**ISO 20022**

Request To Pay (RTP) Service - Maintenance 2023-2024

**Message Definition Report** **- Part 1**

Approved by the Payments SEG on 8th January 2024.

This document provides information about the use of the messages for the Request-to-Pay (RTP) Service and includes, business scenarios and messages flows.

March 2024

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**Preliminary note:**

The Message Definition Report (MDR) is made of three parts:

* **MDR - Part 1** describes the contextual background required to understand the functionality of the proposed message set. Part 1 is produced by the submitting organisation that developed or maintained the message set in line with a MDR Part1 template provided by the ISO 20022 Registration Authority (RA) on [www.iso20022.org](http://www.iso20022.org)
* **MDR – Part 2** is the detailed description of each message definition of the message set. Part 2 is produced by the RA using the model developed by the submitting organisation.
* **MDR – Part 3** is an extract of the ISO 20022 Business Model describing the business concepts used in the message set. Part 3 is an Excel document produced by the RA.

# Introduction

## Terms and definitions

The following terms are reserved words defined in ISO 20022 Edition 2013 – Part1. When used in this document, the UpperCamelCase notation is followed.

| Term | Definition |
| --- | --- |
| BusinessRole | Functional role played by a business actor in a particular BusinessProcess or BusinessTransaction. |
| Participant | Involvement of a BusinessRole in a BusinessTransaction. |
| BusinessProcess | Definition of the business activities undertaken by BusinessRoles within a BusinessArea whereby each BusinessProcess fulfils one type of business activity and whereby a BusinessProcess may include and extend other BusinessProcesses. |
| BusinessTransaction | Particular solution that meets the communication requirements and the interaction requirements of a particular BusinessProcess and BusinessArea. |
| MessageDefinition | Formal description of the structure of a message instance. |

1. When a MessageDefinition or message identifier is specified, it should include the variant and version number. However, in this document (except in the business examples section, if present), variant and version numbers are not included. In order to know the correct variant and version number for a MessageDefinition, the related Message Definition Report Part 2 document should be consulted.

## Abbreviations and Acronyms

The following is a list of abbreviations and acronyms used in the document.

| Abbreviation/Acronyms | Definition |
| --- | --- |
| EPC | European Payments Council |
| EIPP | Electronic Invoice Presentment and Payment |
| EISP | Electronic Invoice Solution Provider |
| RTP | Request To Pay |
| MSG | Multi-Stakeholder Group |
| XML | eXtensible Mark-up Language |
|  |  |

## Document Scope and Objectives

This document is the first part of the ISO 20022 Message Definition Report (MDR) that describes the BusinessTransactions and underlying message set. For the sake of completeness, the document may also describe BusinessActivities that are not in the scope of the project.

This document sets:

* The BusinessProcess scope (business processes addressed or impacted by the project)
* The BusinessRoles involved in these BusinessProcesses

The main objectives of this document are:

* To explain what BusinessProcesses and BusinessActivities these MessageDefinitions have addressed
* To give a high level description of BusinessProcesses and the associated BusinessRoles
* To document the BusinessTransactions and their Participants (sequence diagrams)
* To list the MessageDefinitions

## References

| Document | Version | Date | Author |
| --- | --- | --- | --- |
| ISO 20022 Business Justification – E-invoice Presentment and Payment (EIPP) Services | 1.0 | 20 November 2019 | EPC RTP MSG |
| [*Report from the EIPP Multi-Stakeholder Group - November 2018*](https://www.ecb.europa.eu/paym/retpaym/shared/pdf/10th-ERPB-meeting/Report_from_the_EIPP_Multi_-_Stakeholder_Group.pdf?6fb4e75198566ea357712e02fad3a58e) | 1.0 | 28 November 2018 | EPC RTP MSG |
| ISO 20022 Maintenance Change Request (MCR #234) document (Payments Maintenance 2023/2024) | 2023 | 2 October 2023 | Swift |
|  |  |  |  |
|  |  |  |  |

# Scope and Functionality

## Background

This Message Definition Report covers a set of eight ISO 20022 MessageDefinitions developed by the EPC RTP MSG in close collaboration with SWIFT and submitted and submitted to the ISO 20022 Payments Standards Evaluation Group (SEG) for evaluation in December 2023.

