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Additional Protocol (AP) Protocol Reporter Version 3.0 (PR3) System Requirements Specification (SRS)

March 2014

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ADDITIONAL PROTOCOL (A)
PROTOCOL REPORTER VERSION 3.0 (PR3)
SYSTEM REQUIREMENTS SPECIFICATION (SRS)

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1.0 Introduction

1.1 Background

The Protocol Reporter (PR) was developed by the International Atomic Energy Agency (IAEA) to assist Member States in the creation and preparation of declarations pursuant to articles 2 and 3 of the model Additional Protocol (AP, INFCIRC/540, corrected), and was designed to be a complete tool for compiling, arranging, editing, managing, and submitting State declarations in support of the AP.

Version 1.0 (PR1) was released in 1999 and version 2.0 (PR2), the most recent version, was released in December 2008. Both are stand-alone desktop systems that allow users to systematically identify and input data on AP-declarable activities and facilities as well as to prepare a complete declaration for submission to the IAEA. The user interface is modeled similarly to that of the Microsoft Windows operating systems' File Management Module. A hierarchical structure is used to organize States (Parties), Submissions, Declarations, and Entries.

The software is currently experiencing compatibility problems with newer operating systems. Additionally, the Agency has noted shortcomings in the PR2 software and Member States have identified desirable enhancements. In this regard, Mr. Kevin Veal of the US Department of Energy (DOE) National Nuclear Security Administration (NNSA) Office of Nuclear Safeguards & Security sent a letter dated March 26, 2013, to Mr. Herman Nackerts, Deputy Director General, Department of Safeguards, IAEA, offering DOE/NNSA's support to the Agency in upgrading the PR2 software. The IAEA accepted this offer in a May 15, 2013, letter from Mr. Nackerts to Mr. Veal.

In addition to numerous email exchanges, the following working sessions were held to facilitate documentation of the requirements specifications herein.

Date	**Location**	**Participants**
25–26 September 2013	IAEA, Vienna	SG/SGIM/ISD, IAEA SG/SGIM/IFC, IAEA SG/SGIM/ISI, IAEA INSEP, DOE/NNSA
29–31 January 2014	IAEA, Vienna	SG/SGIM/ISD, IAEA SG/SGIM/IFC, IAEA SG/SGIM/ISI, IAEA INSEP, DOE/NNSA
11–12 March 2014	IAEA, Vienna	SG/SGIM/ISD, IAEA SG/SGIM/IFC, IAEA SG/SGIM/ISI, IAEA INSEP, DOE/NNSA

The intended audiences of this document are the analysts and developers tasked with designing the system to fulfill the identified requirements and the testers who must verify the requirements have been met.

Within this document, the term "the system" refers to the Protocol Reporter version 3 only.

1.2 Scope

This System Requirements Specification (SRS) documents and defines the functional and data high-level requirements for an automated information system to capture and manage data submitted to the IAEA as part of a State's AP obligations. The planned system is intended to succeed the current IAEA-developed software tools known as the IAEA Protocol Reporter versions 1.0 and 2.0.

The scope of this document is to provide the reader with discrete and verifiable software requirements for the version 3.0 of the Protocol Reporter (PR3). Section 2.0 gives a general vision of the PR3. Section 3.0 includes use-case scenarios, defining actors, system objectives, and their respective interactions. Section 4.0 decomposes the use cases into detailed functional specifications and business rules. Appendix A contains acronyms, and a glossary is included in Appendix B. Appendix C lists detailed data element requirements and their relationships, and Appendix D describes reporting requirements, including individual reports and the content of each. Appendices E and F map the legacy data elements from Protocol Reporter versions 1.0 and 2.0 into the PR3 data structure.

The SRS is not intended to capture design information. Rather, design specifications are consciously avoided to prevent injection of artificial parameters that may unintentionally constrain design options. Detailed design plans will be documented in the System Design Specification (SDS), which will cross-reference the SRS to ensure all requirements are met.

1.3 Ownership

This SRS was funded and developed by the United States Department of Energy National Nuclear Security Administration (DOE/NNSA) in support of, and in coordination with, the International Atomic Energy Agency (IAEA). DOE/NNSA is providing this document to the IAEA to assist the Agency in its goal of updating the Protocol Reporter software. The work is sponsored by the DOE International Nuclear Safeguards Engagement Program (INSEP). Neither the IAEA nor DOE/NNSA is bound by the specifications herein.

1.4 Related Documents

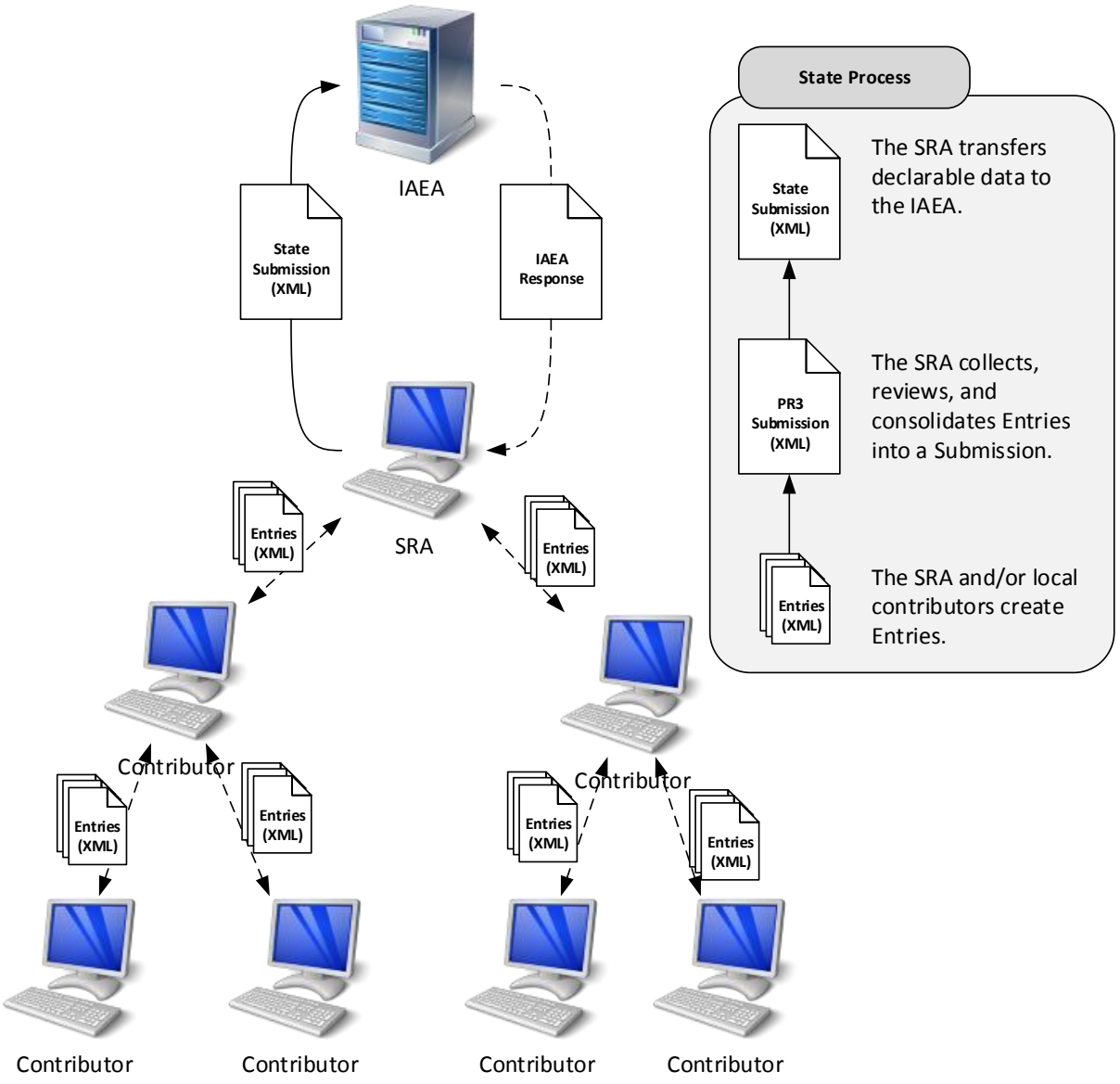
1. Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards (INFCIRC/540, corrected)
2. Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements, May 2004 (Service Series 11)
3. The document: Requirement specifications for PR3.0_ISD version August 2013_JI
4. The document: Idinger - Requirement specifications_Meeting_Sep2013
5. The document: Shortcomings of PR
6. The document: PR2 Requirements Document – Draft (where applicable)
7. PR3 working meeting notes: 25–26 September 2013
8. PR3 working meeting notes: 29–31 September 2013
9. PR3 working meeting notes: 11–12 March 2014

2.0 Product Perspective

The primary functions of the PR3 are to assist States to

- create and manage entries,
- create and manage declarations and submissions, and
- transfer or transmit submissions to the IAEA.

This diagram shows how data will be passed between participants in a State's AP declaration process. A State's Safeguards Regulatory Authority (SRA) will collect declaration data from organizations within that State in the form of declaration Entries. Then, the SRA will organize them into Declarations within a Submission. Finally, the SRA will transmit only the declarable data it has collected to IAEA.



3.0 Use Cases

3.1 Actors

This section defines the roles a user may take when interacting with the Protocol Reporter 3.0, depending on the task they are performing. A user may have more than one role, or his/her role(s) may change, depending on the context.

Roles are only for the purpose of defining use cases. The system will not identify a user as a member of a particular role or restrict functionality based on roles.

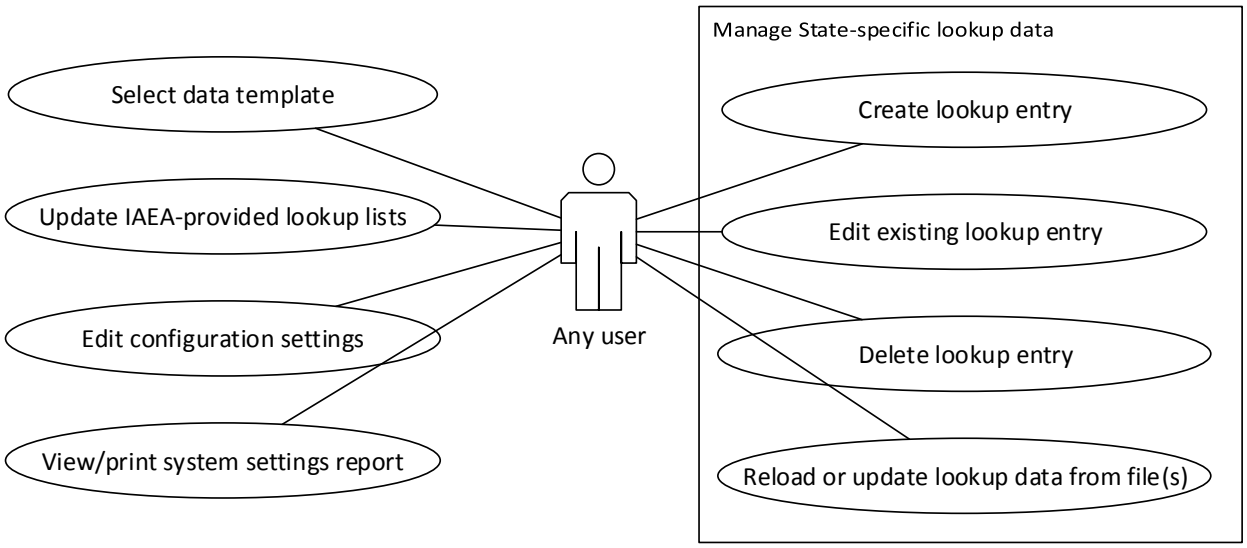
Actor or Role	Type of Role	Is a(n)	Must be able to
Contributor Originator	Originator	Field subject matter expert; may know little about the AP	Create and edit entries
Contributor Reviewer	Reviewer	Field subject matter expert	View, review, and print entries and related reports
Safeguards Regulatory Authority (SRA) Originator	Originator	SRA subject matter expert	Create and edit entries, declarations, and submissions
SRA Reviewer	Reviewer	SRA subject matter expert	View, review, and print entries, declarations, submissions, and related reports
SRA Submitter	Submitter	SRA authority	Finalize and submit completed submission to the IAEA

3.2 Software Installation

Installs:

- Executable software
- Data templates available to the State
- IAEA-provided lookup file(s)
- Default values for State-specific lookup file(s)
- Electronic versions of manuals, guides, etc.
- If there is more than one data template included in the installation package, the user will select one.

3.3 Manage Settings



3.3.1 Select data template

- The user is able to view a list of all installed data templates and select the one to be the default when creating new Entries or Submissions.

3.3.2 Update IAEA-provided lookup lists

- These values match data specified in the Lookup section of the data model. Update data will be imported from a file provided by the IAEA.

3.3.3 Manage State-specific lookup data

- These values match data specified in the Lookup section of the data model.

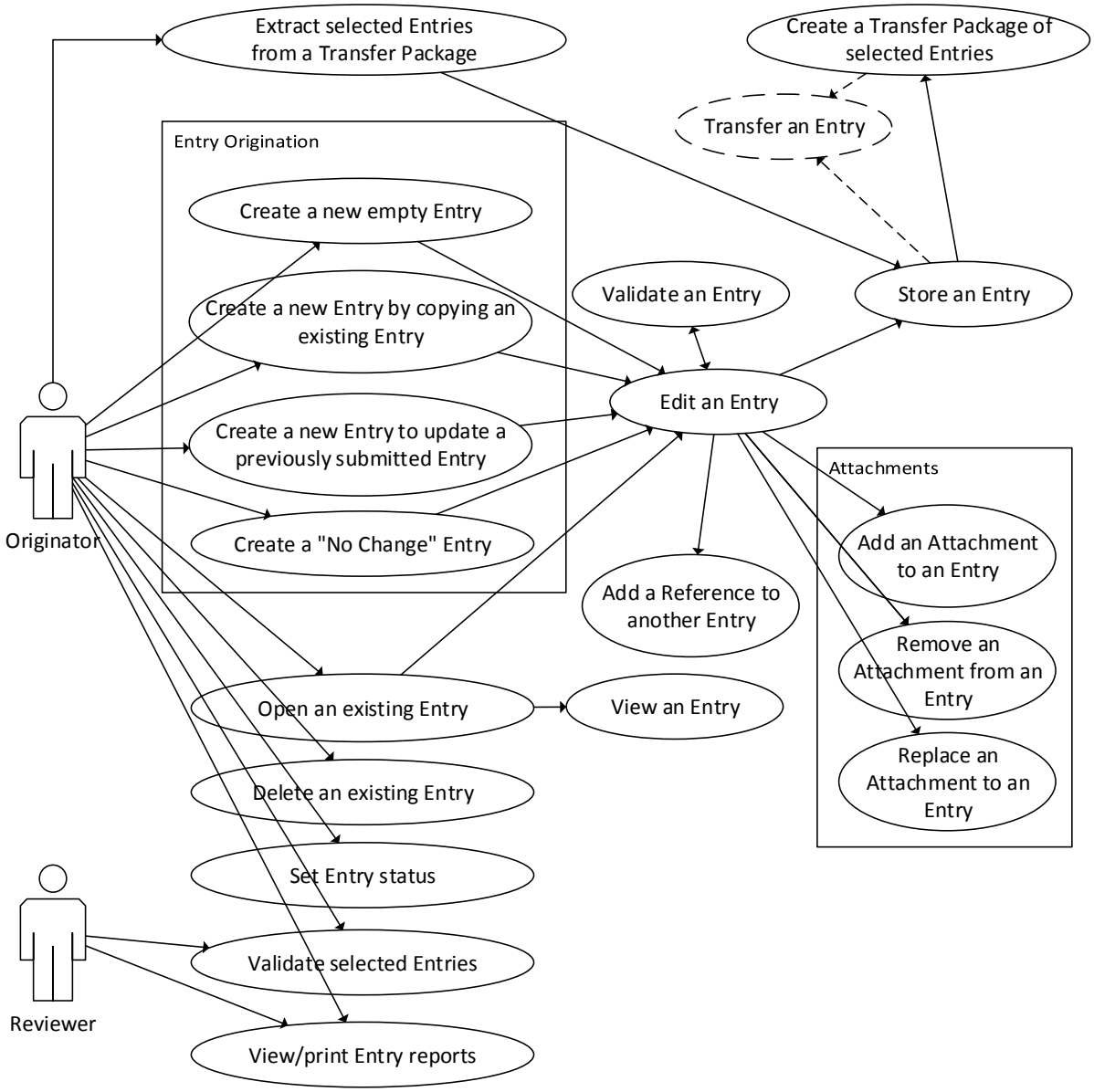
3.3.4 Edit configuration settings

- Examples: default data directory, network/proxy server settings

3.3.5 View or print system settings reports

- A user may view a report that shows all installed data template(s), lookup list data, and lookup data.

3.4 Manage Entries



3.4.1 Create a new empty Entry

- Applies to: Contributor Originator or SRA Originator
- The user selects the Article for the new Entry.

3.4.2 Create a new Entry by copying an existing Entry

- Applies to: Contributor Originator or SRA Originator
- Data used to uniquely identify the source Entry (which will be different for the new Entry) will not be copied.

3.4.3 Create a new Entry to update a previously submitted Entry

- Applies to: Contributor Originator or SRA Originator
- A reference to the source Entry will be added to the new Entry.

- Data used to uniquely identify the source Entry (which will be different for the new Entry) will not be copied.

3.4.4 Create a "No Change" Entry

- Applies to: Contributor Originator or SRA Originator
- The user refers to or selects a valid Entry to update (the source Entry), if available.
- A reference to the source Entry will be added to the new Entry.
- If available, data will be copied from the source Entry to the new Entry. Specific fields used to uniquely identify the source Entry (which will be different for the new Entry) will not be copied.
- Undeclarable fields such as comments may be changed, but declarable fields will not be editable.

3.4.5 Open an existing Entry

- Applies to: Contributor Originator or SRA Originator
- Read-only Entries will be opened for viewing rather than editing.

3.4.6 Delete an existing Entry

- Applies to: Contributor Originator or SRA Originator
- If the system contains a file manager, the user may delete an Entry file from the file manager.
- The system will warn the user prior to deletion if other Entries contain references to the Entry to be deleted.
- The user may delete an Entry file through Windows Explorer.

3.4.7 Set Entry status

- Applies to: Contributor Originator or SRA Originator
- The user may set the current status of an Entry.
- Some statuses will make the Entry read only.

