ISO 20022 Registration Procedures

ISO 20022 RMG Rules Subgroup
Approved by the RMG Rules Subgroup on 23 March 2015
**Foreword**

As pre-reading material, the readers are invited to first go through the scripted ‘Introduction to ISO 20022’ Powerpoint presentation available on [www.iso20022.org](http://www.iso20022.org). The concepts introduced in the script of the presentation are considered as known by the reader.

Readers are also expected to be familiar with the ISO 20022 registration bodies, their mission, scope, membership and decision-making processes. These are set out in a document entitled *ISO 20022 Registration Bodies Governance*.

Although these Registration Procedures cover the activities of the various ISO 20022 registration bodies, they are especially targeted to helping Standards Evaluation Group (SEG) members to understand the ISO 20022 registration process and the particular role and operations of a SEG. This document has been prepared and approved by the ISO 20022 Registration Management Group (RMG). This document is a non-normative guide to the operation of the ISO 20022 organisational environment and, as such, provides operational clarification on matters beyond those contained in the ISO 20022 standard.

For the convenience of the reader, these Registration Procedures include relevant material from the standard. It is, however, recommended that the reader also read the standard itself. RMG, TSG and SEG members have access to a copy of the standard in the *ISOTC Livelink* system.

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1 Access to the RMG, SEG and TSG subfolders in the TC68 folder of the ISOTC livelink system requires a user id and password given by ISO upon specific request by either the national standards body or the liaison organisation that nominated the RMG, TSG or SEG member.
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1 Registration process for development of new ISO 20022 message definitions

Registration requests generally relate either to the development of new candidate ISO 20022 message definitions or to the updating of existing ISO 20022 message definitions. The former type of requests follows the 'Registration' process described in this chapter, while the latter follows the 'Maintenance' process described in Chapter 2.

This chapter is divided into two parts: the first part describes the registration process for development of a new ISO 20022 message definition, while the second part describes the registration process for development of a ‘variant’ (see section 6.1.4) of an existing message definition.

1.1 Registration process for development of new ISO 20022 message definitions

Note: a flowchart of the registration process for new candidate ISO 20022 message definitions is available from the website

The registration process includes four phases which are described below:

- The Business Justification Process
- The development
- The evaluation
- The publication

1.1.1 Business Justification process

An organisation wishing to develop new candidate ISO 20022 message definitions must first introduce a 'Business Justification' to give an overview of the scope, reason and estimated users/volumes/savings of the intended message definitions. The request is expected to reflect global need or usage, or to enhance the global relevance of the standard, without excluding large communities of users at a regional or domestic level.

A Business Justification template can be downloaded from the ISO 20022 website. The completed Business Justification is sent to the RA at iso20022ra@iso20022.org where it is checked for completeness, logged on the ISO 20022 website in the 'Status of Submissions', and confirmed to the submitter within the next five business days.

1.1.1.1 Approval by the RMG

When the Business Justification is ready for submission, the RA sends the Business Justification via e-mail to the RMG members and to the Convener, Vice Convener and Secretary of the SEG(s) to be involved in the evaluation of the future message definitions as
proposed by the submitting organisation in the 'scope' section of the Business Justification. The RA also copies the Convener and Vice Convener of the CSH to investigate, with the SEG leadership, where the future messages fit from a transactional point of view and whether other SEG(s) need to be involved in the evaluation to ensure that requirements of actors that come into play in other business areas, either before or after in the end-to-end transaction chain, are taken into account in the proposed message set.

RMG members are given one month to upload any comments or requests for clarification to be addressed by the submitting organisation in the RMG folder on ISOTC Livelink (see 7.1.1).

During this period, the relevant SEG(s) as identified by the CSH – at least the SEG(s) suggested by the submitting organisation in the Business Justification – will confirm that the proposed development falls into their business domain and formulate their opinion on the Business Justification from a ‘future users’ perspective. They verify that the submitting organisation proposes to include the relevant industry bodies in the development. The SEG(s) may challenge the information provided by the submitting organisation and submit clarification requests. The Convener, Vice Convener or Secretary of the SEG uploads the collated comments from the SEG to the RMG folder on ISOTC Livelink (see 7.1.1) before the end of the commenting period.

- If no comments have been received within the commenting period or if the only 'comments' received are the positive opinion of the SEG(s), the RA appends the opinion of the SEG(s) to the Business Justification and invites the RMG voting members by e-mail to vote on the Business Justification within the next two weeks. At the same time, the RA informs the RMG secretary who initiates the ballot in ISOTC Livelink (see 7.1.2).

- If comments have been received from the RMG or the SEG(s) during the commenting period, the RA sends them via e-mail to the submitting organisation contact persons mentioned on the BJ. The submitting organisation is given up to three weeks to submit an updated Business Justification to the RA. The updated Business Justification shall include:

  o the text of the original Business Justification which may be updated by the submitting organisation based on the comments received. Such updates will be clearly highlighted using 'track change' or similar mode.

  o a copy of and a response to each of the received comments.

As soon as the updated Business Justification is received, the RA checks it for completeness, logs a copy on the ISO 20022 website and e-mails it to the RMG members for vote. Simultaneously, the RA informs the RMG secretariat which initiates the ballot in ISOTC Livelink (see 7.1.2). The RMG members are given one month to vote on the updated Business Justification. During this period, a conference call is organised by the RA to give RMG members the opportunity to discuss the response to the comments with the submitting organisation before casting their vote.

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2 In the Business Justification, the submitting organisation has to mention the industry bodies that it intends to involve in the development.
The votes are 'Yes', 'No' or 'Abstain'. Comments are no longer accepted with the votes. All RMG members have an obligation to vote and a vote will not be considered valid if less than seven RMG members have responded, among which at least five P-member countries.

Countries or liaison organisations that are not involved in the business domain of the Business Justification or have no opinion on the Business Justification are expected to vote 'Abstain'. Only the received 'Yes' and 'No' votes are computed. A Business Justification is approved if at least two thirds of the 'Yes'/No' votes are 'Yes'. The RMG secretariat immediately notifies the RA, which notifies the submitting organisation and the relevant SEG(s) of the result of the vote via e-mail.

The Business Justification comment and approval procedure is detailed in Annex C.

1.1.1.2 Formation of the Evaluation Team by the SEG(s)

*Note:* It is sometimes necessary to combine the expertise of more than one SEG to adequately represent future users of a candidate message set. In this case, the RMG will appoint a 'Lead SEG' for the evaluation. If the submission does not fall within the scope of an existing SEG, the RMG will either initiate the creation of a new SEG or widen the scope of an existing SEG.

Upon approval of the Business Justification, the SEG may already start composing the Evaluation Team which will handle the evaluation of the candidate ISO 20022 message definitions once ready for evaluation.

If several SEGs have been assigned the evaluation, the Convenors, Vice Convenors and Secretaries of all SEGs involved will be responsible for the composition of the Evaluation Team under the leadership of the Lead SEG Convenor, Vice Convenor and Secretary.

1.1.2 Development by the submitting organisation

When a Business Justification has been approved, the message definitions proposed for development are called 'candidate ISO 20022 message definitions'.

The submitting organisation is expected to develop candidate ISO 20022 compliant models and message definitions within the timeframe indicated in its Business Justification. If during the development, the submitting organisation realises that the candidate ISO 20022 message models will not be ready for delivery to the RA at the date specified in the business justification, it will promptly inform the RA about the new submission date.

The RA has limited resources which are not available for development work, but provides the submitting organisation with a clear description of the required deliverables, the materials

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3 They keep this name during the development and the evaluation. They become 'ISO 20022 message definitions' or 'ISO 20022 compliant message definitions' only if and when approved for publication by the SEG.

4 The organisation that provides the RA services committed three staff year to this effort. This includes the compliance review of the submissions, the provisional and official registration, the preparation of the SEG documentation, the publication of the Repository, the maintenance of the ISO 20022 website, the participation in
necessary to set up the required modelling environment and a 'compliance checklist' of rules to observe to ensure ISO 20022 compliance of the candidate models.

A modelling tool, “The Editor”, is provided by the RA to submitting organisations without charge. Additionally, to ensure openness of the submission process to the RA, the RA publishes and maintains on the ISO 20022 website appropriate technical details (i.e., the implementation meta model) to allow submitting organisations to use software tools that would produce message models compliant with the latest edition of ISO 20022 as implemented by the RA. The RA uses the implementation meta model to process submissions.

