



Instructions for Submitting a Service Expression Description

(last revised 8 May 2007)

Step 1. Review relevant policy documents

Please read the [e-Framework policy documents](#) that govern the subsequent use of Service Expression descriptions that are submitted to the e-Framework.

- Intellectual Property Rights Statement
- Privacy Statement
- Service Expression Submission Policy

Step 2. Prepare Service Expression description documentation

Use the e-Framework's template to ensure that complete information is captured.

- Download the [Service Expression Description Template](#) (Microsoft Word document)
- Refer to the [General Considerations](#), [Helpful Links](#) and [Guidelines](#) that will help you provide the appropriate information for the elements of the Service Expression description
- The description you prepare must include all required elements
- Include the recommended and optional elements if possible (elements that are not used can be deleted from the document prior to submitting the template to the e-Framework)

Step 3. Submit the Service Expression Description to the e- Framework

When you have completed preparing the Service Expression Description, follow these steps to submit the document to the e-Framework for review.

- Go to [Submit Service Expression](#) page on the e-Framework website



- Fill in the requested information for the online form (your contact information, etc.)
- Upload your completed template documents
- Click "Submit"
- Service Expressions that are ultimately accepted will be published and maintained in the Service Expression Registry on the e-Framework website

General considerations

- The words MUST, MUST NOT, REQUIRED, SHALL, SHALL NOT, SHOULD, SHOULD NOT, RECOMMENDED, MAY, and OPTIONAL in this document will be interpreted as described in [RFC 2119].
- When documenting a Service Expression, avoid making statements that are truisms for the e-Framework (e.g., do not write: "this Service Expression is a specialisation of a Service Genre")
- Avoid repetition
- Avoid using project-specific language
- Include a simple, real-world example where possible

Helpful links and contact information

- See an overview and diagram of the [submission and review processes](#) on the e-Framework website under "Guides"
- If you have questions about the preparation of the template or the overall process, please contact the Editor: editor [at] e-framework.org

Guidelines for all elements of the Service Expression Description

These directions and notes are provided to assist you in completing the Service Expression Description template completely and accurately. Required elements are so indicated within the brackets that follow each element in the list below and in the template.



If you need to see the complete technical definition of these elements, click on the particular element from the list of [Service Expression Elements](#).

Note: The Service Expression description template includes e-Framework Service Expression description elements as of March 2007 and e-Framework service classifications as of March 2007.

Name [required]

- Provide an appropriate name for your Service Expression
- A meaningful name will allow others quickly grasp what it covers and to discover your Service Expression efficiently
- The name should be simple, concise and informative

Note: The e-Framework may not use the common, English word that you supply, but may re-label this element with a Name or Identifier according to a system it will devise.

Rationale [required]

- Introduce the Service Expression that you are submitting
- Describe the underlying idea or principle that makes the Service Expression useful when applied in the domain(s)
- Classification [required]
- Select the most appropriate choice(s) for each classifier listed in the e-Framework [Service Expression Classification Scheme](#)
- In the template, type an "X" in the brackets next to your choice(s)
- Required classifiers are those in **bold**
- You may delete any Optional classifiers that you do not use
- You may select more than one choice for Domain, Batch Behaviour and Protocol Binding
- Accurate classification choices will ensure that your Service Expression can be catalogued in numerous ways and be readily discovered by a search
- The e-Framework may add to or revise the classifier choices to ensure consistency
- The e-Framework Integrity Group (eFIG) will provide values for the Status and Confidence level of the submitted Service Expression



Service Genre [required]

- Provide the name of the Service Genre that you have specialised to create your Service Expression
- View the list of current Service Genres in the e-Framework [Service Genre Registry](#)

Version [required]

- Provide the version for this Service Expression Description
- If a revised Service Expression has technical changes or altered capabilities, you should submit an updated Version of the Service Expression Description
- Version information that reflects editorial changes to the descriptive document may differ from the Version of the Service Expression itself
- The e-Framework Editor will keep track of the versions

Description [required]