3.4.8 Validate selected Entries or validate an open Entry

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, or SRA Reviewer
- The user may execute validation as desired.
- Validation at this stage is a user feedback mechanism, not a constraint, and will not restrict any action.

3.4.9 View or print Entry Reports

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, or SRA Reviewer
- The user may select one or more Entries (either as individual files, part of a Declaration, or part of a Submission) and view details in a printable format.

3.4.10 Edit an Entry

- Applies to: Contributor Originator or SRA Originator
- All undeclarable and declarable data can be edited; however, the Entry's Article or associated data template cannot be changed.

3.4.11 Add a Reference to another Entry

- Applies to: Contributor Originator or SRA Originator
- The reference could indicate an update or complementary information.
- If the referenced Entry is available, the user selects it from a pick list.
- If the referenced Entry is not available, the user enters the declaration number, entry number, and (if necessary) state.
- References will be automatically resolved whenever Submissions are numbered.

3.4.12 View an Entry

- Applies to: Contributor Originator or SRA Originator
- This action will be used for Entries that are read only.
- The user cannot change the Entry data.

3.4.13 Add an Attachment to an Entry

- Applies to: Contributor Originator or SRA Originator
- The user must either select a file or enter the title of a printed document being referenced.

3.4.14 Remove an Attachment from an Entry

- Applies to: Contributor Originator or SRA Originator
- A selected attachment is removed from the Entry.

3.4.15 Replace an Attachment to an Entry

- Applies to: Contributor Originator or SRA Originator
- The user must either select a new file (or a new version of the file) or change the title of the printed document being referenced.

3.4.16 Store an Entry

- Applies to: Contributor Originator or SRA Originator
- Validation errors or warnings will not prevent the user from storing an Entry.

3.4.17 Transfer an Entry

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, or SRA Reviewer
- Entries stored as individual files can be transferred among system users and opened per "Open an existing entry" without further processing.
- The system will not enforce or provide a method for transfer. States and sites can decide how they will transfer saved Entries internally (network file share, email, web-based collaboration software such as SharePoint, etc.).

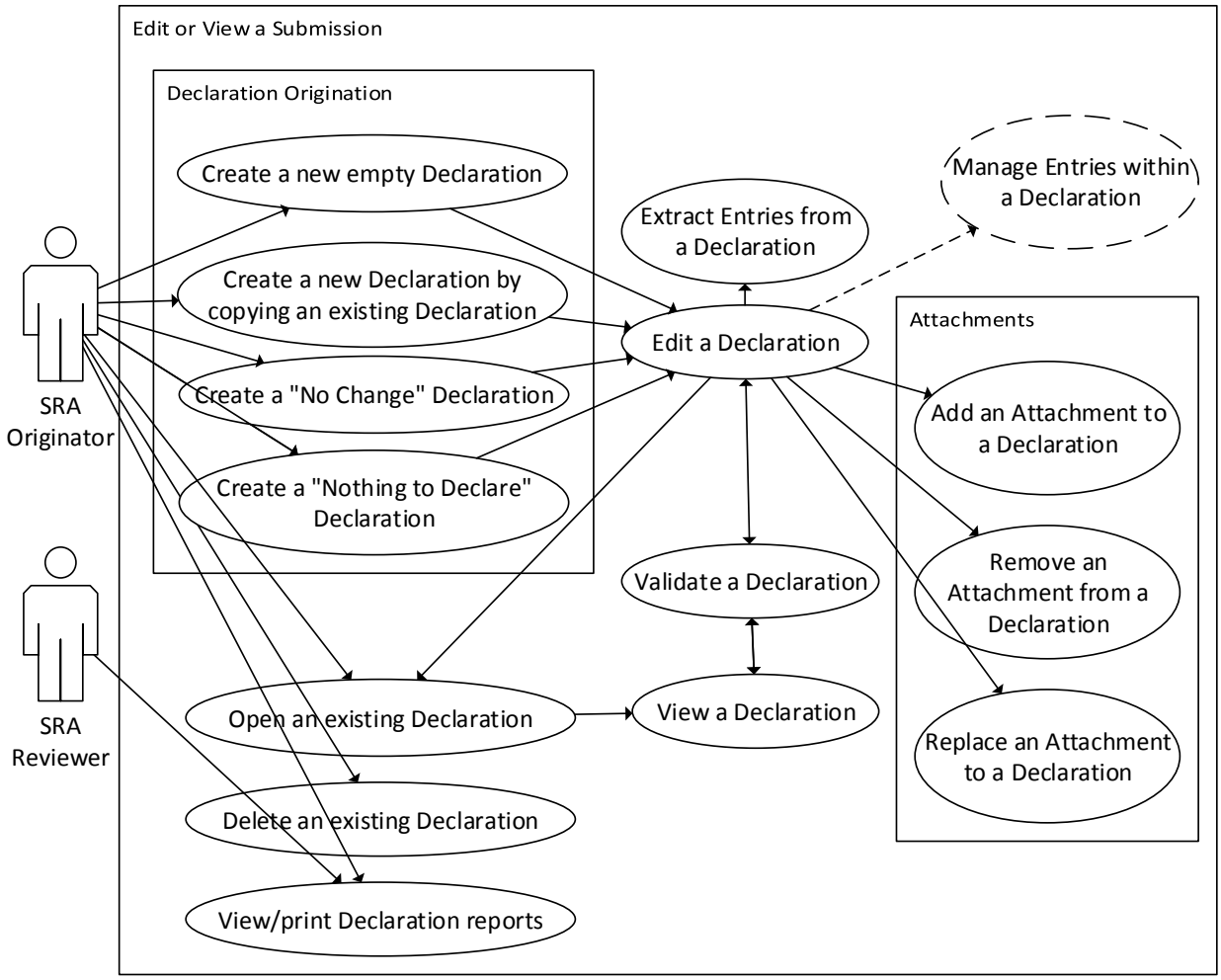
3.4.18 Create a Transfer Package of selected Entries

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, SRA Reviewer
- The user can employ an enhanced Entry management interface to select and locally store a collection of Entries that can then be transferred among system users.
- The system will not enforce a method for transfer. States and sites can decide how they will transfer saved Entries internally (network file share, email, web-based collaboration software such as SharePoint, etc.).

3.4.19 Extract selected Entries from a Transfer Package

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, SRA Reviewer
- A user can extract Entries from a Transfer Package directly in the system and manage them as they would in the case of locally created entries.

3.5 Manage Declarations



3.5.1 Create a new empty Declaration

- Applies to: SRA Originator
- The user selects the Article for the new Declaration from on the list of Articles allowed for the Submission.

3.5.2 Create a new Declaration by copying an existing Declaration

- Applies to: SRA Originator
- The source Declaration type must be valid for the Submission containing the new Declaration.
- Entries contained by the Declaration will also be copied.

- Data used to uniquely identify the source Declaration and its Entries (which will be different for the new Declaration) will not be copied.

3.5.3 Create a "No Change" Declaration

- Applies to: SRA Originator
- The source Declaration type must be valid for the Submission containing the new Declaration.
- No Entries will be copied.
- Data used to uniquely identify the source Declaration and its Entries (which will be different for the new Declaration) will not be copied.

3.5.4 Create a "Nothing to Declare" Declaration

- Applies to: SRA Originator
- The user selects the Article for the new Declaration from the list of Articles allowed for the Submission.
- Entries may not be added to a Nothing to Declare Declaration.

3.5.5 Open an existing Declaration

- Applies to: SRA Originator
- Read-only Declarations will be opened for viewing rather than editing.

3.5.6 Delete an existing Declaration

- Applies to: SRA Originator
- The user will be warned regarding references to Entries contained by this Declaration within other Entries prior to deletion.

3.5.7 View and print Declaration reports

- Applies to: SRA Originator or SRA Reviewer
- The user may select one or more Declarations and view details in a printable format.
- Some reports will contain full details of the Entries contained by Declarations.

3.5.8 Edit a Declaration

- Applies to: SRA Originator
- All undeclarable and declarable data can be edited; however, the Declaration's Article or associated data template cannot be changed.
- Changes to the Declaration will be stored when the Submission containing it is stored.

3.5.9 Validate an open Declaration

- Applies to: SRA Originator or SRA Reviewer
- The user may execute validation as desired.
- Validation at this stage is a user feedback mechanism, not a constraint, and will not restrict any action.
- Both the Declaration and the Entries it contains will be validated by this action.

3.5.10 View a Declaration

- Applies to: SRA Originator
- This action will be used for Declarations that are read only.

- The user cannot change any Declaration or Entry data.

3.5.11 Extract Entries from a Declaration

- Applies to: SRA Originator
- Entries contained in a Declaration can be copied out of the Declaration as independent Entries, or pasted into another Declaration for the same article.

3.5.12 Add an Attachment to a Declaration

- Applies to: SRA Originator
- The user must either select a file or enter the title of a printed document being referenced.

3.5.13 Remove an Attachment from a Declaration

- Applies to: SRA Originator
- A selected attachment is removed from the collection.

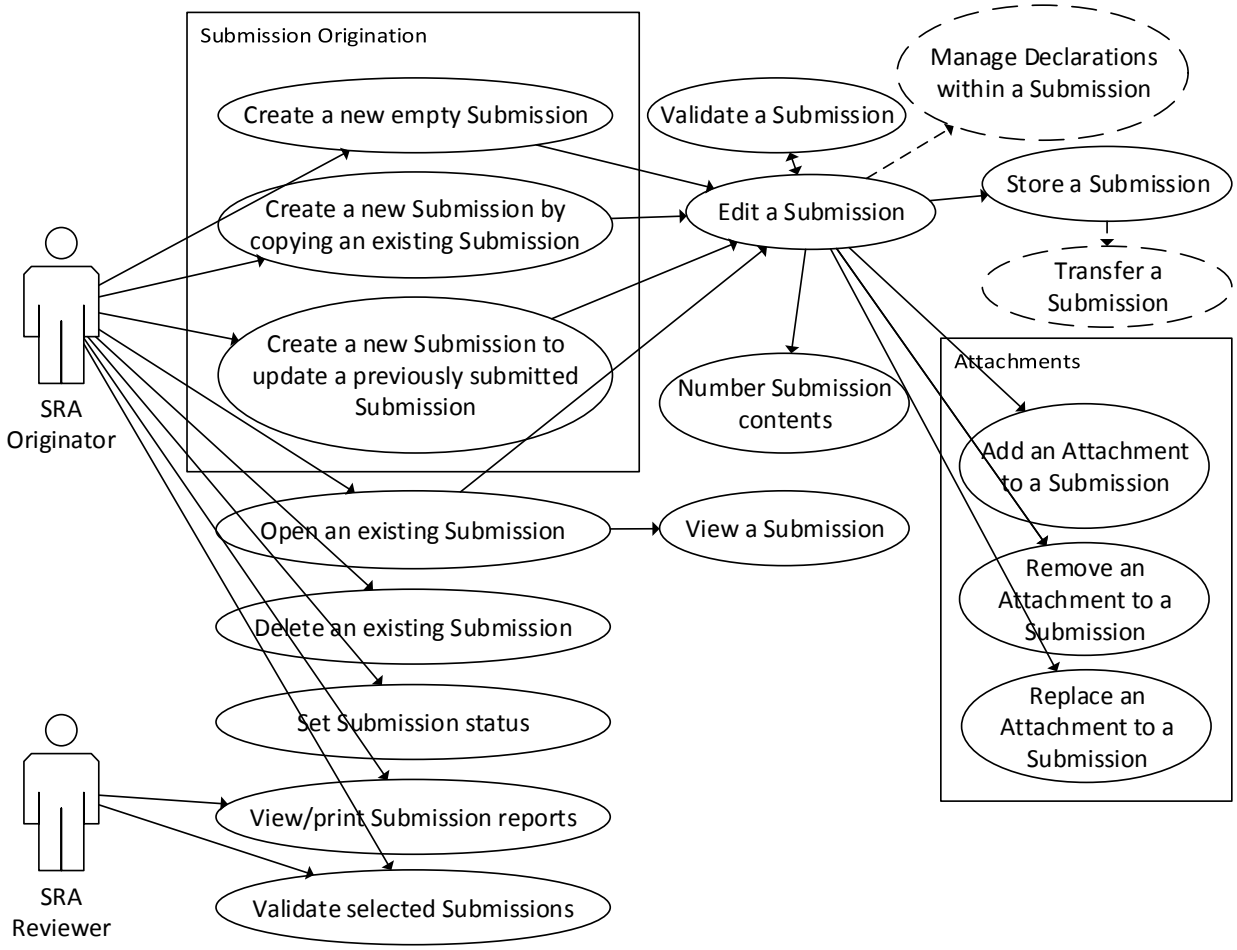
3.5.14 Replace an Attachment to a Declaration

- Applies to: SRA Originator
- The user must either select a new file (or a new version of the file) or change the title of the printed document being referenced.

3.5.15 Manage Entries within a Declaration

- Applies to: SRA Originator
- All operations that can be performed on Entries that exist independently can be performed on Entries contained in a Declaration. (However, some of these operations may be implemented slightly differently.)
- Entries within a Declaration are only editable if the Submission containing them is editable.
- The user will be able to perform all functions under Section 3.4, Manage Entries, for all Entries contained in a Declaration.
- The status of Entries within a Declaration is limited by that Declaration's status. For example, if the Declaration is read only, all of its contents will be read only.

3.6 Manage Submissions



3.6.1 Create a new empty Submission

- Applies to: SRA Originator
- The user selects the Submission type.

3.6.2 Create a new Submission by copying an existing Submission

- Applies to: SRA Originator
- Declarations and Entries in the source Submission will also be copied.
- Data used to uniquely identify the source Submission and its Declarations and Entries (which will be different for the new Submission) will not be copied.

3.6.3 Create a new Submission to update a previously submitted Submission

- Applies to: SRA Originator
- Declarations and their Entries in the source Submission that are eligible for update will also be copied.
- A reference to the corresponding Entry in the source Submission will be added to each new update Entry as necessary.
- Data used to uniquely identify the source Submission, its Declarations, and their Entries (which will be different for the new Declaration) will not be copied.

3.6.4 Open an existing Submission

- Applies to: SRA Originator
- Read-only Submissions will be opened for viewing rather than editing.

3.6.5 Delete an existing Submission

- Applies to: SRA Originator
- The user will be warned regarding references to Entries contained by Declarations in this Submission within other Entries prior to deletion.

3.6.6 Set Submission status

- Applies to: SRA Originator
- The user may set the current status of a Submission.
- Some statuses will make the Submission read only.

3.6.7 View and print Submission Reports

- Applies to: SRA Originator or SRA Reviewer
- The user may select one or more Submissions and view details in a printable format.
- Some reports will contain full details of the Declarations and Entries in the Submission.

3.6.8 Validate selected Submission or validate an open Submission

- Applies to: SRA Originator or SRA Reviewer
- The user may execute validation as desired.
- Validation at this stage is a user feedback mechanism, not a constraint, and will not restrict any action.
- The Submission and its Declarations and Entries will all be validated as part of this action.

3.6.9 Edit a Submission

- Applies to: SRA Originator
- All undeclarable and declarable data can be edited; however, the Submission's type or associated data template cannot be changed.

3.6.10 Number Submission contents

- Applies to: SRA Originator
- The Declarations and Entries in a Submission will be numbered, either automatically (sequentially, with no gaps) or explicitly.
- The first Declaration number and Entry number used in automatic numbering may be specified for each Submission.
- Numbering must occur before submission to IAEA.
- After numbering or renumbering, references will be resolved and updated accordingly.

3.6.11 View a Submission

- Applies to: SRA Originator
- This action will be used for Submissions that are read only.
- The user cannot change any Submission, Declaration, or Entry data.

3.6.12 Add an Attachment to a Submission

- Applies to: SRA Originator
- The user must either select a file or enter the title of a printed document being referenced.

3.6.13 Remove an Attachment to a Submission

- Applies to: SRA Originator
- A selected attachment is removed from the collection.

3.6.14 Replace an Attachment to a Submission

- Applies to: SRA Originator
- The user must either select a new file (or a new version of the file) or change the title of the printed document being referenced.

3.6.15 Manage Declarations within a Submission

- Applies to: SRA Originator
- The user will be able to perform all functions under Section 3.5, Manage Declarations, for all Declarations contained in a Submission.
- The statuses of Declarations or Entries within a Submission are limited by that Submission's status. For example, if the Submission is read only, all of its contents will be read only.

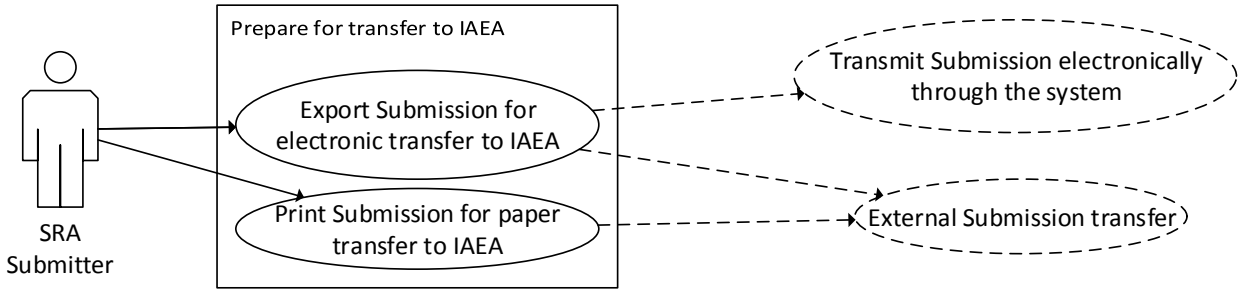
3.6.16 Store a Submission

- Applies to: SRA Originator
- Validation errors or warnings will not prevent the user from storing a Submission.

3.6.17 Transfer a Submission

- Applies to: SRA Originator, SRA Submitter
- Submissions stored as individual files can be transferred among system users and opened per "Open an existing Submission" without any further processing.
- The system does not enforce a method for transfer. States and sites can decide how they will transfer saved data internally (network file share, email, web-based collaboration software such as SharePoint, etc.).

3.7 Transfer Submissions to the IAEA



3.7.1 Export Submission for electronic transfer to IAEA

- Applies to: SRA Submitter
- Validation will be automatically triggered prior to exporting. If the Submission is not complete, appropriate warnings will be shown but will not prevent the user from exporting.
- Only declarable information will be included in the exported file. Undeclarable data entered for State use only will not be included.
- The Submission being exported will have its status changed to "prepared for submission", and will become read only.

