**Change Request**

**for the update of ISO 20022 financial repository items**

*Note: the purpose of this document is to give guidelines to parties who want to introduce a request to change an existing ISO 20022 message(s), or update other items of the ISO 20022 financial repository. Such change requests are subject to the approval of the ISO 20022 Standards Evaluation Group(s) in charge of the related message/item or to the approval of the Technical Support Group (TSG), if the requested change relates to the Business Application Header (BAH). Please consult the iso20022.org website for additional details on the* [*maintenance process*](http://www.iso20022.org/maintenance.page)*. Change requests are to be sent to* [*iso20022ra@iso20022.org*](mailto:iso20022ra@iso20022.org)*. All change requests conforming to this template received by June 1st will be considered for development in the following yearly ISO 20022 maintenance cycle which completes with publication of new message versions in April/May of the following year.*

1. **Origin of the request:**

*A.1 Submitter*:

Bank for International Settlements Innovation Hub (Singapore Centre)

*A.2 Contact person:*

Name: Ben Dyson

E-mail: ben.dyson@bisih.org

Telephone: (+41 61) 280 8080 (BIS HQ)

*A.3 Sponsors*:

**Payment Network Malaysia Sdn Bhd (PayNet)**  
Payments Network Malaysia Sdn Bhd (PayNet) is the national payments network and shared central infrastructure for Malaysia’s financial markets.

**Banking Computer Services (BCS) Singapore**  
BCS manages and operates the national clearing and payment infrastructure in Singapore, including Fast And Secure Transfers (FAST), Interbank GIRO, eGiro, Cheque Clearing, PayNow and SGQR Central Repository.

1. **Related messages:**

This change request is related to the **FIToFICustomerCreditTransferV12** (pacs.008.001.12). The change also impacts the **PaymentReturnV13** (pacs.004.001.13).

Although the business justification for this change request does not require this, the following messages could also benefit from this change:

* FIToFICustomerDirectDebitV11 (pacs.003.001.11)
* FIToFIPaymentReversalV13 (pacs.007.001.13)

1. **Description of the change request:**

This change request proposes the addition of a section of elements to clearly identify the financial institution that provides currency conversion for a specific payment – the “FX Agent” in this proposal – and a Quote Id issued by that FX Agent.

This section of elements is closely related to the existing ExchangeRate (<XchgRate>) element in the pacs.008 and the pacs.004 messages.

**Change 1: New element**

This change therefore requests the addition of the following elements under CreditTransferTransactionInformation <CrdtTrfTxInf>. These elements are modelled on similar usage in ForeignExchangeTradeInstrucionV05 (fxtr.014.001.05).

**“AgreedRate” <AgrdRate>**

*Presence*: [0..2]

*Definition*: Contains information about the exchange rate agreed to by the FX Agent.

AgreedRate <AgrdRate> would contains the following AgreedRate3 elements:

**UnitCurrency <UnitCcy>**

*Presence*: [0..1]

*Definition*: Currency in which the rate of exchange is expressed in a currency exchange. In the example GBP1 = CUR XXX, the unit currency is GBP.

*Datatype:* ActiveCurrencyCode

**QuotedCurrency <QtdCcy>**

*Presence*: [0..1]

*Definition*: Currency into which the base (unit) currency is converted. In the example GBP 1 = CUR XXX, the unit currency is CUR.

*Datatype:* ActiveCurrencyCode

**ExchangeRate <XchngRate>**

*Presence:* [1..1]

*Definition:* The value of one currency expressed in relation to another currency. ExchangeRate expresses the ratio between UnitCurrency and QuotedCurrency (ExchangeRate = UnitCurrency/QuotedCurrency).

*Datatype:* "BaseOneRate"

Note that the UnitCurrency and QuotedCurrency overlap with the Originator and Destination Currency in the InterbankSettlement Amount and the InstructedAmount respectively and could thus be seen as duplication of information. However, to allow for the future scenario of an intermediary currency, where a transaction is not settled directly from the Originator to the Destination currency, but via an intermediary currency (f.e. USD or EUR), we propose to include these currencies in this section as well.

