

IDC Reengineering Phase 2: E3 UC Change Summary

January 30, 2017

SNL's IDC Reengineering Phase 2 team developed 31 Use Cases (UCs) during the E3 Elaboration Iteration. This document describes the changes made to these UCs after their initial delivery to the IDC in October 2016.

UC-01.00 System Acquires Data

- Updates to brief description
 - Change text to talk about data going from one Data Acquisition Partition to another Data Acquisition Partition instead of the Data Processing Partition

UC-01.02 System Receives Bulletin Data

- Updates to brief description
 - Change text to say that are forwarding the data to other Data Acquisition Partitions in the System instead of moving the data to the Data Processing Partition
- Updated PostCondition to simplify – removed text about storing on partitions
- Updated Main Flow actions to not discuss Data Processing partition and remove subflow
 - Added step “Convert data to internal format” to main flow – used to be in subflow
 - “Stores bulletins” became “Store data on Data Acquisition Partition”
 - Instead of invoking the subflow “Copy Bulletin Data to Data Processing Partiong” added two new steps: “Copy data to Data Acquisition Partition” and “Check for missing Data”
- Action Descriptions
 - Changed verb tenses from singular to plural where discussing data
 - Removed SEED as a format for bulletin data
 - Removed sentence about time restraints on acquiring bulletins from the Action Description and moved to an NDC only note
- SSDs – Made S-6523 and S-1195 NDC only specs
- Glossary
 - Removed glossary terms SEED Format and Storage Format
 - Added glossary term for IDC
- Notes
 - Removed general note that talked about seed events and made it an NDC only note
 - Removed IDC-only note about subscriptions
 - Added new IDC-only note that says data are automatically retransmitted if the data fails to transfer

UC-01.03 System Automatically Distributes Data

- Changed verb tenses to be plural when discussing data
- Action Descriptions
 - Added sentence to the action description for “Forward Bulletin Data to authorized customers” that one method of forwarding bulletins is using the web portal and



subscriptions (see 'Requests System Data' UC) since that is the way the IDC will forward bulletin data.

- Notes
 - Changed general note to say that recipients for station data and bulletin data are configured in 'Configures Data Acquisition' UC, not 'Configures Processing Components' UC.
 - Added new IDC-only note that the IDC will forward station data in the CD1.0 format

UC-05.00 Provides Data to Customers

- No changes

UC-05.01 Requests System Data

- Use Case Diagram, Brief Description, Actor Descriptions
 - Removed Release Authority as an Actor
 - Updated brief description to clearly state what kinds of data are available through the web portal
- Precondition – removed precondition about a user needing to be authenticated as an authorized user
- Removed subflow – Approves Data for Release and added an NDC-only note about how data must be approved by the Release Authority
- Main flow
 - Moved the validation step to be the first thing the System does – are validating the request format, not the request itself
 - Changed the decision point to be "Does the user have permission to receive these data" instead of talking about whether data was reviewed for release. At the IDC, everything on the web portal has been reviewed for release.
- Action descriptions
 - Added all the different types of data mentioned in the brief description into the Action description for "Enters request details" Removed the data type "other"
- Alternate flows – Removed the alternate flows that discussed contacting the Release Authority and talked about "other data"
- Specs
 - made S-5982 NDC only
 - moved IDC-only specs S-5763 and S-5764 to 'Perform Expert Technical Analysis' UC
 - added new specs S-6543 and S-6544 which discuss the National Standard Screened Event Bulletin
- Glossary – added terms for the different types of data that can be requested
- Notes
 - Removed four general notes that dealt with the Release Authority, Data Acquisition and Data Processing partitions, the types of reports that are available and "other data"
 - Corrected the use case being referenced in the general note about station configuration parameters
 - Updated IDC-only note about Authorized External Users to make it more clear
 - Removed IDC-only notes about radionuclide data since added that to the brief description

- Added two IDC-only notes to note the document that describes products supported by this UC, and to discuss the National Standard Event Bulletin

UC-06.00 Configures System

- No changes

UC-06.01 Controls Data Acquisition

- Main Flow – removed step about Requesting retransmission of station data and made it an IDC-only note
- Notes - Updated General note #1 to point to the correct use case for configuring data sources

UC-06.02 Configures Station Usage

- Main Flow – removed alternate flow about undo/redo since not an Analyst use case
- Notes – Added new IDC-only note about configuring stations as primary or auxiliary

UC-06.04 Configures Data Acquisition

- Brief Description – removed last sentence about validating parameter values and added as an IDC-only note.
- Specs – mapped S-2261 and S-2237
- Main Flow – added step to configure networks
- Notes – Added new IDC-only notes about validating parameters and sending waveforms and processing results to the SUS/TST system