3.7.2 Print Submission for paper transfer to IAEA

- Applies to: SRA Submitter
- Validation will be automatically triggered prior to printing. If the Submission is not complete, appropriate warnings will be shown but will not prevent the user from printing.
- The printed Submission will match format and submission guidelines.
- Only declarable information will be included in the report. Undeclarable data entered for State use only will not be included.
- The Submission being printed will have its status changed to "prepared for submission", and will become read only.

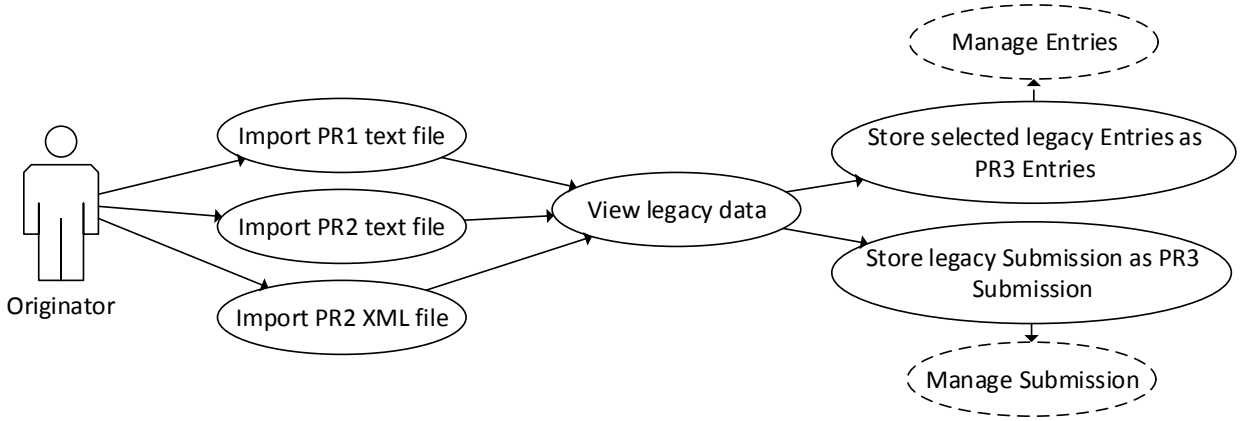
3.7.3 Transfer Submission electronically through the system

- Applies to: SRA Submitter
- A possible use case; not required. This would require cooperation between developers of the PR3 and developers of the IAEA's internal AP system.
- This could be a separate application from the system.
- The user must provide credentials before upload is allowed.
- IAEA's receiving system would immediately report the success or failure of reading, validating, and importing the file.
- The export format would be the same as that produced by "Export Submission for electronic transfer to IAEA," discussed in Section 3.7.1.
- The system would update the status of the Submission based on the response.
- This function should employ appropriate error-checking and security techniques based on requirements to be defined.

3.7.4 External transfer process

- Applies to: SRA Submitter
- A State may transfer its exported or printed Submission to the IAEA outside the system (courier, email, hard copy, disk, flash drive, file upload, etc.).
- This process cannot be tracked by the system.
- Other software or manual processes at the IAEA will be necessary to report the success or failure of reading, validating, and importing the file into the IAEA's internal system to the State.
- The State is responsible for following up if necessary.

3.8 Manage Legacy Data



3.8.1 Import data from a PR1 text file, PR2 text file, or PR2 XML file

- Applies to: Contributor Originator or SRA Originator
- Loads data from PR1 or PR2 format, based on the current data template.
- Submission data to be imported must be in a valid format that matches an installed data template.

3.8.2 View legacy data

- Applies to: Contributor Originator or SRA Originator
- Displays the loaded PR1 or PR2 file in the legacy format (with fields as they existed in the earlier version).
- Legacy data is read only.

3.8.3 Store selected legacy Entries as PR3 Entries

- Applies to: Contributor Originator or SRA Originator
- Imports selected Entries from the legacy Submission in the current format, based on the selected data template.
- Two purposes:
- Allows users to import data initially created in the PR1 or PR2.
- Allows a State's previous submissions to be used for validating references in the system.
- Where the system uses a more granular structure than previous PR versions:
    - The PR3 Entry will be incomplete.

- Combined fields will be stored into general description or declarable comments fields (depending on the Entry Article).
- A user must manually copy and paste data from the legacy Entries into the PR3's structure to meet validation requirements if it is to be submitted later.

3.8.4 Store a legacy submission as a PR3 Submission

- Applies to: SRA Originator
- Saves the legacy data in the current format, based on the selected data template.
- Two purposes:
  - Allows users to enter data initially created in the PR1 or PR2.
  - Allows a State's previous submissions to be used for validating references in the system.
- Where the system uses a more granular structure than previous PR versions:
  - The PR3 Submission will be incomplete.
  - Combined fields will be stored into general description or declarable comments fields (depending on the Entry Article).
  - A user must manually copy and paste data from the legacy Submission into the PR3's structure to meet validation requirements if it is to be submitted later.

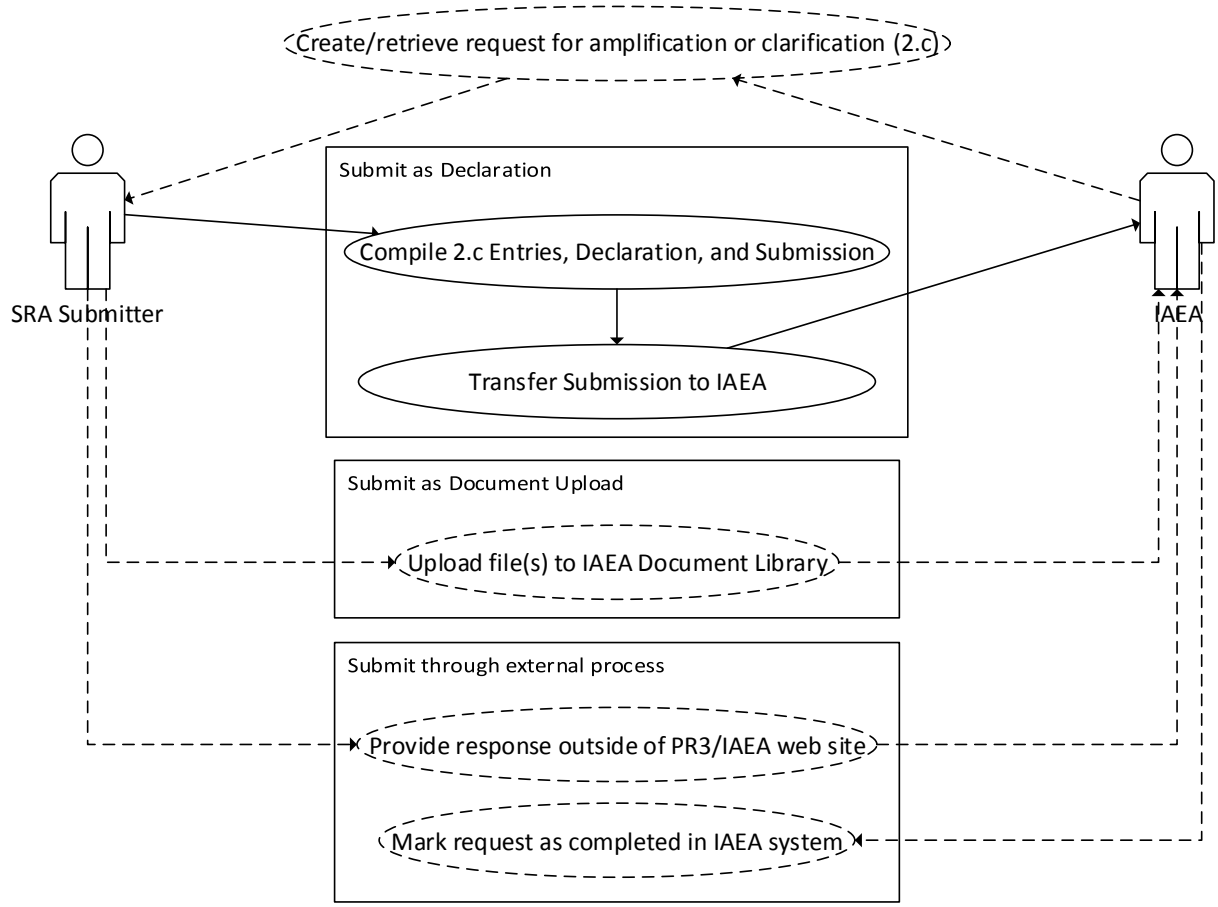
3.8.5 Manage Entries

- Applies to: Contributor Originator, Contributor Reviewer, SRA Originator, or SRA Reviewer
- PR3 Entries created from legacy data can be managed just like independent Entries created in the system.

3.8.6 Manage Submissions

- Applies to: SRA Originator or SRA Reviewer
- A PR3 Submission created from legacy data can be managed just like a Submission created in the system.
- Declarations or Entries in the imported Submission can be extracted into individual Declarations and Entries, and transferred to other users, either at sites or the SRA.

3.9 Respond to IAEA Requests



3.9.1 Create or retrieve request for amplification or clarification

- Applies to: IAEA and SRA Submitter
- The IAEA requests additional information from the State per Model AP article 2.c (or equivalent article in a State-specific AP).

3.9.2 Compile 2.c Entries, Declaration, and Submission

- Applies to: SRA Submitter
- If the request is received as a file in a standard format, the system may be able to automatically generate 2.c Entries or Submissions to be filled in.
- A Submission containing 2.c Declarations and Entries should be created as described in other use cases.

3.9.3 Transfer Submission to IAEA

- Applies to: SRA Submitter
- A Submission containing 2.c Declarations can be exported and submitted to IAEA as described in other use cases.

3.9.4 Upload file(s) to IAEA Document Library

- Applies to: SRA Submitter

- A possible use case; the IAEA may provide a web site to serve as a portal to a document repository so States can upload files directly rather than submit responses through the PR3.
- This option would only be available for requests under article 2.c. Responses to Article 2.a.(ii) requests must still be submitted as Declarations.

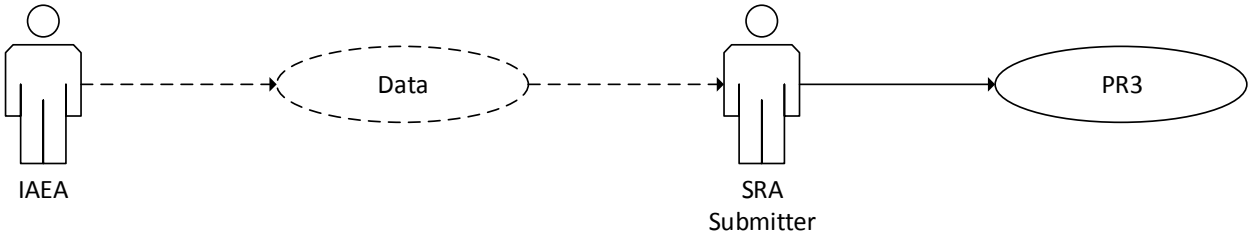
3.9.5 Provide response outside of the system or IAEA website

- Applies to: SRA Submitter, IAEA
- A State should be able to respond to an Agency request without using an IAEA-provided web site or a Submission.
- This option would only be available for requests under article 2.c. Responses to Article 2.a.(ii) requests must still be submitted as Declarations.

3.9.6 Mark request as completed in IAEA system

- Applies to: IAEA
- If a State responds to an Agency request outside of an IAEA-provided web site or a Submission, the IAEA should have a way to mark the request as completed within its system.

3.10 Receive Data from the IAEA



3.10.1 IAEA provides data/SRA Submitter receives data

- Applies to: IAEA and SRA Submitter
- A possible use case; not required. This would require cooperation between developers of the PR3 and developers of the IAEA's internal AP system.
- Data could be downloaded into the system directly or could be received via external means. The latter would require the SRA to enter the data into the system, if necessary.
- The IAEA could allow States to retrieve:
  - Responses to Submissions with any feedback, identification, or notes added by the IAEA
  - Requests for additional information from the IAEA (i.e., Article 2.c)
  - Lists of declarations and entries currently on file and expected to be updated
  - Previously submitted State Submissions

3.10.2 Import or open received data in the PR3

- Applies to: Contributor Originator or SRA Originator
- The actions available in the system will be developed based on the type of data that may be provided by the IAEA.

4.0 Requirements

This section describes detail requirements of the PR3.

The requirement tables include several items of information concerning each individual requirement:

- The requirement identifier
- The actual text of the requirement
- The test method to be used for the requirement

A valid requirement identifier is of the format *aa-nnn,* where *aa* signifies the topical area (such as "OE" for Operational Environment) and *nnn* is a number unique to the given topical area. The requirement number will stay with the requirement for the life of the project to ensure proper traceability.

In regards to Test Method, the following are used.

- Interview (I): The testing process includes an interview of someone (e.g., an authenticated user, system administrator, cyber security officer, system owner, etc.) to confirm that part or the entire requirement has been implemented.
- Observation (O): The testing process includes observing an operation (e.g., system accepts/rejects the data, user initiates help, etc.) to confirm that part or the entire requirement has been implemented.
- Technical Testing (T): The testing process includes technically testing an operation (e.g., upload/download of data, the system generates correct reports, etc.) to confirm that part or the entire requirement has been implemented.
- Documentation (D): The testing process includes verifying that documentation exists and includes the required information (e.g., data management procedures are in place, user/administrators guidance is available, etc.) to confirm that part or the entire requirement has been implemented.

The SRS is a living document that evolves with the project. Additions and modifications will occur as significant new functionality is identified or substantive changes are required.

4.1 System Requirements

4.1.1 Operational Environment (OE)

Reqmt-ID	Requirement	Test Method
OE-001	The system shall be able to operate on a single Windows-based computer.	T
OE-002	The system shall be capable of running on either 32-bit or 64-bit computing platforms.	T
OE-003	The system shall be capable of running under Microsoft Windows XP operating system and later versions of Windows through Windows 8.1.	T
OE-004	Installation and operation of the system shall not require additional software or special environments that lead to the need for supplementary software licenses.	T
OE-005	Human-readable source code for the system shall be available to the State.	O,D

4.1.2 System Configuration (SC)

Reqmt-ID	Requirement	Test Method
SC-001	The system and all associated components (including help files) shall be written in the English language.	O
SC-002	At a minimum, the system shall support a single-user stand-alone installation with no network connection.	T
SC-003	The system shall not require user authentication to operate. This requirement does not apply to any function that electronically transmits or receives Submission data from Agency systems.	T
SC-004	Installation and use of the system shall not require reconfiguration (i.e., changing the default date format) of the target computer.	T
SC-005	The system shall be built such that it can be translated into different languages.	T

4.1.3 System Architecture (SA)

Reqmt-ID	Requirement	Test Method
SA-001	The system's web components (if any) shall operate on computers running appropriate popular browsers with a secure transmission protocol.	T
SA-002	The system shall support two user levels of Entry and Submission development:	O,T
SA-002.1	- Entry preparation by Contributors (for example, at the operator or site level).	O,T
SA-002.2	- Submission preparation at the SRA level.	O,T

Reqmt-ID	Requirement	Test Method
SA-003	The system shall be able to accommodate and apply different data structures for different states in accordance with the requirements of their specific AP agreements.	T
SA-003.1	- Model Additional Protocol	T
SA-003.2	- United Kingdom	T
SA-003.3	- France	T
SA-003.4	- People's Republic of China	T
SA-003.5	- Russia	T
SA-003.6	- Other TBD structures based upon future Agency agreements.	T
SA-004	The system shall allow the user to select which data template the system will use when creating Entries, Declarations, and Submissions.	T
SA-005	The system shall not require installation of a separate database server.	O,T

4.2 Data Requirements

4.2.1 Declarable Data (DD)

Declarable Data is any data that will be provided to the IAEA via the system as part of or in connection with a submission.

Reqmt-ID	Requirement	Test Method
DD-001	The system shall support the creation and management of information that meets the requirements set forth in Article 2 and Article 3 of the AP with file attachments.	O,T
DD-002	A valid Entry is a collection of specific information in a format that meets the requirements of the AP article to which the Entry applies. The required data structure for each type of Entry is listed in Appendix C of this document.	T
DD-003	An Entry can exist independently, without a relationship or reference to any Declaration or Submission.	T
DD-004	A Declaration consists of header information and a collection of zero or more entries that apply to a specific AP article, in a format that meets the requirements of that article. The required data structure for each type of Declaration is listed in Appendix C.	T

Reqmt-ID	Requirement	Test Method
DD-005	A valid Declaration is one that contains all required header information (as defined in Appendix C) and contains one and only one of the following. - An affirmative indication that it is a "No Change" declaration, indicating that the information provided in the previously submitted active declaration for the corresponding article still stands, or - An affirmative indication that there is "Nothing to Declare" for the associated article, or - A collection or list of one or more valid Entries for the associated article.	T
DD-006	A Submission is a collection of one or more Declarations that apply to a specific Submission Type as defined in AP Article 3, along with header information in a format that meets the requirements of that Submission Type. The required data structure for each type of Submission is listed in Appendix C of this document.	T
DD-007	A Submission can exist independently, without a relationship to or "knowledge" of any Declaration or Entry.	T
DD-008	Submission content is identified in terms of Article 3 of the *Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards*. For example, 3.a type Submission will expect only Declarations identified under Article 3.a and Notes. A detailed description is provided in Appendix C of this document.	O,T
DD-009	A valid Submission contains all required header information (as defined in Appendix C) and contains a collection of one or more Declarations that meet the requirements of Article 3 for that Submission Type.	O,T
DD-010	Unless prescribed otherwise by a Submission template, Declaration content is identified in terms of Article 2 of the *Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards*. This includes Article 2.c. A detailed description is provided in Appendix C of this document.	O,T
DD-011	The system shall be capable of tracking Article 2.c support files, such as letters, maps, and copies of correspondence (see File Attachments for related requirements).	T
DD-012	Data entry fields shall be displayed in such a way as to easily distinguish between declarable data fields that will be submitted to the IAEA, and undeclarable data fields that will not be submitted to the IAEA and is reserved for State use.	O

4.2.2 Undeclarable Data (UD)

Undeclarable Data is information that will not be submitted to the IAEA via the system as part of or in connection with a Submission.