Once developed, the submitting organisation submits the candidate models to the RA which checks them for compliance. Upon detection of non-compliance with a rule, the RA may return the invalid submission to the submitting organisation with an indication of the rule that was not observed. The submitting organisation is then expected to correct the models and re-submit to the RA.

When the submission is compliant, new or updated candidate dictionary items may be registered by the RA before evaluation and appear as ‘provisionally registered’ in the Dictionary. On the contrary, provisionally registered message definitions are not shown in the Repository.

The RA generates the SEG documentation and sends it to the members of the Evaluation Team, as communicated by the (Lead) SEG Secretary.

The documentation generated by the RA is provided by e-mail, or uploaded in the SEG ‘drop in box’ folder on ISO TC Liveli link or another agreed website. It contains the following documentation:

- A preliminary Message Definition Report (MDR) with the full description of the new message definitions. The MDR is made of three parts: the first part is written by the submitting organisation to describe the business transactions that the proposed message set is addressing (a template of the MDR part 1 is available on the ISO 20022 website), the second part is a detailed description of the contents of each message definition that is generated by the RA directly from the message models, and the third part shows the extract of the Business Model that is used by the new message definitions.

- The XML or ASN.1 schemas of the new message definitions generated directly from the models

- Examples of instances of the new messages, if provided by the submitting organisation

- A ‘comments template’ for use by the Evaluation Team members

Part 2 of the MDR and the Schemas can be viewed as different ways of describing the same information but from different angles and thus containing various levels of details.

In addition to the above, the submitting organisation may submit a 'Message Usage Guide' (MUG) to complement the Message Definition Report when such report is considered

the various ISO 20022 related groups and subgroups, the answer to various internal and external queries, the training of RMG and SEG members, etc.
insufficient to provide clear guidance on the ways of using the messages. Such a MUG can be submitted to the SEG either at the same time as or after the other evaluation documents.

### 1.1.3 Evaluation

#### 1.1.3.1 Scope of the evaluation

On top of the evaluation documentation provided by the RA, the submitting organisation is expected to give an introductory presentation to the Evaluation Team members and may propose additional documentation to further facilitate the evaluation of the submission.

As a first step, the Evaluation Team shall verify that the submission is within the scope expressed in the corresponding Business Justification approved by the RMG. As indicated in the Business Justification template, at the time the Business Justification is written, it is generally not possible for the submitting organisation to fully describe the business process, information flows, business transaction and message set that will be submitted. These will generally crystallise once the detailed business requirements have been collected and the business and logical models have been developed, something that is usually not performed prior to the introduction of the Business Justification. As a result, the Business Justification will generally include a high level scope and the submitted candidate message set will generally fit within this scope. If it is not the case (the submitting organisation developed less than what was approved, more than what was approved or something different from what was approved), the SEG or Evaluation Team must request the submitting organisation to explain the reasons for this difference. The SEG must formulate an opinion on the stated reasons for the changed scope and, depending on the extent of the variation, may refer back to the RMG for further approval before starting the evaluation of the candidate message definitions. Whenever scope variations are encountered, whether they be minor or major, the SEG and the submitting organisation must modify the latest version of the Business Justification such that the scope is accurate, and forward it to the RA for posting on the ISO 20022 website. Where the SEG feels that it is necessary to refer back to the RMG, the RA will use the modified Business Justification as the basis for re-approval.

The Evaluation Team evaluates the candidate ISO 20022 message definitions from a business standpoint before they are officially accepted and published as ISO 20022 message definitions. In further detail, this means validating, among others, that:

- The message definitions developed, based on the requirements collected by the submitting organisation, actually address the users’ needs and could be used by the user community represented by each Evaluation Team member. This includes the validation of the transaction flow, the message scopes, the message descriptions, including all (new or re-used) components, use of external code sets, data source schemes, or supplementary data components, definitions and others, as included in the SEG documentation.

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5 For example, the submitting organisation may not have estimated well enough the resources required to develop the proposed scope, or, after collection of detailed business requirements, some of the intended functionality proved to make no sense from a business perspective or additional functionality was required to make sense from a business perspective.
- The information requirements of actors that come into play in other business areas, either before or after in the end-to-end transaction chain, are taken into account in the submitted message set.

- The documentation provided is clear enough and sufficient to ensure that future users will understand how to use the new or updated message set. The Evaluation Team is responsible to evaluate the potential need for a Message Usage Guide (MUG) to be provided by the submitting organisation to complement the description of the Message Definition Report.

### 1.1.3.2 External code sets, data source schemes, supplementary data

The Evaluation Team should pay particular attention to the use of external code sets, data source schemes and supplementary data components.

An external code set is a closed list of valid values for a code, but the list is maintained independently of the message definition(s) it is used in, i.e., the list of values can be maintained without need to update the message definition itself. The Evaluation Team should be satisfied that there is sufficient reason to keep the list outside the message schema (it may be part of another standard, or be too dynamic to maintain within the message definition), and that the maintenance procedures for the code set can be followed. External code sets that are specific to ISO 20022 messages are maintained by the relevant SEG on a quarterly basis and are published on the ISO 20022 website.

A data source scheme (DSS) is a mechanism allowing an external body to maintain its own external code set of valid values for a specific message component. Once use of the DSS mechanism has been approved by the SEG for a specific message component, any external body can register its code set(s) for use in this component without need to update the message definition itself. The list of message components supporting the DSS mechanism and the list of DSSs currently registered by the RA for use in each of these components is published on the ISO 20022 website, but the lists of values are not. The Evaluation Team must satisfy itself that there is a need for such type of proprietary code sets (for example, the lists of identifiers maintained by market infrastructures).

A supplementary data component is a mechanism that allows a community of users to add information to an ISO 20022 message that was unknown to and/or not catered for by the developer at the time the message definition was designed, without need to update the message definition itself and, hence, without impacting the other users of the message definition. The information will be included in the supplementary data component of the message at implementation time based on a schema that is made available on the ISO 20022 website. The supplementary data component can also be used at message design time to store information that is very specific to a community and cannot be agreed globally. The Evaluation Team must satisfy itself that sufficient market-specific requirements exist, that the use of a supplementary data will protect the user base against changes required by a specific community or that the message definition is (or will be) used in a changing environment, where changes may be required to take place at a speed greater than that allowed by the ISO 20022 maintenance process. The Evaluation Team should first explore more usual options such as creating a specific message component in the message itself if the business use of the component can be globally agreed and semantically defined.
For some of the above mechanisms, the SEG is required to approve not just the use of the mechanism in a particular case, but also the additional information that supports the mechanism. This additional information may be supplied at the same time as the message design, or as part of a subsequent Change Request (see section 2 below). Full details are available on the ISO 20022 website.

For an external code set, the SEG must approve the values on the list. For the supplementary data component, the SEG must approve the components within it (which will also be registered in the ISO 20022 repository).

1.1.3.3 Evaluation Recommendation

The Evaluation Team, coordinated by the Facilitator, is responsible for collecting comments on the submission in writing from its members, reviewing them as a group and establishing a single commonly agreed upon list of comments to be addressed either by the submitting organisation and/or, possibly by the RA (e.g., comments related to the (non)re-use of dictionary items). Comments that are not directly related to the submission contents, such as questions about the ISO 20022 Governance or Registration Procedures or the specifications/conventions defined in the ISO 20022 standard itself should not be addressed to the submitting organisation, but to the appropriate group within the RMG, RA, TSG or TC68.

The commonly agreed list of SEG comments are disposed of in writing by the submitting organisation and/or the RA. Based on this disposition of comments, the Evaluation Team Facilitator shall strive to reach a consensus recommendation of approval or rejection of the submission. In the case of a rejection, the recommendation will explain the reason(s) for the rejection and what would need to be changed to get an approval.

The Evaluation Team Facilitator submits the Team’s recommendation to the SEG for endorsement. In general, it is expected that the SEG(s) will not take more than two weeks to endorse the recommendation of the Evaluation Team it has selected and approved for this evaluation. The (Lead) SEG Convenor shall notify the RA immediately after the decision has been taken. The RA will then officially inform the submitting organisation and the RMG via e-mail, update the submission status on the ISO 20022 website, and proceed with the publication of the message definitions.

If the Evaluation Team cannot reach a consensus, the issues are first submitted to the full SEG(s) for resolution before being submitted, via the RA, to the RMG for resolution in case the issues cannot be resolved at SEG level.

