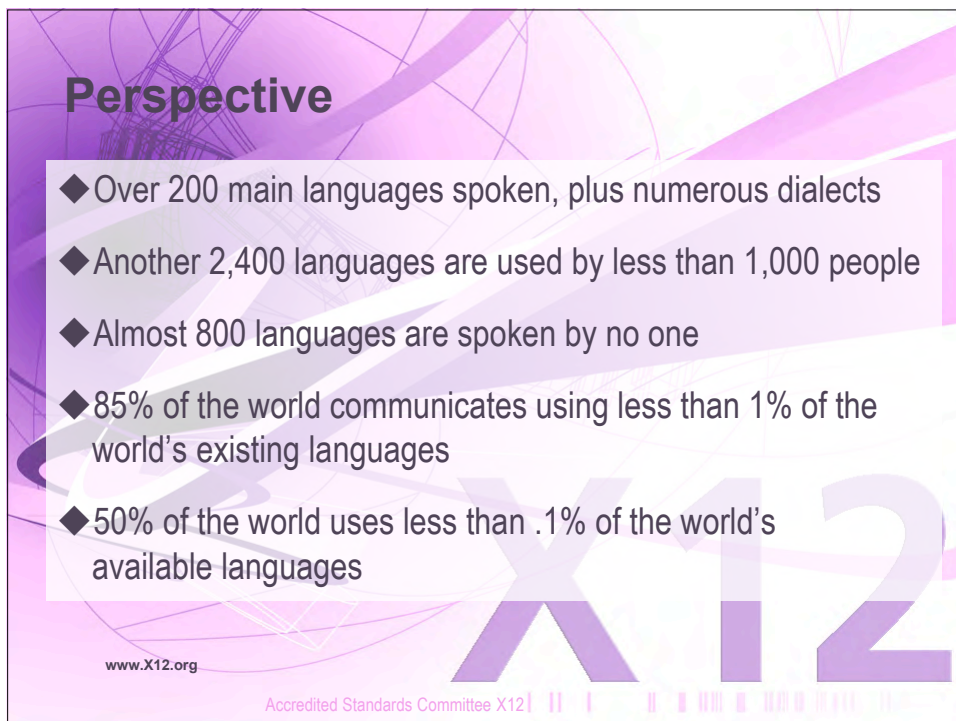




**Benefits of Using Standards  
to Increase Your  
e-Program Participation**

Julia O'Brien  
DISA, on behalf of ASC X12  
August 6, 2007

 ASCX12



**Perspective**

- ◆ Over 200 main languages spoken, plus numerous dialects
- ◆ Another 2,400 languages are used by less than 1,000 people
- ◆ Almost 800 languages are spoken by no one
- ◆ 85% of the world communicates using less than 1% of the world's existing languages
- ◆ 50% of the world uses less than .1% of the world's available languages

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## The Value of Standards

- ◆ Simplifies exchanges for government by using same format with all trading partners
- ◆ Enhances relationships with suppliers & business partners
- ◆ Leverages industry-specific semantics and extends them to cross-industry settings
- ◆ Productive collaboration minimizes duplication, share best practices & lessons learned
- ◆ Provides confidence in data by understanding its definition, purpose & characteristics
- ◆ Requires less energy expended on how you can get and interpret data & more on what you can do with it

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## Why do we need standards?

- ◆ Standards are the key to successful relationships, internal & external to the organization
- ◆ Standards meet agreed-upon market needs, thus satisfying constituent needs & providing added value
- ◆ Standards provide assurances that products are safe
- ◆ Using standards reduces time to market, costs & use of proprietary technologies
- ◆ Produces more powerful communications

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## ASC X12

- ◆ Accredited by ANSI in 1979 - 25+ years of developing business content for business processes
- ◆ Neutral environment for cross-industry standards development & collaboration nationally & internationally
- ◆ Produces XML Schema via X12's Context Inspired Component Architecture (CICA)
- ◆ Over 315 X12 EDI transaction sets & X12 XML schemas (CICA-based) with many more in the pipelines
- ◆ Proven dynamic process that effectively creates, reviews, approves & maintains standards in various syntaxes

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## ASC X12 Vision & Mission

### Vision

*To be the recognized cross-industry forum to build and support electronic data exchange standards, related documents and products that are available for use worldwide.*

### Mission

*ASC X12 brings together business and industry professionals in a cross-industry forum to develop and support electronic data exchange standards and related documents for the national and international marketplace to enhance business processes, reduce costs and expand organizational reach.*

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## Commonly Used Acronyms

- ◆ ANSI: American National Standards Institute
- ◆ EDI: Electronic Data Interchange, a set of standardized formats for the computer-to-computer exchange of business documents
- ◆ X12: The most widely used standard for EDI
- ◆ X12.6: Application Control Structure standard, defines syntax of X12 EDI
- ◆ CICA: Context Inspired Component Architecture. X12 framework for developing reusable syntax-neutral components that can be expressed as XML
- ◆ TIGERS: Tax Information Group for E-Commerce Requirements Standardization
- ◆ X12.7: CICA Technical Specification & XML Syntax Representation
- ◆ X12.71: CICA Design Rules
- ◆ XML: Extensible Markup Language. A W3C language designed to represent and exchange data electronically

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## What is EDI?