In addition, the following new element would be added to AgreedRate:

**Quote Identification <QtId>**

*Presence:* [1..1]

*Definition:* The identification of a quote issued by the FX Agent. The Quote Identification is generated by the FX Agent and can be used to associate the payment with a specific quote for this transaction, to unambiguously link the quote to the transaction. This identification is passed on unchanged, throughout the entire end-to-end chain.

To avoid conflict between quotes from different FX Agents, the Quote Id should be a UUIDv4Identifier.

*Datatype:* UUIDv4Identifier

In contrast to the usage of AgreedRate in the *fxtr* message, we propose that the multiplicity of the AgreedRate element should be [0..2] to allow for scenarios where an intermediary currency is involved in the payment. For example, a payment from Malaysia (MYR) to Mexico (MXN) may need to be routed through the eurozone (EUR). In this case there would be two AgreedRates, one from MYR to EUR, and one from EUR to MXN.

We are not aware of a scenario where more than one intermediary currency is required (since the cost of FX conversion would likely be higher than alternative routes), so suggest the multiplicity does not need to be higher than [0..2].

**Change 2: Identification of the FX Agent**

It is also important to identify the FX Agent – the agent that accepts the currency of the Debtor and pays out the currency of the Creditor.

The FX Agent can be described as follows:

**FXAgent <FXAgt>**

*Presence:* [0..2]

*Definition:* The Agent who provides FX conversion from the currency of the Debtor (or an intermediate currency) to the currency of the Creditor (or an intermediate currency).

*Datatype:* BranchAndFinancialInstitutionIdentifier6

Note that in the fxtr message set, the equivalent agent would probably be TradeParty. In the context of pacs.008 and pacs.004, this terminology is likely to be confusing, and so the new term “FX Agent” seems to be easier to understand.

**Location of FXAgent:**

We believe there are two possible locations for FXAgent and would appreciate the SEG’s judgement on the most effective place to record this information:

1. **Option 1: Include the FXAgent in the AgreedRate element**

This has the advantage of ensuring that the FXAgent is described within the AgreedRate block for the rate that they have quoted for. Where there are two FX conversions steps (ie where an intermediary currency is used), it would be clear which agent relates to each conversion and currency pair.

1. **Option 2: Add the FXAgent immediately under CreditTransferTransactionInformation <CrdtTrfTxInf>**

This approach has the advantage of ensuring that the pacs.008 message describes all Agents at the same level of hierarchy, in the same way that Intermediary Agents are described at the same level as DebtorAgent or CreditorAgent.

As some payments will flow through an intermediate currency and would have two AgreedRate elements (from the Debtor’s currency to an intermediate currency, then to the Creditor’s currency), this location would require the option to have FXAgent1 and FXAgent2 (similar to the numbering of IntermediaryAgent1, 2 and 3).

**Purpose of the change:**

Although this change request was prompted by Nexus (see below), we have taken care to propose changes that are applicable to a wide range of cross-border payment scenarios and arrangements. We believe the changes address a general limitation of the current pacs.008 and pacs.004 data structure and would be beneficial across the payments industry.

**Nexus** is a BIS Innovation Hub (BISIH) project which aims to improve the speed, cost, transparency and accessibility of cross-border payments by linking instant payment systems (IPS). Connecting these IPS to each other has the potential to enable cross-border payments from sender to recipient within 60 seconds. This “interlinking” of IPS is a priority of the G20 Roadmap for Enhancing Cross-Border Payments, which highlights Project Nexus as a priority action (Action 2(c)) towards achieving the Roadmap’s targets for speed, cost, transparency, and accessibility.

Nexus payments require a financial institution to play the role of FX Provider – referred to as FX Agent in this proposal. The FX Agent is an entity that holds (at least) two currencies in (at least) two separate instant payment systems. The FX Agent may be a member of the IPS or may access the IPS indirectly by holding an account with an existing IPS member.

Different financial institutions can play the role of FX Agent, depending on the payment. In Nexus, an FX Agent may be the same entity as the Debtor Agent (where the Debtor Agent already holds the currency of the Creditor in the Creditor’s country), or the Intermediary Agent 1 (when the FX Agent is a separate entity from the Debtor Agent, but they are both participants in the same payment system). Alternatively, the FX Agent may be an entirely separate entity.