A record of the commonly agreed upon list of Evaluation Team members’ comments, how the comments were disposed of, and the final recommendation of the SEG, shall be kept by the SEG Secretary on ISOTC Livelink. This central record can be used for future reference when answering questions or when changes are requested to the approved message definitions.

6 “Consensus: General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments. NOTE Consensus need not imply unanimity.” Source: ISO Directives.
### 1.1.3.4 Timing and priority of evaluations

A recommendation on a full documentation shall be given by the Evaluation Team as quickly as possible and take no longer than three calendar months, unless otherwise agreed upon with the RMG (e.g., when the submission covers a large number of items).

The above timing does not include the time required to establish the Evaluation Team or the two-week endorsement by the SEG. If there are several concurrent submissions ready for evaluation by a single Evaluation Team, they shall be treated in the sequence fixed by the RMG, one after the other and each within the response time described above, unless it makes sense to the Evaluation Team to combine them into a single evaluation.

In the case of multiple concurrent submissions, they shall normally be treated on a first-come first-served basis, except if the RMG decides otherwise. Should the submitting organisation or the SEG wish to change the priority order of evaluations, the endorsement of the RMG is required.

If resources are available, the SEG may create several Evaluation Teams to address several submissions in parallel.

### 1.1.4 Publication of approved ISO 20022 message definitions

The RA publishes the ISO 20022 message definitions on the ISO 20022 website. This includes:

- Registering the new Message Definitions and all related message items in the Business Process Catalogue.
- Officially registering all related, new or updated Data Dictionary items (items that would have been 'provisionally registered' are switched to 'registered' status).
- Publishing the final Message Definition Report, the XML or ASN.1 schemas and, possibly, examples of message instances and a MUG of the approved message definitions in the Catalogue of ISO 20022 messages.
- Making a new extract of the ISO 20022 Repository (Business Process Catalogue and Data Dictionary) accessible through the e-Repository function, which allows users to download an EMF-based Repository containing all approved message definitions and the Data Dictionary, and through the Repository Search function. In case several submissions are expected to be approved within the same timeframe (e.g. in the same quarter), the RA will wait until the last set of message definitions is published to generate a new repository extract.

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7 Open source “Eclipse Modelling Framework”. 
1.1.5 Withdrawal

At any time during the registration process and until the message definitions are approved by the SEG for publication, the submitting organisation may decide to withdraw or suspend its submission, simply by informing the RA and providing the reason for such decision. The RA will change the status of the submission accordingly and inform the RMG and SEG of the decision and the reason thereof.

1.2 Registration process for development of new variants of existing ISO 20022 message definitions

A variant is a restricted version of an ISO 20022 message definition (see also section 6.1.4) that requires the development of a specific message model that eliminates all the elements of the global message definition not used by the variant and replaces the components that are restricted by new derived components. In addition to restricting the structure of the global message definition, the business rules of the global message definition may also be restricted in the variant. But the restriction cannot be limited to the business rules (that is, the schema of the variant cannot be identical to the schema of the global message definition). Specific modelling guidelines must be used to create sharper message elements derived from and still associated with the original message elements. Therefore, the development of a variant requires the same kind of expertise as the development of a new message definition.

In general, requests for registration of variants relate to several or all of the message definitions of a particular ISO 20022 message set. Therefore, each request for registration of variants, even if for a single message definition, is associated to a particular ISO 20022 message set and the resulting set of variant(s) is published together with the message set it relates to in the Catalogue of Messages.

The registration process for variants is similar to the registration process for new global message definitions except that there is no need for a SEG evaluation of the variant message documentation and schema. Indeed, as the SEG already approved the global message definition, all variants of this global message definition are de facto valid. As a result, the process only includes the following three phases which are described below:

- The Business Justification process
- The development
- The publication

Note: a flowchart of the registration process for new candidate variants of ISO 20022 message definitions is available from the website.

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8 In certain cases, the request for registration of variants may cover more than one message set and may require a specific Business Justification for each message set (see Business Justification template for variants).
1.2.1 Business Justification process

An organisation wishing to develop new candidate variants of existing ISO 20022 message definitions must first introduce a 'Business Justification' to give an overview of the scope, reason and estimated users/volumes/savings of the intended variants. ISO 20022 message variants are expected to support the adoption of ISO 20022 messages globally, that is, either internationally by a specific segment of the industry or by a significant portion of the community.

A specific template for Business Justification for variants can be downloaded from the ISO 20022 website. The completed Business Justification is sent to the RA at iso20022ra@iso20022.org where it is checked for completeness, logged on the ISO 20022 website in the 'Status of Submissions', and confirmed to the submitter within the next five business days.

When the Business Justification is ready for submission, the RA sends it via e-mail to the RMG members and to the Convener, Vice Convener and Secretary of the (Lead) SEG(s) that approved the related global ISO 20022 message definitions.

RMG members are given one month to upload any comments or requests for clarification to be addressed by the submitting organisation in the RMG folder on ISOTC Livelink (see 7.1.1). During this period, the SEG formulates its opinion on the Business Justification from a 'future users' perspective and verify that the submitting organisation proposes to include the relevant industry bodies in the development. The SEG may challenge the information provided by the submitting organisation and submit clarification requests. The Convener, Vice Convener or Secretary of the SEG uploads the collated comments from the SEG to the RMG folder on ISOTC Livelink (see 7.1.1) before the end of the commenting period.

- If no comments have been received within the commenting period or if the only 'comments' received are the positive opinion of the SEG, the RA appends the opinion of the SEG to the Business Justification and invites the RMG voting members by e-mail to vote on the Business Justification within the next two weeks. At the same time, the RA informs the RMG secretary who initiates the ballot in ISOTC Livelink (see 7.1.2).

- If comments have been received from the RMG or the SEG during the commenting period, the RA sends them via e-mail to the submitting organisation contact persons mentioned on the BJ. The submitting organisation is given up to three weeks to submit an updated Business Justification to the RA. The updated Business Justification shall include:

  o the text of the original Business Justification which may be updated by the submitting organisation based on the comments received. Such updates will be clearly highlighted using 'track change' or similar mode.

  o a copy of and a response to each of the received comments.

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9 In the Business Justification, the submitting organisation has to mention the industry bodies that it intends to involve in the development.
As soon as the updated Business Justification is received, the RA checks it for completeness, logs a copy on the ISO 20022 website and e-mails it to the RMG members for vote. Simultaneously, the RA informs the RMG secretary who initiates the ballot in ISOTC Livelink (see 7.1.2). The RMG members are given one month to vote on the updated Business Justification. During this period, a conference call is organised by the RA to give RMG members the opportunity to discuss the response to the comments with the submitting organisation before casting their vote.

The votes are 'Yes', 'No' or 'Abstain'. Comments are no longer accepted with the votes. All RMG members have an obligation to vote and a vote will not be considered valid if less than seven RMG members have responded, among which at least five P-member countries.

Countries or liaison organisations that are not involved in the business domain of the Business Justification or have no opinion on the Business Justification are expected to vote 'Abstain'. Only the received 'Yes' and 'No' votes are computed. A Business Justification is approved if at least two thirds of the 'Yes'/No' votes are 'Yes'. The RMG secretariat immediately notifies the RA, which notifies the submitting organisation of the result of the vote via e-mail.

### 1.2.2 Development by the submitting organisation

If the Business Justification is approved, the RA assigns a variant number that will be used to identify the group of variants that the submitting organisation will develop for the related message set. The variant number is dedicated to any and all variants that the submitting organisation will develop for this message set under this business justification.

Example: a submitting organisation proposes to develop variants for 4 message definitions of a message set that includes 10 message definitions. If the RA assigns the variant number ‘002’ to this set of 4 variants, the number ‘002’ will never be used to identify the variants that another submitting organisation would develop for this message set, even if these latter variants relate to the six message definitions that do not have a variant 002.

The submitting organisation is expected to develop a candidate ISO 20022 compliant model of the set of variants within the timeframe indicated in the Business Justification. If during the development, the submitting organisation realises that the candidate ISO 20022 message model will not be ready for delivery to the RA at the date specified in the Business Justification, it will promptly inform the RA about the new submission date.

The RA has limited resources which are not available for development work, but provides the submitting organisation with a clear description of the required deliverables, the materials necessary to set up the required modelling environment and a 'compliance checklist' of rules to observe to ensure ISO 20022 compliance of the candidate models.

