

Introducing Metal XML

Introduction

Metal XML – a proposal for a draft document standard for metal trading, is launched by Steelscreen and partners.

By establishing and using an industry standard for commercial documents, processes along the entire metal value chain can be made significantly more efficient. Substantial savings can be made and new opportunities will arise due to the new conditions that a common standard will imply.

This document contains a general introduction to Metal XML¹ and a brief description of the DTDs² that convey the information structure in Metal XML. The DTDs are described more thoroughly at www.metal-xml.org -the official channel for information about Metal XML, where updates and changes in metal XML will be published from here on. Interested parties are welcome to discuss Metal XML and post feed-back at this site- feed-back that will become the valuable cornerstones in the forthcoming development of Metal XML.

The driving force behind this initiative is primarily Steelscreen- the first market place for metal trading in Europe but others such as Icon Medialab one of the world's leading internet consulting firms have also been helpful in developing the standard. The founders of Steelscreen have a solid expertise in the metal business and vouch for the relevance of the content in Metal XML.

¹eXstensible Markup Language

² Document Type Definition



The Benefits

By implementing Metal XML we hope that the following benefits will be reaped by the participants.

Sellers

- Major cost savings on administration
- Faster and more reliable transaction
- Easier capacity leveling- Find and co-operate with other mills
- Lower IT maintenace costs- Increased inhouse IT homogenity
- Increased reach- Find and interact with business parters across the globe
- Homogeneous market- Understand what people want to buy or sell
- Improved CRM³

Buyers

- Increased competition- Better deals due to a more transparent market
- Better service due to faster and more accurate transmission of inquiries and orders
- Major cost savings on administration
- Increased reach
- Homogeneous market

Intermediaries

- The opportunity to offer cost effective intermediating services for buyers and sellers
- Increased reach

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³ Customer Relationship Management



The Metal Industry

As in many other industries the producers of metal are struggling with plunging prices and rough global competition. The production processes are already to a very large extent optimised and the business are looking for new ways to slash costs as well as find new sources for revenues.

In the steel industry large sums of money are spent on administration of certificates, which could be handled electronically instead. Re-engineering of this process would only be feasible if the industry agreed on a standard.

The Heterogenity of Existing Systems

A troublesome inheritance from the past decade's IT-development is a diversity of different back-office systems. Even thought the evolution has progressed towards more and more standardised solutions, tight integration along the value chain is still difficult due to to the lack of common platforms and transfer protocols.

At present companies in the metal business use a number of different systems- from isolated inhouse developed solutions to large homogeneous ERP-systems. Many of the larger players also use EDI-solutions between themselves, their buyers and sub-contractors. On top of that, few of the companies who have put up web interfaces as front-ends have successfully managed to integrate them with their core back-office systems.

One major cause behind the lack of success stories when it comes to integration is hence the lack of a common metal standard which greately would simplify the communication between the different systems at the market.

The Integration Imperative

If electronic business is to prevail over conventional business through speed and accuracy, the sellers need to integrate their back-office systems with their front-ends and their front-ends with their customers front-ends. This requires advanced interfaces between all the participating systems or a common standard.

A Forrester report⁴ states that integration is critical due to the following factors:

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 $^{^4}$ The Commerce Integration Imperative, July 1998- This article focus on front to back-end integration-

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- ° Customers require fast, consistent treatment. This is difficult to achieve without integration. The web customer has to communicate with their suppliers in a number of ways and if the service provider does not convey a homogeneous picture of their services and their company they are at risk of lowering the percieved quality of their services- in spite of the added web features.
- ° Firms must leverage scarce resources. If the web business is left outside the original infrastructure, companies will have to duplicate core processes in order to keep their site running, which implies unnecessary costs. A better alternative is to share the existing resources through integration.
- Transaction systems are elemental to Transactive Content⁵. If we are to serve our customer in an appropriate and fulfilling way, we have to use all knowledge we have about the customer- including the one the customer herself provides. We have to blend our knowledge with the customers' own desires in order to create an interface and set of services that reponds to the unique needs of every customer.

Objectives

The prime objective is to create a standard that is easy to support and update at a basic level, but yet comprehensive and extensible, so that it may support the needs of buyers, sellers and intermediaries alike.

We want to institute a industry standard for metal trading that enables effective and cost efficient transactions and simplifies integration between buyers and sellers in the business.

W3C divides its support for specifications into four levels; *recommendation*, *proposed recommendation*, *working draft* och *notes*.⁶. Where a set of documents which have received W3C's *recommendation* could be considered to be well established and thoroughly evaluated.

Our goal is to have Metal XML approved as recommendation in 12 months by W3C.

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⁵ A concept discussed and described in a number of Forrester articles.

⁶ http://www.w3.org

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In order to reach this goal we will encourage sellers, buyers and other representatives (like Euroferr and EAA) to interact at www.Metal-XML.org and refine Metal XML after their requirements.

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Metal XML

XML has rapidly become the key data interchange standard for actors on the Web and offers an universal file format for representing data-hence it was descided to be the natural foundation for Metal XML.

XML was the result of a project lead by the World Wide Web Consortium (W3C), eXtensible Markup Language became a formal specification in February 1998. XML is a metalanguage, meaning it gives information about information. It has been called a system for defining other languages. XML describes the way data is formatted and exchanged between the server and clients over an IP network.

Metal XML is on one hand the general documents describing the standard (like this paper) and on the other hand a set of DTD and schemas which make up the frame-work for standardised transactions. The DTDs and schemas are divided into seven documents that define and stucture the required elemements in a request/order process.

The present set of documents are developed in co-operation between Steelscreen and Icon Medialab and will serve as a sound foundation for further work. However, Metal XML will never become an approved and used standard if we continue to develop it on our own- as stated earlier in this document, a crucial enabler for the success of Metal XML is the participation of the different players in the business. We therefore welcome and encourage visits to www.Metal-XML.org -together we can make our business more effective at the benefit of all contributors.

Documents

Inquiry

The inquiry document is a request from a customer to suppliers for price and delivery time of the described products in the document. The inquiry is either answered by a offer or it is rejected by the supplier

Offer

The Offer document is an offer to a customer from a supplier for delivery of products to a specified price. The offer can be followed by an order from the customer to the supplier.



Order

The order document is a firm order from a customer to the supplier for delivery of the requested products in the document. The order is settled when an Order acknowledgement has confirmed the deal.

Order Acknowledgement

The order acknowledgement document is a confirmation from the supplier of a received order and fully describes the agreement between a customer and supplier.

Certificate

The certificate document describes a delivered product in terms of conformance to standard, extent of delivery, chemical composition and test results.

Company

The company subset describes a company involved in a transaction and is used by other Metal XML documents

Contact

The contact subset describes contact information for an individual person involved in a transaction.

Product Specification

The product subset describes a metal product and is used by other Metal XML documents.

Metal XML CodeSet

Metal XML Codeset is a repository for metal trading were terminology and definitions for elements are defined.

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Coming documents

Also documents for metal standards, order status, invoice and shipping advice will be defined in Metal XML.

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