



Where to get the best ISO 20022 library

Why downloading an XML schema is not the answer !

What every ISO 20022 project needs

ISO 20022 has now become the financial industry's primary standard, with major infrastructure services leading the waves of migration to the format. Recent European examples include SEPA, TARGET2 and TARGET2-Securities (T2S), and there are many others.

This means of course that more and more financial institutions need to create, read, validate and transform ISO 20022 messages.

The obvious starting point for all such projects is a high quality set of ISO 20022 message definitions, as these will be either the (inbound) source or (outbound) target of every mapping process.

Schemas are not standards

Many developers would at this point be tempted to simply download a freely available XML schema from, for example, the official ISO 20022 website.

Unfortunately, just downloading an XML schema is not the most efficient way to proceed, and may significantly slow down the project. This is because there is much more to the full and complete ISO 20022 standard than is captured in any free schema.

At Trace Financial we have created a set of ISO 20022 libraries for Transformer which model the ISO 20022 standard very fully. These libraries are a powerful tool for delivering high quality ISO 20022 projects in less time.

Let's look at the main advantages of using Transformer as opposed to a schema.

Transformer provides business-meaningful names

The basic ISO 20022 schemas that can be freely downloaded provide only minimal information about each field. Frequently they only supply a somewhat cryptic field name such as "CtrctSz" or "XpryDt". The field's meaning is not described at all. Transformer always provides a business-meaningful field name – e.g. "Contract Size" and "Expiry Date". These are easier to work with and far less likely to cause misunderstandings. The same is true for all higher-level components right up to the whole message itself, thus helping analysts to navigate around the message and relate its numerous parts to business-level specifications more easily.

Transformer's ISO 20022 library also includes full descriptions of every field's purpose and meaning. These are usually only included in PDF format documentation supplied on the ISO 20022 web site and/or the SWIFT User Handbook. We have added this information into Transformer's ISO 20022 library.

The same principle is applied to field content, in fields that only allow a fixed range of entries. These are typically defined as short codes and a standard XML schema only contains those code values. The Transformer ISO 20022 library contains a full description alongside each code value, making it far easier to identify the correct code to use.

Transformer supports cross-field validation rules

XML schemas are not technically able to specify any validation rule which involves a relationship between two or more fields (e.g. field B can only be used if field A is also included in the message). Schemas can only specify the validation of a single field (for example that it is mandatory, or that it must be a date).

Because ISO 20022 schemas are unable to model cross-field rules a separate Message Definition Report (MDR), published by the Registration Authority, is used to document them.

However all of these cross-field validation rules are fully modelled within the Transformer ISO 20022 standards libraries. This means that messages validated by Transformer are far more likely to be processed successfully end-to-end.

Transformer libraries contain multiple ISO 20022 message versions

Typically each Transformer ISO 20022 library comprises one business area, e.g. Payments (pacs). Updated editions of these libraries are released by Trace Financial as new versions of the messages are issued. Older versions of the messages are also retained within the library published by Trace Financial, because in the ISO 20022 world there is no rule forcing users to adopt the latest versions of all messages.

Transformer maximises re-use

One of the key philosophies of Transformer is the concept of re-use. Projects are far more efficient when low-level 'building block' validations and mappings can be created once, tested thoroughly and then used in many places. The Transformer ISO 20022 libraries support re-use by providing one definition for any given field or other component, which may then be referenced in many messages. Projects can achieve maximum re-use of all validation and mappings that are based on this element. By contrast downloadable schemas do not always adopt this approach – the same field may be defined separately for each message in which it appears, leading to a far less efficient project.

Summary

Transformer's rich, business-meaningful definitions make every aspect of the ISO 20022 standard messages far easier to work with, cutting project timescales and greatly reducing the risk of message rejections.

In short, Transformer's ISO 20022 library provides the ideal basis for any project that needs to validate, create, map or consume ISO 20022 messages.

About Trace Financial

Trace Financial Limited are leading specialists in financial message transformation and have been designing, implementing and supporting mission critical solutions to the financial industry for over 30 years. Trace Financial is part of the privately-owned Trace Group.