Reqmt-ID	Requirement	Test Method
UD-001	The system shall generate an internal unique identifier for each Entry, Declaration, and Submission.	T
UD-002	The system shall allow status information to be tracked for Entry, Declaration, and Submission (see Entry and Submission Status section for related requirements).	O,T
UD-003	The system shall support the entry of undeclarable data at the Submission level. These undeclarable data are for use by State authorities and are not included in the submission to the IAEA. A detailed description is provided in Appendix C of this document.	O,T
UD-004	The system shall support the entry of undeclarable data at the Declaration level. These undeclarable data are for use by State authorities and are not included in the submission to the IAEA. A detailed description is provided in Appendix C of this document.	O,T
UD-005	The system shall support the entry of undeclarable data at the Entry level. These undeclarable data are for use by State authorities and are not included in the Submission to the IAEA. A detailed description is provided in Appendix C of this document.	O,T

4.2.3 Lookup Data (LD)

This can include any fixed lookup data in the lookup file provided by the IAEA, as well as any lookup data created within the State. The latter may include fields such as Contributor.

Reqmt-ID	Requirement	Test Method
LD-001	The system shall load lookup files containing choices for enumerated fields provided by both the IAEA and the State.	O,T
LD-002	The system shall allow the user to manually update lookup tables not provided by the IAEA.	O,T
LD-003	The system shall allow the user to export State-maintained lookup tables to a file that can be loaded into another instance of the system.	O,T
LD-004	A user shall be able to merge State-maintained lookup data from a file with existing local lookup data.	O,T
LD-005	The system shall allow users to view the contents of lookup files and relevant revision information.	O

4.3 Process Requirements

4.3.1 Entry and Submission Statuses (ES)

Reqmt-ID	Requirement	Test Method
ES-001	Entries shall have a Status field representing their current state in the declaration development process.	O,T
ES-002	Submissions shall have a Status field representing their current state in the declaration development process.	O,T
ES-003	There shall be at least two categories of statuses:	O
ES-003.1	- Statuses representing in-development declaration data, which are fully editable.	O
ES-003.2	- Statuses representing completed or submitted declaration data, which are read only.	O
ES-004	Users may change the status of an Entry or Submission, since the purpose of the status field is for users to track their own progress.	O,T
ES-004.1	- Validation or other process requirements shall not restrict status changes.	O,T
ES-004.2	- Status may be changed automatically by certain actions within the system.	O,T
ES-004.3	- If a Submission has a completed or submitted status, its Entries must also be completed or submitted.	O,T

4.3.2 Manage Submissions (MS)

Reqmt-ID	Requirement	Test Method
MS-001	The system shall provide the capability to create a new Submission. Submission contents and properties are described in Appendix C of this document.	O,T
MS-002	The system shall provide the capability to create a new Submission by copying an existing Submission.	O,T
MS-003	The user shall be able to manage Declarations as part of a Submission (see Manage Declarations for related requirements).	O,T
MS-004	The system shall provide the capability to import a Submission (see Import/Export for related requirements) from legacy formats.	T
MS-005	The system shall provide the capability to edit the properties of a Submission.	O,T
MS-006	The system shall provide a warning to the user before deleting a Submission.	O,T

Reqmt-ID	Requirement	Test Method
MS-007	The system shall be capable of exporting a Submission to a format that can be submitted to the IAEA (see Import/Export and Quality Control for related requirements).	T
MS-008	The system shall allow a Submission to be created based on the previous Submission, with the possibility to denote each declaration as “Update” or “No Change.”	O,T
MS-009	When creating a new Submission to update a previous Submission, the default reporting period dates shall be generated automatically.	O,T

4.3.3 Manage Declarations (MD)

Reqmt-ID	Requirement	Test Method
MD-001	The system shall provide the capability to create a Declaration. Declaration contents and properties are described in Appendix C of this document.	O,T
MD-002	The system shall allow a Declaration to be created based on a previous Declaration, with the possibility to denote it as “No Change,” or its Entries as “Update.”	O,T
MD-003	The user shall be able to manage Entries as part of a Declaration (see Manage Entries for related requirements).	O,T
MD-004	A user shall be able to add existing Entries for a given Article to a Declaration for the same Article.	O,T
MD-005	The user shall be able to extract Entries from a Declaration, either to save independently or insert into another Declaration.	O,T
MD-006	A Declaration shall not be considered valid unless it includes at least one Entry for the associated Article or is marked as either “No Change” or “Nothing to Declare.”	T
MD-007	A Declaration marked as “No Change” or “Nothing to Declare” shall not contain Entries.	T
MD-008	The system shall provide the capability of entering Declaration data as described in Appendix C of this document.	O,T
MD-009	The system shall provide the capability to edit an existing Declaration.	O,T
MD-010	The system shall provide the capability to delete a Declaration.	O,T
MD-011	Where practical, the system shall use structured fields in place of general text fields that cannot be easily validated.	O,T
MD-012	The system shall provide the capability of attaching any number of files to a Declaration (see File Attachments for related requirements).	O,T

Reqmt-ID	Requirement	Test Method
MD-013	Where practical, the layout of the primary Declaration view shall resemble that depicted in *Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements (May 2004).*	O
MD-013.1	- The system shall provide the capability of displaying sorted Entries within a Declaration by Entry number or by another column selected by the user.	O
MD-014	The system shall provide methods for validating a Declaration for correctness and completeness, and the user shall be able to execute validation when editing or viewing a Declaration.	O,T
MD-015	The process of validating a Declaration shall also validate its Entries.	O,T
MD-016	To avoid re-entry of the same data, the system shall automatically generate default reporting period and "as-of" dates where practical.	O,T
MD-017	Default reporting periods and "as-of" dates should be easily changeable by the user.	O,T
MD-018	If there are multiple Declarations in an Initial Submission or the first update for a given Article, then those Declarations may have different "as-of" dates.	T

4.3.4 Manage Entries (ME)

Reqmt-ID	Requirement	Test Method
ME-001	The system shall provide the capability to create Entries. Entry data structure is described in Appendix C of this document.	O,T
ME-002	The system shall provide the capability to create a new Entry by copying an existing Entry.	O,T
ME-003	The system shall allow the user to include any number of Entries in a Declaration.	O,T
ME-004	The system shall provide the capability to edit an existing Entry.	O,T
ME-005	The system shall provide the capability to edit a previously submitted Entry by changing the status of the Entry (or the Submission containing it) to one that allows editing.	O,T
ME-006	The system shall allow an Entry to be created based on a previous Entry, with the possibility to denote it as "Update" or "No Change."	O,T
ME-006.1	- The system shall display a warning before allowing the user to create an Update Entry for a previously submitted Final Entry.	O,T
ME-007	The system shall provide the capability to delete an Entry.	O,T

Reqmt-ID	Requirement	Test Method
ME-008	The system shall provide the capability of displaying Entries sorted by a column selected by the user.	O,T
ME-009	Where practical, the system shall use structured fields in place of general text fields that cannot be easily validated.	O,T
ME-010	The system shall provide the capability of attaching any number of files to an Entry (see File Attachments for related requirements).	O,T
ME-011	The system shall provide the same functions for managing an Entry whether or not it is part of a Declaration.	O,T
ME-012	The system shall provide methods for validating an Entry for correctness and completeness, and the user shall be able to execute validation when editing or viewing an Entry.	O,T
ME-013	It shall be possible to transfer Entries to other users.	T
ME-014	If Entries are not stored in individual files by default, it shall be possible to export and import them to and from the file system.	T
ME-015	The system shall allow input of multiple fuel cycle stages for Article 2.a.(i), 2.a.(x), and 2.b.(i) Entries.	O,T
ME-016	For Article 2.a.(ix) Entries, the system shall allow only the year or only the year and month to be entered in case the exact export date is not available.	T

4.3.5 Declaration and Entry Numbering (DN)

Reqmt-ID	Requirement	Test Method
DN-001	By default, the first declaration created in the system shall be numbered "1". Subsequent declarations shall be numbered sequentially within each submission and shall continue sequentially from one submission to the next.	O,T
DN-002	By default, the system shall automatically renumber Declarations as they are added to, removed from, or re-ordered within a Submission to achieve sequential numbering with no gaps.	O,T
DN-003	It shall be possible to specify the starting number for automatically numbering declarations within a submission. This may be used to specify a number other than "1" for the first Declaration in the first Submission.	O,T
DN-004	By default, the system shall automatically renumber Entries as they are added to, removed from, or re-ordered within a Declaration to achieve sequential numbering with no gaps.	O,T
DN-005	The system shall provide the capability to reserve a particular number for a particular Declaration or Entry, so that missing Declarations or Entries can be included in a later Submission, while preserving numbering.	O,T

4.3.6 Entry Cross-referencing (EC)

Reqmt-ID	Requirement	Test Method
EC-001	The system shall provide the capability for an Entry to cross-reference any number of other Entries, either within the same and/or another Submission.	O,T
EC-002	The system shall provide the capability for an Entry to cross-reference any number of Declarations within the same and/or another Submission.	O,T
EC-003	A cross-reference shall consist of the Declaration and Entry Number of the related entry.	O,T
EC-004	Within the same Submission, if Entry "A" refers to Entry "B," then Entry "B" shall automatically refer to Entry "A."	O,T
EC-005	Where applicable, the system shall perform quality check to ensure that if Entry "A" references Entry "B", Entry "B" references Entry "A" as well.	T
EC-006	The system shall support viewing the referenced Entry from the referencing Entry if the referenced Entry is available.	O,T
EC-007	It shall be possible to delete a Reference.	O,T
EC-008	If Declarations or Entries within a Submission are renumbered, all References within that Submission shall be updated to reflect the new numbers.	O,T

4.3.7 Data Entry (DE)

Reqmt-ID	Requirement	Test Method
DE-001	Data validation shall be available where practical on all entry screens (see Quality Control (QC) for related requirements).	O,T
DE-002	Data entry fields shall be displayed in such a way as to easily distinguish between which elements the IAEA considers mandatory and those considered optional.	O
DE-003	Printable output of Declarations or Submissions not intended for paper transfer to the IAEA shall include the designation, "Not valid for submission to the IAEA until certified by the State."	O
DE-004	Where appropriate (such as for authorities and addresses), the system shall provide a means for States to manage their own validation lists.	O,T
DE-005	Where data are displayed in a grid, the system shall allow the user to change the column order and width. These changes shall persist between user sessions.	O

4.3.8 Search, Filter, and Navigate (SFN)

Reqmt-ID	Requirement	Test Method
SFN-001	At a minimum, the system shall provide the capability of searching Declaration data using the following criteria:	O,T
SFN-001.1	- Declaration number	O,T
SFN-001.2	- AP Article	O,T
SFN-001.3	- Declaration date(s)	O,T
SFN-001.4	- Cross-reference	O,T
SFN-002	The system shall include the capability of performing a full-text search (including Boolean operators and wildcards) across all data that is accessible by the system.	O,T
SFN-003	It shall be possible to easily filter, navigate, and browse Declaration and Entry data throughout a Submission.	T

4.3.9 Import/Export (IE)

Reqmt-ID	Requirement	Test Method
IE-001	The system shall be capable of importing files of text-delimited Submissions as defined in Protocol Reporter 1.0 export format even if the file to be imported includes validation errors.	T
IE-002	The system shall be capable of importing files of text-delimited Submissions as defined in Protocol Reporter 2.0 export format even if the file to be imported includes validation errors.	T
IE-003	The system shall be capable of importing files of .xml Submissions as defined in Protocol Reporter 2.0 export format even if the file to be imported includes validation errors.	T
IE-004	The system must be capable of importing previously submitted Declaration data provided by the Agency in PR1, PR2, or PR3 format.	T
IE-005	By default, legacy data shall be imported in read-only format.	T
IE-006	A user may opt to convert legacy data into an editable format.	T
IE-007	The system shall notify the user and provide details if an import or export fails.	T

Reqmt-ID	Requirement	Test Method
IE-008	The system must be capable of deleting any imported data.	O,T
IE-009	The ability to import and export files shall be a standard feature of the system and not require special activation to enable.	O,T
IE-010	The system shall be capable of importing any output exported by the system.	T
IE-011	All data exported by the system shall be in human-readable format.	T
IE-012	The system shall support export in UTF-8 text format.	T
IE-013	Data shall be exported without adding to or changing its content.	T
IE-014	Where applicable, exported data shall include all attached files (see File Attachments (FA) for related requirements).	T
IE-015	Where applicable, exported Submissions shall provide dates formatted as YYYY-MM-DD.	O,T
IE-016	All data shall be validated prior to export. The user shall be notified of any errors and warnings, but may choose to continue the export.	O,T

4.3.10 File Attachments (FA)

Reqmt-ID	Requirement	Test Method
FA-001	The system shall include the capability to attach any number of files at the Submission level.	O,T
FA-002	The system shall include the capability to attach any number of files at the Declaration level.	O,T
FA-003	The system shall include the capability to attach any number of files at the Entry level.	O,T
FA-004	The system shall include the capability of removing attached files.	O,T
FA-005	The system shall enable the user to open attachments with associated applications defined in the operating system.	O,T

4.3.11 Quality Control (QC)

Reqmt-ID	Requirement	Test Method
QC-001	The system shall employ validation checks and user feedback mechanisms wherever necessary to help ensure all Entry, Declaration, and Submission data meet the format and content requirements specified in the Detail Requirements and Appendix C.	O,T
QC-002	Each validation feedback message shall be identified as an error, warning, or informational message to indicate the severity of the problem.	O
QC-003	Validation feedback shall contain sufficient detail to help the user correct the problem.	O
QC-004	The system shall not prevent the use of any functionality in the system as a result of failed validation.	T
QC-005	Where applicable, the system shall perform quality checks on dates to ensure consistency and correct chronology.	O,T
QC-006	Where applicable, the system shall perform quality checks on Entry cross-references and other data to ensure consistency and accuracy.	O,T
QC-007	If applicable, the system shall provide the user with details of any errors or messages returned from IAEA following electronic transmission of a Submission.	O,T

4.3.12 Reports (RP)

Reqmt-ID	Requirement	Test Method
RP-001	The system shall provide the capability to generate a viewable and printable report of any Submission, including its Declarations and Entries (or any user-selected subset). Detailed descriptions of such reports are provided in Appendix D of this document.	O,T
RP-002	The system shall provide the capability to generate a viewable and printable report of Submission due dates. A detailed description of the report is provided in Appendix D of this document.	O,T
RP-003	The system shall support multiple print layouts.	O,T
RP-004	Where applicable, the system shall clearly differentiate Declarable Data from Undeclarable Data in reports.	O
RP-005	The system shall provide the capability to generate a viewable and printable report of a user-selected collection of one or more Entries. A detailed description of the report is provided in Appendix D of this document.	O,T

4.3.13 User Documentation (UD)

Reqmt-ID	Requirement	Test Method
UD-001	System help shall include thorough documentation, explanation of major system functions, and reference documents.	T,D
UD-001.1	- System help shall include a copy of the IAEA document, Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards (INFCIRC/540, corrected).	D
UD-001.2	- System help shall include a copy of the IAEA document, Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements (or equivalent document).	D
UD-001.3	- System help shall include an explanation of the determination of due dates, including the significance of the Entry Into Force and As-Of dates.	D
UD-002	Where applicable, access to system help topics shall be context-sensitive.	O,T
UD-003	Where necessary, help topics shall include examples of Entry, Declaration, and Submission data.	D

4.4 Other Requirements

4.4.1 External Interface Requirements

At the time of this writing, specific external interface requirements were dependent upon factors outside the scope of this effort. As these factors become better defined, detailed external interface requirements will be identified and documented.

4.4.2 Performance Requirements

There are no special performance requirements for this system.

4.4.3 Design Constraints

The system shall adhere to the scope, terminology, obligations, and specifications of the *Model Protocol Additional to the Agreement(s) Between State(s) and the International Atomic Energy Agency for the Application of Safeguards* (INFCIRC/540, corrected).

4.4.4 Standards Compliance

There are no special standards compliance requirements for this system.

4.4.5 Reliability

There are no special reliability requirements for this system.

4.4.6 Availability

There are no special availability requirements for this system.

4.4.7 Security

At the time of this writing, specific security requirements were dependent upon factors outside the scope of this effort. As these factors become better defined, detailed security requirements will be identified and documented.

4.4.8 Maintainability

There are no special maintainability requirements for this system.

4.4.9 Portability

There are no special portability requirements for this system.

4.4.10 Usability

There are no special usability requirements for this system.

Appendix A: Abbreviations

AP	Additional Protocol
DOE	US Department of Energy
IAEA	International Atomic Energy Agency
INSEP	International Nuclear Safeguards Engagement Program
ISD	IAEA Declared and Statistical Information Analysis Section
NNSA	National Nuclear Security Administration
PR1	Protocol Reporter version 1.0
PR2	Protocol Reporter version 2.0
PR3	Protocol Reporter version 3.0
SDS	System Design Specification
SG	IAEA Department of Safeguards
SGIM	IAEA Safeguards Information Management
SRA	Safeguards Regulatory Authority
SRS	System Requirements Specification
SSAC	State System of Accounting for and Control of Nuclear Material
The Agency	The International Atomic Energy Agency

Appendix B: Glossary

Additional Protocol (AP)	Refers to the additional reporting agreements following the "*Model Protocol Additional to the Agreement(s) between State(s) and the International Atomic Energy Agency for the Application of Safeguards*" (INFCIRC/540) document
Article 2	That section of an Additional Protocol that defines the types of information that a State must provide to the IAEA.
Article 3	That section of an Additional Protocol that defines the frequencies at which different types of information defined in Article 2 must be provided to the IAEA.
Contributor	An organization or individual in a Member State that is responsible for preparing and submitting a portion of the State's declaration data to the SRA or to another Contributor or reviewer for eventual submission to the SRA.
Declarable Data	Data in fields that are intended to be transmitted to the IAEA as part of the declaration process. When the PR3 prepares a Submission to be transferred to the IAEA, it will contain only Declarable data.
Declaration	Information submitted to the IAEA by a State about its nuclear program and related activities pursuant to an AP agreement. A Declaration consists of header information and a collection of zero or more entries that apply to a specific paragraph of AP Article 2, in a format that meets the requirements of that article.
Entry	An Entry is a description of a specific activity and/or location for a specific reporting period that is reported to the IAEA pursuant to a specific paragraph of AP Article 2.
Entry Into Force (EIF) Date	The date on which the Agency receives from a State written notification that the State's statutory and constitutional requirements for entry into force have been met. A State may, at any date before its AP enters into force, declare that it will apply the AP provisionally.
Final Entry	An Entry reporting an activity or location that is completed or closed, for which future updates are not expected to be submitted to the IAEA.

