

FSA Integration Partner

United States Department of Education

Federal Student Aid



**Data Strategy Enterprise-Wide
XML Framework Team
123.1.17 XML Framework
Communications Strategy**

Task Order #123

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Executive Summary

FSA has developed the XML Framework to guide its usage of XML as part of Task Order 123 - Data Strategy Enterprise-Wide. The XML Framework has established a high-level vision for using XML at FSA, as well as established standards for modeling data in XML for data exchange and data quality. Going forward, FSA will need to manage and maintain the XML vision and standards.

In order to encourage adoption of these standards and achieve the benefits offered by the XML Framework, FSA must effectively communicate the importance of XML, future XML implementation efforts, and enhancements and issue resolutions, to various business partners across the lifecycle. The creation of a Communication Strategy is the first step in implementing a successful overall Communication and Outreach Program.

The XML Framework Communications Strategy identifies the recommended audiences, key messages, vehicles, and frequency of communication in preparation for the XML Framework deployment.

The Communications Strategy provides high level information on the following communications areas:

- Audiences
- Messages
- Vehicles
- Timing and Frequency

FSA can use the XML Framework Communications Strategy as a starting point for developing a communications program to support the XML Framework. This strategy provides the first steps towards defining a detailed communications plan.

Audiences

Because the XML Framework is a critical component for many FSA areas and will continue to grow in importance as more system interfaces are moved to XML, the target audiences for the Communication Strategy cross a large spectrum of groups internal and external to FSA. The key audiences can be categorized into the following areas:

- Internal FSA (e.g., business owners, operations partners, etc.)
- Community Organizations (e.g., PESC, NCHELP, and ELM)
- FSA Business Partners (e.g., Schools, Lenders Guaranty Agencies, etc.)



Messages

In order for FSA to help prepare Business Partners for adopting XML, FSA communications plan should address the following key messages:

- XML Awareness
- Community XML Standards
- New FSA Development Projects
- Schema Updates

Vehicles

For communications activities to be successful, it is important to select the appropriate communications vehicle. Communication vehicles should be selected with the following key factors in mind:

- Audience Size
- Type of Information Communicated
- Frequency Required
- Audience Reaction/Required Response

Each factor plays a major part in successfully relaying a message to an audience.

Timing and Frequency

Both timing and frequency play a major role in the effectiveness of communication delivery. Timing is determined based on when message delivery is necessary. Frequency establishes how often messages will need to be communicated in order for target audiences to keep up with change, and maintain a high level of commitment. Communicating a message at an inappropriate time or infrequently can render the message ineffective.



Amendment History

DATE	SECTION/ PAGE	DESCRIPTION	REQUESTED BY	MADE BY
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1 Introduction

1.1 Overview

The XML Framework Communications Strategy will create a foundation for effectively developing a communications plan that will specify the communication activities for an XML implementation.

The Communications Strategy will focus on providing answers to the following key questions:

- What should be achieved through the communication?
- Who are the key audience groups?
- What are the key messages for each audience group?
- What are the most effective communications vehicles?
- What are the key elements of the timing of the communications?

1.2 Purpose

The XML Framework Communications Strategy provides the basis for developing an effective communications plan that successfully delivers a message from the appropriate sender to the appropriate audience, via the appropriate vehicle, and at the appropriate time and frequency. The Communications Strategy specifically documents the recommended audiences, messages, vehicles, and timing and frequency of communication in preparation for the deployment of the XML Framework.

1.3 Scope

The scope of this deliverable includes the initial task of developing the communication strategy. Developing a comprehensive communications and outreach program is outside the scope of this task and would also need to include:

- Development and execution of a communications plan.
- Assessment and evaluation of a communication feedback.

FSA should use the Communications Strategy as the first step to develop its overall communications and outreach program.

1.4 Assumptions

- The XML Framework Communications Strategy will be the first piece of FSA's communications effort for the XML Framework. In order to realize the benefits of educating the Financial Aid Community and FSA's Business Partners about the XML Framework, work will need to be done to follow the strategy and deliver the right messages through the right vehicles.
- The XML Framework Communications Strategy provides a high-level approach for developing FSA's overall communications and outreach program for the XML Framework. It is assumed that individual systems development projects will still be responsible for



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developing their own communications plans to communicate pertinent information to their Business Partners and the Financial Aid Community.

