**T2S CHANGE REQUEST FORM**

| **General Information (Origin of Request)** |
| --- |
| ☐ User Requirements (URD) or GUI Business Functionality Document (BFD) |
| ☒ Other User Functional or Technical Documentation (SYS) |

| **Request raised by:** 4CB | | **Institute:** 4CB | **Date raised:** 24/08/2022 |
| --- | --- | --- | --- |
| **Request title:** T2S alignment to ISO 10962:2021 CFI code – removal of decommissioned codes | | | **Request No.:** T2S 0792 SYS |
| **Request type:** Common | **Classification:** Standards compliance | | **Urgency:** Normal |
| **1. Legal/business importance parameter[1]:** Medium | | **2. Market implementation efforts parameter[2]:** Low | |
| **3. Operational/Technical risk parameter[3]:** Low | | **4. Financial impact parameter[4]:** Low | |
| **Requestor Category:** 4CB | | **Status:** Allocated to a Release | |

**Reason for change and expected benefits/business motivation:**

T2S makes use of several ISO Standards for codes, all of which are part of ISO 20022. T2S internal validations and processing are based on specific published versions of each ISO Standard. 4CB carry out a periodic review of ISO Standards implemented on T2S side in order to determine the T2S software's continuing adherence to the existing Standards, also considering the possible updated versions of each ISO Standard published since the last review. Upon publication of an updated version of a given ISO Standard, this review may lead to different possible outcomes depending on the nature of the update: either the T2S software is assessed to be already in line with the update – in which case the new ISO Standard version is then declared as the version officially implemented in T2S implementation – or a software change is required to maintain the alignment.

The version of ISO 10962 implemented in T2S corresponds to the ISO 10962:2015 version of the standard, implemented with CR534. This version of the standard restricts the possible values in the Classification of Financial Instruments (CFI) codes that may be input as part of the Securities data in CRDM. Two new versions of the standard (ISO 10962:2019 and ISO 10962:2021) were published since the version used in T2S. The 4CB review highlighted the need for two types of changes:
- New CFI code patterns should be allowed
- Currently allowed CFI code patterns should no longer be allowed

In order to allow the transition to the new standard in an ordered manner, two CRs are being raised, one for each of the changes listed above. This CR focuses on the second change required in a chronological order, i.e. the removal of decommissioned code patterns.

**Description of requested change:**

The internal processing corresponding to CRDM business rules for the CFI Code in the Securities object should be updated to no longer allow decommissioned values as foreseen in the ISO 10962:2021 standard.

No impact has been detected on the Financial Instrument Type categories based on the CFI codes and used in the T2S Penalty Mechanism as described in T2S UDFS section 1.2.7.

The full list of decommissioned code patterns is below. In line with the ISO Standard, the term "Attribute" represents the four final characters in the code pattern (e.g. "first attribute" is the third character in the code).
The "X" character represents an undefined value and as such is used to represent the code patterns.

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[1] Legal/business importance parameter was set to 'Medium' because with this change T2S will be compliant with the latest ISO standard related to CFI codes.

[2] Market implementation effort parameter was set to 'Low' because this change will not require a long implementation time on the side of Participating CSDs, CBs and their communities so that they take full benefit of the change.

[3] Operational/technical risk parameter was set to 'Low' because this change is not expected to have a significant operational impact on the Participating CSDs, CBs or 4CB.

[4] Low < 100kEUR < Low-Medium < 200 kEUR < Medium < 400kEUR < High < 700kEUR < Very high

| Category | Group | Attribute modified | Value | CFI Code |
|---|---|---|---|---|
| Equities | ED | Second | X | EDXXXX |
| Swaps | SR | Fourth | C | SRXXXC |
| Swaps | SR | Fourth | P | SRXXXP |
| Swaps | SF | Fourth | N | SFXXXN |
| Non Listed and Complex | HT | First | Q | HTQXXX |
| Non Listed and Complex | HF | Second | A | HFXAXX |
| Non Listed and Complex | HF | Second | B | HFXBXX |
| Non Listed and Complex | HF | Second | C | HFXCXX |
| Non Listed and Complex | HF | Second | D | HFXDXX |
| Non Listed and Complex | HF | Second | E | HFXEXX |
| Non Listed and Complex | HF | Second | F | HFXFXX |
| Non Listed and Complex | HF | Second | H | HFXHXX |
| Non Listed and Complex | HF | Second | I | HFXIXX |
| Non Listed and Complex | HF | Fourth | N | HFXXXN |
| Forwards | JF | Fourth | N | JFXXXN |

