

National Highway Specification Website (NHSW) Submission Standards for Administrative Users

General

These submission standards describe the duties of agency-level users of the National Highway Specification Website (NHSW), and provide step-by-step instructions for the submission, alteration, and deletion of electronic specification files and related documents. Adherence to the submission standards is necessary for the effective maintenance and operation of the NHSW.

In order to submit, alter or delete specifications on the NHSW, each participating Agency must identify a user, who is responsible for maintaining their Agency's specifications on the NHSW. For most State departments of transportation (DOT's), this will typically be the "Specifications Engineer" or similar position within the agency, representing the person responsible for the development and upkeep of the State's construction specifications.

For Federal security purposes, Agency users must be registered in the Federal Highway Administration's User Profile and Access Control System (UPACS) and must be granted a UPACS ID and access rights to the NHSW system. Once granted, the user's access rights will allow them to upload, alter, or delete their agencies specifications on the NHSW. The State DOT's can register an Agency User by contacting their local FHWA Division Office.

Agency Administrative Homepage

After completing the registration process, Agency users can access the administrative functions of the NHSW by selecting the "Administrative Access" link shown in the "Specification Library" home page, and entering their appropriate UPACS User Name and Password on the next screen.

Agency users can select from the following options on the Administrative Access Homepage:

- Upload New Specification
- Revise/Replace Specification
- Delete Specification

After selecting any of these options, Agency users can access two primary folders (or Categories): Standard Specifications and Supplements or Innovative and Emerging Specifications. The NHSW Category structure provides the basic document organization for the NHSW, and facilitates localized document searches via the website search engine. It is essential to understand key organizational differences between the Standard Specifications and Supplements Category and the Innovative and Emerging Specifications Category. This information is provided below.

File Structure for the Standard Specifications and Supplements Category

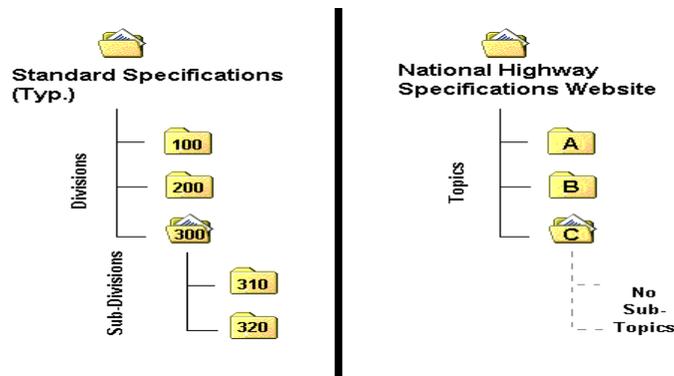
The Standard Specifications and Supplements Category for each Agency of the NHSW contains several subfolders (or Topics), which are analogous to divisions within the Standard Specifications document. For example, the Alabama Department of Transportation (ALDOT) contains eight Topics in its Standard Specifications and Supplements Category, shown below, that correspond with Divisions 100 through 800 of ALDOT's Standard Specifications for Highway Construction (2002 Edition).

- A – General Provisions
- B – Earthwork
- C – Bases
- D – Surfacing and Pavements
- E – Structures
- F – Incidentals
- G – Traffic Control Devices and Highway Lighting
- H – Materials

In turn, each Topic within the Standard Specifications and Supplements Category contains specification files that fall within that division of the Standard Specifications. For example, under the Topic Earthwork, typical specification files could include the following:

- 201 Clearing and Grubbing
- 202 Removal of Structures and Obstructions
- 203 Excavation and Embankment
- 204 Geotechnical Instrumentation
- 205 Temporary Erosion and Sediment Control

Some divisions of an Agency's Standard Specifications may contain additional subsections. However, the Topic folders will not have a lower-tier folder structure. Specification sections within any sub-division will exist within the Topic folders of the NHSW. This point is clarified by the graphic below.



Some Agencies, however, do not organize their Standard Specifications into divisions in the manner described above. For these Agencies, the specification files have been organized according to the AASHTO Guide Specifications for Highway Construction. The AASHTO's eight divisions are listed below. Three additional Topics: Drainage, Traffic Control, and Other, have been added to capture information that does not clearly fall within the recommended AASHTO divisions.