Format Guidelines	An IAEA publication entitled “Guidelines and Format for the Preparation and Submission of the Declarations Pursuant to Article 2 & 3 of the Model Protocol Additional to Safeguards Agreements (May 2004)”.
Legacy Data	For the purposes of this document, legacy data refers to any Declaration data created in Protocol Reporter 1.0 or Protocol Reporter 2.0 format.
No Change Declaration	A Declaration indicating that the information previously submitted under the associated AP Article remains accurate for the indicated reporting period. In a Submission, this indicates that the absence of new information related to that Article is intended. No Change Declarations may include No Change Entries for each activity or location that was previously declared, but this is not required.
No Change Entry	A special case of Update Entry indicating that the information previously submitted for an activity or location remains accurate for the indicated reporting period. In a Declaration, this indicates that the absence of new information related to that activity or location is intended.
Nothing to Declare Declaration	A Declaration indicating that no activities or locations are declarable under the associated AP Article for the indicated reporting period. In a Submission, this indicates that the absence of Declaration data related to that AP Article is intended. If a State has declarable activities or locations, but they have not changed since the last Submission, use a No Change Declaration instead.
Safeguards Regulatory Authority (SRA)	The organization in a Member State responsible for preparing, certifying, and submitting declarations to the IAEA.
Submission	A set of one or more Declarations that are compiled by a State to be provided to the IAEA in accordance with AP Article 3.

Undeclarable Data	Data in fields that are intended to be withheld from the IAEA and used only for internal State record-keeping or for tracking the declaration development process. When the PR3 prepares a Submission to be transferred to the IAEA, it will contain no Undeclarable Data.
Update Entry	An Entry that provides information related to a specific activity or location reported in a previously submitted Entry. The Update Entry shall include a reference to the previous Entry.

Appendix C: Data Structure

C.1 Model AP Data Structure

Entry Data Structures

Base Entry Data Structure

All Entries, no matter the article type, should contain the following fields.

Name	Type	Notes
Internal ID	String	Will be automatically generated (i.e., GUID) by the PR3.
Undeclarable Comments	String	
Contributor	Contributor (see Lookups)	Must contain one.
State	State (see Lookups)	Must contain one.
INFCIRC #	INFCIRC # (see Lookups)	Must contain one.
Data Template	Data Template (see Lookups)	Must contain one.
AP Article	AP Article (see Lookups)	Chosen as part of the creation process. Cannot be changed.
References	Set of References (see Data Types)	May contain zero, one, or many.
Document References	Set of Documents (see Data Types)	May contain zero, one, or many.
Declarable Comments	String	
Local ID	String	Undeclarable field used for the Contributor's local identifier for the activity.
Entry Number	Integer	Only assigned as part of a Submission.
Entry Title	String	To be used as identification to SRA or Contributor users until the Entry is numbered as part of a Submission.
Entry Type	Entry Type (see Lookups)	
Reporting Period Start	Date	Used by SRA to build Submission. Must contain a date value to validate.
Reporting Period End	Date	Used by SRA to build Submission. Must contain a date value to validate.
Final Entry	Boolean	If True, this entry represents the final update for this activity. (Used for IAEA analysis. This does not affect any actions the user could take on this entry.)

Additional Entry fields will also be provided for internal State use. These fields may be labeled by users and their contents will not be included in any submission to IAEA.

Entry 2.a.(i)

Name	Type	Notes
Fuel Cycle Stages	Set of Fuel Cycle Stages (see Lookups)	May contain zero, one, or many. Must contain at least one to validate for submission.
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Project Title	String	
Project ID	String	

Name	Type	Notes
Relationship to State	String	
Description	String	Must contain a value to validate for submission.
Organizations	Set of Organizational Involvement (see Data Types)	May contain zero, one, or many.
Objectives	String	
Degree Met	String	
Intended Application	String	
Foreign Collaboration	Set of Collaboration (see Data Types)	May contain zero, one, or many.
Sublocations	Set of Sublocations (see Data Types)	May contain zero, one, or many.
Project Start Period	Date	
Project End Period	Date	

Entry 2.a.(ii)

Name	Type	Notes
Agreed Information	String	

Entry 2.a.(iii)

Name	Type	Notes
Site ID	Site Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Facility/LOF	String	Free text field, but options may be provided from the Facility/LOF lookup.
MBA Code	String	Free text field, but options may be provided from the MBA Code lookup
Key Measurement Point	String	
Building	String	Must contain a value to validate for submission.
Number of Floors	Integer	
Size	Float	
Size Units	Unit of Area (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Use	String	Must contain a value to validate for submission.
Previous Use	String	
Contents	String	
Coordinates	GeoCoordinates (see Data Types)	May contain zero or one. Must contain one to validate for submission.

Entry 2.a.(iv)

Name	Type	Notes
Annex I Item	Annex I (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Voluntary Extension	String	Required for submission (and may only contain a value) if Annex I Item is "Voluntary Extension."
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Brief Description	String	
Capacity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Extent Used	Float	
Sublocations	Set of Sublocations (see Data Types)	May contain zero, one, or many.

Entry 2.a.(v)

Name	Type	Notes
Mine/Plant Identifier	Mine/Plant (see Lookups)	May contain zero or one. Must contain one to validate. Other validation rules will vary depending on whether a mine/plant or "State Total" is selected.
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Operation	Operation (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Status	Operation Status (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Estimated Annual Capacity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission unless "State Total" is selected for Mine/Plant Identifier.
Actual Current Year Production	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission if "State Total" is selected for Mine/Plant Identifier.

Entry 2.a.(vi).(a)

Name	Type	Notes
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Chemical Composition	Chemical Composition (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Quantity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Intended Use Code	Intended Use Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Intended Use	String	Must contain a value to validate for submission.

Entry 2.a.(vi).(b)

Name	Type	Notes
Destination	State (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Interim Destinations	Set of States (see Lookups)	May contain zero, one, or many.
Chemical Composition	Chemical Composition (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Quantity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Intended Use Code	Intended Use Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Intended Use	String	Must contain a value to validate for submission.
Export Date	Date	Must contain a value to validate for submission.

Entry 2.a.(vi).(c)

Name	Type	Notes
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Chemical Composition	Chemical Composition (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Quantity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Import Date	Date	Must contain a value to validate for submission.
Exporting State	State (see Lookups)	May contain zero or one. Must contain one to validate for submission.

Name	Type	Notes
Intended Use Code	Intended Use Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.

Entry 2.a.(vii)

Name	Type	Notes
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Exemption	Exemption (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Element	Material Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Percent Uranium	Float	
Weight	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Intended Use Code	Intended Use Code (see Lookups)	May contain zero or one. Must contain one to validate for submission.
Intended Use	String	Must contain a value to validate for submission.

Entry 2.a.(viii).(a)

Name	Type	Notes
Waste Type	String	Must contain a value to validate for submission.
Number of Items	String	Must contain a value to validate for submission.
Type of Items	String	Must contain a value to validate for submission.
Conditioned Form	String	
Quantity Pu	Quantity (see Data Types)	May contain zero or one.
Quantity HEU	Quantity (see Data Types)	May contain zero or one.
Quantity U233	Quantity (see Data Types)	May contain zero or one.
Quantity Np/Am	Quantity (see Data Types)	May contain zero or one.
Previous Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
New Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.

Entry 2.a.(viii).(b)

Name	Type	Notes
Waste Type	String	Must contain a value to validate for submission.
Number of Items	String	Must contain a value to validate for submission.
Type of Items	String	Must contain a value to validate for submission.
Conditioned Form	String	
Quantity Pu	Quantity (see Data Types)	May contain zero or one.
Quantity HEU	Quantity (see Data Types)	May contain zero or one.
Quantity U233	Quantity (see Data Types)	May contain zero or one.
Quantity Np/Am	Quantity (see Data Types)	May contain zero or one.
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Processing Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Start Date	Date	

Name	Type	Notes
End Date	Date	
Processing Purpose	String	

Entry 2.a.(ix).(a)

Name	Type	Notes
Item Identity	String	Must contain a value to validate for submission.
Annex II Paragraph	Annex II (see Lookups)	May contain zero or one. Must contain one (and be a selectable Annex II entry) to validate for submission.
Quantity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Location of Intended Use	Location (see Data Types)	May contain zero or one.
Export Date	Date	

Entry 2.a.(ix).(b)

Name	Type	Notes
Agency Request Number	String	Should be validated as “MC-CCC-##” or “MC-CCC-##.#” where “CCC” is the country code and “##” or “##.#” is the request number.
Agency Request Date	Date	
Item Identity	String	Must contain a value to validate for submission.
Annex II Paragraph	Annex II (see Lookups)	May contain zero or one. Must contain one (and be a selectable Annex II entry) to validate for submission.
Quantity	Quantity (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Location of Intended Use	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Not Received	Boolean	Per the Formatting Guidelines for 2.a.(ix) Explanation 8, if the import is not yet received "not received" should be entered in the Date field. (This occurs if 2.a.(ix) is submitted as a response to an Agency request.) Suggested alternative: a valid Entry will either contain an Import Date or the Not Received field will be true.
Import Date	Date	To pass validation: • Contains a value, and Not Received is not checked, or • Does not contain a value, and Not Received is checked.

Entry 2.a.(x)

Name	Type	Notes
Fuel Cycle Stage	Set of Fuel Cycle Stages (see Lookups)	May contain zero, one, or many. Must contain at least one to validate for submission.
Development Plans	String	
R&D Plans	String	
Collaboration	Set of Collaboration (see Data Type)	May contain zero, one, or many.
Organizations	Set of Organization Involvement (see Data Type)	May contain zero, one, or many.

Entry 2.b.(i)

Name	Type	Notes
Fuel Cycle Stages	Set of Fuel Cycle Stages (see Lookups)	May contain zero, one, or many. Must contain at least one to validate for submission.
Location	Location (see Data Types)	May contain zero or one. Must contain one to validate for submission.
Project Title	String	
Project ID	String	
Description	String	Must contain a value to validate for submission.
Organizations	Set of Organizational Involvement (see Data Types)	May contain zero, one, or many.
Objectives	String	
Degree Met	String	
Intended Application	String	
Foreign Collaboration	Set of Collaboration (see Data Types)	May contain zero, one, or many.
Sublocations	Set of Sublocations (see Data Types)	May contain zero, one, or many.
Project Start Period	Date	
Project End Period	Date	

Entry 2.b.(ii)

Name	Type	Notes
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.
Agency Request Date	Date	
Location	Location (see Data Types)	May contain zero or one. Must contain one to pass validation.
Related Site Code	Site Code (see Lookups)	May contain zero or one. Must contain one to pass validation.
Physical Features	String	
Description of Activities	String	
Sublocations	Set of Sublocations (see Data Types)	May contain zero, one, or many.
Carried Out By	Set of Organization Involvement (see Data Types)	Identity of persons/entities carrying out activities. May contain zero, one, or many.

Entry 2.c

Name	Type	Notes
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.
Agency Request Date	Date	
Agency Question	String	
Response	String	

Entry Note

Name	Type	Notes
Document References	Set of Documents (see Data Types)	May contain zero, one, or many. Must contain at least one to validate (as opposed to Document References in base Entry definition).
General Description	String	

Submission Data Structure

Submission

Name	Type	Notes
Internal ID	String	Will be automatically generated (i.e., GUID) by the PR3.
Data Template	Data Template (see Lookups)	Must contain one.
Status	Status (see Lookups)	Set to default automatically by the PR3.
Description	String	
State	State (see Lookups)	
Submission Type	Submission Type (see Lookups)	Chosen as part of the creation process. Cannot be changed.
Declaration Date	Date	
Declarable Comments	String	
Undeclarable Comments	String	
Declarations	Set of Declarations	

Additional Submission fields will also be provided for internal State use. These fields may be labeled by users and their contents will not be included in any submission to IAEA.

Declaration

Name	Type	Notes
Internal ID	String	Will be automatically generated (i.e., GUID) by the PR3.
Declaration Number	Integer	
Data Template	Data Template (see Lookups)	Must contain one.
AP Article	AP Article (see Lookups)	Chosen as part of the creation process. Cannot be changed.
Reporting Period Start	Date	Populated with the as-of date for initial declarations. Will not be required for 2.a.(ix).(b) declarations.
Reporting Period End	Date	Populated with the as-of date for initial declarations. Will not be required for 2.a.(ix).(b) declarations.
Declaration Type	Declaration Type (see Lookups)	Set to default automatically by the PR3.
Details	Declaration Detail	May contain zero or one. May be one of several types of Declaration Details, for declarations that require additional headers.
Declarable Comments	String	
Undeclarable Comments	String	
Entries	Set of Entries	
Document References	Set of Documents (see Data Types)	

Additional Declaration fields will also be provided for internal State use. These fields may be labeled by users and their contents will not be included in any submission to IAEA.

Declaration Details 2.a.(iii)

Name	Type	Notes
Site Code	Site Code (see Lookups)	May contain one or zero.
Working Hours	String	
Site Holidays	Set of Dates	

Declaration Details 2.a.(ix).(b)

Each Declaration is submitted in response to a specific Agency request. A separate Entry is added to the Declaration for each export in the request.

Name	Type	Notes
Agency Request Date	Date	
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.

Declaration Details 2.b.(ii)

Each Declaration is submitted in response to a specific Agency request. A separate Entry is added to the Declaration for each location of interest in the request.

Name	Type	Notes
Agency Request Date	Date	
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.

Declaration Details 2.c

Each Declaration is submitted in response to a specific Agency request. A separate Entry is added to the Declaration to respond to each question in the request.

Name	Type	Notes
Agency Request Date	Date	
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.

Common Data Types

Collaboration

Name	Type	Notes
State	String	Must contain a value to validate for submission.
Organization	String	Must contain a value to validate for submission.
Address	String	Must contain a value to validate for submission.
Involvement	String	Must contain a value to validate for submission.

Document

MimeType and FileContents are used for attachments that are embedded in PR3 files. References to paper documents will only use Description, Document Title, and Document Type.

Name	Type	Notes
Document Title	String	Required.
Mime Type	String	
File Contents	Binary (Base64)	
Description	String	
Document Type	String	

GeoCoordinates

Will specify a latitude and longitude. The exact format is TBD, as there are several possible ways to represent this.

Location

Name	Type	Notes
Name	String	Must contain a value to validate for submission.
Address	String	Must contain a value to validate for submission.
Coordinates	GeoCoordinates	May contain zero or one. Must contain one to validate for submission.

Organization Involvement

Name	Type	Notes
Organization	String	Must contain a value to validate for submission.
Brief Description	String	Must contain a value to validate for submission.

Quantity

Name	Type	Notes
Value	Float	Must contain a value to validate for submission.
Units	Unit of Quantity (see Lookups)	Must contain a value to validate for submission.

Reference

Reference would either use State-Declaration-Entry format (referring to submitted Entries) or Internal ID (referring to Entries in development). When line items were added to a Submission and numbered, all references would be resolved to State-Declaration-Entry format.

Valid references in State-Declaration-Entry format may contain:

- State, Declaration, and Entry
- Declaration and Entry (for reference to the same State)
- State and Declaration (for reference to a Declaration)
- Declaration (for reference to a Declaration in the same State)

Name	Type	Notes
Reference Type	Reference Type (see Lookups)	Required.
State	String	
Declaration	Integer	
Entry	Integer	
Internal ID	String	Required if Entry not specified.
Notes	String	

Sublocation

Name	Type	Notes
Building	String	Must contain a value to validate for submission.
Room	String	
Subarea	String	
Facility/LOF	String	Free text field, but options may be provided from the Facility/LOF lookup.
Managed Access	Boolean	

Lookup Data

Annex I

Value	Description
i	The manufacture of centrifuge rotor tubes or the assembly of gas centrifuges
ii	The manufacture of diffusion barriers
iii	The manufacture or assembly of laser-based systems
iv	The manufacture or assembly of electromagnetic isotope separators
v	The manufacture or assembly of columns or extraction equipment
vi	The manufacture of aerodynamic separation nozzles or vortex tubes
vii	The manufacture or assembly of uranium plasma generation systems
viii	The manufacture of zirconium tubes
ix	The manufacture or upgrading of heavy water or deuterium
x	The manufacture of nuclear grade graphite
xi	The manufacture of flasks for irradiated fuel
xii	The manufacture of reactor control rods
xiii	The manufacture of criticality safe tanks and vessels
xiv	The manufacture of irradiated fuel element chopping machines
xv	The construction of hot cells
VE	Voluntary Extension

Annex II

Only the lowest-level items in each branch of the tree are selectable. Depending on how this data is stored, it might be useful to add either a Parent or Child field, as well as a Selectable flag for each item.