- The XML Framework Communications Strategy does not include the communications plan with detailed dates and activities. The detailed communications schedule will need to be developed separately.
- The XML Framework Communications Strategy does not include the communications deliverables specified by the communications plan. The communications deliverables will need to be developed separately.
- FSA will periodically evaluate the effectiveness of communications initiatives and adjust communications plan appropriately.



2 Functional Description

2.1 *Functional Description Section Overview*

This functional description section provides a high-level overview of the XML Framework Communications Strategy. Specifically, this section includes information on the following areas:

- Communications Overview
- Audience
- Messages
- Vehicles
- Timing and Frequency

2.2 *Communications Overview*

2.2.1 Purpose

This overview will provide functional information about effective communications by defining a high level step-by-step approach for communicating a message.

2.2.2 Communications Program

Developing an effective Communications Strategy is the first step in creating a comprehensive communications and outreach program which will communicate key messages to target audiences with the eventual intent of creating positive perception and high level of commitment to the initiative. The communication strategy outlines the audience, setting, and environment in which the communication activities will evolve, and in which communications activities need to be considered.

2.3 *Audience*

FSA conducts its business by providing service to the Financial Aid Community throughout the Student Aid lifecycle, which spans from initial aid awareness, to origination and disbursement of awards, to repayment and collection of loans. FSA operates this business through a number of systems and with a large and complex group of Business Partners and organizations. These groups consist of schools, software vendors, lenders, guaranty agencies, government agencies and others. Keeping these organizations synchronized across numerous interfaces has required a significant amount of effort. One of the difficulties in managing this infrastructure is the lack of a single standard for data exchange and interfaces. The XML Framework attempts to alleviate this problem by establishing a common data standard that FSA can use with its numerous Business Partners across its many system interfaces.

In order to encourage adoption of these standards and achieve the benefits offered by the XML Framework, FSA must effectively communicate the importance of XML, and future XML



implementation efforts, to various groups across the lifecycle. The first step in spreading this message is to begin by identifying the target audiences.

There are three distinct types of target audiences for XML Framework Communications:

- Internal FSA Groups
- Community Organizations
- FSA Business Partners

Each type consists of organizations that will play an integral role in ensuring that the framework's benefits are fully achieved through proper utilization of the framework. Effectively communicating XML implementation initiatives and compliance will be essential to achieving these results. These target organizations are listed below:

2.3.1 Internal FSA Groups

- Business Owners
- Integration Partner Managers and Developers
- Operating Partners (overseeing system development and operations)

2.3.2 Community Organizations

- Postsecondary Electronic Standards Council (PESC)
- National Council of Higher Education Loan Program (NCHELP)
- ELMNet

2.3.3 Business Partners

- Schools
- State Agencies
- Lenders
- Guaranty Agencies
- Government Agencies
- Department of Education (outside of FSA)
- Call Centers

2.4 Messages

The Communications Strategy identifies the key messages that FSA will need to communicate to its Business Partners. The following list includes FSA's key message categories:

- XML Awareness
- Community XML Standards



- New FSA Development Projects
- Schema Updates

2.5 Vehicles

Communication vehicles are defined as the means by which messages are conveyed. The vehicles will be selected based on several key factors, which include:

- Audience Size
- Type of Information Communicated
- Frequency Required
- Audience Reaction/Required Response

Each factor plays a major part in successfully relaying a message to an audience. For example, based on the factors above, an appropriate vehicle to communicate the creation and implementation of a new XML schema, to a community organization, would be a conference. A conference can facilitate delivering information that requires infrequent presentation, to a large audience with members from different regions.

These vehicles are defined in further detail in Section 3.5: Vehicles.

2.6 Timing and Frequency

The type of information that needs to be conveyed will affect the timing and frequency of a communication. Determining the timing for communications will help determine:

- When it will be necessary to deliver messages (i.e., at what stage in the overall project will messages be communicated)?
- What the logical sequence is for communicating to different audiences?

For example, a communication sent in advance of a major change event (e.g., a new schema implementation) can anticipate and preempt audience questions while alleviating concern and confusion about the event. In addition, communicating a change to internal FSA customer service staff prior to communicating to the external community will help prepare individuals to answer questions.

Frequency will establish how often messages will need to be communicated in order for target audiences to keep up with change, and maintain a high level of commitment.