- A – General Provisions
- B – Earthwork
- C – Drainage
- D – Base Courses
- E – Flexible Pavements
- F – Rigid Pavement
- G – Rehabilitation of Pavements
- H – Structures
- I – Traffic Control
- J – Miscellaneous Construction
- K – Materials
- L – Other

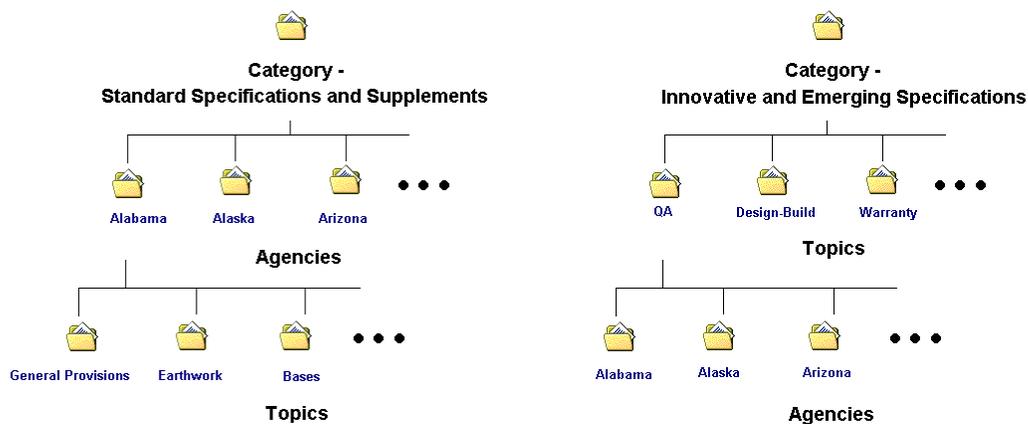
File Structure for the Innovative and Emerging Specifications Category

The titles of Standard Specifications and Supplements Topics can vary from Agency to Agency because the division titles of each Agency’s Standard Specifications will differ. However, the NHSW is designed so that Topics in the Innovative and Emerging Specifications Category are fixed. An Agency may place these specifications into one of the six Topics below:

- Quality Assurance Specifications
- Performance Related Specifications
- Warranty Specifications
- Design-Build Specifications
- References and Report Documents
- Other Innovative and Emerging Specifications

As with Standard Specifications and Supplements Topics, each Innovative and Emerging Specifications Topic may contain numerous specification files and related documents, but there will not be a lower-tier Topic folder beyond the six Topics specified above.

You will notice a fundamental difference between the document organization structure of the Standard Specifications and Supplements Category and the Innovative and Emerging Specifications Category for all Agencies shown in the figure below.



The reason for this difference is that many Agencies do not currently employ all types of Innovative and Emerging Specifications. To facilitate efficient identification of these documents by the user, the NHSW is designed to display only Agencies that contain information for a particular Innovative and Emerging Specifications Topic. This is achieved by removing unused Innovative and Emerging Specifications Topic folders (i.e. Quality Assurance Specifications, Warranty Specifications, etc.) from the NHSW. This action can only be performed by the FHWA NHSW User.

For example, if the Hawaii Department of Transportation does not employ Quality Assurance Specifications, then the FHWA NHSW User could delete Hawaii DOT's Quality Assurance Specifications folder. This will ensure that Hawaii DOT does not appear among the Agencies listed within the Quality Assurance Specifications Topic.

This method applies to all Innovative and Emerging Specifications Topics.

Compliance with Section 508 of the Rehabilitation Act

The National Highway Specifications Website (NHSW) must comply with Section 508 of the Rehabilitation Act of 1973, 29 USC 794(d), as amended in 1998. Section 508 requires that Federal agency provide the same access to electronic and information technology to people with disabilities as they provide to people without disabilities. Section 508 also required the Architectural and Transportation Barriers Compliance Board (the Access Board) to develop accessibility standards that all Federal agencies must follow.

Section 508 does not impose any requirements on States agencies or private industry. The construction specifications stored in the NHSW are State documents, however the NHSW is a Federal agency website and as such, all documents submitted to it must be in compliance with the applicable standards.