A modelling tool developed by SWIFT, “The Editor”, is provided by the RA to submitting organisations without charge. Additionally, to ensure openness of the submission process to the RA, the RA publishes and maintains on the ISO 20022 website appropriate technical details (i.e., the implementation meta model) to allow submitting organisations to use software tools that would produce message models compliant with the latest edition of ISO 20022 as implemented by the RA. The RA uses the implementation meta model to process submissions.
Once developed, the submitting organisation submits the candidate model to the RA which checks it for compliance. Upon detection of non-compliance with a rule, the RA may return the invalid submission to the submitting organisation with an indication of the rule that was not observed. The submitting organisation is then expected to correct the model and re-submit to the RA. During the compliance review, the RA verifies that the candidate variants are indeed true restrictions of the related global message definitions.

After verification of the compliance of the variants with the ISO 20022 specifications and the compliance with the related global message definitions, the RA registers and publishes the variants.

1.2.3 Publication of ISO 20022 message variants

The RA publishes the variant message definitions on the ISO 20022 website. This includes:

- Registering the new variant Message Definitions and all related message items in the Business Process Catalogue.

- Officially registering all related, new or updated Data Dictionary items.

- Publishing, in the Catalogue of ISO 20022 messages of the related business domain (Payments, Securities, Trade Services, Cards, FX), an introductory document provided by the submitting organisation, the Message Definition Report (Part 2), the XML or ASN.1 schemas and, if provided by the submitting organisation, examples of message instances and a MUG of the variant message definitions.

- Making a new extract of the ISO 20022 Repository (Business Process Catalogue and Data Dictionary) accessible through the Repository Search function and through the e-Repository function, which allows users to download an EMF-based Repository containing all approved message definitions and variants together with the Data Dictionary. In case several submissions are expected to be approved within the same timeframe (e.g. in the same quarter), the RA will wait until the last set of message definitions is published to generate a new repository extract.

1.2.4 Withdrawal

At any time during the registration process and until the variant message definitions are published, the submitting organisation may decide to withdraw or suspend its submission, simply by informing the RA and providing the reason for such decision. The RA will change the status of the submission accordingly and inform the RMG and SEG of the decision and the reason thereof.

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10 Open source “Eclipse Modelling Framework”.

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2 Maintenance process

Note: a flowchart of the maintenance process for existing ISO 20022 message definitions is available from the website.

The process for updating existing message definitions is different from the new message development process since the deployment of a new version of a message definition may impact a whole community of users. Therefore, change requests are validated and approved by the SEG(s) which approved the current version of the message definitions on behalf of the community of users.

Existing ISO 20022 message definitions can be updated on a yearly basis provided changes are requested by the users and approved by the SEG(s). New versions of message definitions, if any, are published in April/May of each year. Change requests for the following yearly cycle must be introduced prior to the 1st of June of the preceding year.

Until the migration of the securities industry from the ISO 15022 securities messages to their equivalent ISO 20022 message definitions, there is a specific process for the maintenance of the Securities Settlement and Reconciliation message set and the Corporate Action message set. This maintenance process is described in appendix (see chapter 5).

In certain circumstances such as urgency or where required by the relevant business community, it is possible to request the maintenance of ISO 20022 message definitions outside of the yearly cycle. When an existing message definition includes a supplementary data component (see section 1.1.3.2), it is also possible, in specific cases, to request using the supplementary data component to extend the existing message definition with additional information rather than changing the message definition itself. Such a request is also introduced via a change request that is validated by the SEG(s) which approved the current version of the message definition. If approved by the SEG, the development, registration and publication of the ISO 20022 compliant content of the supplementary data component can happen outside of the maintenance cycle since it does not impact the existing message definition.

The maintenance of existing variants of global message definitions does not follow the same process as the maintenance of global message definitions. Submitting organisations responsible for variants are responsible for their maintenance and may decide to develop new versions of their variants whenever necessary. Requests for change to a variant are thus to be addressed directly by the requester to the submitting organisation responsible for the variants. They do not need to be submitted to the RA or approved by the SEG. However, in case of dispute between a submitter of a change request and the submitting organisation in charge of the variants, the SEG(s) in charge of the related global message set(s) may be asked to arbitrate.

On the other hand, a message variant is “attached” to a specific version of a global message definition, that is, a message variant is a subset of a specific version of a global message.
definition. If a new version of this global message definition is approved by the SEG\textsuperscript{11}, the attached message variant is transferred by the RA to the message archive with the old version of the global message. It is up to the submitting organisation to review the variant as required to make it a subset of the new version of the global message definition and re-submit it to the RA for qualification and publication with the new version of the global message definition. When a submitting organisation decides to develop a new version of its variants, it informs the RA of the expected submission time and submits the new variant message model to the RA for registration when developed. Before registration, the RA always verifies that new versions of variants are still compliant restrictions of the targeted versions of the global message definitions.

### 2.1.1 The RA collects change requests from users

Actual or potential users of ISO 20022 message definitions, or their representatives, are invited to forward their requests for changes to the RA\textsuperscript{12}. Each change request must describe the scope of the change including the list of impacted ISO 20022 message definitions, the purpose of the change, the community of users interested by the change and the urgency and expected benefit/impact of the proposed change on current or future users. If the change is proposed to be implemented outside the yearly schedule or proposes to use the supplementary data component of a message, the change request must include the justification thereof. A change request template is available from the ISO 20022 website. A specific change request form must be completed for each particular change requested. If the requested change consists, for example, of adding new functionality which requires several changes which would not make sense if not performed all together, then all these related changes should be described on the same change request form\textsuperscript{13}.

Change requests must be sent to the Registration Authority at iso20022ra@iso20022.org. The RA checks each change request for completeness and conformance to the change request template and return to the submitter in case of invalidity.

When the change request is valid (that is, conforming to the change request template), the RA publishes the change request in the Catalogue of Change Requests and forwards it to the SEG which had approved the current version of the identified ISO 20022 message definitions, with a copy to the submitter. The purpose of the Catalogue of Change Requests is to give the possibility to users who intend to introduce a change request to check whether this change has already been requested or not.

Valid change requests must be received by the RA prior to June 1 to be considered for implementation in the next yearly maintenance cycle. The RA forwards valid change request

\textsuperscript{11} Submitting organisations responsible for variants are informed by the SEG about change requests impacting the related versions of the global message definitions (see 2.1.2).

\textsuperscript{12} Requests for change to a variant are to be submitted directly to the submitting organisation in charge of this variant.

\textsuperscript{13} There is a specific template for 'Change Request for the update of an External Code Set' which follows a specific quarterly maintenance cycle.
forms to the Convener, Vice Convener and Secretary of the relevant SEG on an ongoing basis. When the current version of the message definitions had been approved by several SEGs under the leadership of a Lead SEG, the RA forwards the change request to the Lead SEG and copies the other SEGs. All valid change requests for the yearly maintenance cycle that are received by the RA prior to June 1 are communicated to the SEG by June 7 at the latest.

2.1.2 The SEG performs the initial evaluation of the change requests

Change requests are evaluated by the SEG(s) which approved the current version of the impacted message definitions on behalf of the community of users. The purpose of the initial evaluation is to filter change requests and already reject those that are not justified. Change requests which are not rejected will be analysed further later on to determine the actual impact of their implementation (see 2.1.4).

The SEGs should not wait until all change requests are received to start the initial evaluation. On the contrary, the SEGs are invited to look at the change requests as soon as received and to contact the requester at the earliest possible moment with any queries as to scope, purpose or other points of clarity. If an Evaluation Team was established by the SEG to evaluate the current version of the message definitions, the SEG may re-establish this Evaluation Team and ask for their expert opinion on the validity of each requested change. The SEG must also invite the submitting organisation that is responsible for the maintenance of the message definitions to participate in the initial evaluation. When several organisations are jointly responsible for the maintenance of the message definitions, all of them are invited to participate in the initial evaluation. If the message definitions have registered variant(s), the SEG must also invite the submitting organisation(s) in charge of the variant(s).

The SEG updates the change request form with its recommendation either to reject the change request or to keep it for further consideration. If the request is accepted for further consideration, the SEG indicates whether it believes the implementation timing proposed by the requester (whether in or outside of the yearly cycle) is reasonable. For reasons explained in section 6.3, the SEG may wish to wait until all change requests are received – or a sufficient number of them - to decide whether it makes sense to release a new version of the message definitions in the current yearly cycle or it is better to wait for the following cycle.