## Scope

These messages are specifically designed to support the RTP “servicing messages”, which enable:

* Creditors/Payees to register in the RTP eco-system (enrolment messages).
* Debtors/Payers to activate the RTP service with a given Creditor/Payee (activation messages).

Complementary unenrolment, amendment, deactivation and responses to the abovementioned messages should also be created.

## Groups of MessageDefinitions and Functionality

The messages have been developed to fill gaps in the range of existing ISO 20022 messages to support the service requirement and exchanges in the scope of the RTP.

1. These messages are to be used with the ISO 20022 Business Application Header (head.001). The schema and more information about the Business Application Header (BAH) can be found on the www.iso20022.org web site

### Creditor Enrolment MessageDefinitions

The Creditor enrolment MessageDefinitions are used to manage the enrolment of a Creditor/Payee. The purpose of these MessageDefinitions is to manage the registration of the Payee in the eco-system. They are exchanged between the Creditor/Payee and its RTP Service Provider and between the Creditor/Payee RTP Service Provider and the Directory Provider(s). The instruction message definition is completed with amendment, cancellation and status report message definitions.

|  |  |
| --- | --- |
| MessageDefinition | Message Identifier |
| RequestToPayCreditorEnrolmentRequest | reda.066 |
| RequestToPayCreditorEnrolmentAmendmentRequest | reda.067 |
| RequestToPayCreditorEnrolmentCancellationRequest | reda.068 |
| RequestToPayCreditorEnrolmentStatusReport | reda.069 |

### Debtor Activation MessageDefinitions

The Debtor activation MessageDefinitions are used to manage the RTP service activation between a Debtor/Payer and a Creditor/Payee. The Activation request message is sent by the Debtor/Payer through its RTP Service Provider to request the activation of the RTP service from a given Creditor/Payee. The Activation request message expresses the consent of the Debtor/Payer to receive a RTP from the Creditor/Payee.

|  |  |
| --- | --- |
| MessageDefinition | Message Identifier |
| RequestToPayDebtorActivationRequest | reda.070 |
| RequestToPayDebtorActivationAmendmentRequest | reda.071 |
| RequestToPayDebtorActivationCancellationRequest | reda.072 |
| RequestToPayDebtorActivationStatusReport | reda.073 |

# BusinessRoles and Participants

A BusinessRole represents an entity (or a class of entities) of the real world, physical or legal, a person, a group of persons, a corporation. Examples of BusinessRoles: “Financial Institution”, “ACH”, “CSD”.

A Participant is a functional role performed by a BusinessRole in a particular BusinessProcess or BusinessTransaction: for example the “user” of a system, “debtor”, “creditor”, “investor” etc.

The relationship between BusinessRoles and Participants is many-to-many. One BusinessRole (that is, a person) can be involved as different Participants at different moments in time or at the same time: "user", "debtor”, "creditor", "investor", etc. Different BusinessRoles can be involved as the same Participant.

In the context of RTP Service, the high-level BusinessRoles and typical Participants can be represented as follows.

## Participants and BusinessRoles Definitions

Participants

|  |  |
| --- | --- |
| Description | Definition |
| EISP | Company offering e-invoicing solutions and services, such as creation, delivery, routing of e-invoices and requests-to-pay, automatic reconciliation of e-invoices with payment data, conversion services, interfaces with ERP applications, etc. |
| RTP Service Provider | Company offering RTP solutions and services to Creditors/Payees and Debtors/Payers |
| RTP Registry/Directory Provider | Company offering Registry/Directory services to RTP Service Providers |
| Supplier/Payee/Issuer/  Creditor | Provider of the goods and services and the beneficiary of the funds transferred in the payment flow. |
| Consumer/Payer/Debtor/  Buyer | Party receiving the goods and services and the originator of the funds transferred in the payment flow. |
| Ultimate Debtor/Payer | Ultimate party that owes an amount of money to the (ultimate) Creditor/Payee. |
| Ultimate Creditor/Payee | Ultimate party to which an amount of money is due. |
| PSP | Payment Service Provider |