UC-06.05 Configures Processing Components

- Main Flow – removed alternate flow about undo/redo since not an Analyst use case
- Specs – unmapped S-2261 and S-2237

UC-06.07 Configures Analyst Interfaces

- No changes except for grammar

UC-07.00 Monitors Performance

- No changes

UC-07.03 Monitors Station State-of-Health

- Notes – Added new general note that SOH limits and thresholds are configured in the 'Configures Processing Components' UC

UC-08.00 Supports Operations

- No changes

UC-08.01 Accesses the System

- Main Flow – removed alternate flow about terminating System access on the System operations floor
- Glossary – added term Operational System (OPS) and removed term OPS (Operational Subsystem) because OPS pointed to Operational Subsystem

- Notes – added an IDC-only note that login and password management will be managed in accordance with the CTBTO “single sign on”

UC-08.03 Exports Data

- Specs
 - updated S-6509 to use term SC3XML instead of SC3 Inventory XML
 - added IDC-only spec for the GeoLib format
- Glossary
 - removed “Storage Format” glossary term
 - added the following glossary terms – Backup, Primary, Standalone Subsystem, CSS 3.0 Format, SEED Format, Mini-SEED Format, Waveform
- Notes – changed SC3 Inventory XML to SC3XML in the note about formats

UC-08.04 Imports Data

- Main Flow – added new alternate flow about how the System handles importing data that is already on the System
- Specs
 - updated S-6501 to use term SC3XML instead of SC3 Inventory XML
 - added IDC-only spec for the GeoLib format
- Glossary – added the following glossary terms - Backup, Primary, CSS 3.0 Format, SEED Format, Mini-SEED Format
- Notes – Added new general note about warning the user if importing data that doesn’t have all the parameters present in the System format.

UC-08.07 Provides Analyst Feedback

- Notes
 - Added a sentence to general note #1 that analyst feedback is for internal use only and not released externally as part of the event information
 - Added a new general note to say that access to individual feedback reports can be restricted to a single recipient

UC-08.08 Views Analyst Feedback

- Notes – added general note #3 to say that access to individual reports can be restricted to a single recipient

UC-08.09 Views Analyst Performance Metrics

- Brief Description – removed “for any set of Analysts”
- Notes
 - Removed note about any analyst being able to view metrics for any other Analyst
 - In the note about the visibility of the metrics being configurable by the System Maintainer, added a sentence to say that some users (e.g., Analyst Instructor) could see metrics for more than one analyst at a time.

UC-09.00 Tests System

- No changes

UC-10.00 Maintains System

- No changes

UC-10.01 Performs System Backups

- Notes – removed general notes #1 and #3 about backing up the CM system and incremental database backups

UC-10.02 Performs System Restores

- Notes – removed the general note about the restored state is dependent upon the state saved to the backup

UC-10.03 Install Software Update

- Brief Description – changed text to say all Subsystems instead of just calling out the Training and Standalone Subsystems
- Preconditions
 - Removed precondition about having to be logged onto the appropriate Subsystem
 - Removed precondition that notes that the target subsystem is not running during the update
- Main Flow
 - Removed subflow about auditing the update
 - Created a new step for auditing the software update and added text to the action description
 - Updated alternate flow to add that if the System Maintainer cancels the install rolls back to the previous version of the software
 - Added a second alternate flow for when the update fails
- Notes
 - Removed general note about how schema changes could affect software updates
 - Removed note about what subsystems are referred to in the brief description since we modified the brief description to remove this note
 - Removed the note about auditing.

UC-11.00 Performs Research

- No changes

UC-11.01 Analyzes Research Events

- Main Flow – updated second alternate flow to point to the ‘Performs Multiple Event Location’ UC
- Specs – updated IDC-only spec S-2031 to say that the database can be accessed through a “read-only” ANSI/ISO standard SQL interface
- Notes
 - Removed general note that gave multiple event location as an example of a Researcher tool
 - Updated general note to say specifically that generated Researcher data must be in an importable format
 - Added and IDC-only note to clearly state that it is read-only access to the data via a standard SQL interface

UC-11.03 Determines Optimal Processing Component Configuration

- Main Flow
 - Removed the step “Stores updated parameter values”
 - Moved the last sentence from the action description for “Stores updated parameter values” and added it to the action description for “Selects optimal parameter values”
- Action Descriptions – replaced “Primary or Backup” with Operational Subsystem wherever it occurred in the document
- Glossary – added Operational Subsystem, Pipeline Processing and Waveform to glossary
- Notes – updated general note #4 to be more specific about what parameters are meant when discussing exporting parameters from the Development Subsystem to the other subsystems

UC-12.00 Performs Training

- No changes

UC-12.02 Trains Analysts

- No changes except for grammar

UC-13.00 Operates Standalone System

- No changes