The SEG indicates the reason for the changes it recommends rejecting. In certain cases, the SEG may recommend that new message definitions be developed to accommodate the requested changes instead of developing a new version of the existing ISO 20022 message definitions. This can happen, for example, when the proposed updates change the scopes of the current ISO 20022 message definitions and/or are pertinent only for a new, distinct community of users. In such a case, the submitter of the change request will have to find a submitting organisation ready to undertake such development and introduce a Business Justification for the development of new message definitions (see Chapter 1).

The SEG forwards completed change request forms to the RA on an ongoing basis. All change request forms received by the SEG by June 7 and targeted for the upcoming yearly cycle must be completed and returned to the RA by July 7 at the latest. The RA updates the Catalogue of Change Requests with the SEG decision and posts the completed change request forms.
If the SEG has approved change requests for further consideration, it should already form the Evaluation Team that will undertake the evaluation of the forthcoming Maintenance Change Request (see 2.1.4). Whenever possible, SEG members should look for actual users of the current version of the message definitions to join this Evaluation Team.

Change requests that propose using the supplementary data component of an existing message definition are managed independently as soon as submitted and, if approved by the SEG, may not require further consideration since their implementation does not impact the existing message definition. The SEG must satisfy itself that sufficient market-specific requirements exist, that the use of the supplementary data component will protect the user base against changes required by a specific community or that the additional information will be used in a changing environment, where changes to this information may be required to take place at a speed greater than that allowed by the ISO 20022 maintenance process. The SEG should carefully examine each piece of information that is proposed to be added in the supplementary data component and first explore the opportunity of adding this piece of information in the message definition itself if the business use of this information can be globally agreed. The SEG completes the change request form with its decision and forwards it to the RA. If use of the supplementary data component is approved, the RA informs the submitter of the change request that the ISO 20022 compliant structure to be used in the supplementary data component can be developed and submitted to the RA for compliance checking and registration and publication. There is no further approval required from the SEG.

### 2.1.3 The submitting organisation prepares a 'Maintenance Change Request'

Although the submitting organisation in charge of the maintenance of the impacted message definitions is involved in the initial evaluation, the RA officially communicates all change requests approved for further consideration by the SEG by July 7 to the submitting organisation in charge. Urgent change requests that are approved by the SEG for immediate consideration outside of the yearly maintenance cycle are communicated by the RA to the submitting organisation as soon as received from the SEG.

*Note:* in general, new versions of message definitions will be developed by the original submitting organisation, i.e., the organisation that developed the original version of the message definitions. If, for any reason, the original submitting organisation cannot perform all or part of the requested changes, the RA, the SEG and the submitter(s) of the change request(s) will seek an alternative submitting organisation ready to maintain the message definitions. The SEG may also agree to postpone all or part of the requested changes.

The submitting organisation prepares a Maintenance Change Request which includes all the change requests approved for further consideration by the SEG and indicates, for each of them, how the submitting organisation proposes to implement the change and the impact on the ISO 20022 message definitions. The impact analysis may reveal that a requested change has a bigger impact than expected or impacts more message definitions than those targeted by the submitter of the change request. The Maintenance Change Request also confirms whether or not the submitting organisation agrees to dedicate required resources to the development of the
changes in the requested timeframe. A Maintenance Change Request template is available from the ISO 20022 website.

Valid Maintenance Change Requests for the following yearly maintenance cycle must be received by the RA by August 21. Maintenance Change Requests related to urgent change requests approved by the SEG for immediate consideration are expected to be received by the time agreed between the SEG and the submitting organisation during the initial evaluation. The RA checks the Maintenance Change Requests for completeness and posts each valid Maintenance Change Request in the corresponding ‘Log History’ spreadsheet of the Status of Submissions. From this point on, the status of the Maintenance Change Request is tracked by the RA in the Status of Submissions.

By September 1 at the latest, the RA forwards the Maintenance Change Request via e-mail to the Convener, Vice Convener and Secretary of the SEG which had approved the current version of the ISO 20022 message definitions mentioned in the Maintenance Change Request. When the current version of the message definitions had been approved by several SEGs under the leadership of a Lead SEG, the RA forwards the Maintenance Change Request to the Lead SEG and copies the other SEGs.

2.1.4 The SEG evaluates the Maintenance Change Request

The SEG – or its Evaluation Team – has until October 1 to review the Maintenance Change Request and approve the proposed implementation of each change request. The submitting organisation participates in the evaluation to give any further clarification regarding the proposed updates.

The result of the review is an agreement regarding which changes will be implemented, how and when. The SEG takes into account the impact analysis performed by the submitting organisation and its capacity to perform the proposed changes in the requested timeframe. If, for any reason, the submitting organisation cannot perform all or part of the requested changes, either the SEG may agree to postpone these changes, or the RA, the SEG and the submitter(s) of the change request(s) will seek an alternative submitting organisation ready to maintain the message definitions within the requested time frame.

In approving or rejecting each change, the SEG or Evaluation Team will apply the same validation criteria as for initial approval of a message (see section 1.1.3.1 above).

By October 1, the SEG updates the Maintenance Change Request with its decision to approve or reject each of the proposed changes and forwards the updated document to the RA, which transmits it officially to the submitting organisation(s) and posts it in the ‘Log History’ spreadsheet of the Status of Submissions.

2.1.5 The submitting organisation develops the new candidate ISO 20022 message definitions

For the yearly maintenance cycle, the submitting organisation has until December 1 to develop a new ISO 20022 compliant version of the message models and to update part 1 of the Message

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Definition Report, in line with the changes approved by the SEG, and get them checked for compliance by the RA. For urgent unscheduled changes, the timeframe is agreed with the SEG during the evaluation of the Maintenance Change Request and is indicated in the approved Maintenance Change Request form.

The RA registers the candidate new version of ISO 20022 message definitions and all related new or updated items in the Repository and generates the evaluation documentation. The evaluation documentation includes the updated Message Definition Report and the XML or ASN.1 schemas generated from the message models. It may include an updated MUG provided by the submitter, as agreed with the SEG.

2.1.6 The SEG verifies the documentation of the new candidate ISO 20022 message definitions

The evaluation documentation is distributed to the SEG as soon as produced.

For the yearly maintenance cycle, distribution is done during December and the SEG - or its Evaluation Team – has until February 1 to verify that the new version of the message definitions actually reflects the approved changes, as agreed during the evaluation of the Maintenance Change Request. If it is not the case, the submitting organisation may be requested to correct the models or documentation as appropriate by March 1.

Upon approval of the SEG, the RA officially notifies the submitting organisation and the RMG of the newly approved version of ‘ISO 20022 message definitions’. It is only after the approval by the SEG that the new candidate ISO 20022 message definitions (or ISO 20022 compliant message definitions).

2.1.7 The RA publishes the new version of the ISO 20022 message definitions

Upon approval by the SEG, the submitting organisation finalizes the MDR part 1, and, possibly, examples of XML or ASN.1 message instances and an updated MUG. This additional information must be received by the RA no later than May 1.

At the latest in April/May, the RA publishes the new versions of the ISO 20022 message definitions on the ISO 20022 website. This includes:

- Archiving the documentation of the previous version of the message definitions in the ISO 20022 Message Archive.
- Registering the new message definitions and all related items in the Business Process Catalogue and Data Dictionary.
- Publishing the final Message Definition Report, the XML or ASN.1 schemas, and possibly example of message instances and a MUG in the Catalogue of ISO 20022 messages.
• Making a new extract of the ISO 20022 Repository (Business Process Catalogue and Data Dictionary) accessible through the e-Repository function, which allows users to download an EMF\textsuperscript{14}-based Repository containing all approved message definitions and the Data Dictionary, and through the Repository Search function. In case several Repository updates are expected to be approved within the same timeframe (eg in the same quarter), the RA will wait until the last set of message definitions is published to generate a new repository extract.

3 Testing and Implementation

Until the newly published message definitions have been tested or implemented, one cannot fully guarantee that:

- The new ISO 20022 message definitions are described accurately enough in the published documentation to allow users to implement the new version as intended and approved by the SEG;

- The approved message definitions can be implemented from a technical perspective with no or minimal adverse effects on communication infrastructures and/or applications (for example, excessive processing time).