Additional information can be found at:

<http://www.access-board.gov/508.htm> (Access Board's Section 508 page)

<http://www.section508.gov> (GSA's Section 508 page)

<http://www.usdoj.gov/crt/ada/websites2.htm> (U.S. Justice Department guidance to state and local governments)

File Format

The only acceptable format for the files submitted to the NHSW is the Portable Document Format (PDF). users who attempt to submit files in any other format (e.g. .doc or .txt) will receive the following error message and their submittal will fail:

Error: The file (filename) that you are trying to upload is not a PDF file. The NHSW can only accept files with a .pdf extension.

Files in PDF format often are not compliant with Section 508. The latest releases of Adobe Acrobat (Version 5 or later) provide accessibility features to create PDF files that are in compliance with

Section 508, with the exception of files that contain extremely complex tables. State users are encouraged to simplify tables as needed to meet accessibility requirements. All files submitted to the National Highway Specification must make use of these accessibility features.

Information about Adobe Acrobat's accessibility features can be found at <http://access.adobe.com>. This site provides detailed information about accessibility features found in Adobe Version 6.

The following documents provide useful information for creating Section 508 compliant PDF files using Adobe Version 5:

"How to Create Accessible Adobe PDF Files", Adobe Systems,
<http://www.adobe.com/products/acrobat/pdfs/accessbooklet.pdf>

"Advance Techniques for Creating Accessible Adobe PDF Files", Adobe Systems,
<http://www.adobe.com/products/acrobat/pdfs/CreateAccessibleAdvanced.pdf>

Adobe Acrobat Accessibility Answers to Frequently Asked Questions
http://www.adobe.com/products/acrobat/access_faq.html

Specification Approval Process

In order to maintain the integrity and usefulness of the data stored on the NHSW, State users must ensure that each Topic folder contains only the latest approved standard specifications and supplemental specification files. State users should not attempt to upload any specifications to the NHSW until they have been approved for use by the FHWA through the local review and approval process used by the FHWA Division and the State DOT.

It is important to note that the process used by any particular State DOT and its FHWA Division Office counterpart for developing, reviewing, and approving State specifications should in no way be affected by the submission of data to the NHSW. The approval of the specifications by FHWA constitutes their acceptance, and the approved specifications can be implemented for use in Federal-aid construction contracts according to the established procedures used by the State and the FHWA Division. The specifications do not need to be uploaded to the NHSW before they can be used on Federal aid contracts. While the timely submission of data to the NHSW is essential, the submission process is a post-approval activity and should not delay any of the State's construction project activities that are underway. Refer to Technical Advisory T5080.16 for additional guidance on the FHWA's process for reviewing and approving specifications.

State users are encouraged to coordinate with their respective FHWA Division representatives to establish local procedures for submission of specifications to the NHSW. This includes:

- Organizing the approved specifications using the format outlined in these Submission Standards and structuring the specifications into PDF formatted electronic files.
- Ensuring the electronic files meet Federal accessibility requirements in accordance with Section 508 of the Rehabilitation Act.

- Submitting the approved specifications to the NHSW within 30 days of final approval of the specifications by the division. The submission of data to the NHSW should be incorporated into the overall specification review and approval process used by the State and the FHWA division.

File Structure

Agencies typically maintain their electronic Standard Specifications in one of three ways: 1) as numerous small-sized sub-files, each pertaining to a single specification section; 2) as a few medium-sized files, each containing all specification sections that compose a single division; or 3) as a single large-sized file, which contains the entire Standard Specifications document.

If an Agency maintains separate electronic sub-files, as in 1), individual sub-files can simply be uploaded into the appropriate Topic folder as described herein.

If an Agency maintains one electronic file for each division, as in 2), each division file can be uploaded into its own Topic folder.

However, if an agency maintains a single electronic file for the entire standard specification book, as in 3) above, the file must be divided, at a minimum, into sub-files for each major division (Topic) in order to facilitate document searches using the search tool that has been incorporated into the NHSW.

This also applies to Innovative and Emerging Specifications. Typically, however, Agencies maintain many of these types of specifications—special provisions, reference reports and other related documents, etc.—as individual files.

However, if an Agency maintains all of its Supplemental Specifications in a single file, it is considered acceptable practice to place this file in the General Provisions Topic under Standard Specifications and Supplements. It is not necessary to divide a Supplemental Specifications file into its composite divisions prior to uploading to the NHSW.

