

Business Application Header – Frequently Asked Questions

There has been a lot of discussion about the Business Application Header within the ISO 20022 community in recent years. The ISO 20022 Registration Management Group has put together some Frequently Asked Questions, together with their answers, to shed a little light on this subject.

What is the Business Application Header?

The Business Application Header is a header that has been defined by the ISO 20022 community, that can form part of an ISO 20022 business message. Specifically, the BAH is an ISO20022 message definition (head.001.001.01) which can be combined with any other ISO20022 message definition to form a business message.

It gathers together, in one place, data about the message, such as which organisation has sent the business message, which organisation should be receiving it, the identity of the message itself, a reference for the message and so on.

What is the purpose of the BAH?

The purpose of the BAH is to provide a consistent and predictable way for this data to be conveyed with the message, regardless of implementation factors such as the choice of network. This does not prevent such data being conveyed either within the ISO 20022 message definition itself, or as part of a network header.

What's in the BAH?

Full details can be found on the ISO 20022 website www.iso20022.org, but the key data is:

- From: the organisation that sent the message (with a wide choice of formats);
- To: the organisation that should receive the message;
- Business Message Identifier: a unique identifier for this particular message instance, as defined by the sending application or system;
- Message Definition Identifier: the identity of the message definition, as published on the ISO 20022 website;
- Creation Date: the creation date (and time) for the data in the BAH;
- Copy Duplicate and Possible Duplicate: fields to aid the identification of duplicate data;
- Priority: the priority of the data within the message;
- Signature: the digital signature of the sending organisation;
- Related: information about another, related message.

Why was the BAH introduced?

The first implementations of ISO 20022 messages were designed with the anticipation that this data would be provided by the network over which the messages were carried. Later implementations found that they did not want to use the same network, and wanted to use a network where such data was not added as part of the transportation of the message. Rather than come up with an independent solution, these later implementers engaged the ISO 20022 community to establish a common means of conveying the data.

Is use of the BAH optional?

Yes. When a community decides to implement a set of ISO 20022 messages, they must agree between themselves whether to use the BAH to provide this data. This could be at the level of the entire implementation, or of message sets, or even at the level of individual messages. However, the benefit of the BAH is to provide data in a consistent way, so too many variations would reduce its usefulness.

Why is it a separate header?

At the time that the BAH was introduced, in order to minimise the impact on existing implementations, the data elements were gathered together in an independent header, for optional use. The published ISO 20022 message definitions were not affected. However, note that some ISO 20022 messages have subsequently been adapted so that fields duplicated in the BAH were removed from the ISO 20022 message definition.

Does that mean that the header should be 'stripped away' from the rest of the ISO 20022 message by the receiving organisation's systems?

Not at all. In communities that have chosen to implement it, the BAH forms part of the business message itself and remains with it all the way to the target business application. It contains business information, such as the time that the message was prepared, who sent it, and more. This data can affect the business decisions required at the target application.

What if my community does not want to use the BAH?

A community may choose not to use the BAH when exchanging ISO 20022 messages. Any ISO 20022 message that is defined on the ISO 20022 website can be sent without the BAH.

Implementers then have a range of possibilities. They can use another header, such as one they have designed or that is provided by their network provider. Or there may be sufficient information within the ISO 20022 message definition itself. In some cases, this latter approach may require a change to the ISO 20022 message format: if the message had been defined (or had been amended) with the expectation that it would be sent alongside a BAH, then a change request may be necessary. This case is dealt with specifically in a later question.

What if I participate in multiple communities, some of whom use the BAH and some who do not?

In this case, you will need to build some intelligence into your application software to allow some messages to include the BAH, and others to be sent without it. It may be the case that certain organisations will always use the BAH, or it may be the case that certain functions or domains will use it, while others will not. The complexity depends on the implementation choices of the communities concerned. For example, the Target2Securities (T2S) community has decided to use the BAH, whereas the payments community was already implementing their messages when the BAH was proposed, and so do not use it. A member of both communities will need to be able to process business messages that contain the BAH and those that do not.