Besides the potential users, the submitting organisation is also invited to review the published documentation and organise/encourage testing and implementation of the new message definitions.

The submitting organisation, testers or first implementers are invited to communicate to the RA any remarks they have on the published documentation. The remarks may include proposals for changes to clarify the documentation, eliminate ambiguity or correct errors that prevent implementation of the message definitions. They may include proposals to make the message definitions easier to implement or process, but may normally not include new business requirements, unless (1) they are in the scope of the approved Business Justification or Maintenance Change Request and (2) the SEG, the RA and the submitting organisation jointly agree that the proposed changes can and must be implemented as soon as possible to ensure adoption of the new message definitions.

If a correction of the message definitions and/or documentation is approved, the new publication is clearly announced on the ISO 20022 website and an 'errata' with the list of the changes is published by the RA for the convenience of implementers who would have started using the published version of the message definitions/documentation. If the message schemas have been 'patched' to correct a mistake (the schemas did not reflect what the SEG had approved) or an error (the schema was invalid), the corrected schemas bear a new generation

\textsuperscript{14} Open source “Eclipse Modelling Framework”. 
timestamp but keep the same version number. If any other change is made to a schema (improvement, new requirement), the message version number is increased.

4 Business Model Maintenance Process

The ISO 20022 Business Model is part of the ISO 20022 Data Dictionary (see 6.1.2) and includes the business concepts that are used in the ISO 20022 message definitions. As such, it is usually enriched at the occasion of the development or maintenance of ISO 20022 message definitions. It is however possible to update and complement the ISO 20022 Business Model independently of the message development, provided that the updates can be made without impacting the existing ISO 20022 message definitions.

The business model update process includes the following steps:

4.1.1 The RA collects change requests from users

Actual or potential users of the ISO 20022 Business Model submit their requests for changes to the Business Model based on the specific Business Model change request to the Registration Authority (RA) at iso20022ra@iso20022.org. Each Business Model change request must describe the scope of the change, the business concepts to be changed, the proposed name, definition, etc.

The RA checks each Business Model change request for completeness and conformance to the Business Model change request template. When the change request is valid (that is, conforming to the change request template), the RA returns a positive acknowledgement to the submitter and posts the change request in the Catalogue of change requests.

4.1.2 The RA performs the evaluation of the change requests

Change requests to the Business Model are evaluated by the RA, as well as the impact that the changes could have on existing ISO 20022 message definitions.

If the changes can be made without impacting the existing ISO 20022 message definitions, the RA updates the Business Model and prepares the documentation necessary for the submission of the updated model to the relevant SEG, or the Cross-SEG Harmonisation team (CSH) if the changes relate to ‘common’ business concepts that are used by several business domains.

If the changes require an update of existing ISO 20022 message definitions, the RA contacts the submitter with the request to prepare required message change requests as per the regular ISO 20022 maintenance process.

4.1.3 The SEG reviews the business model change request

The SEG or the CSH reviews the updated Business Model and approves the proposed implementation of each Business Model update.
The submitter is invited to participate in the evaluation to give any further clarification regarding the proposed updates. The result of the review is an agreement regarding which changes will be implemented. The RA updates the Business Model change request with the SEG or CSH decision for each of the proposed changes, informs the submitter and updates the status of the change request in the Catalogue of change requests.

4.1.4 The RA publishes the new version of the ISO 20022 Business Model

The RA publishes the updates to the Business Model on the ISO 20022 website. This may include:

- An update of the Business Model diagrams and definitions
- An update of the e-Repository
- An update of ISO 20022 Repository extract accessible through the Repository Search function.
5 Annex A - Specific maintenance process for the Securities Settlement & Reconciliation and Corporate Action message definitions

5.1 Background:

Until the migration of the securities industry from the ISO 15022 securities message formats to their equivalent ISO 20022 message definitions, there is a need to maintain the compatibility between the two sets of messages. The two sets of messages serve the same community of users but have their specific maintenance processes. To avoid a duplication of effort by (often the same) industry representatives involved in these maintenance processes, the following combined review process has been established. This is currently related only to the Settlement & Reconciliation messages and the Corporate Actions messages. The maintenance of the other ISO 20022 securities message definitions follows the normal maintenance process.

5.2 Combined ISO 15022/20022 yearly maintenance process:

1. **By June 1**: Users may channel their change requests (CRs) to the ISO 15022 RA for ISO 15022 message formats and/or the ISO 20022 RA for ISO 20022 message definitions by June 1 using the appropriate “Change Request Template”. All received CRs (ISO 15022 and 20022 CRs) are published by the RA in the ISO 20022 Catalogue of Change Requests for information, but are not yet submitted to the Securities SEG for review.

2. **By July 7**: SWIFT, in its dual role of ISO 15022/20022 RA and submitting organisation responsible for the maintenance of both Settlement & Reconciliation and Corporate Actions messages, reviews the CRs, requests complementary information to submitters if necessary to assess the business case, identifies whether the CRs impact ISO 15022, ISO 20022 or both sets of messages, and prepares an initial version of the two Maintenance
Change Requests - one for Settlement & Reconciliation messages, one for Corporate Actions messages - that include all valid CRs received by June 1. These MCRs include additional information about the way the CRs can be implemented and the actual impact on message definitions. By July 7, the MCRs are posted in the Status of Submissions and submitted to the relevant SWIFT/ISO 15022 Maintenance Working Groups and Securities SEG Evaluation Teams for review.

3. **By August 31**: At the end of August, SWIFT organises joint evaluation meetings of the SWIFT/ISO 15022 Maintenance Working Groups and ISO 20022 Evaluation Teams for Corporate Actions and for Settlement and Reconciliation. Depending on the number of CRs to be discussed, a physical meeting at SWIFT premises may be organized. The purpose of the meeting is to review the MCRs, discuss the business case of each CR, decide which CRs are accepted for implementation and how they will be implemented.

4. **By September 15**: As a result of the outcome of the evaluation meetings, SWIFT produces a final version of the MCRs which is posted in the Status of Submissions and delivered to the SEG by the RA.

5. **By October 31**: The CRs impacting ISO 20022 message definitions are reviewed and approved by the SEG Evaluation Teams and endorsed by the Securities SEG as a whole. In parallel, the CRs impacting ISO 15022 message formats are submitted to the approval of the representatives of the ISO 15022 community of users via a SWIFT country vote.\(^\text{15}\)

6. **By December 1\(^\text{16}\)**: SWIFT, as submitting organisation, develops new versions of the ISO 20022 message models incorporating the approved CRs and submit them to the RA for quality review and generation of the preliminary Message Definition Report and candidate message schemas.

7. **By February 1**: The Securities SEG validates that the new versions of ISO 20022 message definitions indeed include the approved changes.

8. **By April-May**: The approved new versions of ISO 20022 message definitions are published by the RA.

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\(^\text{15}\) Considering the existing overlap between the membership of the SWIFT/ISO 15022 Maintenance Working Groups and the membership of the equivalent SEG Evaluation Teams on one hand, and the fact that these groups represent the exact same communities of users on the other hand, it is expected that there will be no discrepancies in decisions. If so, though, each exception will be handled on a case by case basis by the RA, the SEG and the SWIFT/ISO 15022 MWG.

\(^\text{16}\) As from that stage, the process follows the usual ISO 15022 and ISO 20022 yearly maintenance processes.
6  Annex B - Maintenance of the ISO 20022 Repository

6.1  Organisation and Publication of the ISO 20022 Repository

6.1.1  Introduction

The purpose of this section is to introduce some concepts that help understand how the Repository is maintained by the RA. The detailed description of the organisation of the Repository can be found in the ISO 20022 standard itself. The level of the description below is deliberately limited to what is relevant to understanding the maintenance aspects and how change requests should be managed by the ISO 20022 registration bodies.

6.1.2  Repository, Data Dictionary, Business and Message Concepts

The ISO 20022 Repository consists of two parts, the Business Process Catalogue and the Data Dictionary.

The Business Process Catalogue contains, among others, the message models and the derived message schemas.

The Data Dictionary contains, among others, the 'business components' and the 'message components'.

The 'business components' are the business concepts used and processed to perform the various financial activities, such as 'Account', 'Trade', and 'Party'. Business components are usually characterised by a series of 'business elements'. For example, a ‘Trade’ will be characterised by business elements such as Trade Date, Trade Time, Trade Price and Trade Place. Business components are defined during the business modelling phase (Business Analysis).