Prior to the implementation of the software change in each environment, CSDs will have to check and possibly update their data in order to ensure that no existing, non-mature Securities remain using the decommissioned codes.

**Submitted annexes / related documents:**

CFIDeltaISO2015-2021.xlsx: full list of changes from the ISO 10962:2015 standard to the ISO 10962:2021 version.

**Outcome/Decisions:**

*CRG on 21 September 2022: the CRG agreed to request the preliminary assessment of CR-792.
*CRG on 12 January 2023: the CRG agreed to recommend CR-792 for authorization by the T2S Steering Level.
*AMI-SeCo on 26 January 2023: the AMI-SeCo agreed with the CRG recommendation of CR-792 for T2S Steering Level Authorisation.
*NECSG on 27 January 2023: the NECSG agreed to authorise CR-792.
*CSG on 27 January 2023: the CSG agreed to authorise CR-792.
*MIB on 1 February 2023: the MIB agreed to authorise CR-792.
*PMG on 7 February 2023: the PMG agreed to launch the detailed assessment of CR-792 with a view of scoping in Release 2024.NOV.
*PMG on 12 December 2023: the PMG agreed to launch the detailed re-assessment of CR-792 with a view of scoping in Release 2025.JUN, following the OMG view that it would be preferrable to implement CR-0791 in R2024.NOV and CR-0792 in R2025.JUN, so that a migration of decommissioned codes could be handled with no operational risk.
*CRG on 30 January 2024: the CRG agreed to recommend to the PMG the inclusion of CR-792 in the scope of R2025.JUN.
*OMG on 28 February 2024: the OMG did not identify any operational impact of the inclusion of CR-0792 with R2025.JUN.
*PMG on 12 March 2024: the PMG agreed to recommend the inclusion of CR-0792 in the scope of R2025.JUN.
*CSG on 25 March 2024: the CSG approved the implementation of CR-0792 with R2025.JUN.
*NECSG on 25 March 2024: the NECSG approved the implementation of CR-0792 with R2025.JUN.
*MIB on 26 March 2024: the MIB approved the implementation of CR-0792 with R2025.JUN.

**Documentation to be updated:**

No additional change to the T2S Scope-defining documents is foreseen other than the ones already included in CR T2S-0791-SYS. However, the T2S software implementation will be fully in line with the T2S SDD changes with the implementation of both CRs. The SDD changes are copied here for ease of consultation.

**CRDM UDFS**

1.3.4.3 Description of the entities

## 1. Securities

| ATTRIBUTE | DESCRIPTION |
|---|---|
| CFI | Classification of the security according to ISO/~~DIS~~ 10962:202~~15~~1(E) standards. |

**4.5.3.6 Securities - New**

| Flat file | Excel | Column Name | Format | Description | Rules | Occurs per Record | Occurs per Group |
|---|---|---|---|---|---|---|---|
| 2 | B | Record Id | NUMERIC (10) | Unique identifier of the record. | Must occur in each line of the record. | 1..n | |
| Group "Securities" | | | | | | 1..1 | |
| 3 | C | ISIN | CHAR (12) | Actual value for the securities code, (the ISIN for the security). | | | 1..1 |
| 4 | D | CFI Code | CHAR (6) | Classification of the security according to ISO/DIS 10962:202~~15~~1(E) standard. | | | 1..1 |
| [...] | | | | | | | |