Internal Hyperlinks and Bookmarks

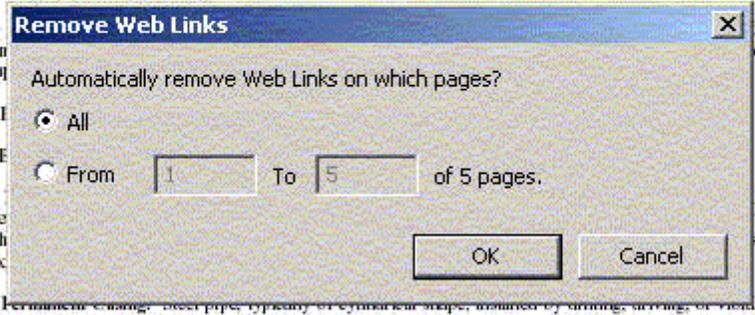
Internal links and bookmarks are commonly used as a navigation tool for web-based specifications. The NHSW is structured such that links are not needed to navigate or search the specification files. Thus, all external links in the files to be uploaded should be turned off or deactivated. These links can be removed through Adobe Acrobat by using the option to remove web links. That option is found in the menu option Tools – Locate Web Addresses - Remove web links from document. Selecting this option will open the below dialog box.

SECTION 1006—DRILLED CAISSONS

1006.1 DESCRIPTION—This work is construction of reinforced cement concrete drilled caisson foundations consisting of shaft sections with or without casings left in place, as indicated or directed, and with or without rock sockets or belled footings, all formed within drilled excavations.

The following definitions apply:

- (a) **Without end of its comp**
- (b) **I**
- (c) **E**
- (d) **earth auger and/or other strength ex**
- (e) **Permanent casing**—steel pipe, typically of cylindrical shape, installed by driving, air-raising, or casting, which, when filled with concrete, becomes a permanent part of the drilled caisson.
- (f) **Tamperless casing**—drivability steel pipe, typically of cylindrical shape, installed by drilling, driving, or



Clicking O.K. will remove all absolute (external) links from the document. Any relative (internal, e.g. bookmarks) links will not be deleted, staying in the document.

The NHSW provides agencies the ability to share and compare specifications for the purpose of improved specification development. Each agency using links will maintain electronic versions of their specifications on their own websites, where internal and external links are available.

Administrative Login Procedure

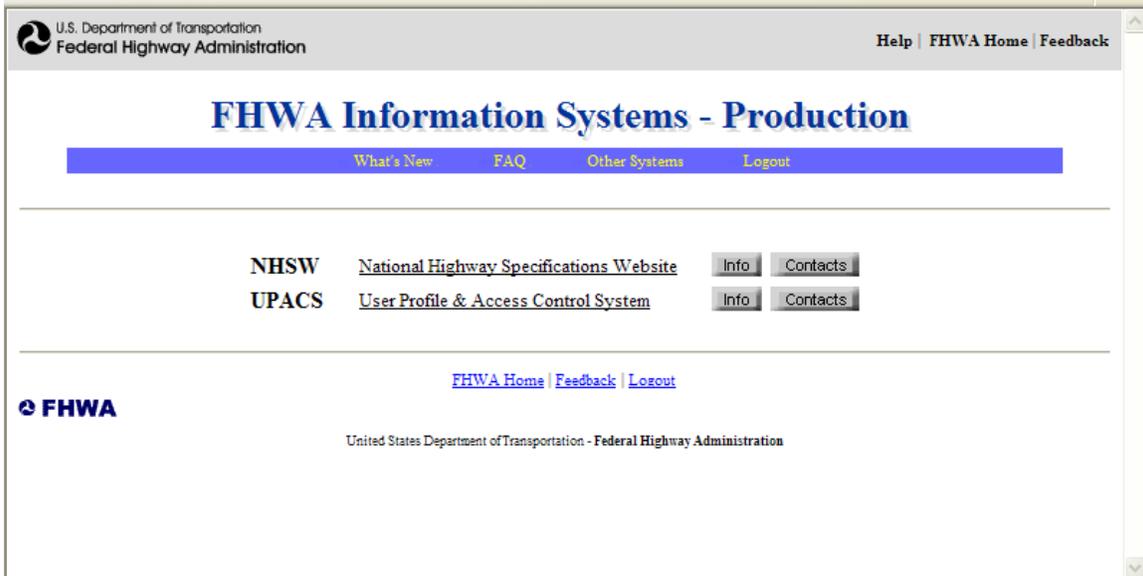
1. At the NHSW Homepage click on the “Administrative Access” link located in the blue Menu bar.



2. Insert User ID and Password, then click on “Login” button.



3. Click on the “National Highway Specifications Website” link.



Administrative Options – Upload, Revise, and Delete

1. Select from the administrative options provided on the NHSW Administrative Options Home page:
 - a. Upload New Specification
 - b. Revise / Replace Specification
 - c. Delete Specification



2. The following applies to each of the three available options:

a. Select from the following Categories:

Standard Specifications and Supplements
Innovative and Emerging Specifications

b. If the Standard Specifications and Supplements Category is selected, then select from the available Topics. The Topics listed below are for reference only – each Agency’s actual Topics for this Category will vary as explained above.

A - General Provisions
B - Earthwork
C - Drainage
D - Base Courses
E - Flexible Pavements
F - Rigid Pavements
G - Rehabilitation of Pavements
H - Structures
I - Traffic Control
J - Miscellaneous Construction
K - Materials
L - Other

c. If the Innovative and Emerging Specifications Category is selected, then select from among the listed available Topics. Again, one or more of the six unchanging Innovative and Emerging Specifications Topics may not be displayed for the reasons mentioned above. The Topics below are provided for reference only.

Quality Assurance Specifications
Performance Related Specifications
Warranty Specifications
Design-Build Specifications
References and Report Documents
Other Innovative and Emerging Specifications

d. Continue following the step-by-step instructions as provided below. An error message will appear if an operation is not completed properly or if additional information is required.

Specification Upload Function

1. After completing Steps 1) and 2) of Administrative Options above, complete the Upload New Specification Screen shown below. It is possible to upload a maximum of three files at once using this screen provided the files are directed to the same Topic folder. Click the “Upload” Button at the bottom of the screen to execute the transaction.

U.S. Department of Transportation
Federal Highway Administration

FHWA Home | Feedback

National Highway Specifications

Search FHWA: Go!

FHWA > Infrastructure > Construction > Admin Access

Upload New Specification - Step 3 of 3

Please select one to three files to upload.

Selected Agency: VIRGINIA
Selected Category: Standard Specifications and Supplements
Selected Topic: C - Roadway Construction

File One:

Spec Description:

Supplement Code: Not Applicable

Date Effective: *format: mm/dd/yyyy*

Select a File to Upload:

File Two:

- a. Specification Description Field
 - (1) The Description should include, at a minimum, the title of the specification. Additional text from the general description paragraph can also be added to this field.
 - (2) If the specification number is not identifiable from the file name, the specification number should also be provided in the Specification Description Field.
 - (3) Text for the Specification Description Field can be copied from a PDF file and pasted into the field provided.
- b. Supplement Code Field

Select either “Not Applicable” or “Supplement” from the menu. The default, “Not Applicable,” should be used for Standard Specifications files. Only identify a file as a “Supplement” if it is not a Standard Specification.

NOTE: Generally, if a Supplement is provided, a corresponding Standard Specification should also be provided unless the agency’s position is that the Standard Specification has been superceded and is no longer used.

c. Date Effective Field

This date should correspond with the FHWA’s latest approved-for-use date. For example, if an agency’s Standard Specifications book was approved for use by the FHWA on January 1, 2001, the Date Effective Field should read “01/01/2001” for all standard specification files on the NHSW. If a Supplement for a particular specification was approved for use on July 1, 2002, its Date Effective Field should read “07/01/2001.”

d. Select a File to Upload Field

Click on the “Browse” Button to locate the PDF file to upload to the NHSW.

File names for specifications are typically based on the specification numbering system used by each agency. Specifications in the NHSW should be recognizable by a combination of a numbered PDF file name and a description. For example, Section 201 could be simply named “201.pdf.” If a Supplement exists for Section 201, the file name could include a suffix denoting the supplement, for example “201S or 201S1.pdf.” In most cases, the existing filenames conform closely enough to these conventions to suffice.

NOTE: If an attempt is made to upload a file that has the same filename (for example, “101.PDF”) as any other file currently in the same Topic, an error message will appear as shown below and the transaction will not execute.