In general, a 'Message component' is a 'subset' of business component as required in the specific context of a message. The 'message components' are defined when the details of the required message set are analysed (Logical Design). Similarly to business components, message components are characterised by 'message elements'. For example, if a message uses the business component 'Trade', but needs to only communicate the business elements Trade Date, Trade Price and Trade Place, a new message component is created. If a new message definition needs to transport Trade Date, Trade Price and Trade Place, a new message component will be created with these three message elements.

The names attributed to these message components (e.g., Trade1, Trade2, Trade3, etc.) may not look very user-friendly because they are not semantically meaningful. It is important to note however that, once used in a message, the message component name (i.e., Trade1, Trade2, etc) is replaced by a name that is more meaningful to the users of the particular message(s). For example, in a message where the only relevant trade info is the trade date and the trade price,

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17 There are other ways of defining message components which are not described here.
the message component Trade1 will be (re-)used, but in the actual message instances on the wire, the set of these two message elements may be called 'TradeInfo'. The link between the name 'TradeInfo' and the message component 'Trade1' will be given in the schema and the Message Definition Report.

In summary, one business component may have several derived message components which are clearly 'traced' back to their original business component\(^\text{18}\). If an existing message component is inadequate for a new message, instead of modifying the message component – which would impact all messages using this component - a new message component will be created.

### 6.1.3 Versioning of the Repository and Repository items

The RA maintains the Repository on a continuous basis and publishes an updated static copy of the Repository on [www.iso20022.org](http://www.iso20022.org) on a regular basis for general consultation. As said above, the Repository includes a Business Process Catalogue and a Data Dictionary.

The Business Process Catalogue contains all the current versions of the models and messages (identified by a specific version number). Previously registered versions of the models and messages remain available in the [Message Archive](http://www.iso20022.org) on the ISO 20022 website.

The Data Dictionary contains all 'registered' items used in current and previously registered versions of models and message definitions. It also contains the 'provisionally registered' items used in new versions of models and message definitions currently in development. The Data Dictionary items have a unique name. They are not versioned since the Dictionary always contains all the items that are in use in all currently used versions of the message definitions – current versions shown in the Business Process Catalogue or previous versions shown in the Message Archive. If changes are made to a dictionary item, for example, to update the definition of the item or its status from 'provisionally registered' to 'registered', such changes are logged in a 'change history record', which is associated with each item and available on the website.

If a new version of a message definition is created and requires the update of one of its message components, a new message component will be created and the 'change history record' of this new message component will indicate that it is new, the date of the creation, the requestor and the reason. The replaced message component is kept in the dictionary as long as the previous version of the message definition is in use (see below).

In the Dictionary, there is normally one business component to express each business concept, such as Trade, Account, etc. If a business component needs to be updated, then the change is logged into the 'change history record' associated with the component.

\(^{18}\) The 'tracing' from a message component to its parent business component is shown in the MDR Part3 of each message set and in the Repository Search function on [www.iso20022.org](http://www.iso20022.org) through a specific indication 'This message component traces to:' followed by the (clickable) name of the business component. Also, in the business component view, all the derived message components are listed.
If a community of users states that they have discontinued using a (previous) version of a message definition, this message version will be marked as such in the ISO 20022 Message Archive with a 'removal date' set to a date one year in the future when the message version will actually no longer be part of the set of used ISO 20022 message definitions. This is to allow possible unknown users to make themselves known by this removal date, in which case the ‘removal date’ of the message definition will be withdrawn until these users confirm that they are no longer using the message definition.

When a ‘removal date’ is set for a message definition, all of its message components that are not used in other still used message definitions, will be marked as obsolete with the same removal date. If all the message components of a business component are marked as 'obsolete', then the business component will be marked as obsolete as well, with the same removal date. When the removal date of the related message definition is reached and no users have turned up, the message definition is declared obsolete and no longer part of the set of used ISO 20022 message definitions. The obsolete message definition is kept in the Message Archive but all message and business components used solely in this message definition are removed from the Dictionary, to keep the size of the current Dictionary manageable.

If a provisionally registered item of the Dictionary is eventually not used (i.e., never gets to status 'registered'), it will be removed from the Dictionary without going through a removal period with the status 'obsolete'.

6.1.4 Versions and variants

It is important to understand the difference between the concepts of 'variants' and 'versions'.

Variants

When a message definition is complex or covers a wide variety of use cases or there is a need to accommodate specific needs of communities of users migrating to ISO 20022, various levels of automation of users or other similar situations, it may be appropriate to define distinct 'variants' of the message definition which each exactly matches the business needs of the targeted community, on top of the global message definition that includes the business needs of all communities. A 'variant' is a restricted version of a global message definition. For example, a variant may exclude the portions of the global message definition that are rarely used in order to provide a message definition that is easier to implement and still covers 80% of the cases. The concept of variants may facilitate adoption of ISO 20022 message definitions by removing complexity and/or making it much clearer how to use a message definition in a specific context. For example, a variant may force the use of BICs only, where the global message definition proposes use of BICs or full name and addresses. The concept of variants allows communities of users to be very specific in the description of the messages which facilitates their documentation, increases the level of STP and may help implementation through sharper schemas. Thanks to variants, users will not have to implement sets of conditional rules to obtain the same message instances from the global message definition (e.g., “if STP message, then use BIC”). The global message definition, however, may be used to build applications that can process all message instances generated either through the global message schema or through the schema of any of its derived variants.
To facilitate the use of this concept, each ISO 20022 message definition has a 'variant number'. The global message definition always bears variant number '001', as does a message definition with no variants (i.e., all users use the same message definition).

ISO 20022 message variants are expected to support the adoption of ISO 20022 messages globally, that is, either internationally by a specific segment of the industry or by a significant portion of the community. Variants are not supposed to replace Implementation Guides or Usage Guidelines that describe the specific way of using a message in a particular context or by a specific community of users. Implementation Guidelines used by initiatives adopting ISO 20022 messages are not registered and published by ISO 20022 but can be identified (with the place where to find them) as part of the ISO 20022 Adoption Initiatives Report or through their own community’s publication or communication mechanism.

As said above, variants can be used to help the migration to ISO 20022 from other message standards or proprietary formats. In this case, restrictions will make sure that the resulting variant is compatible with the equivalent to-be-migrated message. It may happen however that, to ensure compatibility, the to-be-migrated message should also be restricted (for example, a message standard using references of 50 characters will not be compatible with the ISO 20022 messages which use references of 35 characters). If the to-be-migrated messages cannot be restricted and it is not possible either to adapt the ISO 20022 messages, then the compatibility can be achieved by using a combination of restrictions (variant mechanism) and extensions (supplementary data mechanism) to design an ISO 20022 variant that matches the to-be-migrated message.

**Versions**

When there is a need to update a message definition, the old 'version' is replaced by a new 'version' of the same message definition. All message definitions, including variants, have a 'version number'.

Timing is of the essence: variants run in parallel while versions replace each other. Families of variants exist concurrently to cope with the particular business requirements of specific communities or categories of users. Versions allow the switch from one (old) way of using a message to a new way of using it, based on the evolution of the business (or technical) requirements. Migration from one version to the next involves all users of the current version, while a specific user may never use a specific variant developed for another community of users.

Creating a new version of a variant may or may not require the creation of a new version of the global message definition, depending on whether the new variant version introduces features that were already available or not in the global message definition. Similarly, a new version of a global message definition may or may not impact a derived variant. Certain updates within the global message definition may lead to the withdrawal of an existing variant (e.g., all users decide to use the BIC only). Indeed, the RA will not accept to register a variant that has become identical to the new version of the related global message definition.

**Identification of variants and versions**
All message definitions have a 'Message Identifier' attributed by the RA which includes a variant number and a version number.

For example, the 'CustomerCreditTransferInitiationV03' message has the Message Identifier ‘pain.001.001.03’ where:

- 'pain' – is an alphabetic code in four positions (fixed length) identifying the business area (in this case, payment initiation). The list of ISO 20022 Business Areas is available on the website.
- ‘001’ – is an alphanumeric code in three positions (fixed length) identifying the message functionality (in this case, credit transfer initiation)
- ‘001’ – is a numeric code in three positions (fixed length) identifying a particular variant of message functionality (in this case, ‘001’ identifies the global message definition)
- ‘03’ – is a numeric code in two positions (fixed length) identifying the version.