3 Detailed Description

3.1 *Detailed Description Section Overview*

This section provides a detailed description of FSA's XML Communication Strategy. Specifically, this section includes detailed information necessary to define an appropriate communications strategy, in the following areas:

- Communications Overview
- Audience
- Messages
- Vehicles
- Timing and Frequency

3.2 *Communications Overview*

3.2.1 Communications Commitment Stages/Phases

Before a specific audience group is convinced of the need for change, it will go through different stages of commitment to the idea, as shown in the following graph. For each commitment stage, there are different possible outcomes (i.e., progression to the next stage or regression to a negative commitment level). Continuous and appropriate communications ensure that the audience proceeds to the next commitment level.

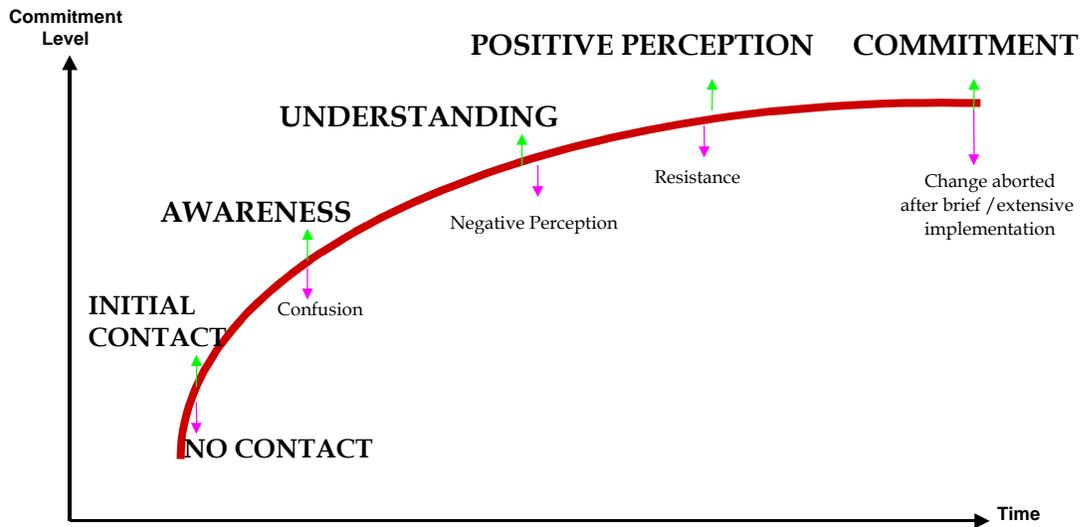


Figure 1 - Communication Stages

<u>Legend of communication stages:</u>	
Initial contact:	Stakeholder has heard of the IT initiatives
Awareness:	Stakeholder has some knowledge, but is unclear of scope and impact of IT initiatives
Understanding:	Stakeholder understands the scope and goal of the IT initiatives, services, products
Positive Perception:	Stakeholder appreciates the services of IT and its products
Commitment:	Stakeholder is committed to the goal and strategy of IT and the benefits of its products

Source: D. Conner "Managing at the speed of change"



3.2.2 Communications and Outreach Program

The following diagram outlines the steps required to achieve effective communication:

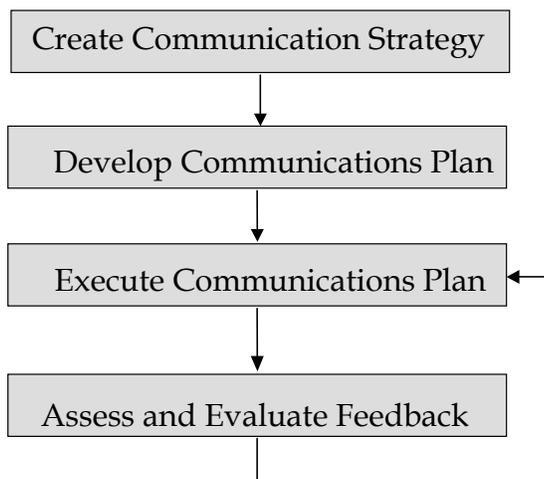


Figure 2 - Communication Workflow

1) Create Communications Strategy.

The first step in developing and implementing a Communications Program is to develop a Communications Strategy. The Communications Strategy will provide a high-level overview of the purpose, key audiences, messages, and vehicles for the communications program.