5.1 Business Rules

| BR NAME | DESCRIPTION | INBOUND MESSAGE | REPLY MESSAGE | CODE USE | REASON CODE | ERROR TEXT |
|---|---|---|---|---|---|---|
| DSC1700 | When performing a Securities Create request, the CFI must be compliant with ISO/~~DIS~~ 10962:202~~15~~1(E) standards. | reda.006 | reda.008 | | REJT | CFI not compliant with ISO/~~DIS~~ 10962:202~~15~~1(E) standards |
| DSU1410 | When performing a Securities Create request, the CFI must be compliant with ISO/~~DIS~~ 10962:202~~15~~1(E) standards. | reda.007 | reda.29 | | REJT | CFI not compliant with ISO/~~DIS~~ 10962:202~~15~~1(E) standards |

**CRDM UHB Book 2**

Section 4.3.2.46 Security – New/Edit Screen (references for error messages)

| Reference for error message | Field or button | Error Text | Description |
|---|---|---|---|
| DSC1700 | - CFI Code field<br>- Submit button | CFI not compliant with ISO/~~DIS~~ 10962:20<u>21</u>~~15(E)~~ standards | When performing a Securities Create request, the CFI must be compliant with ISO/~~DIS~~ 10962:20<u>21</u>~~15(E)~~ standards. |
| DSU1410 | - CFI Code field<br>- Submit button | CFI not compliant with ISO/~~DIS~~ 10962:20<u>21</u>~~15(E)~~ standards | When performing a Securities Update request, the CFI must be compliant with ISO/~~DIS~~ 10962:20<u>21</u>~~15(E)~~ standards. |

**T2S UDFS**

**1.2.2.2 Concept of securities in T2S**

T2S stores securities reference data required for settlement purpose for all eligible financial instruments.

T2S identifies securities by means of the International Securities Identification Number (ISIN) code, as defined in the ISO 6166:2013 standard. Additionally, T2S classifies securities by CFI (Classification of Financial 3 Instruments, ISO/DIS 10962:20<u>21</u>~~15(E)~~ standards)

**Preliminary assessment:**

- **Financial impact: Low**
- **Impacted modules: CRDM, LCMM and SETT**
- **Impact on other Eurosystem Services or Projects: n/a**
- **Risk analysis: No risks have been identified during the preliminary assessment**
- **Findings:**

The internal processing corresponding to CRDM business rules DSC1700 and DSU1410 for the CFI Code in the Securities object should be updated to no longer allow decommissioned values as foreseen in the ISO 10962:2021 standard.

Change reference to new CFI code standard for the following messages/tags in MyStandards. "CFIOct2015Identifier" to be replaced by 2021 reference5.

| Message | path |
|---|---|
| reda.006 | /Document/SctyCreReq/Scty/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| reda.007 | /Document/SctyMntncReq/UpdTp/UpdTp/Modfy/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| reda.010 | /Document/SctyQry/SchCrit/ClssfctnFinInstrm |
| reda.012 | /Document/SctyRpt/SctyRptOrErr/SctyRptOrBizErr/SctyRpt/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| semt.013 | /Document/IntraPosMvmntInstr/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| semt.016 | /Document/IntraPosMvmntPstngRpt/FinInstrm/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| semt.029 | /Document/IntraPosMvmntQryRspn/Mvmnts/Mvmnt/MvmntDtls/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| semt.034 | /Document/IntraPosMvmntPdgRpt/Mvmnts/Mvmnt/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| sese.023 | /Document/SctiesSttlmTxInstr/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |
| sese.030 | /Document/SctiesSttlmCondsModReq/AddtlInf/ClssfctnTp/ClssfctnFinInstrm |
| sese.032 | /Document/SctiesSttlmTxGnrtnNtfctn/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm |

The messages and fields that could be impacted by the removal of decommissioned code patterns in the Classification of Financial Instruments (CFI) codes, are the following ones:

- o   Sese.025

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5 Need to decide on a unified reference to the 2021 framework that is common for all messages.