**Backward compatibility**

The new version of a message is said to be 'backward compatible' when the receivers of the message who are still using the old version can still receive and process this new version correctly. Although every effort should be made to preserve backward compatibility, it is very rare that the business requirements for a new version offer this possibility. It happens, for example, when making an optional message item mandatory or removing an optional message item. In both of these cases, the receiver who has not yet implemented the new version, can, in theory, still receive and process all instances of the new version.

Requests for new versions are, however, generally driven by business evolution and the need to 'extend' the message definition to cope with new business functionality. An 'extension' of a message definition, even if as minor as adding an optional code, is not backward compatible since the receiver will not be able to read the instances where the new code is used.

It should also be considered that, as the version number is part of the Message Identifier, a 'backward compatible' new version of a message will not bear the same message identifier as its predecessor, which may require receivers of the old version to at least make the changes required to accept this new message identifier in their (old) application.

There is, however, always compatibility between all the variants of a message definition and their parent global message definition. Consequently, the introduction of a new variant – and even the introduction of a new version of a variant that doesn't impact the current version of the global message – impacts only the users of this variant. Similarly, changes to an external code set, registration of additional Data Source Schemes and addition of information in a supplementary data component do not impact the current version of the global message definition and, therefore, impacts only the users that required these changes (see 1.1.3.2).

### 6.1.5 Publication of the Repository

The RA updates the Repository any time there are updates to be made. The updates may be either a provisional registration of items resulting from an approved development or change request, or the official registration upon final SEG approval.
The publication of a new static copy of the Repository on the ISO 20022 website will generally coincide with the publication of new approved ISO 20022 message definitions. The published copy of the Repository is identified by a version number and the date of publication of this version.

6.2 Intellectual Property Rights

The Intellectual Property Rights (IPR) policy of ISO 20022 keeps the Intellectual Property of a message version with the submitting organisation(s) that contributed it. It is expected that new versions will generally be proposed by the original submitting organisation, especially if it had indicated in the original Business Justification that it committed to undertake the future maintenance of the message definitions.

If a new version of a message definition is developed by an organisation that is not the original submitting organisation, the IP of the new version will be shared by the original submitting organisation and the new contributor(s). Similarly, if a variant of a global message definition is developed by one or several organisations that were not the organisations that developed the global message definition, the IP of the variant will be shared by the organisations that own the IP of the related global message definition and the organisation(s) that develop the variant of the global message definition.

6.3 Release cycles

This section is about the cycle of publication of new versions of ISO 20022 message definitions on the ISO 20022 website. It is important to note that the publication of a new version does not mandate users to implement it. Actual implementation of new versions and the migration conditions ('big bang' or migration preceded by a period of coexistence) are not governed by ISO, but by the communities of users.

However, frequent publication of new versions of the same set of messages should be avoided to ensure the stability expected by users and implementers. If a message definition is updated continuously, potential users will wait until it is stabilised to invest in its implementation. A user wants to invest in a version that will be implemented by all its counterparts. Frequent updates make it difficult for new communities of users to ensure they will all implement the same version.

On the other hand, some changes may be mandatory (e.g., regulatory changes) or absolutely necessary to ensure that current users keep using the messages.

The change request template requires the requester to explain the urgency of the maintenance and the expected availability of the new message version (next yearly maintenance cycle or earlier). The SEG that validates the change request should carefully examine the proposed timing, taking into account:

- The priority of the change for the community of users. As representative of the users, the SEG is the appropriate body to check the appetite of the users for a new version.
- The last time the messages were changed. If there is no particular pressure, it is recommended to wait for more significant changes to develop and publish a new version.

- Any other expected updates that will need to be made to the message definitions in the foreseeable future. For example, if a regulatory update is approaching, it may be better to wait and package the two updates in the same new version.

- The possibility to use the supplementary data component to add required information in the same version of the message, without impacting communities of users that are not interested in this information.

- The availability of the RA and SEG resources and the priority of the maintenance request with regards to other projects already assigned. Here also, packaging several changes to the same message set in a single maintenance is more efficient and may save significant RA and SEG resources.

- The resources of the submitting organisation. The submitting organisation may not have much flexibility to develop new versions.

In other words, the timing of a new version will generally have to be agreed upon between the various parties involved on a case by case basis.
7 Annex C

7.1 RMG Voting and RMG voting module

The RMG voting module shall be used only by the specific RMG voting member Principal or Alternate or 2nd Alternate from RMG participating P-member countries and Category A Liaison Organisations.

The voting module is accessed by user name and password for RMG official voting. The voting module is used for the two-step business justification approval process: a commenting period followed by a voting period. To vote on business justifications and other RMG related ballots, please go to the ‘Consultations’ menu of ISO/TC 068/WG 07 “ISO 20022 RMG” at [http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name](http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name), and click on the related items. This requires entry of your ISOTC Livelink user name (e-mail address) and password.

7.1.1 Business Justification for Comment

When a new BJ is ready for submission to the RMG, the RA creates a BJ folder in the ‘Drop-in box for members’ of ISO/TC 068/WG 07 “ISO 20022 RMG” at [http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name](http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name) and posts the Business Justification to this folder. The BJ is also posted on the ISO 20022 website in the "Log History" spreadsheet attached to the submission in the Status of Submissions table.

The RA sends an email to the RMG members and to the Convener, Vice Convener and Secretaries of the SEGs and the Convener and Vice Convener of the CSH informing them of the new BJ, the deadline for the commenting period, and instructions on where to post any comment documents. RMG members and the Convener, Vice Convener or Secretary of the SEGs and CSH may upload comment documents in the folder created by the RA. At the end of the commenting period, the RA forwards any comments received to the submitting organisation which is notified that it has three weeks to submit a corrected (if necessary) document to the RA.

7.1.2 Business Justification Approval

The RA reviews the corrected BJ (if necessary), forwards it to the RMG Secretary to initiate the ballot in ISOTC Livelink.

The RMG Secretary creates an RMG ballot in the ‘Consultations’ menu of ISO/TC 068/WG 07 “ISO 20022 RMG” at [http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name](http://isotc.iso.org/livelink/livelink?func=ll&objId=13824339&objAction=browse&sort=name)
with a close date of either a month for ballot on a BJ with comments or 2 weeks for a BJ without comments. The BJ document is posted with the ballot.

The RA sends an email to the RMG informing them of the new BJ ballot as well as the conference call schedule with the BJ submitter to discuss resolution of comments from the commenting period. The conference call information is provided by the RA.

The BJ document is posted to ISO/TC Livelink in the BJ folder and on the ISO 20022 website in the "Log History" spreadsheet attached to the submission in the Status of Submissions table.

Automatic reminders to vote are sent to all (voting and non-voting) members listed in the Member List of the RMG in the ISO/TC Livelink folder of ISO/TC 068/WG 07. It is expected that only one of the voting members (principal or alternate) of each RMG delegation (P-member country of category A liaison) will vote. At the end of the ballot period, the RMG secretariat immediately sends the ballot results to the RMG and to the RA which informs the submitting organisation and the relevant SEGs.

The voting ballot results are posted to the RMG members on ISO/TC Livelink in the BJ folder.

7.2 Use of the ISO/TC Livelink Drop-In Box for Members

The ISO/TC Livelink “Drop-In Box for Members” may be used to provide documents and reports such as the country or liaison reports to RMG meetings.

Those reports or documents dropped in should be clearly identified as to the action that is to be taken or contain a cover note with the instructions for the RMG secretary to take.

The drop in box folder will be checked daily during normal business hours.

All requests dropped in shall be taken on a first in basis.

Following are instructions on how this drop in box folder works.

Instructions on use of ISO/TC’s Livelink Drop In Box (folder):

1- Login to the TC68 “folder” in ISO/TC Livelink using your user name and password.

2- Within the Child Committees sub menu, click on ISO/TC 068/WG 07 - “ISO 20022 RMG” (note there is a drop in box folder on each committee so please do not use the TC68 when you intend to use the RMG)

3- Select or click on the drop in box for members. Optionally, select or click the relevant folder in this box.

4- In the top right hand corner of the drop in box page, click on “+Add Document”

5- Upload the document via the “browse” area which takes you into your computer browser to add or “upload” the document.

6- Click ADD at the bottom of the screen to add the document to the drop in box for members.