In a typical Nexus payment:

1. Nexus compiles going FX rates available from registered FX Agents
2. A Debtor Agent requests quotes for a specific currency pair from Nexus
3. Nexus generates a list of quotes from known FX Agents, each with a unique quote ID, and provides this to the Debtor Agent
4. The Debtor Agent selects the quote they wish to use and must reference this in the pacs.008 payment instruction
5. As the pacs.008 message flows from the Debtor Agent’s IPS through Nexus to the Creditor Agent’s IPS, Nexus will review the quote ID to validate that the ExchangeRate provided in the pacs.008 is the same as the ExchangeRate provided by the original quote.

**Limitations of the current pacs.008 data structure**

The current pacs.008 has an ExchangeRate <XchngRate> element but does not provide:

* An element to describe which financial institution in the pacs.008 is responsible for honouring that exchange rate by converting one currency to another (ie the FX Agent)
* An element to describe the Quote ID provided by that FX Agent, which can be validated by the clearing system or FX Agent itself to ensure that the ExchangeRate element is correct before it is applied to the InterbankSettlementAmount.

In the current blueprint for Nexus we have worked around the first limitation by adding the FX Quote Id to the Additional Remittance Information. This is not ideal, as it requires adding a prefix such as “NXSQT-” to the Quote ID (this prefix then needs to be stripped before the data can be used. This approach also runs the risk of a failed payment if the three Additional Remittance Information elements are already used for another purpose.

Inclusion of FX Agent and Quote Id elements as described above would address the ambiguity in pacs.008 about which agent is responsible for converting the currency in a cross-border payment and would allow cross-border payment services to reconcile the exchange rate provided against a quote issued by a specified FX Agent.

In order to make the change request future proof, as well as generic, this change request includes the option of referencing an intermediate currency (such as the major currencies) by requesting a multiplicity of 2 for the AgreedRate element.

1. **Urgency of the request:**

This change request can follow the normal schedule.

1. **Business examples:**

OPTION 1: FX AGENT DESCRIBED IN AGREED RATE:

<Document>

    <FIToFICstmrCdtTrf>

        …

        <CdtTrfTxInf>

            …

            <AgrdRate>

                <XchgRate>1.52</XchgRAte>

                <UnitCcy>SGD</UnitCcy>

                <QtdCcy>USD</QtdCcy>

                <QtId>703ed9f5-a626-4930-82de-7bf7b40b6715</QtId>

                <FXAgt>

                    <FinInstnId>

                        <BICFI>

                            AAAASGAA

                        </BICFI>

                    </FinInstnId>

                </FXAgt>

            </AgrdRate>

            …

        </CdtTrfTxInf>

    </FIToFICstmrCdtTrf>

</Document>

OPTION 2: FX AGENT DESCRIBED AT SAME LEVEL AS OTHER AGENTS:

<Document>

    <FIToFICstmrCdtTrf>

        …

        <CdtTrfTxInf>

            …

            <AgrdRate>

                <XchgRate>1.52</XchgRAte>

                <UnitCcy>SGD</UnitCcy>

                <QtdCcy>USD</QtdCcy>

                <QtId>703ed9f5-a626-4930-82de-7bf7b40b6715</QtId>

            </AgrdRate>

            <FXAgt1>

                <FinInstnId>

                    <BICFI>

                        AAAASGAA

                    </BICFI>

                </FinInstnId>

            </FXAgt1>

            …

        </CdtTrfTxInf>

    </FIToFICstmrCdtTrf>

</Document>

1. **SEG/TSG recommendation:**

*This section is not to be taken care of by the submitter of the change request. It will be completed in due time by the SEG(s) in charge of the related ISO 20022 messages or the TSG for changes related to the BAH.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Consider** | | X | **Timing** |
|  | | - **Next yearly cycle: 2024/2025**  (the change will be considered for implementation in the yearly maintenance cycle which starts in 2024 and completes with the publication of new message versions in the spring of 2025) | | X |
|  | | - **At the occasion of the next maintenance of the messages**  (the change will be considered for implementation, but does not justify maintenance of the messages in its own right – will be pending until more critical change requests are received for the messages) | |  |
|  | | - **Urgent unscheduled**  (the change justifies an urgent implementation outside of the normal yearly cycle) | |  |  |
|  | | - **Other timing:** | | |  |

Comments:

|  |  |
| --- | --- |
| **Reject** |  |

Reason for rejection: