



EUROPEAN CENTRAL BANK

EUROSYSTEM

Demystification of ISO 20022 Message Unfreeze Strategy

From payments perspective

T2-CG Meeting
10 December 2024



Market Infrastructure and Payments
European Central Bank

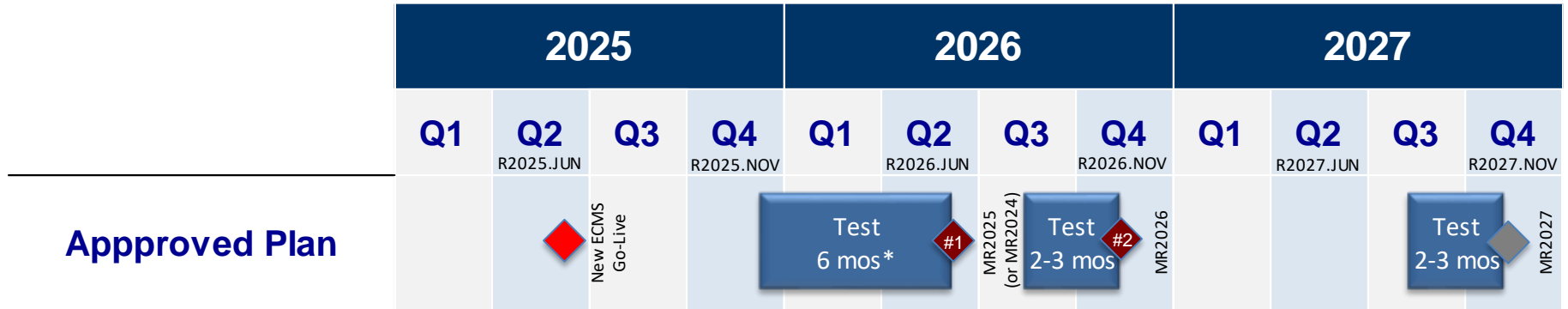


ISO 20022 message unfreeze strategy

- MIB agreed original ISO unfreeze strategy in April 2018 as well as revisions of strategy in April 2022, in March 2023 and in June 2024
- Last update to strategy planning and approach was required in view of revised ECMS go live date
- ISO 20022 message unfreeze strategy foresees:
 - To implement initial step of ISO message unfreeze in June 2026
 - To implement “real-time”* ISO message maintenance releases (MR) on yearly basis as of November 2026
- Strategy allows for maximum testing by all stakeholders as part of major TARGET Services release in June 2026
- Exceptions to ISO message unfreeze strategy continue to be feasible and to be assessed case by case, e.g. TIPS messages under EPC and NPC governance to remain on ISO MR2019 until further notice