/Document/SctiesSttlmTxConf/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm
- o    Sees.028

/Document/SctiesSttlmTxAllgmtNtfctn/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm
- o    Semt.002

/Document/SctiesBalCtdyRpt/BalForAcct/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm

/Document/SctiesBalCtdyRpt/SubAcctDtls/BalForSubAcct/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm
- o    Semt.015

/Document/IntraPosMvmntConf/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm
- o    Semt.017

/Document/SctiesTxPstngRpt/FinInstrmDtls/InvstmtFndsFinInstrmAttrbts/ClssfctnTp/CFI

/Document/SctiesTxPstngRpt/SubAcctDtls/FinInstrmDtls/InvstmtFndsFinInstrmAttrbts/ClssfctnTp/CFI
- o    Semt.019

/Document/SctiesSttlmTxAllgmtRpt/AllgmtDtls/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm
- o    Semt.040

/Document/SctiesAcctPosRspn/Bals/BalForAcct/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm

/Document/SctiesAcctPosRspn/Bals/SubAcctDtls/BalForSubAcct/FinInstrmAttrbts/ClssfctnTp/ClssfctnFinInstrm

**Detailed assessment:**

| EUROSYSTEM ANALYSIS – GENERAL INFORMATION | | | |
|---|---|---|---|

| T2S Specific Components | | Common Components | |
|---|---|---|---|
| **LCMM** | | | |
| | Instructions validation | | |
| | Status management | | |
| | Instruction matching | | |
| | Instructions maintenance | | |
| | Penalty Mechanism | | |
| | | | |
| **Settlement** | | | |
| | Standardisation and preparation to settlement | | |
| | Night-time Settlement | | |
| | Daytime Recycling and optimisation | | |
| | Daytime Validation,  provisioning & booking | | |
| | Auto-collateralisation | | |
| | | | |
| **Liquidity Management** | | | |
| | Outbound Information Management | | |
| | NCB Business Procedures | | |
| | Liquidity Operations | | |
| | | | |
| **T2S Interface** | | **Eurosystem Single Market Infrastructure Gateway** (from R6.0 June 2022) | |
| | Communication | | Communication |
| | Outbound Processing | | Outbound Processing |
| | Inbound Processing | | Inbound Processing |
| | | | |
| **Static Data Management** (until June 2022) | | **Common Reference Data Management** (from  R6.0 June 2022) | |
| | Party data management | | Party data management |
| | Securities data management | X | Securities data management |
| | Cash account data management | | Cash account data management |
| | Securities account data management | | Securities account data management |

| Rules and parameters data management | | Rules and parameters data management |
|---|---|---|
| | | |
| **Statistics and archive** | | **Statistics and archive** |
| Statistical information (until June 2022) | | Short term statistical information |
| Legal archiving (until June 2022) | | Legal archiving (from R6.0) |
| | | Data Warehouse (from R6.0) |
| | | |
| **Information** *(until June 2022 containing reference data)* | | **CRDM business interface** *(from R6.0 June 2022)* |
| Report management | | Report management |
| Query management | | Query management |
| | | Communication |
| | | Outbound Processing |
| | | Inbound Processing |
| | | |
| **Operational Services** | | |
| Data Migration (T2S DMT) | | Data Migration (CRDM DMT, from R6.0) |
| Scheduling (until June 2022) | | Business Day Management (from R6.0) |
| | | Business Day Management business interface (from R6.0) |
| Billing (until June 2022) | | Billing (from R6.0) |
| | | Billing business interface (from R6.0) |
| Operational Monitoring | | Operational and Business Monitoring |
| MOP Contingency Templates | | |
| | | |