**Error: The file xxx.pdf is already on the system.
Use the *Revise / Replace Specification* link to replace it.**

Revise / Replace Function

1. The Revise / Replace Function is a combination of the Upload New Specification and Delete Specification Functions. Select the Revise / Replace Function to replace one specification file that is located on the NHSW with another specification file that is not.
2. After completing Steps 1) and 2) of Administrative Options above, complete the Revise / Replace Specification Screen below.

NHSW Home

Specifications Library

Search Specifications

Discussion Forums

Links

Administrative Homepage

Administrative Logout

Submission Standards

Revise/Replace Specification - Step 3 of 3

Selected Agency: VIRGINIA

Selected Category: Standard Specifications and Supplements

Selected Topic: C - Roadway Construction

Select a File to Upload:

Spec Description:

Supplement Code:

Date Effective: format: mm/dd/yyyy

Please select one of the following specifications to be replaced by the above file:
Note: To keep the same description copy and paste the old description below into the text area.

File to Revise	File Name	Supplement Code	Date Effective	Description
<input type="radio"/>	301.pdf		01/01/2002	SECTION 301?CLEARING AND GRUBBING
<input type="radio"/>	302.pdf		01/01/2002	SECTION 302?DRAINAGE STRUCTURES
<input type="radio"/>	303.pdf		01/01/2002	SECTION 303?EARTHWORK
<input type="radio"/>	304.pdf		01/01/2002	SECTION 304?CONSTRUCTING DENSITY CONTROL

- a. The upper half of the Revise / Replace Specification Screen is nearly identical to the Upload New Specification Function Screen. Specify a file here to replace one of the files within the Topic shown at the top of the Revise / Replace Specification Screen.

NOTE: For additional information regarding this portion of the Revise / Replace Specification Screen, refer to the Upload New Specification Function section of these Submission Standards.

- b. The lower half of the Revise / Replace Specification Screen displays all of the specification files currently loaded into a particular Topic of the NHSW. Specify a file here to be replaced by the file specified in the previous step. Click the “Revise/Replace” Button at the bottom of the screen to execute the transaction.

NOTE: For additional information on this portion of the Revise / Replace Specification Screen, please refer to the Delete Specification Function section of these Submission Standards.

3. The Revise / Replace Specification Function is a useful tool for correcting any erroneous information entered for a particular specification file because it combines the “Upload” and “Delete” Functions into a single step. For example, if a Supplemental Specification file is uploaded to the NHSW, but the Supplement Code Field is inadvertently left as “Not Applicable,” the Agency User can correct this by performing the Revise / Replace Function for the affected file.

NOTE: A PDF file must always be uploaded when performing the Revise / Replace Function. This applies when the intention is to correct a file’s data field(s) and not to actually replace the file with a revised one. Simply replace a file already on the NHSW with an identical file from the Agency User’s local network, making sure that the data fields of concern have been corrected.

An error message will appear as shown below and the transaction will not be complete if a file is not selected in the upload portion of the Revise / Replace Specification Screen.

Error: File name must be specified!

Delete Specification Function

1. The Delete Specification Function will remove any specification files that are specified from the NHSW. After completing Steps 1) and 2) of Administrative Options above, complete the Delete Specification Screen shown below. Click the “Delete” Button at the bottom of the screen to execute the transaction.

U.S. Department of Transportation
Federal Highway Administration

FHWA Home | Feedback

National Highway Specifications

Search FHWA:

[FHWA](#) > [Infrastructure](#) > [Construction](#) > [Admin Access](#)

Delete Specification - Step 3 of 4

Selected Agency: VIRGINIA
Selected Category: Standard Specifications and Supplements
Selected Topic: C - Roadway Construction

Select one or more of the following specifications to be deleted:

- [301.pdf](#)
- [302.pdf](#)
- [303.pdf](#)
- [304.pdf](#)
- [305.pdf](#)
- [306.pdf](#)
- [307.pdf](#)
- [308.pdf](#)
- [309.pdf](#)
- [310.pdf](#)

2. On the next screen, verify the file(s) to be deleted by pressing the “Delete” Button at the bottom of the screen.

NOTE: The Delete Specification Function is irreversible and there is no way to restore a file that has been deleted from the NHSW. Carefully verify that only the correct files have been selected prior to deleting.

If a file has been inadvertently deleted from the NHSW, it must be uploaded as described by the Upload Specification Function of these Submission Standards.