2) Develop Communications Plan.

The second step towards implementing a Communications Program is to develop the actual communications plan which will identify the specific steps FSA should follow in implementing a communications program to support the XML Framework. Based on the strategy, the communications plan will be detailed, specifying the exact communication activities and their sequence. It will then be executed as planned. However, the plan will need to be adapted to reflect changes as they occur based on the feedback received by the audiences. This approach will ensure that important aspects are taken into consideration and that measures can be rapidly considered, when major changes occur and require adaptation in the communication activities.

3) Execute Communications Plan

The communication activities will focus on providing accurate, consistent, and relevant information to the various audiences affected by the development of the XML Framework. By effectively communicating messages, rumors, fears and negative perception can be reduced, as the audience groups will receive timely and adequate information. This will enable the targeted



audiences to move progressively towards understanding, with a positive perception and a sense of commitment.

4) Assess and Evaluate Feedback

In order to ensure that FSA is effectively communicating with its internal and external stakeholders, FSA should assess and evaluate feedback on an ongoing basis. In this way, FSA can regularly evaluate the effectiveness of its communication vehicles and identify the best way and timing to communicate information both internally and externally. As FSA assesses feedback on the communications plan and execution, it can refine the plan to effectively target the intended audiences.

3.3 Audience

The target audiences for XML Framework Communications consist of the following three types:

- Internal FSA Groups
- Community Organizations
- Business Partners

Each type consists of organizations that will play an integral part in utilizing the XML Framework and ensuring that its benefits are achieved. Additionally, individuals within each of these target audience groups can be broken down into user groups. Identifying user groups can help more precisely target individuals for communications.

3.3.1 Internal FSA Groups

Internal FSA Groups are the key initial audience that should be targeted for communicating the XML Framework. Internal FSA Groups can be further broken down into the two primary types identified in the following table.

Audience Type	Description
FSA Business Owners	Comprised of system contacts with business knowledge of each of FSA's systems.
Integration Partner Managers and Developers	Consist of contractors involved in new development and support of FSA systems.
Operating Partners	Consist of individuals overseeing system development and operations.

Table 1 - Internal FSA Groups

3.3.2 Community Organizations

Community organizations work with the members of the Financial Aid Community in order to help ensure standards are supported across the membership. The following table identifies several community organizations.



Organization	Description
PESC	Establishes standards when no standards exist within the Postsecondary Education Community and recommends standards where there are conflicting or ambiguous standards.
NCHELP	Represents a nationwide network of guaranty agencies, secondary markets, lenders, loan servicers, collectors, schools and other organizations involved in the administration of the Federal Family Education Loan Program (FFELP).
ELMNet	Global loan inquiry service providing real-time information direct from the systems of participating lenders and servicers.

Table 2 - Community Organizations

3.3.3 Business Partners

Business Partners are entities with whom FSA shares or trades data across the financial aid lifecycle. The following table lists the audience types within the Business Partners category.

Audience Type	Description
Schools	Currently over 6,000 Title IV eligible schools exist, including public community colleges, public and private 4-year degree institutions, public and private vocational schools, and public and private graduate/professional schools.
State Agencies	Presently 58 registered state agencies exist according to FSA's Financial Management System (FMS), one agency per state as well as eight agencies in various US commonwealths and territories.
Lenders	Approximately 4,000 Lenders participate in the Federal Family Education Loan Program (FFELP).
Guaranty Agencies	Presently 39 registered guaranty agencies exist according to FMS.
Call Centers	There are presently 13 call centers that receive calls about various systems and applications across the lifecycle from different end users.
Department of Education	Comprised of individuals that are directly involved with interfaces between the Department of Education and FSA. Also includes individuals involved with XML as part of the Department's own Data Strategy initiatives.
Government Agencies	There are presently 14 government agencies that have interfaces with FSA.

Table 3 -Business Partners

3.3.4 User Groups

These target audiences can also be segmented into specific user groups. Identifying these user groups will allow for the creation of more succinct messages with an appropriate level of detail for the specific audience to more precisely target individuals who will directly affect the success



of the framework. These groups are identified and defined in the table below. In addition, each entry includes an example user that falls within each group.