Value	Description
1	Reactors and Equipment Therefor
1.1	Complete nuclear reactors
1.2	Reactor pressure vessels
1.3	Reactor fuel changing and discharging machines
1.4	Reactor control rods
1.5	Reactor pressure tubes
1.6	Zirconium tubes
1.7	Primary coolant pumps
2	Non-Nuclear Materials for Reactors
2.1	Deuterium and heavy water
2.2	Nuclear grade graphite
3	Plants for the Reprocessing of Irradiated Fuel Elements, and Equipment Especially Designed or Prepared Therefor
3.1	Irradiated fuel element chopping machines
3.2	Dissolvers
3.3	Solvent extractors and solvent extraction equipment
3.4	Chemical holding or storage vessels
3.5	Plutonium nitrate to oxide conversion system
3.6	Plutonium oxide to metal production system
4	Plants for the Fabrication of Fuel Elements
4.(a)	Plants for the fabrication of fuel elements includes the equipment which normally comes in direct contact with, or directly processes, or controls, the production flow of nuclear material
4.(b)	Plants for the fabrication of fuel elements includes the equipment which seals the nuclear material within the cladding
5	Plants for the Separation of Isotopes of Uranium and Equipment, Other Than Analytical Instruments, Especially Designed or Prepared Therefor
5.1	Gas centrifuges and assemblies and components especially designed or prepared for use in gas centrifuges

Value	Description
5.1.1	Rotating components
5.1.1.(a)	Complete rotor assemblies
5.1.1.(b)	Rotor tubes
5.1.1.(c)	Rings or bellows
5.1.1.(d)	Baffles
5.1.1.(e)	Top caps/bottom caps
5.1.2	Static components
5.1.2.(a)	Magnetic suspension bearings
5.1.2.(b)	Bearings/dampers
5.1.2.(c)	Molecular pumps
5.1.2.(d)	Motor stators
5.1.2.(e)	Centrifuge housing/recipients
5.1.2.(f)	Scoops
5.2	Especially designed or prepared auxiliary systems, equipment and components for gas centrifuge enrichment plants
5.2.1	Feed systems/product and tails withdrawal systems
5.2.2	Machine header piping systems
5.2.3	UF6 mass spectrometers/ion sources
5.2.4	Frequency changers
5.3	Especially designed or prepared assemblies and components for use in gaseous diffusion enrichment
5.3.1	Gaseous diffusion barriers
5.3.2	Diffuser housings
5.3.3	Compressors and gas blowers
5.3.4	Rotary shaft seals
5.3.5	Heat exchanges for cooling UF6
5.4	Especially designed or prepared auxiliary systems, equipment and components for use in gaseous diffusion enrichment
5.4.1	Feed systems/product and tails withdrawal systems
5.4.2	Header piping systems
5.4.3	Vacuum systems
5.4.4	Special shut-off and control valves
5.4.5	UF6 mass spectrometers/ion sources
5.5	Especially designed or prepared systems, equipment and components for use in aerodynamic enrichment plants
5.5.1	Separation nozzles
5.5.2	Vortex tones
5.5.3	Compressors and gas blowers
5.5.4	Rotary shaft seals
5.5.5	Heat exchangers for gas cooling
5.5.6	Separation element housings
5.5.7	Feed systems/product and tails withdrawal systems
5.5.8	Header piping system
5.5.9	Vacuum systems and pumps
5.5.10	Special shut-off and control valves
5.5.11	UF6 mass spectrometers/ion sources
5.5.12	UF6/carrier gas separation systems
5.6	Especially designed or prepared systems, equipment and components for use in chemical exchange or ion exchange enrichment plants
5.6.1	Liquid-liquid exchange columns (chemical exchange)
5.6.2	Liquid-liquid centrifugal contactors (chemical exchange)
5.6.3	Uranium reduction systems and equipment (chemical exchange)
5.6.4	Feed preparation systems (chemical exchange)
5.6.5	Uranium oxidation systems (chemical exchange)
5.6.6	Fast-reacting ion exchange resins/adsorbents (ion exchange)
5.6.7	Ion exchange columns (ion exchange)
5.6.8	Ion exchange reflux systems (Ion exchange)

Value	Description
5.7	Especially designed or prepared systems, equipment and components for use in laser-based enrichment plants
5.7.1	Uranium vaporization systems (AVLIS)
5.7.2	Liquid uranium metal handling systems (AVLIS)
5.7.3	Uranium metal 'product' and 'tails' collector assemblies (AVLIS)
5.7.4	Separator module housings (AVLIS)
5.7.5	Supersonic expansion nozzles (MLIS)
5.7.6	Uranium pentafluoride product collector (MLIS)
5.7.7	UF6 carrier gas compressors (MLIS)
5.7.8	Rotary shaft seals (MLIS)
5.7.9	Fluorination systems (MLIS)
5.7.10	UF6 mass spectrometers/ion sources (MLIS)
5.7.11	Feed systems/product and tails withdrawal systems (MLIS)
5.7.12	UF6/carrier gas separation systems (MLIS)
5.7.13	Laser systems (AVLIS, MLIS and CRISLA)
5.8	Especially designed or prepared systems, equipment and components for use in plasma separation enrichment plants
5.8.1	Microwave power sources and antennae
5.8.2	Ion excitation coils
5.8.3	Uranium plasma generation systems
5.8.4	Liquid uranium metal handling systems
5.8.5	Uranium metal 'product' and 'tails' collector assemblies
5.8.6	Separator module housings
5.9	Especially designed or prepared systems, equipment and components for use in electromagnetic enrichment plants
5.9.1	Electromagnetic isotope separators
5.9.1.(a)	Ion sources
5.9.1.(b)	Ion collectors
5.9.1.(c)	Vacuum housings
5.9.1.(d)	Magnet pole pieces
5.9.2	High voltage power supplies
5.9.3	Magnet power supplies
6	Plants for the Production of Heavy Water, Deuterium and Deuterium Compounds and Equipment Especially Designed or Prepared Therefor
6.1	Water-hydrogen sulphide exchange towers
6.2	Blowers and Compressors
6.3	Ammonia-hydrogen exchange towers
6.4	Tower internals and stage pumps
6.5	Ammonia crackers
6.6	Infrared absorption analyzers
6.7	Catalytic burners
7	Plants for the Conversion of Uranium and Equipment Especially Designed or Prepared Therefor
7.1	Especially designed or prepared systems for the conversion of uranium ore concentrates to UO3
7.2	Especially designed or prepared systems for the conversion of UO3 to UF6
7.3	Especially designed or prepared systems for the conversion of UO3 to UO2
7.4	Especially designed or prepared systems for the conversion of UO2 to UF4
7.5	Especially designed or prepared systems for the conversion of UF4 to UF6
7.6	Especially designed or prepared systems for the conversion of UF4 to U metal
7.7	Especially designed or prepared systems for the conversion of UF6 to UO2
7.8	Especially designed or prepared systems for the convention of UF6 to UF4

AP Article

Value	Description
2.a.(i)	Government-sponsored NFC R&D not involving nuclear material
2.a.(ii)	Information agreed with the Agency to facilitate safeguards implementation
2.a.(iii)	Buildings and sites

Value	Description
2.a.(iv)	Manufacturing, assembly, and construction activities listed in Annex I
2.a.(v)	Mines and concentration plants
2.a.(vi).(a)	Source material inventories
2.a.(vi).(b)	Source material exports
2.a.(vi).(c)	Source material imports
2.a.(vii)	Safeguards-exempted nuclear material
2.a.(viii).(a)	Changes in location of intermediate and high level waste
2.a.(viii).(b)	Further processing of intermediate and high level waste
2.a.(ix).(a)	Exports of equipment and non-nuclear material listed in Annex II
2.a.(ix).(b)	Imports of equipment and non-nuclear material listed in Annex II
2.a.(x)	Nuclear fuel cycle R&D ten-year plan
2.b.(i)	Privately-sponsored NFC R&D not involving nuclear material
2.b.(ii)	General description of activities at locations identified by the Agency
2.c	Upon request by the Agency, State to provide Agency with amplifications or clarifications of any information provided under Article 2
Note	

Chemical Composition

Chemical Composition

Contributor

Organization	Address	POC Name	POC Email	POC Phone
TBD by State	TBD by State	TBD by State	TBD by State	TBD by State

Declaration Type

Value
New information
No change
Nothing to declare
Consolidated update

Entry Type

Value
New entry
No change
Revised entry

Exemption

Exemption
Article 36b
Article 37

Facility/LOF

Facility/LOF Code list may be used to provide a dropdown/autocomplete list for Facility/LOF fields, but the list will not restrict entry in those fields.

Code	Name
TBD by State/IAEA	TBD by State/IAEA

Fuel Cycle Stages

Fuel Cycle Stage
Conversion of Nuclear Material

Fuel Cycle Stage
Enrichment of Nuclear Material
Nuclear Fuel Fabrication
Reactors
Critical Facilities
Reprocessing of Nuclear Fuel
Processing of Waste
Source Material Recovery

INFCIRC

INFCIRC could be provided as part of the Data Template, rather than a table included in the lookup file.

Number	Description
TBD by IAEA	TBD by IAEA

Intended Use Code

Code	Description
NN	Non-Nuclear
N	Nuclear
ND	Not Designated

Material Code

Code	Description
NU	Natural Uranium
DU	Depleted Uranium
Th	Thorium
Pu	Plutonium
U-233	Uranium-233
E	Enriched Uranium

MBA Code

MBA Code may be used to provide a dropdown/autocomplete list for MBA Code fields, but does not restrict entry in those fields.

Code	Name
TBD by State/IAEA	TBD by State/IAEA

Mine/Plant

A list of mines and plants is updated by the State and is used to identify which locations require actual production to be declared per Agency request.

Operation	Requires Actual Production to be Declared
State Total	Yes
TBD by State/IAEA	TBD by State/IAEA

Operation

Operation
U Mine
U Mine and Concentration
Th Concentration
Th Mine
U Plants

Operation
Th Plants

Operation Status

Operation Status
Operating
Closed Down
Abandoned
Total

Reference Type

Value
Related
Update

Site Code

Code	Name
TBD by IAEA/State from DIQ	TBD by IAEA/State from DIQ

State

Code	Name
TBD by IAEA	TBD by IAEA

Status

Value	Is Read-Only	Is Submitted
In Progress	No	No
Submitted	Yes	Yes
Other statuses TBD	Other statuses TBD	Other statuses TBD

Submission Type

Value	Description
3.a	Initial
3.b	Annual update for initial
3.c	Annual update (source material imports & exports)
3.d	Quarterly update (Annex II exports)
3.e	Annual update (intermediate and high-level waste)
3.f	Response to agency request (2.a.(ii))
3.g	Response to agency request (Annex II imports)
Response to Agency Request	Response to agency Request (2.c)
General	General

Unit of Area

Unit
Square meters
(Other allowed units TBD by IAEA)

Unit of Quantity

Unit
g
Kg
Items

Unit
MT
(Other allowed units TBD by IAEA)

AP Article Declarations by Submission Type

Submission Type	Allowed AP Articles	Required AP Articles
3.a	2.a.(i), (iii), (iv), (v), (vi).(a), (vii), (x), 2.b.(i), Note	2.a.(i), (iii), (iv), (v), (vi).(a), (vii), (x), 2.b.(i)
3.b	2.a.(i), (iii), (iv), (v), (vi).(a), (vii), (x), 2.b.(i), Note	
3.c	2.a.(vi).(b), (vi).(c), Note	
3.d	2.a.(ix).(a), Note	
3.e	2.a.(viii), Note	
3.f	2.a.(ii), Note	
3.g	2.a.(ix).(b), Note	
Response	2.b.(ii), 2.c, Note	
General	2.a.(i), (ii), (iii), (iv), (v), (vi), (vii), (viii), (ix), (x), 2.b.(i), (ii), 2.c, Note	

Due dates by Submission Type

Submission Type	Due Date
3.a	180 days of Entry-Into-Force date
3.b	Starting May 15 of the year following EIF, then every year after
3.c	Starting May 15 of the year following EIF, then every year after
3.d	60 days of the end of each quarter
3.e	180 days before further processing is carried out, and every May 15 of each year following EIF
3.f	Agreed upon by state and IAEA
3.g	60 days of IAEA request

Data Template Identification

This will likely be defined in the data template, rather than being a separate lookup value

ID	Display Name	Icon
ModelAP	AP	IAEA logo

C.2 EURATOM extensions to the Model AP Data Structure

The EURATOM data template contains the same structure as the Model AP, with the following additions:

Base Entry Data Structure

Name	Type	Notes
Security Level	String	

Declaration

Name	Type	Notes
Security Level	String	

Declaration Details 2.a.(iii)

Name	Type	Notes
Site Contact Details	String	
Geographical Location	String	
Site Holidays	String	

Name	Type	Notes
Working Hours	String	
Site Address	String	

Data Template Identification

ID	Display Name	Icon
EURATOM	EURATOM AP	EU flag

C.3 US extensions to the Model AP Data Structure

The US data template contains the same structure as the Model AP, with the following additions:

Base Entry Data Structure

Name	Type	Notes
Internal US Record Keeping Information	String	
US Reporting Code	String	

Entry 2.a.(v)

Name	Type	Notes
GPS Coordinates	Set of GeoCoordinates (see Data Types)	

Data Template Identification

ID	Display Name	Icon
USA	US AP	US flag

C.4 AP Data Structure for China

The AP for China uses similar data structures to those used in the Model AP, but with several modifications. It may be implemented as its own template rather than an extension of the Model AP. It is described in relation to the Model AP here to avoid repetition.
This data structure is based on limited information, so it may be incomplete or inaccurate. It will be revised as more information becomes available.

Base Entry Data Structure

The AP for China uses the same base Entry structure as the Model AP.

Entry 2.a.(i)

The AP for China Entry 2.a.(i) structure is the same as that for Entry 2.a.(iv) in the Model AP.

Entry 2.a.(ii)

The AP for China Entry 2.a.(ii) structure is the same as that for Entry 2.a.(v) in the Model AP.

Entry 2.a.(iii).(a)

The AP for China Entry 2.a.(iii).(a) structure is the same as that for Entry 2.a.(vi).(b) in the Model AP.

Entry 2.a.(iii).(b)
The AP for China Entry 2.a.(iii).(b) structure is the same as that for Entry 2.a.(vi).(c) in the Model AP.

Entry 2.a.(iv)
The AP for China Entry 2.a.(iv) structure is the same as that for Entry 2.a.(vii) in the Model AP.

Entry 2.a.(v) Export
The AP for China Entry 2.a.(v) Export structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additional field:

Name	Type	Notes
Export Date	Date	

Entry 2.a.(v) Import
The AP for China Entry 2.a.(v) Import structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additional field:

Name	Type	Notes
Import Date	Date	

Entry 2.a.(vi)
The AP for China Entry 2.a.(vi) structure is the same as that for Entry 2.a.(ix).(a) in the Model AP.

Entry 2.a.(vii)
The AP for China Entry 2.a.(vii) structure is the same as that for Entry 2.a.(x) in the Model AP.

Entry 2.b
The AP for China Entry 2.b structure is the same as that for Entry 2.a.(i) in the Model AP, with the addition of the following fields:

Name	Type	Notes
Agency Request Date	Date	
Agency Request Number	String	Should be validated as “MC-CCC-##” or “MC-CCC-##.#” where “CCC” is the country code and “##” or “##.#” is the request number.

Entry 2.c
The AP for China uses the same Entry 2.c structure as the Model AP.

Entry 2.d
The AP for China Entry 2.d structure is the same as that for Entry 2.c in the Model AP.

Entry Note
The AP for China uses the same Entry Note structure as the Model AP.

Submission Data Structure

Submission
The AP for China uses the same Submission structure as the Model AP.

Declaration
The AP for China uses the same Submission structure as the Model AP.

Declaration Details 2.b
Each Declaration is submitted in response to a specific Agency request. A separate Entry is added to the Declaration for each location of interest in the request.

Name	Type	Notes
Agency Request Date	Date	
Agency Request Number	String	Should be validated as "MC-CCC-##" or "MC-CCC-##.#" where "CCC" is the country code and "##" or "##.#" is the request number.

Common Data Types

Collaboration
The AP for China uses the same Collaboration structure as the Model AP.

Document
The AP for China uses the same Document structure as the Model AP.

GeoCoordinates
The AP for China uses the same GeoCoordinates structure as the Model AP.

Organization Involvement
The AP for China uses the same Organization Involvement structure as the Model AP.

Quantity
The AP for China uses the same Quantity structure as the Model AP.

Reference
The AP for China uses the same Reference structure as the Model AP.

Sublocation
The AP for China uses the same Sublocation structure as the Model AP.

Lookup Data

The Lookup table structure and data is the same as for the Model AP, with the following exceptions:

AP Articles

Value	Description
2.a.(i)	Annex I Manufacturing Activities in cooperation with NNWS
2.a.(ii)	Mines and Concentration Plants involved in production for NNWS
2.a.(iii).(a)	Pre-Safeguards Source Material Exports to a NNWS (nuclear and non-nuclear use)
2.a.(iii).(b)	Pre-Safeguards Source Material Imports to a NNWS (nuclear and non-nuclear use)
2.a.(iv)	Exempted Nuclear Material processed or used for a NNWS
2.a.(v)	Intermediate and High-Level Waste (exports and imports to/from NNWS)
2.a.(vi)	Exports of Annex II items to a NNWS

Value	Description
2.a.(vii)	General Fuel Cycle Plans in cooperation with NNWS
2.b	Nuclear Fuel Cycle R&D not involving nuclear material in cooperation with NNWS
2.c	Upon request by the Agency, China shall provide amplifications or clarifications of any information provided under Article 2
2.d	Upon request by the Agency, China shall provide confirmation of information submitted by a NNWS

Data Template Identification

ID	Display Name	Icon
China	AP for China	Chinese flag

C.5 AP Data Structure for France

The AP for France uses similar data structures to those used in the Model AP, but with several modifications. It will likely be implemented as its own template, rather than an extension of the Model AP. It is described in relation to the Model AP here to avoid repetition.

Entry Data Structures

Base Entry Data Structure

The AP for France uses the same base Entry structure as the Model AP.

Entry 2.a.(i)

The AP for France uses the same Entry 2.a.(i) structure as the Model AP, with the following exceptions:

Model AP Field Name	AP for France Field Name
Foreign Collaboration	Information on the NNWS entity
Location	Location of the entity in France
Sublocations	Location of the activities and access information

Entry 2.a.(ii)

The AP for France uses the same Entry 2.a.(ii) structure as the Model AP.

Entry 2.a.(iii)

The AP for France Entry 2.a.(iii) structure is the same as that for Entry 2.a.(iv) in the Model AP, but with the following additions and exceptions:

Name	Type	Notes
Information on the NNWS entity	Collaboration (see Data Types)	May contain zero or one.

Model AP Field Name	AP for France Field Name
Location	Location of the entity in France
Sublocations	Location of the activities and access information

Entry 2.a.(iv)
The AP for France Entry 2.a.(iv) structure is the same as that for Entry 2.a.(v) in the Model AP.

Entry 2.a.(v).(a)
The AP for France Entry 2.a.(v).(a) structure is the same as that for Entry 2.a.(vi).(b) in the Model AP.:

Entry 2.a.(v).(b)
The AP for France Entry 2.a.(v).(b) structure is the same as that for Entry 2.a.(vi).(c) in the Model AP.

Entry 2.a.(vi).(a)
The AP for France Entry 2.a.(vi).(a) structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additions and removals:

Name	Type	Notes
Export Date	Date	

Model AP Field Name not used in AP for France
Waste Type
Quantity Np/Am

Entry 2.a.(vi).(b)
The AP for France Entry 2.a.(vi).(b) structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additions and removals:

Name	Type	Notes
Import Date	Date	

Model AP Field Name not used in AP for France
Waste Type
Quantity Np/Am

Entry 2.a.(vii).(a)
The AP for France Entry 2.a.(vii).(a) structure is the same as that for Entry 2.a.(ix).(a) in the Model AP, with the following additions:

Name	Type	Notes
Annex I Paragraph	Annex I (see Lookups)	May contain zero or one. Must contain one (and be a selectable Annex I entry) to validate for submission.

Entry 2.a.(vii).(b)
The AP for France Entry 2.a.(vii).(b) structure is the same as that for Entry 2.a.(ix).(b) in the Model AP, with the following additions:

Name	Type	Notes
Annex I Paragraph	Annex I (see Lookups)	May contain zero or one. Must contain one (and be a selectable Annex I entry) to validate for submission.

Entry 2.a.(viii)

The AP for France Entry 2.a.(viii) structure is the same as that for Entry 2.a.(x) in the Model AP, with the following additions, differences, and removals:

Name	Type	Notes
Information on the NNWS entity	Collaboration (see Data Types)	May contain zero or one.

