 4.4.6.2 **Updated PDD:** an updated version of the PDD, including any updates and changes made by the developer during verification
 - 4.4.6.3 **Updated Risk Assessment Matrix:** an updated assessment of project risks and their potential impacts
 - 4.4.6.4 **Updated Safeguards Declaration:** the developer's updated declaration of environmental and social safeguards in place during the remainder of the project
 - 4.4.6.5 **Updated Project Budget):** an updated version of the summary of realised project expenses



4.5 Issuance

Issuance Authorisation

- 4.5.1 The issuance process within the Equitable Earth Registry occurs during the 'Issuance and Transfer' status.
- 4.5.2 The Certification team, on behalf of the developer, requests the issuance of VRUs for a project.
- 4.5.3 Only Secretariat users can approve an issuance request and issue VRUs.

Issuance Allocation

Equitable Earth allocates a percentage of a project's VRUs to the buffer pool according to the following rules:

- 4.5.4 Upon issuance, 20% (rounded up) of VRUs are allocated to the Equitable Earth buffer pool.
- 4.5.5 The remaining 80% (rounded down) are subsequently transferred to the account holder(s) by the Secretariat.

Addressing Erroneous Issuance

Equitable Earth implements the following measures to ensure the integrity and accountability of the issuance process within the Equitable Earth Registry, safeguarding against errors and discrepancies:

- 4.5.6 Every issuance goes through a redundancy system, under which an Equitable Earth Secretariat agent issues VRUs, and another reviews all issuances of the previous week.
- 4.5.7 If an erroneous issuance is identified, a report is filed, and a Secretariat agent cancels the affected VRUs.
- 4.5.8 Equitable Earth subsequently notifies affected account holders of the issue.
- 4.5.9 The registry administrator holds the authority to cancel erroneously issued assets on behalf of any account holder.



4.6 Transfer

Secretariat-Initiated Transfers

4.6.1 Secretariat users have the authority to transfer VRUs. These transfers must be authorised by the developer, and VRUs can originate from the project account and be directed to any account holder account.

Account Holder-Initiated Transfers

- 4.6.2 Account holders can initiate proprietary VRUs transfers at their discretion. This transfer privilege is not restricted by project status, allowing account holders the flexibility to manage their VRUs as needed.
- 4.6.3 Erroneous transfers initiated by an account holder are not remediated by Equitable Earth.

4.7 Cancellation

- 4.7.1 VRU cancellations within the Equitable Earth Registry are initiated by the Secretariat in response to:
 - 4.7.1.1 A reversal event. For more details about compensation, refer to the <u>Compensation</u> section in the <u>Programme Manual</u>.
 - 4.7.1.2 A double-counting event, in the context of Article 6 transfers. For more details about double-counting, refer to the <u>Double Counting</u> section in the <u>Programme Manual</u>.
 - 4.7.1.3 Project failure. For more details about project failure, refer to the <u>Project Failure</u> section in the <u>Programme Manual</u>.
- 4.7.2 VRUs cancelled in the Equitable Earth Registry can no longer be transferred or retired.
- 4.7.3 Only the Registry administrator and Secretariat users have the authority to cancel VRUs in the buffer pool or a project's account whenever a cancellation event is identified.
- 4.7.4 The Secretariat must follow a systematic cancellation procedure in the following cases:



Reversal Events

4.7.5 **Step 1: Reversal quantification**

At verification, Equitable Earth determines if the impact of loss events resulted in a reversal or not. If a reversal is identified, Equitable Earth defines the nature—avoidable or unavoidable—of the reversal based on the loss event(s). Refer to the *Reversal Procedures* at the methodology level for more details.

4.7.6 Step 2: Reversal accounting

The quantified reversal is deducted from the verification period's total VRU issuance. Refer to the quantification methods at the methodology level for more details.

4.7.7 **Step 3: VVB verification**

An accredited VVB verifies the reversal claim(s) and produces a verification report. If the verification confirms the reversal accounting, the Secretariat must proceed to the cancellation of the necessary amount of VRUs.

4.7.8 **Step 4: Notification.**

Equitable Earth notifies the developer associated with the cancellation event, specifying the nature of the reversal.

4.7.9 **Step 5: Cancellation**

The Equitable Earth Secretariat must cancel VRUs in the buffer pool in an amount equal to the net GHG loss during the verification period as full compensation for the reversal. Refer to the <u>Compensation</u> section in the <u>Programme Manual</u> for more details.

4.7.10 Step 6: VRU replacement (if applicable)

If the reversal has been qualified as avoidable, the developer must deposit VRUs issued by the project or other Equitable Earth-certified projects in the buffer pool in an amount equal to the net GHG loss of the verification period.