User Group	Description	Example (COD)
Super Users	Individuals that train users and support XML development during and after rollout.	XML SME (e.g., Andrew Smalera)
Frequent Users	Individuals that use XML extensively as part of their daily job functions.	System Developer/ System Support (e.g., Jean Petrell)
Focused Users	Individuals that occasionally use a system that utilizes XML or that perform a limited set of functions on such a system.	Integration Partner Support Teams/ System Administrators
Managers	Individuals that manage projects that use XML for development, or as part of business requirements gathering.	Integration Partner Development Team Managers, ITA, School IT Development Managers (e.g., James Crown)
Others	Individuals that need a basic understanding of XML.	System Business Owners (e.g., Rosemary Beavers)

Table 4 - Audience User Groups

3.4 Messages

In order for FSA to help prepare Business Partners for adopting XML when developing system interfaces for data exchange, FSA's communication plan should address the following initial key messages:

- XML Awareness
- Community XML Standards
- New FSA Development Projects
- Schema Updates

The following table further defines these message categories and lists specific examples.



Message Description	Audience	Timing
XML Awareness	All	Immediately
Community XML Standards	All (e.g., PESC, NCHELP, ELM, etc.)	Immediately
New FSA Development Projects (e.g., XML ISIR Implementation for 2005- 2006 Award Year)	Internal, External (e.g., Schools, Software Vendors)	Need to communicate during or prior to requirements cycle for '05-'06 development and after implementation.
Schema Updates (e.g., COD Schema Updates for the 2005-2006 Award Year)	Internal, External (e.g., FSA, Schools, Software Vendors)	Need to communicate during or prior to requirements cycle for '05-'06 development

Table 5 - Future XML Framework Messages

3.4.1 XML Awareness

Creating a general awareness of XML usage and its benefits, within the FSA organization, as well as among FSA Business Partners and the financial aid community, is vital to the success of the XML Framework. Overall awareness will encourage XML adoption across the enterprise, as well as encourage XML standards usage for development among the Financial Aid Community.

By understanding the XML Framework, FSA target audiences will better understand XML's role within future data quality efforts, as well as increase knowledge about XML and its potential use within other parts of the enterprise. Similarly, disseminating information about work that has been completed, to audiences outside of FSA, and stressing its importance and adoption, will ensure that the community is moving forward at a similar pace using agreed upon XML standards for development initiatives.

3.4.2 Community XML Standards

FSA should provide information about accessing and using the XML standards it has developed while collecting feedback from the community organizations (e.g., NCHELP, PESC, and ELM). Effective Communication will be vital in negotiating data standards with the community.

In the past, members of the Financial Aid Community have stressed the need for information on using XML for development. In particular, the community has requested support for development issues. Specific complaints have arisen at previous National Association of Student Financial Aid Administrators (NASFAA) conferences.

Using the XML Technical Reference and Usage Guidelines, as a basis for future XML development, will ensure that the community has a common XML standard as well as a starting point for support. The Technical Reference and Usage Guidelines will provide a day-to-day, working-level guide for practitioners and managers. The stated goal of the Technical Reference



is to facilitate adherence to FSA's XML standards. Additional support should be provided through Focus Groups at Software Developer and EAC Conferences.

It is important to present messages about XML support, and future messages about changes and additions to the standard, to target audiences, to ensure proper compliance among FSA, all Business Partners and the Financial Aid Community.

3.4.3 New FSA Development Projects

For any new interfaces that FSA plans to implement using XML, FSA should plan to communicate the information to its Business Partners with sufficient time to allow these partners to incorporate the changes into their development lifecycle (i.e., requirements, design, development, test, and deployment). Specifically, the layout of the interface and frequency of messages will need to be communicated to the Business Partners.

3.4.3.1 CPS XML ISIR Implementation

In the near future, the communications plan for the CPS XML ISIR will be the first FSA development project that should be addressed in FSA's XML Communications Strategy. Similar to COD, which implemented a new record layout using XML in 02-03, CPS should adequately prepare its Business Partners with time to develop the necessary interfaces to generate and process XML as well as to test these new interfaces.

The XML ISIR schema was defined as part of the Data Strategy Enterprise - Wide initiative. Since this schema was completed prior to the completion of the XML Framework Technical Reference and Usage Guidelines and Core Component Dictionaries, it will need to undergo another revision to fully incorporate these FSA standards.