Model AP Field Name	AP for France Field Name
R&D Plans	General Plans for NFC and related R&D
Organizations	Partner entity in France

Model AP Field Name not used in AP for France
Development Plans

Entry 2.b

The AP for France Entry 2.b structure is the same as that for Entry 2.b.(i) in the Model AP.

Entry 2.c

The AP for France uses the same Entry 2.c structure as the Model AP.

Entry Note

The AP for France uses the same Entry Note structure as the Model AP.

Submission Data Structure

Submission

The AP for France uses the same Submission structure as the Model AP.

Declaration

The AP for France uses the same Submission structure as the Model AP.

Common Data Types

Collaboration

The AP for France uses the same Collaboration structure as the Model AP.

Document

The AP for France uses the same Document structure as the Model AP.

GeoCoordinates

The AP for France uses the same GeoCoordinates structure as the Model AP.

Organization Involvement

The AP for France uses the same Organization Involvement structure as the Model AP.

Quantity

The AP for France uses the same Quantity structure as the Model AP.

Reference
The AP for France uses the same Reference structure as the Model AP.

Sublocation
The AP for France uses the same Sublocation structure as the Model AP.

Lookup Data

The Lookup table structure and data is the same as for the Model AP, with the following exceptions:

AP Article

Value	Description
2.a.(i)	Description and Location of R&D activities related to a NNWS
2.a.(ii)	Information identified by Agency to increase effectiveness or efficiency at designated facilities
2.a.(iii)	Description of scale of operations for each Location engaged in Activities specified in Annex I and linked to an NNWS
2.a.(iv)	Location, operational status and estimated annual production of Mines and Concentration Plants situated in France involved in production for a NNWS
2.a.(v).(a)	Exports of Source Material from France to NNWS Outside the Community
2.a.(v).(b)	Exports of Source Material to France from NNWS Outside the Community
2.a.(vi).(a)	Information regarding exports from a NNWS outside of the Community of intermediate or high level waste containing Pu, HEU or U-233 on which safeguards have been terminated under Article 11
2.a.(vi).(b)	Information regarding imports to a NNWS outside of the Community of intermediate or high level waste containing Pu, HEU or U-233 on which safeguards have been terminated under Article 11
2.a.(vii).(a)	Export of Equipment manufactured in the context of the Annex I activities and specified equipment and non-nuclear material listed in Annex II to a NNWS outside of the Community
2.a.(vii).(b)	Import of Equipment manufactured in the context of the Annex I activities and specified equipment and non-nuclear material listed in Annex II from a NNWS outside of the Community
2.a.(viii)	Civil Nuclear Fuel Cycle R&D Ten Year Plan
2.b	Provision of Information regarding Enrichment, Reprocessing or Processing of High Level Waste that is not funded, authorized or controlled by, or carried out on behalf of the France
2.c	Upon request by the Agency, France or Community or Both to provide Agency amplifications or clarifications of any information provided under Article 2

Data Template Identification

ID	Display Name	Icon
France	AP for France	French flag

Submission Type

Value	Description
3.a	Initial
3.b	Annual update for initial
3.c	Annual update
3.d	Quarterly update
3.e	Annual update

Value	Description
3.f	Response to agency request (2.a.(ii))
3.g	Response to agency request (2.a.(vii).(b))
Response to Agency Request	Response to agency Request (2.c)
General	General

AP Article Declarations by Submission Type

Submission Type	Allowed AP Articles	Required AP Articles
3.a	2.a.(i), (iii), (iv), (viii), 2.b, Note	
3.b	2.a.(i), (iii), (iv), (viii), 2.b, Note	
3.c	2.a.(v), Note	
3.d	2.a.(vii), Note	
3.e	2.a.(vi), Note	
3.f	2.a.(ii), Note	
3.g	2.a.(vii), Note	
Response	2.c, Note	
General	2.a.(i), (ii), (iii), (iv), (v), (vi), (vii), (viii), 2.b, 2.c, Note	

C.6 AP Data Structure for Russia

The AP for Russia uses similar data structures to those used in the Model AP, but with several modifications. It will likely be implemented as its own template, rather than an extension of the Model AP. It is described in relation to the Model AP here to avoid repetition.

Entry Data Structures

Base Entry Data Structure

The AP for Russia uses the same base Entry structure as the Model AP.

Entry 2.a.(i)

The AP for Russia uses the same Entry 2.a.(i) structure as the Model AP, with the following exceptions:

Model AP Field Name	AP for Russia Field Name
Foreign Collaboration	Information on the NNWS entity
Location	Location of the entity in Russia
Sublocations	Location of the activities and access information

Entry 2.a.(ii)

The AP for Russia uses the same Entry 2.a.(ii) structure as the Model AP.

Entry 2.a.(iii)

The AP for Russia Entry 2.a.(iii) structure is the same as that for Entry 2.a.(iv) in the Model AP, but with the following additions and exceptions:

Name	Type	Notes
Information on the NNWS entity	Collaboration (see Data Types)	May contain zero or one.

Model AP Field Name	AP for Russia Field Name
Location	Location of the entity in Russia
Sublocations	Location of the activities and access information

Entry 2.a.(iv)
The AP for Russia Entry 2.a.(iv) structure is the same as that for Entry 2.a.(v) in the Model AP.

Entry 2.a.(v).(a)
The AP for Russia Entry 2.a.(v).(a) structure is the same as that for Entry 2.a.(vi).(b) in the Model AP.

Entry 2.a.(v).(b)
The AP for Russia Entry 2.a.(v).(b) structure is the same as that for Entry 2.a.(vi).(c) in the Model AP.

Entry 2.a.(vi)
The AP for Russia Entry 2.a.(vi) structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additions and removals:

Name	Type	Notes
Export Date	Date	

Model AP Field Name not used in AP for Russia
Waste Type
Quantity Np/Am

Entry 2.a.(vii).(a)
The AP for Russia Entry 2.a.(vii).(a) structure is the same as that for Entry 2.a.(ix).(a) in the Model AP.

Entry 2.a.(vii).(b)
The AP for Russia Entry 2.a.(vii).(b) structure is the same as that for Entry 2.a.(ix).(b) in the Model AP.

Entry 2.b
The AP for Russia Entry 2.b structure is the same as that for Entry 2.b.(i) in the Model AP.

Entry 2.c
The AP for Russia uses the same Entry 2.c structure as the Model AP.

Submission Data Structure

Submission
The AP for Russia uses the same Submission structure as the Model AP.

Declaration
The AP for Russia uses the same Submission structure as the Model AP.

Common Data Types

Collaboration
The AP for Russia uses the same Collaboration structure as the Model AP.

Document
The AP for Russia uses the same Document structure as the Model AP.

GeoCoordinates
The AP for Russia uses the same GeoCoordinates structure as the Model AP.

Organization Involvement
The AP for Russia uses the same Organization Involvement structure as the Model AP.

Quantity
The AP for France uses the same Quantity structure as the Model AP.

Reference
The AP for Russia uses the same Reference structure as the Model AP.

Sublocation
The AP for Russia uses the same Sublocation structure as the Model AP.

Lookup Data

The Lookup table structure and data is the same as for the Model AP, with the following exceptions:

AP Article

Value	Description
2.a.(i)	Description and location of R&D activities related to a NNWS
2.a.(ii)	Information identified by Agency to increase effectiveness or efficiency at designated facilities
2.a.(iii)	Description of scale of operations for each location engaged in activities specified in Annex I and linked to a NNWS
2.a.(iv)	Location and current annual production of uranium mines and concentration plants and thorium concentration plants in the Russian Federation, involved in production for a NNWS
2.a.(v).(a)	Exports of source material out of the Russian Federation to a NNWS
2.a.(v).(a)	Imports of source material into the Russian Federation from a NNWS
2.a.(vi)	Information regarding exports to a NNWS of intermediate or high-level waste containing Pu, HEU or U-233
2.a.(vii).(a)	Export of specified equipment and non-nuclear material listed in Annex II to a NNWS
2.a.(vii).(b)	Import of specified equipment and non-nuclear material listed in Annex II from a NNWS
2.b	Provision of information regarding enrichment, reprocessing or processing of high-level waste that is not funded, authorized or controlled by, or carried out on behalf of the Russian Federation
2.c	Upon request by the Agency, the Russian Federation shall provide amplifications or clarifications of any information provided under Article 2

Data Template Identification

ID	Display Name	Icon
Russia	AP for Russia	Russian flag

Submission Type

Value	Description
3.a	Initial
3.b	Annual update for initial
3.c	Annual update
3.d	Quarterly update
3.e	Response to agency request (2.a.(ii))
3.f	Response to agency request (2.a.(vii))
Response to Agency Request	Response to agency Request (2.c)
General	General

AP Article Declarations by Submission Type

Submission Type	Allowed AP Articles	Required AP Articles
3.a	2.a.(i), (iii), (iv), 2.b, Note	
3.b	2.a.(i), (iii), (iv), 2.b, Note	
3.c	2.a.(v), 2.a.(vi), Note	
3.d	2.a.(vii), Note	
3.e	2.a.(ii)	
3.f	2.a.(vii), Note	
Response	2.c, Note	
General	2.a.(i), (ii), (iii), (iv), (v), (vi), (vii), 2.b, 2.c, Note	

C.7 AP Data Structure for the UK

The AP for the UK uses similar data structures to those used in the Model AP, but with several modifications. It will likely be implemented as its own template, rather than an extension of the Model AP. It is described in relation to the Model AP here to avoid repetition.

Entry Data Structures

Base Entry Data Structure

The AP for the UK uses the same base Entry structure as the Model AP.

Entry 2.a.(i)

The AP for the UK uses the same Entry 2.a.(i) structure as the Model AP.

Entry 2.a.(ii)

The AP for the UK uses the same Entry 2.a.(ii) structure as the Model AP.

Entry 2.a.(iii)

The AP for the UK Entry 2.a.(iii) structure is the same as that for Entry 2.a.(iv) in the Model AP.

Entry 2.a.(iv)
The AP for the UK Entry 2.a.(iv) structure is the same as that for Entry 2.a.(v) in the Model AP.

Entry 2.a.(v).(a)
The AP for the UK Entry 2.a.(v).(a) structure is the same as that for Entry 2.a.(vi).(b) in the Model AP.

Entry 2.a.(v).(b)
The AP for the UK Entry 2.a.(v).(b) structure is the same as that for Entry 2.a.(vi).(c) in the Model AP.

Entry 2.a.(vi)
The AP for the UK Entry 2.a.(vi) structure is the same as that for Entry 2.a.(vii) in the Model AP.

Entry 2.a.(vii).(a)
The AP for the UK Entry 2.a.(vii).(a) structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additions and removals:

Name	Type	Notes
Export Date	Date	

Model AP Field Name not used in AP for the UK
Waste Type
Quantity Np/Am

Entry 2.a.(vii).(b)
The AP for the UK Entry 2.a.(vii).(b) structure is the same as that for Entry 2.a.(viii).(a) in the Model AP, with the following additions and removals:

Name	Type	Notes
Import Date	Date	

Model AP Field Name not used in AP for the UK
Waste Type
Quantity Np/Am

Entry 2.a.(viii).(a)
The AP for the UK Entry 2.a.(viii).(a) structure is the same as that for Entry 2.a.(ix).(a) in the Model AP.

Entry 2.a.(viii).(b)
The AP for the UK Entry 2.a.(viii).(b) structure is the same as that for Entry 2.a.(ix).(b) in the Model AP.

Entry 2.a.(ix)
The AP for the UK Entry 2.a.(ix) structure is the same as that for Entry 2.a.(x) in the Model AP.

Entry 2.b
The AP for the UK Entry 2.b structure is the same as that for Entry 2.b.(i) in the Model AP.

Entry 2.c
The AP for the UK uses the same Entry 2.c structure as the Model AP.

Entry Note
The AP for the UK uses the same Entry Note structure as the Model AP.

Submission Data Structure

Submission
The AP for the UK uses the same Submission structure as the Model AP.

Declaration
The AP for the UK uses the same Submission structure as the Model AP.

Common Data Types

Collaboration
The AP for the UK uses the same Collaboration structure as the Model AP.

Document
The AP for the UK uses the same Document structure as the Model AP.

GeoCoordinates
The AP for the UK uses the same GeoCoordinates structure as the Model AP.

Organization Involvement
The AP for the UK uses the same Organization Involvement structure as the Model AP.

Quantity
The AP for the UK uses the same Quantity structure as the Model AP.

Reference
The AP for the UK uses the same Reference structure as the Model AP.

Sublocation
The AP for the UK uses the same Sublocation structure as the Model AP.

Lookup Data

The Lookup table structure and data is the same as for the Model AP, with the following exceptions:

AP Article

Value	Description
2.a.(i)	Description and Location of R&D activities related to a NNWS
2.a.(ii)	Information identified by Agency to increase effectiveness or efficiency at designated facilities

Value	Description
2.a.(iii)	Description of scale of operations for each Location engaged in Activities specified in Annex I and linked to an NNWS
2.a.(iv)	Location, operational status and estimated annual production of Mines and Concentration Plants situated in UK involved in production for a NNWS
2.a.(v).(a)	Exports of Source Material to UK from NNWS Outside the Community
2.a.(v).(b)	Imports of Source Material from UK to NNWS Outside the Community
2.a.(vi)	Materials Exempted from Safeguards under Article 37 that are Processed or Used for a NNWS
2.a.(vii).(a)	Information Regarding the processing of High Level Waste Containing Pu, HEU or U-233 which have been terminated under Article 11 and have been Exported to a NNWS Outside the Community
2.a.(vii).(b)	Information Regarding the processing of High Level Waste Containing Pu, HEU or U-233 which have been terminated under Article 11 and have been Imported from a NNWS Outside the Community
2.a.(viii).(a)	Export of Equipment Listed in Annex II to a NNWS Outside the Community
2.a.(viii).(b)	Import of Equipment Listed in Annex II from a NNWS Outside the Community
2.a.(ix)	Civil Nuclear Fuel Cycle R&D Ten Year Plan
2.b	Provision of Information regarding Enrichment, Reprocessing or Processing of High Level Waste that is not funded, authorized or controlled by, or carried out on behalf of the UK
2.c	Upon request by the Agency, UK or Community or Both to provide Agency amplifications or clarifications of any information provided under Article 2

Data Template lookup

ID	Display Name	Icon
UK	AP for the UK	UK flag

Submission Type

Value	Description
3.a	Initial
3.b	Annual update for initial
3.c	Annual update
3.d	Quarterly update
3.e	Annual update
3.f	Response to agency request (2.a.(ii))
3.g	Response to agency request (2.a.(viii))
Response to Agency Request	Response to agency Request (2.c)
General	General

AP Article Declarations by Submission Type

Submission Type	Allowed AP Articles	Required AP Articles
3.a	2.a.(i), (iii), (iv), (vi), (ix), 2.b, Note	
3.b	2.a.(i), (iii), (iv), (vi), (ix), 2.b, Note	
3.c	2.a.(v), Note	
3.d	2.a.(viii), Note	
3.e	Note	
3.f	2.a.(ii), Note	
3.g	2.a.(viii), Note	
Response	2.c, Note	

Submission Type	Allowed AP Articles	Required AP Articles
General	2.a.(i), (iii), (iv), (vi), (vii), (viii), (ix), 2.b, 2.c, Note	

Appendix D: Report Definitions

These outlines represent the minimum data required for each report. Additional details may be added to reports in the final product.

The scope, format, and content of some reports may vary based on user definable parameters at the time of execution.

System Settings

This report is available for all users, and is mainly intended to be used for administration and troubleshooting. The report will list the currently selected data template, all data templates available in this installation of the PR3, all lookup and authority data loaded by the PR3 (see the "Lookup Data" section), and any additional system settings and preferences the user may set.

- A table showing the currently selected data template, as well as all data templates available in this installation of the PR3.
- A table showing all of the values for each type of lookup or authority data.
- A summary of any additional system settings or preferences the user can configure in the PR3.

Declarations in Submission (RP-001)

This report will list either all Declarations (RP-001) or selected (RP-002) Declarations in the Submission, in order, along with details about the Entries included in each one.

The header of the report will contain information about the Submission, including the submission type, contributor, INFCIRC/State, submission date (if available), and comments.

Each Declaration will be listed, including its article, declaration type (New, Updated, Nothing to Declare, No Change, etc.), declaration number (if assigned), declaration period (either start/end or as-of date), comments, and site (for 2.a.(iii) or other applicable articles).

Entries will be listed under each Declaration, and the fields shown will be based on the article type of the Declaration and its Entries (see "Entry Tables" below).

- Submission Header:
    - Submission Type
    - Contributor
    - INFCIRC #
    - Submission Date
    - Declarable Comments
    - Undeclarable Comments
- Declarations list:
    - Header:
        - Declaration Article
        - Declaration Type (New, Updated, Nothing to Declare, No Change, etc.)
        - Declaration Number (if assigned)
        - Declaration Period (start/end or as-of)
        - Declarable Comments
        - Undeclarable Comments

        - Site (for applicable Articles)
    - Entries list:
        - Based on Article type. See “Entries Tables” below.

Selected Entries in Declaration (RP-001)

The report will list the selected Entries included in the selected Declaration.

The header of the report will contain information about the Submission, including with its article, declaration type (New, Updated, Nothing to Declare, No Change, etc.), declaration number (if available), declaration period (either start/end or as-of date), comments, and site (for 2.a.(iii) or other applicable articles).

Entries will be listed, and the fields shown will be based on the article type (see “Entries Tables” below).

- Declaration Header:
    - AP Article
    - Contributor
    - INFCIRC #
    - Declaration Type (New, Updated, Nothing to Declare, No Change, etc.)
    - Declaration Number (if assigned)
    - Submission Date (if available)
    - Declaration Period (start/end or as-of)
    - Declarable Comments
    - Undeclarable Comments
    - Site (for applicable Articles)
- Entries list:
    - Based on Article type. See “Entries Tables” below.

Submission Due Dates (RP-002)

The Due Dates report will show future Submission due dates based on a State’s Entry Into Force date for a period specified by the user.

The header will show the selected Entry Into Force date and report period. A list of Submission due dates will be shown, including the Submission type and description, the due date, the declaration period, and a list of article types the Submission may contain.

- Parameters:
    - Entry Into Force date (default: State EIF date)
    - From date (default: current date)
    - Report period (default: 1 year)
- Header:
    - Entry Into Force date
    - Report period
    - State
- Due Dates table (in chronological order):
    - Submission Type
    - Submission Type Description
    - Due Date

- Declaration Period Start
- Declaration Period End
- Declaration Article(s) contained

Selected Individual Entries (RP-005)

This report will be used by local originators and reviewers working with individual Entries. The report will list selected Entries with details such as entry title, contributor, INFCIRC/State, article, status, the date and time last modified, and any Undeclarable or Declarable Comments.