- Write a narrative description that explains in plain language what your Service Expression does
- Do not assume the members of your audience are programmers
- Provide sufficient details so that anyone reading your description can understand its basic purpose and capabilities
- Be sure to explain:
 - Process or problem the service addresses and how it does it
 - Reasoning behind the approach
 - Limitations on use related to context or situation
- Organize the narrative in a logical way that is easy to follow, providing a clear picture of the Service Expression's intended behaviours
- Include a diagram

Functionality [required]

- List all the capabilities of the Service Expression
- Include the types of things that can be designed as applications or implementations based on this Service Expression



Note: This list should not be the same as the detailed Requests & Behaviours. A functionality may require multiple requests; a request may provide different, unrelated functions.

Usage Scenarios [optional]

- Briefly describe one or more usage scenarios that show how this Service Expression is used in a workflow, or where it fits in a set of business processes

Applicability [optional]

- Explain how your Service Expression should be used
- Point out any situations in which it should not be used
- Make the applicability description as specific as possible

Requests and Behaviours [required]

- List all the basic ways to interact with the Service Expression
- Provide the complete technical specifications. Information might include:
 - Name for the behaviour or request
 - Classification (such as “transactional”)
 - Function or operation provided
 - Format of message or requests
 - Normal and abnormal responses
 - Pre-conditions and post-conditions
 - Algorithms for changes in state

Use and Interactions [required]

- Explain how the Requests and Behaviours included in your Service Expression combine to produce the desired functions
- If there are constraints about the order of use and interactions, be sure to detail them

Note: This technical description is essential for others to understand the interacting requests and behaviours within your Service Expression and the complex interactions with other Service Expressions.



Structure [optional]

- Illustrate the data flow within the Service Expression that reveals the interactions between the data and state

Note: This conceptual picture of how the Service Expression works should not be essential for understanding what it does, but seeing the structure can help implementation designers more readily grasp the complex relationships.

Interface Definition [recommended]

- Define the interfaces to the Service Expression in a machine-processible format (WSDL, document XSDs, vocabularies, etc.)
- While not absolutely required, the Interface Definition is needed to make a service implementation match the Service Expression

Note: There can be only one set of Interface Definitions for each Service Expression in the e-Framework.

Applicable Standards [required]

- List the names and versions of candidate domain and technical standards, specifications and application profiles needed to provide the functionality of your Service Expression
- Note conformance requirements and any exclusions
- Where possible, link to the [JISC Standards Catalogue](#) for each standard referred to
- Only include the standards that pertain to the behaviour and functionality of the Service Expression, not all possible implementations

Design Decisions and Tradeoffs [optional]

- Describe the decisions involved in designing your Service Expression and explain why you made those choices
- Limit your discussion to the overall design of the service, not the internal details
- Use the Aspects of Service Design guidelines in the Core Components and Concepts document for suggestions on which design choice implications to include in your description (available as a [PDF file](#))



Implementation Guidance and Dependencies [recommended]

- Share any anticipated issues that may affect the design or use of implementations based on your Service Expression
- Note any assumptions you made about the technology dependencies not documented elsewhere in the template

Note: While design decisions are left up to the implementer, the implementation guidance you provide can be very helpful.

Known Uses [optional]

- List the known uses of this Service Expression by any Service Usage Models (SUMs) and Commonly Recurring (CoRe) SUMs
- Tell how the Service Expression is used and its status: implemented, deployed, proposed, etc.

Service Expression Dependencies [recommended]

- List the names of all other Service Expressions that must be available in order to use your Service Expression
- If a particular version of another Service Expression is required, include the version information

Related Service Expressions [optional]

- List the names and versions of all Service Expressions that provide the same behaviours and requests but that have a different interface

Related Service Usage Models (SUMs) [optional]

- List the names and versions of the Service Usage Models that use your Service Expression

Note: This information is helpful when designing applications based on the related Service Usage Models.

Related CoRe SUMs [optional]

- List the names and versions of all Commonly Recurring (CoRe) SUMs that use your Service Expression

Note: This information is helpful when designing applications based on any of the related CoRe SUMs.



Download the [Service Expression Description Template](#) now.