In order to encourage the widespread adoption and implementation of the XML ISIR schema among schools, it is necessary to develop a communications plan that targets schools using the appropriate vehicle.

3.4.4 Schema Updates

With the recent development of the Core Component Dictionary, changes will need to be made to existing schemas that were defined prior to its creation. These updates are important to maintain compliance among Business Partners using Core Components for creating XML message specifications. One specific example of a schema that will require updates in the future is the COD Common Record Schema.

3.4.4.1 COD Schema Updates

The COD XML Common Record Schema is scheduled to follow the XML Framework and Core Component guidelines starting in 05-06. Since its implementation in 2002, COD has communicated schema changes and updates to its partners well in advance of the actual change, in order to allow its Business Partners the time to make the necessary development changes to operate with COD. With the creation of the XML Framework, additional changes



will be made to the existing Common Record Schema to integrate defined XML Core Components and modeling methods.

A communications plan should be created which targets Business Partners who will need to make appropriate changes to their systems to ensure compliance. These Business Partners should be made aware of these changes well in advance of the final date for compliance, in order to provide them with the necessary time to complete development.

COD communicates annual schema changes beginning in July at the NASFAA conference, then the Software Developer’s and Electronic Access Conferences. The team publishes a first draft of schema changes in August. In addition, the team uses IFAP to distribute and announce the use of new schemas.

3.5 Vehicles

This Communications Strategy identifies the key vehicles FSA should use to communicate information about the XML Framework. The identification and selection of these target communication vehicles is based on the following key factors:

- **Audience Size** –defined as a large group (i.e., 20+ individuals), medium sized group (i.e., 10 – 20 individuals), and small group (i.e., 1-10 individuals).
- **Type of Information Communicated** – defined as High level or Detailed, based on required amount of detail.
- **Frequency Required** – defined as Low, Medium, or High, based on how often a communication needs to be sent.
- **Audience Reaction/Required Response** – depends upon necessity of audience response.

Understanding each of these factors is essential to successfully presenting a message to an audience. Each will help determine the appropriate vehicle type for a message, and the best means of communicating with a target audience.

The following table presents vehicle types that are presently utilized by FSA, along with their key factors.

Vehicle Type	Audience Size	Type of Information	Frequency	Response Required
Financial Aid Conferences (e.g., Electronic Access, Spring Conference, NASFAA, NACUBO, Software Developers)	Large	High Level - Detailed	Low	No
Dear Colleague Letters	Small - Large	High Level	Medium	No
Information for Aid Professionals (IFAP) Web-site	Large	High Level	High	No
Schools Portals	Large	High Level	High	No
FSA University Home Page	Large	High Level	High	No



Vehicle Type	Audience Size	Type of Information	Frequency	Response Required
Direct Loan Bulletin (DLB)	Large	Detailed	Medium	No
List Serv - FSA Tech	Small - Large	Detailed	High	No
P-messages	Large	High Level	High	No
Technical References	Large	Detailed	Medium	No
Meetings	Small - Medium	High Level - Detailed	Low - High	Yes
Future Deliverables	Small	Detailed	Low	No
Questionnaire	Small - Large	High Level	Low	Yes

Table 6 - Vehicle Type Details

Appendix B: Conferences contains more detailed information about FSA’s Financial Aid Conferences.

3.6 Timing and Frequency

The type of information conveyed can affect the timing and frequency of a communication and vice versa. For example, a communication sent prior to a change event (i.e., schema implementation) can anticipate and preempt audience questions while alleviating concern and confusion about the event.

Communications must be delivered when they are most important to targeted audiences. Selected subject matter experts will be integral to identifying audience needs and helping to customize communications. Timing is also important in that it defines the order that certain communications are sent, since some messages should be sent to specific groups prior to others, to ensure proper feedback (e.g., internal audiences prior to external).

Frequent message delivery will create trust and increase support and acceptance. Although sending information too often can be both time consuming for the correspondent and overwhelming for the recipient, it is vital to maintain proper and effective communication frequency with the audience. In the case of the XML Framework, appropriate message frequency will guarantee buy in from Business Partners and the financial aid community. This will ensure that community organizations will continue to stay abreast of updates to the standards and incorporate them accordingly.



Appendix A: References

Refer to Appendix_A_References.doc file.



Appendix B: Conferences

Refer to Appendix_B_Conferences.doc file.