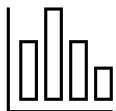


ISO 2022 message unfreeze strategy across TARGET Services

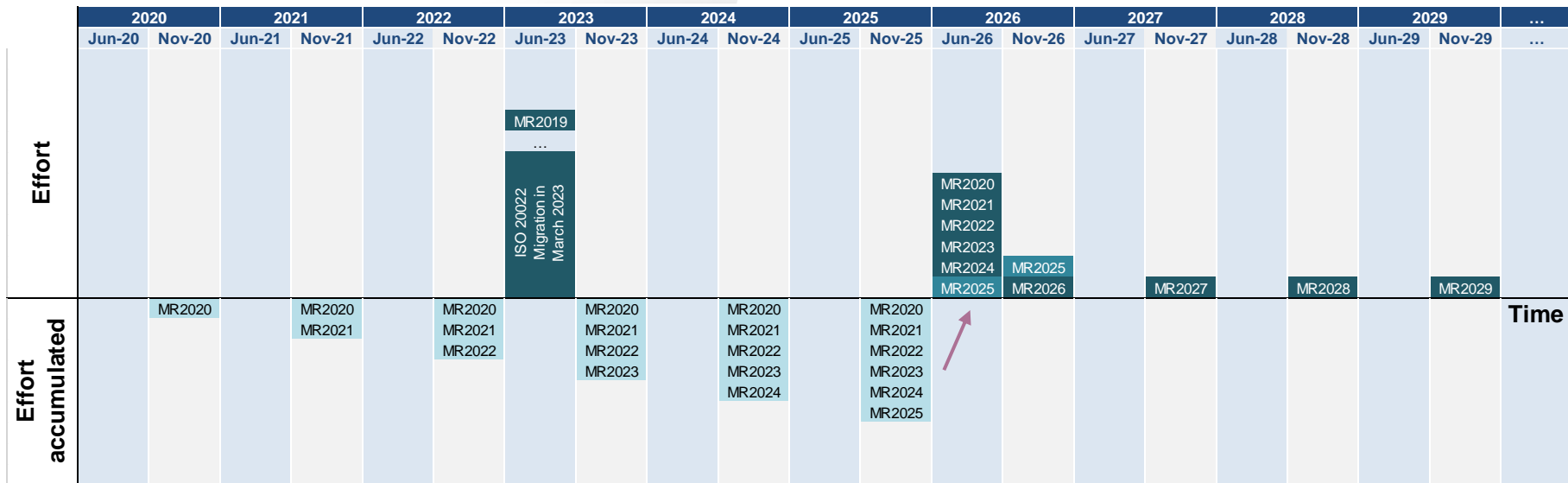


* Condition: T2S R2026.FEB to be dropped – similar approach to ISO MR2019 upgrade of T2S in 2020 when T2S Release 4.1 was dropped

- ❑ Go-live of ISO 2022 message unfreeze step #1 in June 2026 -> allowing 6 months freeze post ECMS go-live
- ❑ At minimum step #1 will upgrade messages from MR2019 to MR2024
- ❑ Depending on MR2025 size and dedicated CR assessment, decision to be taken in May 2025 on either:
 - ❑ Step #1 to upgrade messages from MR2019 to MR2025 and step #2 from MR2025 to MR2026 -> business preference
 - ❑ Step #1 to upgrade messages from MR2019 to MR2024 and step #2 from MR2024 to MR2026 -> fall-back
- ❑ ISO 2022 message unfreeze step #2 allowing for real-time maintenance releases as of November 2026
- ❑ Envisaged start of interoperability testing at EAC-level by end of 2025 requires dropping T2S R2026.FEB*



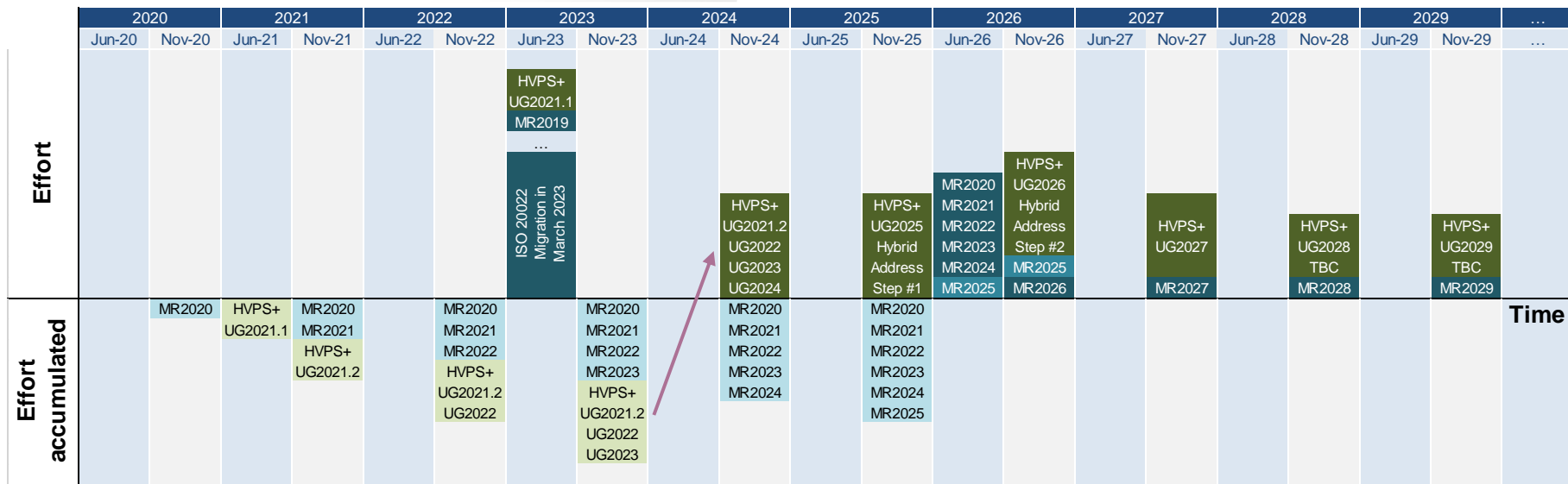
Effort on ISO 20022 message unfreeze strategy from T2 perspective