BusinessRoles

|  |  |
| --- | --- |
| Description | Definition |
| RTP Originator | Originator of the RTP. |
| RTP Recipient | Recipient of the RTP. |
| RTP Service Provider | Entity providing RTP services. |
| Directory Provider | Entity providing directory services. |
| Payment Provider | Entity providing payment services. |

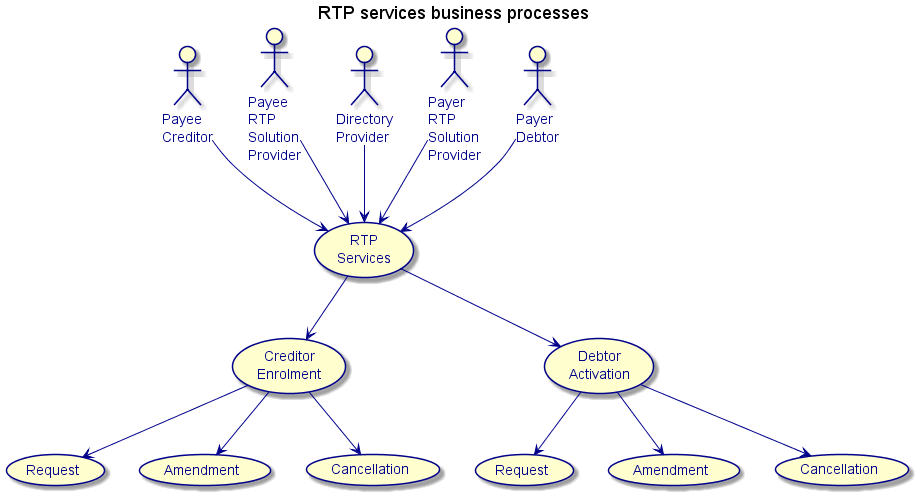
## BusinessRoles and Participants Table

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Participants | BusinessRole  **RTP Originator** | BusinessRole  **RTP Recipient** | BusinessRole  RTP Service Provider | BusinessRole  Directory Provider | BusinessRole  Payment Provider |
| EISP |  |  | X |  |  |
| RTP Service Provider |  |  | X |  |  |
| RTP Registry / Directory Provider |  |  |  | X |  |
| Supplier / Payee / Issuer / Creditor | X |  |  |  |  |
| Consumer / Payer / Debtor / Buyer |  | X |  |  |  |
| Ultimate Debtor/Payer |  | X |  |  |  |
| Ultimate Creditor/Payee | X |  |  |  |  |
| PSP |  |  |  |  | X |

# BusinessProcess Description

## BusinessProcess Diagram

This diagram pictures the high level BusinessProcesses covered by this project. The aim of the below is to describe the high-level scope of the project, not to be exhaustive.



Process RTP Services

This BusinessProcess comprises all underlying sub-processes, which are all related to the handling of RTP services. The RTP services are based on a set of harmonised additional (or servicing) functions to form a “common language” for communication between different RTP Service Providers.

The sub-processes of the RTP services may be split into two parts as following:

* a Creditor/Payee enrolment sub-process,
* a Debtor/Payer activation sub-process.

Each sub-process will allow for the initiation, amendment and cancellation of the specific request.

Creditor/Payee enrolment

|  |  |
| --- | --- |
| Item | Description |
| Definition | A Creditor/Payee requests the enrolment via its RTP Service Provider (to distribute in the RTP eco-system the information about the enrolment (registration) of this Creditor/Payee). |
| Trigger | A Creditor/Payee decides to support the RTP service. |
| Pre-conditions | The required (enrolment) information is available to initiate the enrolment. |
| Post-conditions | The Creditor/Payee is ready to send RTP messages to any Debtor/Payer who has activated the service. |
| Role | Creditor/Payee |