- Entries detail data:
  - Entry Title
  - Contributor
  - INFCIRC #
  - Article
  - Status
  - Last Modified Date
  - Declarable Comments
  - Undeclarable Comments

Entries Tables

When a Declaration's Entries are shown in reports, the fields shown will be based on the Declaration's article type.

Article 2.a.(i)

- Entry Number (if assigned)
- References
- Fuel Cycle Stage(s)
- Location
- Project Title
- Project ID
- Relationship to State
- Description
- Organization(s)
- Objectives
- Degree Met
- Intended Application
- Foreign Collaboration(s)
- Sublocations
- Project Start Date
- Project End Date
- Declarable Comments
- Undeclarable Comments

Article 2.a.(ii)

- Entry Number (if assigned)
- References
- Agreed Information
- Declarable Comments

- Undeclarable Comments

Article 2.a.(iii)

- Entry Number (if assigned)
- References
- Facility/LOF Code
- MBA Code
- Key Measurement Point
- Building
- Number of Floors
- Size + Size Unit
- Use and Previous Use
- Contents
- Coordinates
- MBA Code
- Declarable Comments
- Undeclarable Comments

Article 2.a.(iv)

- Entry Number (if assigned)
- References
- Annex I Item or Voluntary Extension
- Location
- Brief Description
- Capacity
- Extent Used (%)
- Sublocations
- Declarable Comments
- Undeclarable Comments

Article 2.a.(v)

- Entry Number (if assigned)
- References
- Location
- Operation
- Operational Status
- Estimated Annual Capacity
- Actual Current Year Production
- Declarable Comments
- Undeclarable Comments

Article 2.a.(vi).(a)

- Entry Number (if assigned)
- References
- Location
- Chemical Composition
- Quantity
- Intended Use Code + Intended Use
- Declarable Comments
- Undeclarable Comments

Article 2.a.(vi).(b)

- Entry Number (if assigned)
- References
- Destination
- Interim Destinations
- Chemical Composition
- Quantity
- Intended Use Code + Intended Use
- Export Date
- Declarable Comments
- Undeclarable Comments

Article 2.a.(vi).(c)

- Entry Number (if assigned)
- References
- Location
- Chemical Composition
- Quantity
- Import Date
- Exporting State
- Intended Use Code
- Declarable Comments
- Undeclarable Comments

Article 2.a.(vii)

- Entry Number (if assigned)
- References
- Location
- Exemption
- Element
- Percent Uranium
- Weight
- Intended Use Code + Intended Use
- Declarable Comments
- Undeclarable Comments

Article 2.a.(viii).(a)

- Entry Number (if assigned)
- References
- Waste Type
- Number/Type of Items
- Conditioned Form
- Quantities (Pu, HEU, U233, Np/Am)
- Previous Location
- New Location
- Declarable Comments
- Undeclarable Comments

Article 2.a.(viii).(b)

- Entry Number (if assigned)
- References

- Waste Type
- Number/Type of Items
- Conditioned Form
- Quantities (Pu, HEU, U233, Np/Am)
- Location
- Processing Location
- Start/End Dates
- Processing Purpose
- Declarable Comments
- Undeclarable Comments

Article 2.a.(ix).(a)

- Entry Number (if assigned)
- References
- Item Identity
- Annex II
- Quantity
- Location of Intended Use
- Import Date (if received)
- Declarable Comments
- Undeclarable Comments

Article 2.a.(ix).(b)

- Entry Number (if assigned)
- References
- Item Identity
- Annex II
- Quantity
- Location of Intended Use
- Export Date
- Declarable Comments
- Undeclarable Comments

Article 2.a.(x)

- Entry Number (if assigned)
- References
- Fuel Cycle Stage
- Development Plans
- R&D Plans
- Collaboration(s)
- Organization(s)
- Declarable Comments
- Undeclarable Comments

Article 2.b.(i)

- Entry Number (if assigned)
- References
- Fuel Cycle Stage(s)
- Location
- Project Title
- Project ID

- Description
- Organization(s)
- Objectives
- Degree Met
- Intended Application
- Foreign Collaboration(s)
- Sublocations
- Project Start Date
- Project End Date
- Declarable Comments
- Undeclarable Comments

Article 2.b.(ii)

- Entry Number (if assigned)
- References
- Fuel Cycle Stage
- Physical Features
- Brief Description
- Sublocations
- Carried Out By
- Declarable Comments
- Undeclarable Comments

Article 2.c

- Entry Number (if assigned)
- References
- In Reference To
- Amplifications
- Declarable Comments
- Undeclarable Comments

Note

- Entry Number (if assigned)
- References
- Attachments (filenames)
- Declarable Comments
- Undeclarable Comments

Appendix E: Protocol Reporter 1 to Protocol Reporter 3 Data Translations

Base Entry Fields

PR 1 Field	PR 3 Field	Notes
Entry Number	Entry Number	
Reference	Reference	Separate each Reference into Source, State, Declaration, and Entry. If Source is included in Entry, make a note in Undeclarable Comments.
Comments	Declarable Comments	

Entry 2.a(i)

PR 1 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stages	Adds an item to the set if the value is found in the lookup. If not, make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description	May require the user to separate this data into other fields.

Entry2.a.(ii)

Entry2.a.(ii) contains only the Base Entry Fields.

Entry2.a.(iii)

PR 1 Field	PR 3 Field	Notes
Facility(ies) on Site	Facility/LOF Code	
Building	Building	
General Description, Including Use, and Comments	Use	This is separated into several different fields in the PR3. The user would have to manually separate this data.

Entry2.a.(iv)

PR 1 Field	PR 3 Field	Notes
Annex I Item	Annex I Item	If the value is not found in the lookup, leave the field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Description of Scale of Operations	Brief Description	The user will have to manually separate this into Capacity and Extent Used.

Entry2.a.(v)

PR 1 Field	PR 3 Field	Notes
Operation	Operation	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Status	Status	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Estimated Annual Production Capacity (tonnes of element: U or Th)	Quantity	Attempt to parse into a numeric value, and use "tonnes" as the unit. If this fails, leave this field blank and make a note in Undeclarable comments.

Entry2.a.(vi).(a)

PR 1 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity (tonnes of element: U or Th)	Quantity	Attempt to parse into a numeric value, and use "tonnes" as the unit. If this fails, leave this field blank and make a note in Undeclarable Comments.
Intended Use Code	Intended Use Code	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Intended Use	Intended Use	

Entry2.a.(vi).(b)

PR 1 Field	PR 3 Field	Notes
Destination	Destination	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Interim Destination(s)	Interim Destinations	Attempt to parse into a list (by commas or line breaks). If this fails or destinations are not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity (tonnes of element: U or Th)	Quantity	Attempt to parse into a numeric value, and use "tonnes" as the unit. If this fails, leave this field blank and make a note in Undeclarable Comments.

PR 1 Field	PR 3 Field	Notes
Export Date	Export Date	

Entry2.a.(vi).(c)

PR 1 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity (tonnes of element: U or Th)	Quantity	Attempt to parse into a numeric value, and use "tonnes" as the unit. If this fails, leave this field blank and make a note in Undeclarable Comments.
Use (intended)	Intended Use	
Exporting State	Exporting State	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Import Date	Import Date	

Entry2.a.(vii)

PR 1 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Exemption	Exemption	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Material	Element	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity of Element	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Intended Use Code	Intended Use Code	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Intended Use	Intended Use	

Entry2.a.(viii).(a)

PR 1 Field	PR 3 Field	Notes
Waste Type Prior to Conditioning	Waste Type	
Conditioning Form	Conditioned Form	
Number of Items	Number of Items	
Quantity Pu	Quantity Pu	Attempt to parse the string into "value unit." If

PR 1 Field	PR 3 Field	Notes
		this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity HEU	Quantity HEU	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity U233	Quantity U233	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Previous Location	Previous Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
New Location	New Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.

Entry2.a.(viii).(b)

PR 1 Field	PR 3 Field	Notes
Waste Type Prior to Conditioning	Waste Type	
Conditioning Form	Conditioned Form	
Number of Items	Number of Items	
Quantity Pu	Quantity Pu	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity HEU	Quantity HEU	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity U233	Quantity U233	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Processing Location	Processing Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Processing Dates	Note in Undeclarable Comments	This is a free text field in the PR2 that is separated into Start Date and End Date in the PR3. The user would have to manually separate this data.
Processing Purpose	Processing Purpose	String

Entry2.a.(ix).(a)

PR 1 Field	PR 3 Field	Notes
Annex II Paragraph	Annex II	If the value is not a selectable value found in the lookup, leave this field blank and make a note in Undeclarable Comments.

PR 1 Field	PR 3 Field	Notes
Identity of Specific Item(s)	Item Identity	
Quantity (no. or wt.)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location of Intended Use	Location of Intended Use Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Export Date	Export Date	

Entry2.a.(ix).(b)

PR 1 Field	PR 3 Field	Notes
Annex II Paragraph	Annex II	If the value is not a selectable value found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Identity of Specific Item(s)	Item Identity	
Quantity (no. or wt.)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location of Intended Use	Location of Intended Use Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Import Date	Import Date	

Entry2.a.(x)

PR 1 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stage	Adds an item to the set if the value is found in the lookup. If not, make a note in Undeclarable Comments.
General Plans for Development of the Nuclear Fuel Cycle	Development Plans	
General Plans for Nuclear Fuel Cycle-Related Research and Development Activities	R&D Plans	

Entry2.b.(i)

PR 1 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stages	Adds an item to the set.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description	May require the user to separate this data into other fields.

Entry2.b.(ii)

PR 1 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description of Activities	May require the user to separate this data into other fields.
Carried Out By	Noted in Undeclarable Comments	This free text field is separated into a list of structured data in the PR3. The user would have to manually separate this data.

Entry2.c

PR 1 Field	PR 3 Field	Notes
Response (Amplification and clarification)	Amplifications	

Entry Note

PR 1 Field	PR 3 Field	Notes
General Description	General Description	

Appendix F: Protocol Reporter 2 to Protocol Reporter 3 Data Translations

F.1 Model AP

Base Entry Fields

PR 2 Field	PR 3 Field	Notes
Entry Number	Entry Number	
Reference	Reference	Created using the State-Declaration-Entry format.
Attachments	Attachments	Creates an item for each attachment.
Comments	Declarable Comments	
Entry Source	Undeclarable Comments	

Entry 2.a.(i)

PR 2 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stages	Adds an item to the set.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description	May require the user to separate this data into other fields.

Entry 2.a.(ii)

PR 2 Field	PR 3 Field	Notes
Agreed Information	Agreed Information	

Entry 2.a.(iii)

PR 2 Field	PR 3 Field	Notes
Facility/LOF Code	Facility/LOF Code	
Building	Building	
General Description	Use	This is separated into several different fields in the PR3. The user would have to manually separate this data.

Entry 2.a.(iv)

PR 2 Field	PR 3 Field	Notes
Annex I Item	Annex I Item	If the value is not found in the lookup, leave the field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.

PR 2 Field	PR 3 Field	Notes
Description of Scale of Operations	Brief Description	The user will have to manually separate this into Capacity and Extent Used.

Entry 2.a.(v)

PR 2 Field	PR 3 Field	Notes
Operation	Operation	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Status	Status	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Estimated Annual Production Capacity	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.

Entry 2a.(vi).(a)

PR 2 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity (tones of element)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Intended Use Code	Intended Use Code	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Intended Use	Intended Use	

Entry 2.a.(vi).(b)

PR 2 Field	PR 3 Field	Notes
Destination	Destination	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Interim Destination(s)	Interim Destinations	Attempt to parse into a list (by commas or line breaks). If this fails or destinations are not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.

PR 2 Field	PR 3 Field	Notes
Quantity (tones of element)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Export Date	Export Date	

Entry 2.a.(vi).(c)

PR 2 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Chemical Composition	Chemical Composition	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity (tones of element)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Intended Use	Intended Use	
Exporting State	Exporting State	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Import Date	Date	

Entry 2.a.(vii)

PR 2 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Exemption	Exemption	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Material	Element	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Quantity of element	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Intended Use Code	Intended Use Code	If the value is not found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Intended Use	Intended Use	

Entry 2.a.(viii).(a)

PR 2 Field	PR 3 Field	Notes
Waste Type Prior to Conditioning	Waste Type	
Conditioned Form	Conditioned Form	

PR 2 Field	PR 3 Field	Notes
Number of Items	Number of Items	
Quantity Pu	Quantity Pu	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity HEU	Quantity HEU	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity U233	Quantity U233	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity Np/Am	Quantity Np/Am	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Previous Location	Previous Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
New Location	New Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.

Entry 2.a.(viii).(b)

PR 2 Field	PR 3 Field	Notes
Waste Type Prior to Conditioning	Waste Type	
Conditioned Form	Conditioned Form	
Number of Items	Number of Items	
Quantity Pu	Quantity Pu	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity HEU	Quantity HEU	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity U233	Quantity U233	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Quantity Np/Am	Quantity Np/Am	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Processing Location	Processing Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Processing Dates	Note in Undeclarable Comments	This is a free text field in the PR2 that is separated into Start Date and End Date in the PR3. The user would have to manually separate this data.

PR 2 Field	PR 3 Field	Notes
Processing Purpose	Processing Purpose	String

Entry 2.a.(ix).(a)

PR 2 Field	PR 3 Field	Notes
Annex II Paragraph	Annex II	If the value is not a selectable value found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Identity of Specific Item(s)	Item Identity	
Quantity (no. or wt.)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location of Intended Use	Location of Intended Use Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Export Date	Export Date	

Entry 2.a.(ix).(b)

PR 2 Field	PR 3 Field	Notes
Annex II Paragraph	Annex II	If the value is not a selectable value found in the lookup, leave this field blank and make a note in Undeclarable Comments.
Identity of Specific Item(s)	Item Identity	
Quantity (no. or wt.)	Quantity	Attempt to parse the string into "value unit." If this fails, leave this field blank and make a note in Undeclarable Comments.
Location of Intended Use	Location of Intended Use Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
Import Date	Import Date	

Entry 2.a.(x)

PR 2 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stage	Adds an item to the set if the value is found in the lookup. If not, make a note in Undeclarable Comments.
General Plans for Development of the Nuclear Fuel Cycle	Development Plans	
General Plans for Nuclear Fuel Cycle-related Research and Development	R&D Plans	

Entry 2.b.(i)

PR 2 Field	PR 3 Field	Notes
Fuel Cycle Stage	Fuel Cycle Stages	Adds an item to the set.

PR 2 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description	May require the user to separate this data into other fields.

Entry 2.b.(ii)

PR 2 Field	PR 3 Field	Notes
Location	Location Name	Address is a separate field in the PR3, which is required. The user would have to manually separate this data.
General Description	Description of Activities	May require the user to separate this data into other fields.
Carried out by	Noted in Undeclarable Comments	This free text field is separated into a list of structured data in the PR3. The user would have to manually separate this data.

Entry 2.c

PR 2 Field	PR 3 Field	Notes
Agency Question	In Reference To	
Response (Amplification and clarification)	Amplifications	

Entry Note

PR 2 Field	PR 3 Field	Notes
General Description	General Description	

Declaration Details 2.b.(ii)

PR 2 Field	PR 3 Field	Notes
Agency Request Number	Agency Request Number	
Agency Request Date	Agency Request Date	

Declaration Details 2.c

PR 2 Field	PR 3 Field	Notes
Agency Request Number	Agency Request Number	
Agency Request Date	Agency Request Date	

F.2 EURATOM extensions to the Model AP Data Structure

Entries for the EURATOM data template are mapped the same as the Model AP.

F.3 US Extensions to the Model AP Data Structure

Entries for the US data template are mapped the same as the Model AP, with the following additional fields:

Base Entry Data Structure

PR 2 Field	PR 3 Field	Notes
Internal US Record Keeping Information	Internal US Record Keeping Information	
US Reporting Code	US Reporting Code	

Entry 2.a.(v)

PR 2 Field	PR 3 Field	Notes
GPS Coordinates	GPS Coordinates	Attempt to parse string as GPS coordinates. If this fails, leave the field blank and add a note in Undeclarable Comments.

F.4 AP Data Structure for China

Where the AP for China matches the Model AP (as described in C.4), Entries are mapped as they are in the Model AP. Mappings for new fields will be determined when information regarding the PR2 data structure for China is made available by the Agency.

F.5 AP Data Structure for France

Where the AP for France matches the Model AP (as described in C.4), Entries are mapped as they are in the Model AP. This section includes only mappings for new fields.

Entry 2.a.(iii)

PR 2 Field	PR 3 Field	Notes
NNWS Entities	Noted in Undeclarable Comments	NNWS Entries is a free text field in the PR2, but a set of Collaboration records in the PR3. The user would have to manually separate this data.

Entry 2.a.(vi).(a)

PR 2 Field	PR 3 Field	Notes
Export Date	Export Date	

Entry 2.a.(vi).(b)

PR 2 Field	PR 3 Field	Notes
Import Date	Import Date	

Entry 2.a.(vii).(a)

PR 2 Field	PR 3 Field	Notes
Annex I	Annex I	If the value is not found in the lookup, leave the field blank and make a note in Undeclarable Comments.

Entry 2.a.(vii).(b)

PR 2 Field	PR 3 Field	Notes
Annex I	Annex I	If the value is not found in the lookup, leave the field blank and make a note in Undeclarable Comments.

F.6 AP Data Structure for Russia

Where the AP for Russia matches the Model AP (as described in C.5), Entries are mapped as they are in the Model AP. This section includes only mappings for new fields.

Entry 2.a.(iii)

PR 2 Field	PR 3 Field	Notes
NNWS Entities	Noted in Undeclarable Comments	NNWS Entries is a free text field in the PR2, but a set of Collaboration records in the PR3. The user would have to manually separate this data.

Entry 2.a.(vi)

PR 2 Field	PR 3 Field	Notes
Export Date	Export Date	

F.7 AP Data Structure for the UK

Where the AP for the UK matches the Model AP (as described in C.6), Entries are mapped as they are in the Model AP. This section includes only mappings for new fields.

Entry 2.a.(vii).(a)

PR 2 Field	PR 3 Field	Notes
Export Date	Export Date	

Entry 2.a.(vii).(b)

PR 2 Field	PR 3 Field	Notes
Import Date	Import Date	