- ❑ Significant effort has been invested on ISO 20022 migration to MR2019 as part of T2 go live in March 2023
- ❑ ISO 20022 message unfreeze will require additional effort in preparation of T2 release in June 2026 as well as in November 2026
- ❑ Additional effort has accumulated due to “freeze” of message versions in past years
- ❑ Post-unfreeze effort for message maintenance is expected to be smaller and distributed more evenly across time compared to one-off catch up to five ISO 20022 MR message versions in June 2026



ISO 2022 message unfreeze strategy in conjunction with payments market practice evolution



- ❑ A subset of T2 RTGS message usage guidelines (UGs) are based on international market practice guidance developed by HVPS+
- ❑ T2 R2024.NOV caught up on latest developments e.g. alignment between HVPS+ with change request (CR) T2-0125
- ❑ CR T2-0125 is comparable in size and complexity with ISO 2022 unfreeze CR T2-0132 which will be implemented in June 2026
- ❑ Payments market practice on usage of hybrid postal address will require T2 adoption before and after first ISO unfreeze step
- ❑ Additional message related T2 changes are expected in coming years due to payments market practice evolution



ISO maintenance-driven technical changes versus T2 community-driven functional changes

- **“Technical” real-time ISO maintenance release changes:**
 - **Why?** Aligning existing T2 schemas with yearly maintenance release of ISO 20022 standard to stay compliant and enable a subsequent implementation of functional changes that require latest maintenance release version
 - **What?** Technical enhancements of T2 schemas and documentation which are used in current implementation and are mandatory. Technical changes which do not introduce new T2 functionality
 - **Who?** 4CB as service provider to raise related CRs
 - **When?** CRs to be raised around September/October for implementation in T2 November release of following year, as of T2 R2026.NOV
- **“Functional” T2 community-driven changes with message schema impact:**
 - **Why?** Adding new functionality to T2 by introducing optional ISO 20022 enhancements in T2 schema due to business demand
 - **What?** Functional enhancement in T2 that usually require software changes in addition to T2 schema changes as well as addition or amendment of elements when it responds to a new business or user requirement
 - **Who?** T2 community to raise related CRs
 - **When?** CRs raised anytime, to be ranked and authorised by T2-WG for implementation in future T2 June or November releases according to change and release management schedule



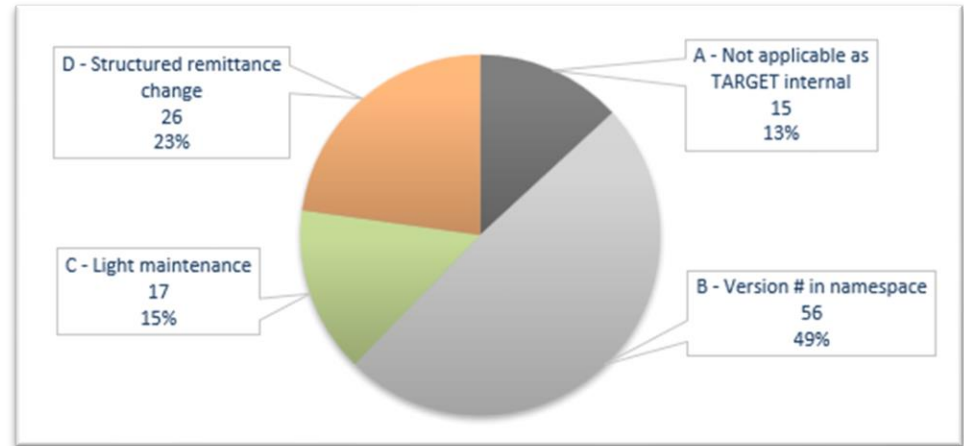
Hygiene effect of “real-time” ISO message maintenance releases

