Introduction to ONIX
Many publishers, booksellers, intermediaries and systems and service providers have adopted ONIX as a key part of their business process. This BIC Bite explains what ONIX is, and why it is the ideal standard for communicating book product information with your trading partners.

Background
ONIX (ONline Information eXchange) is the book industry's primary metadata standard for the supply of information about books and e-books, and is developed and supported by EDItEUR, the trade standards body for the global book, e-book and serials supply chain. ONIX for Books is strongly supported in the UK by BIC and BIC’s Metadata Subcommittee. In addition, the UK ONIX national group hosted by BIC, provides input to the international development of the standard. ONIX 1.0 (released in 2000), ONIX 2.0 (2001) and ONIX 2.1 (2003) aimed to streamline the delivery of product metadata to book supply chain partners. Since then there have been some major changes in the book industry, most notably the global growth of digital sales. ONIX 3.0 (released in 2009) is the latest version of the standard which reflects these new products and channels to market. Organisations that use ONIX 2.1 should, in liaison with their supply chain partners, migrate to ONIX 3.0, and those adopting ONIX for the first time should specify version 3.0 from the outset, as version 2.1 will no longer be supported after December 2014.

Basics of ONIX
ONIX is designed to describe books in all their formats and varieties and so it has to be both flexible and comprehensive enough to cover the many ways in which the book industry delivers its products. ONIX is an XML-based message format, and data about each book is located within the message inside tags which begin and end using the <> and </> notation (similar to HTML). Each ONIX message contains a ‘header’ section containing information about the message itself, and then a series of ‘product records’ which hold all the information about each book.

So an example message might look like this:
```xml
<?xml version="1.0" encoding="UTF-8"?>
<ONIXMessage release="3.0" xmlns="http://ns.editeur.org/onix/3.0/reference">
  <Header>..............</Header>
  <Product>...........</Product>
  <Product>...........</Product>
  <Product>...........</Product>
</ONIXMessage>
```
Inside each product record, between the opening tag <Product> and the closing tag </Product>, there are lots of additional tags for data elements such as title, author, format, price etc. Each element has its own opening and closing tag and the information about that element is located in between. Note that this is a very flexible standard because it can be used to describe one product with just a handful of basic data elements, or hundreds of products with a very rich and comprehensive set of data elements.

The Product Record
This is where the information about the products is located. The Product Record has to cope with a wide range of information: for example it can describe the tradeable item itself, the related marketing material, and information about how the product is supplied. This means that the ONIX message can be complex, with many possible tags and the capability to carry a large amount of data.

There are some mandatory elements such as a record identifier, a product number such as an ISBN-13, and a title, plus a large number of optional elements – contributor names, cover images, sizes, e-book file formats, imprint, publisher, distributor and pricing information. These are all carried in specialised tags such as <PersonName>, <ImprintName> and <PriceAmount>. Here's what an author name might look like:
Tags can carry numbers (like `<SequenceNumber>`), special ONIX codes (like ‘A01’ in `<ContributorRole>`), or textual data. Other tags (e.g., `<Contributor>`) are purely structural, used to group other elements together logically. Some tags are repeatable (e.g., for multiple authors), and the order they occur in the ONIX message is vital. There is an XML definition of the allowed tags and the necessary order, but most ONIX users have a software application that deals with the exact details.

**Why use ONIX?**

As we have seen, ONIX is capable of describing every permutation of product metadata – and as future developments necessitate changes, the standard will adapt to accommodate these requirements. But its capability and comprehensiveness means that it is a significant investment for both senders and receivers of ONIX messages. Yet it makes sense to use a single standard for all trading partners, rather than a customised solution for each different trading partner in the supply chain.

For many publishers, their use of ONIX may depend on what publishing system they use. If they use one of the market leading publisher product management systems, then ONIX 3.0 should be built in and it will be the normal way to supply information. If a publisher has developed their own system in house, then it will depend on the number of titles and size of business as to whether ONIX is the right solution for that publisher’s business. For very small organisations, there are ONIX-compliant, web-based ‘pay as you go’ systems, and services from intermediaries such as Nielsen (even if publishers supply data to Nielsen in more basic formats such as .CSV files, Nielsen can then output ONIX files to trading partners such as wholesalers and retailers).

Generally any large or medium sized publisher supplying books and e-books to a range of trading partners should consider using ONIX 3.0 as the best way to make their data supply efficient.

**Why is metadata important?**

For newcomers to the book industry or to the issues of metadata, it is worth emphasising that online, books and e-books only get ordered if customers can find them. Research has proven that the more information is available to the potential reader, the more likely they are to buy the book. Search and discovery is crucial to building sales, and accurate and complete product metadata – including descriptions and a jacket image – has been shown to make a huge difference to sales performance. BIC has a metadata guideline called BIC BASIC which defines a dozen fields that comprise an absolute minimum of the information to describe a book. Publishers should now look to go beyond BIC BASIC and describe all possible aspects of their product: click [here](#) for more detail on ONIX2 (all versions) fields and [here](#) for ONIX3.0 fields. ONIX 3.0 is the gold standard for describing book products and BIC recommends that ONIX 3.0 should be widely implemented to optimise the product metadata supply chain.

There is a lot more information available about ONIX and how to implement ONIX 3.0. BIC members can raise questions about ONIX with the BIC Metadata Sub-Committee and information is available on our website at [www.bic.org.uk](http://www.bic.org.uk). Alternatively you can contact EDITEUR via its website at [www.editeur.org](http://www.editeur.org). BIC also runs a range of metadata training including standard and advanced courses on ONIX, and a Beginners Guide to Metadata.

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