Registrar Data Escrow Deposit Verification and Error Reporting

This document intends to provide clarification for Registrars and Data Escrow Agents on the provisions included in the Registrar Data Escrow Specifications ("RDE Specifications") available at https://www.icann.org/en/system/files/files/rde-specs-09nov07-en.pdf) that define the requirements for processing Registrar data escrow deposits, and provide a mapping of such requirements with the validation result codes defined in ICANN's Registration Reporting Interface ("RRI") as defined in ICANN Registrar Interfaces ("RRI Specification"), section 2.2, available at https://tools.ietf.org/html/draft-icann-registrar-interfaces.

1. TERMINOLOGY

1.1 Differential deposit: As stated in section 1.3 of the RRI Specification, the "Differential" deposit kind is used in notifications related to registrar data escrow deposits that the RDE Specifications refers to as "Incremental" deposits.

1.2 Escrow Record: This term is used to refer to the collective contents of the data elements to be included in the data escrow deposit for each registered domain name under a registrar's sponsorship, as defined in the RDE Specifications.

2. DATA ESCROW AGENT DEPOSIT VERIFICATION PROCESS

As part of the verification process that the data escrow agent performs, each Escrow Record will be verified to ensure conformance with the data escrow deposit requirements as defined in the RDE Specifications.

If at least one (1) Escrow Record within the deposit fails one or more of the following checks, the Data Escrow Agent must provide the corresponding notification listing the Error Code(s) that matches the failing verification requirement listed in the table below.

Errors reported by the data escrow agent must be addressed by the registrar for the data escrow agent to accept the deposit.

Verification requirement	Error Code	Message
• Registrars must provide a single text file with the deposit hash string(s) following the naming convention in section 4.1.21 of the RDE specifications.	2001	No corresponding hash file found for deposit file.
• Provided hash string(s) must match for each deposit file.	2002	Hash does not match corresponding deposit file.
• Provided hash string(s) must follow the format specified in section 4.1.18 of the RDE specifications.	2003	Invalid hash file format.
• The encrypted and compressed data escrow file(s) must be digitally signed using PGP. • File signature(s) must successfully validate the data escrow deposit file(s) using the Registrar's public PGP key.	2004	Data escrow deposit PGP signature verification error.
• Each one of the compressed files must follow the naming convention defined in section 4.1.21 of the RDE Specifications. • All the compressed files provided by the registrar must be able to be decrypted into the CSV format using any of the compression methods listed in section 4.1.19 of the RDE Specifications.	2005	Archive includes unrecognized files.

• CSV file must not have an encoding other than UTF-8 unless specified otherwise by ICANN.	2006	Invalid encoding for data escrow deposit file.
• Uncompressed individual data escrow deposit files must not exceed 1 GB in size	2007	Data escrow deposit file size exceeds maximum allowed size.
• Individual data escrow deposit files must not exceed 1,000,000 lines.	2008	Data escrow deposit file exceeds maximum allowed number of lines.
• CSV header row must match the header that was provided and agreed initially between the registrar, ICANN and the data escrow agent. • The first field in the header should be the domain name or contact handle as applicable. • CSV header field names must begin with a letter, and consist of a-z, A-Z, 0-9, "-", "_" characters only.	2101	Unrecognized data escrow deposit file CSV header.
• Data Escrow file contents must be compliant with RFC 4180. • If escrow deposit is split in multiple files, the file splits must occur only at the end of record boundaries.	2102	Escrow Record structure does not conform with CSV header definition.
• Data for the elements listed in section 1.2 of the RDE Specifications must be present for every Escrow Record in the deposit. Fields that allow empty values are: o The names of the primary nameserver and secondary nameserver(s) for the Registered Name; o fax number of the technical contact for the Registered Name o Fax number of the administrative contact for the Registered Name o Postal address, e-mail address, voice telephone number, and fax number of the billing contact	2103	Escrow Record found missing data in required field(s).
• Value for the domain name must be composed of NR-LDH labels or valid IDNA2008 a-Labels as defined in the standards track RFCs 5890, 5891, 5892 and 5893 or any RFC that replaces or updates the listed RFCs. • Grandfathered domain names compliant with IDNA2003 are also allowed in the deposit.	2104	Invalid domain name syntax in Escrow Record.
• When present, contact email address syntax must comply with RFC 5322 or its successors.	2105	Invalid email syntax in Escrow Record.
• When present, name server names must comply with: o Values for the name server name must be composed of NR-LDH labels or valid IDNA2008 a-Labels as defined in the standards track RFCs 5890, 5891, 5892 and 5893 or any RFC that replaces or updates the listed RFCs. o Grandfathered domain names compliant with IDNA2003 are also allowed in the deposit.	2106	Invalid hostname syntax in Escrow Record.
• N/A	2107	Invalid date syntax in Escrow Record.
• When present, contact telephone and fax number syntax must comply with section 2.5 of RFC 5733.	2108	Invalid phone syntax in Escrow Record.

• Each domain name must appear only once across the data escrow file. • If used, each contact handle must appear only once in the handle file(s).	2109	Duplicate domain or handle Escrow Record found in deposit.
• When handles are used, all referenced contact handles must be present in the data escrow deposit files.	2110	Handle reference by Escrow Record not found.
• Frequency of "Full" deposits must comply with the schedule defined in section 2.1.3 of the RDE specifications, in accordance to the registrar deposit schedule as notified by ICANN. • A "Full" deposit may be received in place of a "Differential" deposit.	2201	"Full" data escrow deposit expected but received "Differential" instead.
• The data escrow deposit date, as indicated in the file naming convention defined in section 4.1.21 of the RDE specification, must not be a future date.	2202	Data Escrow deposit date is in the future.
• Once a data escrow deposit has been received and passed the verification process, no additional versions of such deposit may be accepted for the same deposit date and Registrar.	2203	A data escrow deposit has been already successfully verified for that date.