Double Claiming

4.7.11 Step 1: Identification and quantification.

The Secretariat identifies the double-claiming event by following the double-counting principles outlined in the <u>Programme Manual</u>.

4.7.12 Step 2: Notification.

The developer is notified and must elaborate and execute the mandatory compensation plan. The plan guarantees that any double-claimed VRUs must



be compensated with the same volume of eligible VRUs, as detailed in the <u>Avoiding Double Claiming Procedure</u>.

4.7.13 Step 3: Cancellation.

The Secretariat cancels the replacement VRUs as full compensation for the double counting. Replacement VRUs can be Equitable Earth VRUs or comparable eligible units approved by Equitable Earth that have not been sold or otherwise retired.

Double Issuance

4.7.14 **Step 1:** Identification and quantification.

The Secretariat identifies the double issuance event following the double-counting principles in the <u>Programme Manual</u>.

4.7.15 **Step 2:** Notification.

The Certification team notifies the developer.

4.7.16 **Step 3:** Cancellation.

The Secretariat must cancel the affected VRUs.

4.8 Retirement

Identification of Retirement Reason

Account holders must select the reason for VRU retirement from the following options:

- 4.8.1 **Compensation claim:** when the retirement aims to balance or neutralise the negative effects of GHG emitted.
- 4.8.2 **Contribution claim:** when the retirement aims at adding up to GHG reduction efforts, but does not replace or balance emissions.

Retirement on Behalf of a Specific Entity

- 4.8.3 Account holders must retire VRUs on behalf of a specific legal entity or individual, ensuring that the retirement is attributed to the rightful owner.
- 4.8.4 VRUs can only be retired once, regardless of the reason for retirement. VRUs retired on the Equitable Earth Registry can no longer be transferred or cancelled.



Documentation

- 4.8.5 Documentation of the retirement action should include details of the:
 - 1) Account holder requesting the retirement.
 - 2) Legal entity or individual attributed to the retirement.
 - 3) Reason for VRU retirement and any supporting details.
- 4.8.6 This documentation is recorded and maintained within the Equitable Earth Registry for transparency and verification purposes.

4.9 VRU Status

4.9.1 Every VRU on the Equitable Earth Registry must have one of the following statuses: active, cancelled, or retired.

4.10 Documentation Disclosure

Documentation and Record-Keeping

- 4.10.1 The content of the buffer pool is publicly disclosed on the Equitable Earth Registry, including details about the origin of VRUs such as the project type, vintage, etc.
- 4.10.2 The Equitable Earth Registry must publicly disclose all of the following elements on every project page:
 - Project ID
 - Project Name
 - Country
 - Geographic coordinates on a map
 - Project description
 - Project developer
 - Project type



- Applied methodology
- Project status
- Labels
- Project registration date
- Crediting period start date
- Crediting period end date
- Project size (hectares)
- Project documents, including but not limited to:
 - Feasibility Report
 - Project Design Document(s)
 - o Annual Report(s), including details of all loss events
 - GHG Parameters and Baseline Calculation Report(s)
 - GHG Monitoring Report(s)
 - Other supporting documents (e.g., Livelihood Matrix, SDG Contribution Tool, Risk Assessment Matrix, Additionality Sheet, Project Budget, KML file)
 - Validation Report(s)
 - Verification Report(s)

4.11 Inter-Registries Operations

4.11.1 **Transfer restrictions.** Currently, VRUs held within the Equitable Earth Registry cannot be transferred out of the APX Registry. This restriction ensures the integrity, tracking, and transparency of Equitable Earth VRU transactions while maintaining consistency within the APX Registry ecosystem.



5 Labelling and Serialisation

This section outlines the principles of labelling and serialisation within the Equitable Earth Registry, highlighting their role in ensuring the uniqueness and traceability of VRUs.

5.1 Uniqueness

- 5.1.1 Each VRU within the Equitable Earth Registry is unique and represents the net removal of one tonne of carbon dioxide equivalent, alongside positive impacts on ecological recovery and livelihoods. To maintain this uniqueness, the following principles apply:
 - 5.1.1.1 **Ownership.** A VRU is owned by only one account at a time within the Equitable Earth Registry.
 - 5.1.1.2 **Transfer.** A VRU can be transferred to only one account at a time within the Equitable Earth Registry.