What happens if a field in the BAH is also in the body of the message?

This can happen where a particular message definition is shared between communities that differ in their approach to the BAH, or where an existing message was designed to include fields that were later included in the BAH. In these cases, the implementing communities need to agree (just as for any other field where flexibility is allowed by the ISO 20022 standard) how to carry the information (for example, a community could agree to only populate the field in the BAH, or to populate both fields with the same value).

Which fields might be duplicated in the BAH and in the body of the ISO 20022 message?

The most common fields are Business Message Identifier and the Creation Date. The Business Message Identifier is a critical field in many message flows, where a subsequent message needs to refer to a message that preceded it in the flow.

If I want to submit an ISO 20022 message for registration, what do I need to do to cater for the BAH?

The BAH does not really change the process you will go through. Every field in your proposed ISO 20022 message will need to be agreed within your community as to how and where to place it. The message will also be validated by the relevant global body (the Standards Evaluation Group, or SEG).

You will be required to indicate in the Business Justification document whether the message is intended for use with or without a BAH. Even if it is your intention to use the message alongside a BAH, other communities (that have not built use of the BAH into their systems) may wish to adopt the new message, and, as such, may request that some fields are present in the new message, even if those fields are duplicates of fields in the BAH.

If there are existing ISO 20022 messages that contain fields that are also contained in the BAH, will they be removed?

Not necessarily. As has been explained above, there are communities that have implemented ISO 20022 messages without the use of the BAH, and where the presence of key fields (such as the Business Message Identifier) within the ISO 20022 message definition is mandatory. In these

communities, the removal of these fields from the message definition would result in a significant impact.

Like any other change to a message definition, this would require a change request to be approved by the global community (again, by the mechanism of validation by the relevant SEG). If the data fields were still required in some implementations of the message, then this approval will not be given.

If my community needs to add fields to the body of an existing ISO 20022 message that are the same as, or similar to, fields in the BAH, is that allowed?

It is possible to add fields to the ISO 20022 message definition, even if they are already present in the BAH. For example, a message that was originally proposed to be used exclusively in communities that had implemented the BAH might then be adopted by a community that was not using the BAH. This latter community may find it to be a lesser impact to add the necessary fields to the message (as optional fields) rather than change their implementation of the BAH.

Again, this would require a change request, which would be analysed by the relevant SEG. If the SEG were to accept that adding the fields to the message would represent an appropriate change for the message, and the business case were strong enough, then the SEG would approve the change.

Has the BAH been implemented?

Not quite, but some securities market infrastructures are planning to implement it. The ECB has developed around 130 messages for the Target2Securities settlement system (T2S). These messages have been designed for use with the BAH, and no duplicate information has been placed in the message body. The T2S user community is preparing for user testing to start early in 2014.

Are there implementations of ISO 20022 without the BAH?

Yes. For example, the Single Euro Payments Area (SEPA) implementation is carried by the SWIFT network, and the data about the message is contained in the SWIFT network header.

Similarly, the Consortium Customer to Business Interaction (CBI) has defined its own header which was delivered as part of the launch of the CBI network in 2007.

I've also heard of a Batch Header. Is that the same thing?

No, it is entirely separate. A batch is a way of grouping several messages together. Each batch would need a header to indicate the properties of the batch as a whole. Each message within the batch could additionally have a Business Application Header, or not, depending on the agreed implementation. Again, this is something that may be part of the transport protocol.

Where can I find out more about the BAH?

The ISO 20022 community has written a Message Usage Guide (MUG) for the BAH. This can be found on the ISO 20022 website (www.iso20022.org) in the Catalogue of Messages. As for all ISO 20022 messages, there is also a Message Definition Guide (MDR) which provides details of the structure and definition of the BAH.