- ◆ EDI is the computer-to-computer exchange of business data in standard formats
- ◆ Information is organized according to a specified format set by both parties, allowing a “hands-off” computer transaction that requires no human intervention or re-keying on either end

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## What is XML?

- ◆ A W3C language designed to represent and enable the exchange of structured data electronically
- ◆ Both X12 EDI & XML messages simplify data exchange processes for organizations of all sizes

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# X12

## ASC X12 is ANSI-accredited

- ◆ ANSI: American National Standards Institute
- ◆ ASC X12 was accredited by ANSI in 1979
- ◆ The ANSI mission is to enhance both global competitiveness of U.S. business and U.S. quality of life by promoting and facilitating voluntary consensus standards and conformity assessment systems, and safeguarding their integrity

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# X12

## ANSI's Purpose & Principle

- ◆ ANSI Strategy provides framework for enhancing domestic economy & U.S competitiveness in a balanced global trading system
- ◆ Strengthen participation by government in development and use of voluntary consensus standards through public/private partnerships
- ◆ Continue to address health, safety, and the environment in the development of voluntary consensus standards
- ◆ Improve the responsiveness of the standards system to the views and needs of the consumers

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## ANSI Purpose cont . . .

- ◆ Actively promote the consistent worldwide application of internationally recognized principles in the development of standards
- ◆ Encourage common governmental approaches to the use of voluntary consensus standards as tools for meeting regulatory needs

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# X12

## X12 Standards Experience

- ◆ Open processes for proposing, creating, maintaining and approving standards that reflect stakeholder needs
- ◆ Proven consensus-based environment for both single and cross-industry standards development & collaboration
- ◆ Over 315 X12 EDI transaction sets & 16 approved X12 XML schemas with many more in the pipelines

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## ASC X12 Business Areas & Industries

- |                       |                      |
|-----------------------|----------------------|
| ◆ Government          | ◆ Healthcare         |
| ◆ Order processing    | ◆ Insurance          |
| ◆ Shipping/Receiving  | ◆ Utilities          |
| ◆ Invoicing           | ◆ Energy             |
| ◆ Payment             | ◆ Financial services |
| ◆ Transportation      | ◆ Supply Chain       |
| ◆ Product development | ◆ Quality Control    |
| ◆ Manufacturing       | ◆ And many others!   |

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## X12 XML Convergence & Harmonization

- ◆ Leverage industry-specific semantics and extend them to cross-industry XML solutions where appropriate
- ◆ Collaborate & harmonize to minimize duplication, share best practices/lessons learned and build best of breed standards for the global market
- ◆ Extend the reach of e-business to small and midsize organizations by building XML standards that interoperate with new & existing offerings

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## ASC X12 Efforts to Collaborate and Enable Convergence

- ◆ Designed an architecture that produces XML schemas & is flexible enough to be used with future markup languages/syntax
- ◆ Developed a **Tools for Members Program** that provides those engaged in the development and maintenance of the X12 Standard with COTS products to support their standards-related activities. These tools are provided at no cost to X12 members.

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## Complimentary Access to Tools for X12 Standards Development Work

- ◆ Altova
  - XMLSpy®
  - MapForce®
  - StyleVision®
  - SchemaAgent™
  - SemanticWorks™
  - DiffDog®
  - UModel®
  - DatabaseSpy™
- ◆ Edifecs: SpecBuilder™
- ◆ GEFEG.FX® : CICA Editor
- ◆ Sparx Systems: Enterprise Architect
- ◆ Stylus Studio



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## What is CICA & why use it?

- ◆ Syntax-neutral architecture
  - Enables X12 to produce XML schema
- ◆ Organizes & structures data so that it is reusable, predictable, and understandable to businesses and their trading partners
- ◆ Includes both business message & implementation content
- ◆ Assimilates data so that is organized, understandable and predictable
- ◆ Provides a syntax-neutral architecture – enables X12 to use same architecture as future markup languages are developed

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## Why CICA?

- ◆ Achieves a single standard, consistent in a competitive world marketplace
- ◆ Ensures new standards development initiatives equate to long-term savings on current & emerging business transactions

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# X12

## Benefits of CICA

- ◆ Establishes a common vocabulary and framework, enabling developers to operate in an environment of flexibility and agility
- ◆ Provides a complete and reusable repository of business data that can be inserted into any kind of business document
  - Enables businesses to reduce development costs and achieve a more rapid return on business messaging investments

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# X12

## X12 Government

- ◆ New X12 development and EDI maintenance, dealing primarily with U.S. DOD standards for e-data exchange
- ◆ XML and X12 EDI development and maintenance for electronic tax information exchange
  - Hosted in cooperation with Federation of Tax Administrators (FTA)

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# X12

## A Great Example of Collaboration

- ◆ TIGERS: Cooperative effort between ASC X12 & FTA
  - X12-hosted meetings 3x/year, FTA-hosted interim meetings 3x/year
  - Tools for X12 Members Program
  - Develops XML specs & schema that support multiple electronic tax filing options
  - Helps tax authorities achieve realized cost savings & efficiencies associated with electronic filing

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**Web Sites of Interest**

[www.X12.org](http://www.X12.org)  
[www.DISA.org](http://www.DISA.org)  
[www.TaxAdmin.org](http://www.TaxAdmin.org)

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