5.2 Serialisation

- 5.2.1 Serialisation is a critical aspect of VRU management. It ensures transparency and accountability and protects against the risks of double-counting. The Equitable Earth Registry employs a unique serialisation method.
- 5.2.2 All VRUs within the Equitable Earth Registry are assigned a unique serial number with the following format:

ERS-[project type]-[project id]-[countrycode]-[unit type]-[issuance date or vintage]-[batch]-[block start]-[block end]

- System Identifier or Originating Registry: Equitable Earth
- Project Type
- Country Code
- Unit Type



- Vintage
- Batch Number: Numeric value assigned to each batch of credits per originating issuance
- Serial Block Start: Numeric values assigned by the registry from 1 999,999,999
- Serial Block End: Numeric values assigned by the registry from 1 999,999,999
- 5.2.3 This unique and immutable serial numbering allows for the traceability of each VRU throughout the project lifecycle.

5.3 Public Information and Cross-Reference

5.3.1 Information on the project location is available on the project page, using the project ID represented in the serial number. Stakeholders can cross-reference this information with other publications about the project that provide geodetic coordinates, ensuring transparency regarding each unique VRU, country of origin, vintage, and original (and, if relevant, revised) project registration date.

5.4 Labelling

- 5.4.1 Assets meeting the eligibility requirements for CORSIA, ICROA, and ICVCM are labelled as such. Labels are reflected in the data warehouse views.
- 5.4.2 Retroactive labelling, where applicable, is applied for previously issued VRUs, ensuring compliance with international standards.



6 Conflicts of Interest

Equitable Earth is committed to preventing, detecting, and addressing conflicts of interest in the governance and provision of Registry services through robust policies and processes. The primary measure in place is the clear separation between the Certification team and the Secretariat team in regard to Registry operations.

6.1 Certification and Secretariat Scopes

The roles and permissions of the Certification and Secretariat teams are carefully defined to minimise potential conflicts. Each team has specific responsibilities, ensuring a clear and distinct division of tasks. Refer to the <u>Equitable Earth Governance</u> document for more details.

6.2 Conflicts of Interest Provisions

Equitable Earth has established explicit conflict of interest policies that are readily accessible to all relevant parties, outlining the principles and guidelines to prevent conflicts, encompassing financial, commercial, and fiduciary conflicts, and promote transparency.

- 6.2.1 Equitable Earth must declare all actual and potential conflicts, and failure to do so may result in the termination or adjustment of their role at Equitable Earth.
- 6.2.2 Equitable Earth employee external interests, relationships with immediate family members in business contexts, and misuse of Equitable Earth resources are subject to strict guidelines. More information is available in Equitable Earth's Code of Ethics and Business Conduct and Anti-Fraud Policy documents.
- 6.2.3 When conflicts of interest arise, Equitable Earth ensures that they are appropriately declared, addressed, and isolated. Refer to the <u>Anti-Fraud Policy</u> and the <u>Code of Ethics and Business Conduct</u> for more details.



7 Security Compliance

All information contained in this section was provided by APX (hereinafter referred to as 'the Registry service provider') through electronic mail and was received by Equitable Earth on 2023-08-16, as part of the contractual relationship between the two entities.

7.1 SOC2

7.1.1 The registry technology provider has been SOC2 certified since 2018, and the latest audit was concluded in 2022-04. The audit affirms that they conform to Trust Services Principles and Criteria for Security, Availability and Processing Integrity by the American Institute of Certified Public Accountants (AICPA). The completion of this audit provides additional assurance that the technology provider designs and implements services according to the highest standards to protect the availability of the Equitable Earth Registry and execution of internal processes.

7.2 Maintenance of Software and Hardware

The registry technology provider utilises rich web-based client technology, working on Angular UI framework and Java mid-tier server application and associated services, leveraging Azure-hosted replicated SQL Server databases to provide a robust underlying data service. This ensures high-speed storage that permits the retention of multiple years of transaction-level historical data online and includes:

- 7.2.1 Fully redundant data centre locations in geographically separated regions of the United States
- 7.2.2 Fully redundant network infrastructures in each data centre location and Operations facility
- 7.2.3 Data replication between the data centres and off-site backup of the database
- 7.2.4 Off-site operations facilities to handle the program if the primary operations facility cannot be used. This includes workstations, network access, and automated phone rerouting



7.3 Disaster Recovery

- 7.3.1 The system must be backed up for two types of failures:
 - 7.3.1.1 Loss of the hardware due to damage
 - 7.3.1.2 Data loss or data corruption
- 7.3.2 For "loss of hardware," the "image" backup method is used. The "image" allows the operating system to be reconstructed swiftly once the damaged hardware has been repaired.
- 7.3.3 For "data loss or data corruption," the provider electronically stores multiple copies of the database backup across geographically distributed locations. This allows data to be retrieved or restored to the same or different hardware.
- 7.3.4 Ad-hoc backups (archives) of the databases are a normal course of operation for the registry. This is currently employed by the registry technology provider in their database operations and is executed as required. The archived backups are stored using the previously described redundant, geographically distributed storage.
- 7.3.5 Recovery of the Operating System, Application, or Database must use existing procedures, which include some of the following:
 - 7.3.5.1 Reload of the database from a known recovery point using the "backed up" copy of the database
 - 7.3.5.2 Reload of the database to a known recovery point using the database transaction logs applied to the restored database created from a "backed up" copy
 - 7.3.5.3 Reload of the database on the existing production system or test system available as part of our SaaS services
- 7.3.6 Backups are maintained for a minimum of two weeks.

7.4 Network Security

The registry technology provider data centres are protected using industry-standard equipment and access methods, including firewalls and other associated networking infrastructure with fine-grained policies defining exactly which traffic is allowed into and out of the servers, both from internal services as well as the public internet.



Their Network Security Group model allows the provider to ensure only traffic appropriate for their applications is allowed into the environment. Events related to the networking and application infrastructure are recorded to a central console that must be monitored 24 hours/day by dedicated security staff who must review reported events of excessive login failures and report the events to the appropriate staff.

7.5 Server Security

Server systems are deployed with fine-grained access policies. Direct access to the servers is only allowed for approved personnel responsible for the administration of infrastructure. Personnel access to the servers is only allowed from the registry technology provider's corporate network. There is no direct access to the servers from the internet. Servers have anti-virus and file system monitoring utilities that report events to a central console monitored by the 24-hour operations group and IT security staff. Login/authentication events are recorded and available for review. Backup of each server's operating system is taken to allow for the quick restoration of a server in the unlikely event that the system becomes unavailable.

7.6 Database Security

- 7.6.1 The database configuration must be performed to allow appropriate access to records depending on the individual's roles/privileges:
 - 7.6.1.1 Users are only able to access and modify the records appropriate for their function.
 - 7.6.1.2 The Administrator is only able to access and modify the records appropriate for their function.
 - 7.6.1.3 Staff responsible for the maintenance of the system have only the minimum level of access to the database needed to complete their job function.
 - 7.6.1.4 Database administrators have full access to the database records. This is required for them to fulfil their job function.
 - 7.6.1.5 IT staff have no access to the system database.



- 7.6.1.6 Access to the database is available to the regular application users and application users with Administrator roles solely via the application user interface. Such users are not allowed direct access to the database.
- 7.6.2 Under no circumstances can direct access to the database occur directly from the internet.

7.7 Application Security

- 7.7.1 Access to application features is based on the Account and privileges granted to the authenticated user.
- 7.7.2 The login name and password must be used to authenticate each user. Multi-factor authentication is also available.
- 7.7.3 Each user is assigned a role. The role grants the user access to a set of modules and also dictates specific data records that the user is entitled to have access to.
- 7.7.4 Each module provides a set of functions that enables the user to accomplish a task or set of tasks.
- 7.7.5 Each attempt at login, success or failure, is recorded in the system log for review by the System Administrator login role.

7.8 End-User Security

- 7.8.1 Access to the registries is done via SSL/HTTPS-secured communication. Individual users are challenged for their unique username and password in order to access the application. Additionally, multi-factor authentication is available if desired to be in place. After the username and password are authenticated and the second-factor authentication is completed, the user gains access to the application's home page. To protect the integrity of passwords, passwords are required to adhere to the following rules: 8 to 16 characters in length, at least one lower-case character, at least one upper-case character, at least one digit, and at least one special character.
- 7.8.2 To ensure compliance with security provisions, Equitable Earth regularly audits and evaluates the security measures in place within the registry. The specific protocols and processes are as follows:



- 7.8.2.1 **Security and provisions for regular security audits**. Equitable Earth conducts periodic security audits or evaluations to assess the effectiveness of security provisions.
- 7.8.2.2 **Clarification**. The nature of the audit or evaluation may encompass both Equitable Earth's auditing of the registry provider's security processes and protocols and the verification of evidence regarding the registry provider's security practices. The exact scope and details of the audit are determined based on the specific requirements and standards.
- 7.8.3 These provisions highlight Equitable Earth's commitment to preventing conflicts of interest, addressing them when they arise, and ensuring compliance with security provisions through regular audits and evaluations. These measures seek to maintain the integrity, transparency, and security of the Equitable Earth Registry.

7.9 Data Breach

- 7.9.1 In the event of a data breach identified by Equitable Earth or by the registry's host APX, Equitable Earth must communicate via email and within 48 hours of notice all impacted registry account holders and relevant accreditation body Secretariats, such as the ICAO Secretariat.
- 7.9.2 Equitable Earth shall keep all parties impacted up-to-date with the breach investigation's advancements by providing regular email updates until the matter is solved.