| **Impact on major documentation** | | |
|---|---|---|
| **Document** | **Chapter** | **Change** |
| Impacted GFS chapter | | No impact |
| Impacted UDFS chapter | 1.3.4.3 Description of the entities<br>4.5.3.6 Securities – New<br>5.1 Business Rules | Change of ISO Standard for Security CFI code |
| Additional deliveries for Message Specification (UDFS, MyStandards, MOP contingency templates) | MyStandards,<br>semt.013, 016, 029, 034<br>sese.023, 030, 032<br><br>reda.006, reda.007, reda.010, reda.012 | Remove reference to ISO 2015 CFI code scheme for the specified messages;<br><br>Add an editorial annotation to the CFI fields in order to reference to the v.2021 of the standard |
| UHB | 4.3.2.46 Security – New/Edit Screen | Change of ISO Standard for Security CFI code for business rules DSC1700 and DSU1410 |
| Other impacted documentation (FA Sch. 05, FA Sch. 07) | | No impact |
| Impacted GDPR message/ screen fields | | No impact |
| Links with other requests | | |
| Links | Reference | Title |

**Summary of functional, development, infrastructure and migration impacts**

Amendment of CRDM Business rules DSC1700 and DSU1410 in order to change the validation on Security CFI code.
The full list of decommissioned code patterns is in the table below.

| Category | Group | Attribute modified | Value | CFI Code | |
|---|---|---|---|---|---|
| Equities | ED | Second | X | EDXXXX | |
| Swaps | SR | Fourth | C | SRXXXC | |
| Swaps | SR | Fourth | P | SRXXXP | |
| Swaps | SF | Fourth | N | SFXXXN | |
| Non Listed and Complex | HT | First | Q | HTQXXX | |
| Non Listed and Complex | HF | Second | A | HFXAXX | |
| Non Listed and Complex | HF | Second | B | HFXBXX | |
| Non Listed and Complex | HF | Second | C | HFXCXX | |
| Non Listed and Complex | HF | Second | D | HFXDXX | |
| Non Listed and Complex | HF | Second | E | HFXEXX | |
| Non Listed and Complex | HF | Second | F | HFXFXX | |
| Non Listed and Complex | HF | Second | H | HFXHXX | |
| Non Listed and Complex | HF | Second | I | HFXIXX | |
| Non Listed and Complex | HF | Fourth | N | HFXXXN | |
| Forwards | JF | Fourth | N | JFXXXN | |

With the amendment of Business rules DSC1700 and DSU1410, CRDM will not accept anymore the above classes of CFI codes. For instance, the class of Codes EDXXXX, that represents more CFI codes, will be no longer accepted when creating or updating a security in CRDM. In each environment, CSDs will have to check and possibly update their data in order to ensure that no existing, non-mature Securities remain using the decommissioned codes.

The CFIDeltaISO2015-2021.xlsx lists all changes from the ISO 10962:2015 standard to the ISO 10962:2021 version.

**Main cost drivers**
- Removal of code patterns for CFI code for the object "Security" with impacts for CRDM Common Component (BE).
- Implementation of means to prevent the creation and the update of the to be decommissioned CFI codes (new functionality, as from software implementation perspective codes are not removed, but features are implemented to prevent the processing of those codes).
- Removal of the reference to ISO 2015 CFI code scheme for the several ISO messages.

**Impact on other TARGET Services and projects**

No impact on other Eurosystem Services or Projects has been identified during detailed assessment.

**Summary of project risk**

No risk has been identified during detailed assessment.

**Security analysis**

No adverse effect has been identified during security assessment.

**14 February 2024**

# Cost assessment on Change Requests

| T2S-792-SYS – T2S alignment to ISO 10962:2021 CFI code – removal of decommissioned codes | | | |
|---|---|---|---|
| One-off | Assessment costs*<br> - Preliminary<br> - Detailed | 2,000.00<br>20,000.00 | Euro<br>Euro |
| One-off | Development costs | 35,703.97 | Euro |
| Annual | Operational costs<br><br> - Maintenance costs<br><br> - Running costs | <br><br>2,047.98<br><br>0.00 | <br><br>Euro<br><br>Euro |

*The relevant assessment costs will be charged regardless of whether the CR is implemented (Cf. T2S Framework Agreement, Schedule 7, par. 5.2.3).