Debtor/Payer activation

|  |  |
| --- | --- |
| Item | Description |
| Definition | The Activation, initiated by a Debtor/Payer to a Creditor/Payee to establish an RTP link between these parties allowing the Creditor/Payee to send RTPs and e-invoices to the Debtor/Payer. |
| Trigger | The Debtor/Payer wants to activate the receipt of RTP messages from a given Creditor/Payee. |
| Pre-conditions | The required (activation) information is available to initiate the activation, and the Creditor/Payee has previously been enrolled in the RTP services.  The Debtor/Payer has previously been enrolled in the RTP services. |
| Post-conditions | The RTP service is activated between the Debtor/Payer and the Creditor/Payee. |
| Role | Debtor/Payer |

# Description of BusinessActivities

This section presents the different BusinessActivities within each BusinessProcess. BusinessActivities of a process are described in swim lane diagrams and are referred in this document as activity diagrams.

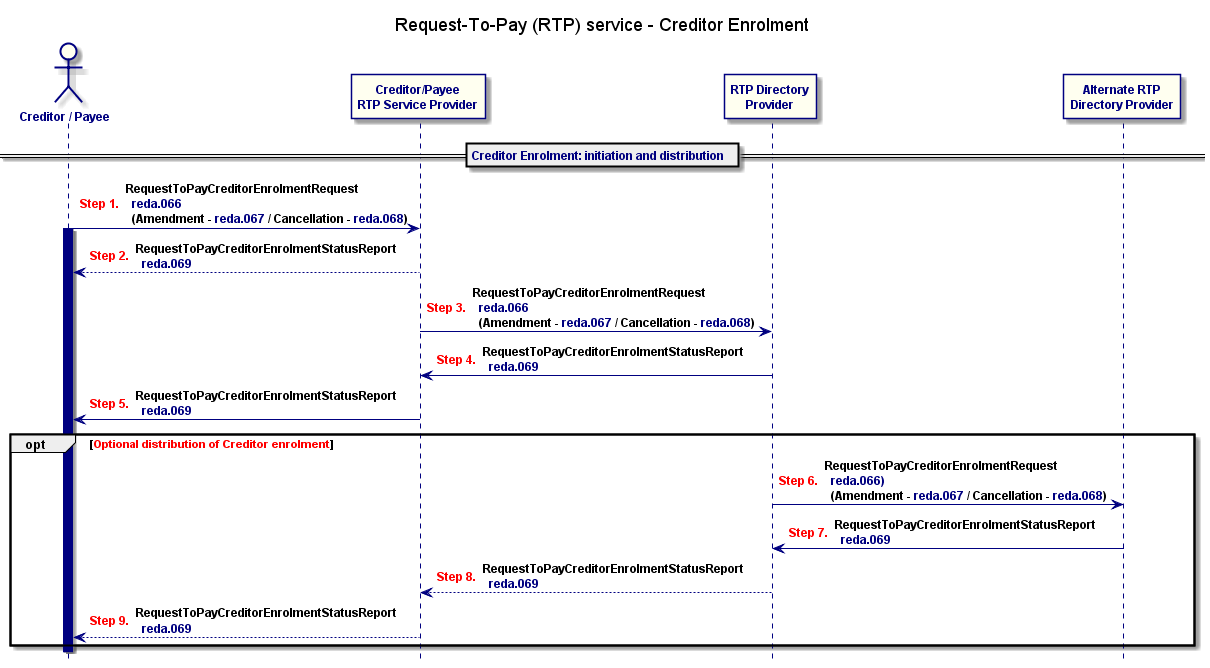
The development of an activity diagram is part of the ISO 20022 modelling process and allows capturing the requirements.

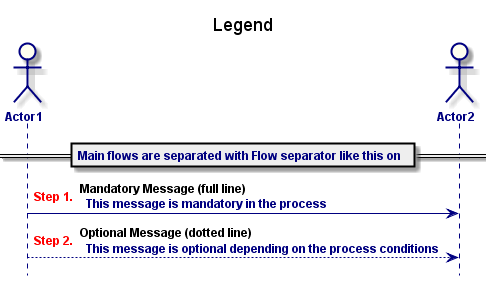
The activity diagram provides a zoom-in on the BusinessActivities taking place during each of the BusinessProcesses described in Section 4. It also shows the BusinessActivities that are triggered when another BusinessActivity has a negative result.

Both in-scope and out-of-scope activities are included, with a different level of details. There are no information requirements for out-of-scope activities, except that they should be clearly identified in the diagram.

Activity diagrams are always accompanied with a text describing the BusinessActivities and their interactions.

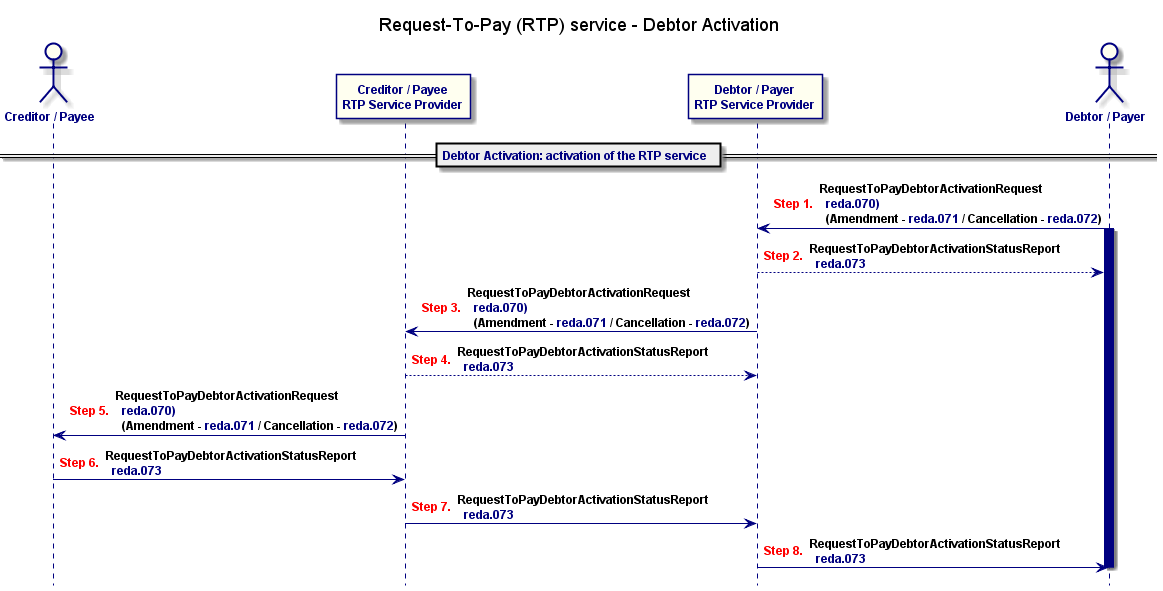
## BusinessProcess – Creditor Enrolment

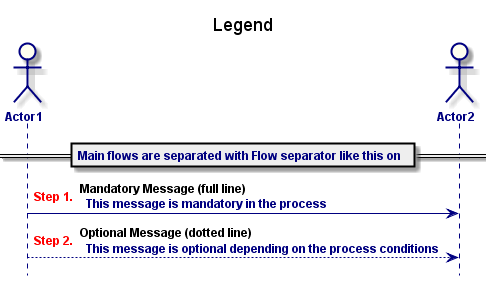




| **Description of the BusinessActivities** | |
| --- | --- |
|  | **Initiator** |
| 1. Requests the enrolment to the RTP service via its RTP Service Provider. 2. The Creditor/Payee may choose to be visible to the end users or not by setting the limited visibility flag. When not limited, the Creditor/Payee is visible through the look up in the Directory and is reachable by Debtor’s/Payer’s activation requests through the scheme. When limited, the Debtor/Payer needs a Dedicated Activation Code to send an activation request through the scheme. 3. Receives the status report | **Creditor/Payee** |
| 1. Enrols Creditors/Payees: records all the details about the Creditor/Payee 2. Adds information from Creditor/Payee 3. Processes and delivers information into the eco-system 4. Forwards amendments and cancellations messages to the Directory Providers 5. Receives status reports 6. Processes the related status reports received 7. Forwards status reports to the Creditor/Payee | **Creditor/Payee Service Provider** |
| 1. Receives and registers Creditor/Payee information from the RTP Service Provider or from other Directory Providers, if applicable 2. Maintains the database of Payees 3. Delivers info to RTP Service Providers (“push mode”) or allows information retrieval by RTP Service Providers (“pull mode”) 4. Receives and transmits the status report received from RTP Service Providers or from other Directory Providers if applicable | **Directory Provider** |
| 1. Receives Creditor/Payee information from Directory Providers (“push mode”) or retrieves the full database (for update purposes) 2. Retrieves Creditor/Payee information from Directory Providers (“pull mode”) prior to an activation 3. Sends status reports in response to enrolment messages received | **Alternate Directory Provider** |

## BusinessProcess – Debtor Activation





| **Description of the BusinessActivities** | |
| --- | --- |
|  | **Initiator** |
| 1. Retrieves from the Creditor/Payee the information needed for activation (out of scope) 2. Subscribes to the RTP service with its RTP Service Provider 3. Inserts Creditor/Payee data into its activation interface 4. Receives the activation request status report | **Debtor/Payer** |
| 1. Queries its internal Database or the Directory Provider for checking the information inserted by the Payer 2. Sends the activation request to the RTP Service Provider of the Creditor/Payee, either directly or through an alternative RTP Service Provider 3. Receives the activation request status report 4. Sends/forwards the activation request status report to the Debtor/Payer | **Debtor/Payer RTP Service Provider** |
| 1. Receives the activation request from the RTP Service Provider of the Debtor/Payer, either directly or through an alternative RTP Service Provider 2. Validates the request received 3. Sends validated activation request to the Creditor/Payee 4. Receives approval or refusal from the Creditor/Payee 5. Sends related activation request status report to the RTP Service Provider of the Debtor/Payer | **Creditor/Payee RTP Service Provider** |
| 1. Receives activation request from its RTP Service Provider 2. Processes the request 3. Agrees/refuses the activation and sends the status report to its RTP Service Provider 4. Activates the RTP service flow | **Creditor/Payee** |

# BusinessTransactions

This section describes the message flows based on the activity diagrams documented above. It shows the typical exchanges of information in the context of a BusinessTransaction.

## RTP Creditor/Payee Enrolment BusinessTransaction

A screenshot of a computer

Description automatically generated

The above illustrates all three messages flows in a single diagram:

* The Creditor/Payee enrolment request (the initiation of the Creditor/Payee enrolment)
* The Creditor/Payee enrolment amendment request (an existing Creditor/Payee enrolment is amended with new data)
* The Creditor/Payee enrolment cancellation request (an existing Creditor/Payee enrolment is cancelled).

The CreditorEnrolmentRequest is sent by the Creditor/Payee (or any authorised initiating party) to the Creditor/Payee RTP Service Provider which will register the Creditor/Payee enrolment and distribute it further in the ecosystem.

## RTP Debtor/Payer Activation BusinessTransaction

A diagram of a diagram

Description automatically generated with medium confidence

The above illustrates all three messages flows in a single diagram:

* The Debtor/Payer activation request (the initiation of the Debtor/Payer activation)
* The Debtor/Payer activation amendment request (an existing Debtor/Payer activation is amended with new data)
* The Debtor/Payer activation cancellation request (a Debtor/Payer activation is cancelled).

The DebtorActivationRequest is sent by the Debtor/Payer (or any authorised initiating party) to the Debtor/Payer RTP Service Provider which will register the Debtor/Payer activation and distribute it further in the ecosystem until the Creditor/Payee.

# Revision Record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Revision** | **Date** | **Author** | **Description** | **Sections affected** |
| 1.0 | 15 Dec 2023 | EPC | Draft version for SEG Review  Harmonisation of terminology, correction of typos and consistency related updates. | ALL |
| 2.0 | March 2024 | ISO 20022 RA | Approved version | All |

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