1.   Characteristic Information

The following defines information that pertains to this particular use case. Each piece of information is important in understanding the purpose behind the Use Case.

Goal In Context:	The goal of this document is define the actions and actors to achieve electronic application submission via Applicant web services at Grants.gov
Scope:	SubmitApplication web service at Grants.gov
Level:	One
Pre-Condition:	Grantee system has tested connectivity with the grants.gov system over SSL with Mutual Authentication
Success End Condition:	Grantee system submits the electronic application to the grants.gov system
Failed End Condition:	A SOAP fault is returned to the grantee system
Primary Actor:	Grantee System
Trigger Event:	Grantee System prepares to submit an electronic application to the Grants.gov SubmitApplication web service

2.   Main Success Scenario

This Scenario describes the steps that are taken from trigger event to goal completion when everything works without failure. It also describes any required cleanup that is done after the goal has been reached. The steps are listed below:

Step	Actor	Action Description
1	Grantee System	Validates that the application submitter is an Authorized Organization Representative (AOR) on behalf of the grantee organization's DUNS number
2	Grantee System	Validates the Grant Application XML using strict XML schema validation
3	Grantee System	Compute the hash value for the Grant Application XML and place it into the header.
4	Grantee System	Sends a SubmitApplicationRequest SOAP message to the SubmitApplication web service on the grants.gov system
5	Grants.gov System	Compute the hash value of the Grant Application XML and compare it to the value in the header.
6	Grants.gov System	Authorizes submission request
7	Grants.gov System	Stores application
8	Grants.gov System	Sends a SubmitApplicationResponse SOAP message
9	Grantee System	Processes a SubmitApplicationResponse SOAP message

3. Scenario Extensions

This is a listing of how each step in the Main Success Scenario can be extended. Another way to think of this is how can things go wrong. The extensions are followed until either the Main Success Scenario is rejoined or the Failed End Condition is met. The Step refers to the Failed Step in the Main Success Scenario and has a letter associated with it. I.E if Step 3 fails the Extension Step is 3a.

Step	Condition	Action Description
1a	The application submitter is NOT an AOR	The grantee organization shall deny access for electronic submission to the grants.gov system.
2a	The XML is invalid and contains errors	Grantee system shall deny access for electronic submission until the xml passes strict schema validation.
5a	The computed hash value does not match with the hash value in the header.	A SOAP Fault will be returned stating the error and will show the computed hash value and the hash value that was given in the header.
6a	Authorization Fails	A SOAP Fault will be returned with the associated error message. Authorization is checking that the SSL client certificate's serial number is registered on grants.gov for the DUNS number in the application.
7a	Grants.gov fails to store the application	A SOAP Fault will be returned with the associated error message.
9a	Grantee system fails to process the SubmitApplicationResponse	Use the GetApplicationList function to obtain a list of all the applications submitted to the grants.gov system

4. Scenario Variations

If a variation can occur in how a step is performed it will be listed here.

Step	Variable	Possible Variations

5. Related Information

The following table gives the information that is related to the Use Case.

Frequency:	Very Often
Super Use Case:	N/A
Sub Use Case(s):	N/A
Channel To Primary Actor:	HTTPS, Client Authentication
Secondary Actor(s):	Grantee System
Channel(s) To Secondary Actor(s):	

6.   Open Issues

The following table provides insight to any unresolved problems or questions. These are the things that seem to apply but could not be fit into this use case on this pass.

Issue ID   **Issue Description**