- **Improved stability and resilience:**
 - Regular technical updates allow for timely correction of flaws in outdated base message versions by enabling new elements in messages (payments return - pacs.004) or by correcting typos in message elements and definitions (“interbank” vs. “inter bank”) which otherwise may lead to data truncation or misunderstandings
- **Enhanced time-to-market:**
 - Regular technical updates allow for timely implementation of newly registered messages or newly introduced message elements, data types and patterns (external code lists, BIC 2014 identifier) which enable business to enhance services or reduce costs
- **Clear segregation of functional and technical changes:**
 - Regular technical updates ease business case creation for functional changes which are dependent upon latest base message version. Cost-benefit analysis of functional changes becomes independent from need to justify a lengthy multi-version message update. Cost-benefit analysis can focus on added value to meet business needs
- **Eased planning, budgeting and de-risking of required technical changes:**
 - Incremental technical updates allow for inclusion in yearly maintenance budget process in a stable fashion. No more costly ad-hoc projects on multi-version message updates which are competing with other business projects



Overview of message changes by category

- CR T2-0132 annex lists 114 change line items in total
- Four categories of changes can be observed:
 - A. 15 items document TARGET internal changes and hence are **not applicable** for market participants
 - B. 56 items refer to increase of version number in message namespace
 - C. 17 items apply light maintenance of related message types
 - D. 26 items are related to changes in the structured remittance information





B – Increase of version number in namespace

Description:

Update schema version from number used in MR2019 to number applicable in MR2024. For example, update schema version from ReportQueryRequestV01 (admi.005.001.**01**) to ReportQueryRequestV02 (admi.005.001.**02**)

Impacted message types (28):

admi.005, camt.003, camt.004, camt.005, camt.006, camt.007, camt.009, camt.010, camt.011, camt.012, camt.025, camt.029, camt.046, camt.047, camt.048, camt.049, camt.050, camt.053, camt.054, camt.056, head.001, pacs.002, pacs.004, pacs.008, pacs.009, pacs.010, reda.064, reda.065

Before:

```
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:admi.005.001.01"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:admi.005.001.01"
CLM_ReportQueryRequest_admi_005_ReportQueryRequest_admi_005_001
01_20191030_1334.xsd">
```

After:

```
<Document xmlns="urn:iso:std:iso:20022:tech:xsd:admi.005.001.02"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:iso:std:iso:20022:tech:xsd:admi.005.001.02"
CLM_ReportQueryRequest_admi_005_ReportQueryRequest_admi_005_001
02_20191030_1334.xsd">
```



C – Light maintenance (1/4):

New datatype ISOYear in tax remittance information

Description:

Correct datatype from “ISODate” to “ISOYear” in structured tax remittance information. In detail, the “Year” element related to a tax payment is to be restricted to a calendar year instead of a full date.

Impacted message types (2):

pacs.008, pacs.009

XML paths:

/Document/FICdtTrf/CdtTrfTxInf/UndrlygCstmrCdtTrf/RmtInf/Strd/TaxRmt/Rcrd/Prd/Yr
/Document/FICdtTrf/CdtTrfTxInf/UndrlygCstmrCdtTrf/RmtInf/Strd/TaxRmt/Rcrd/TaxAmt/Dtls
/Prd/Yr
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/TaxRmt/Rcrd/Prd/Yr
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/TaxRmt/Rcrd/TaxAmt/Dtls/Prd/Yr

Before:

<Yr>2024-12-10</Yr>

After:

<Yr>2024</Yr>



C – Light maintenance (2/4): New datatype BICFIDec2014Identifier

Description:

Update datatype from “BICFIIdentifier” to “BICFIDec2014Identifier” in every occurrence of a BIC element. Change in BIC pattern has been implemented with majority of ISO messages with MR2019 already. Alignment of messages is needed which were updated post MR2019.

Impacted message types (2):

admi.005, head.001

XML paths:

```
/Document/AppHdr/Fr/FIId/FinInstnId/BICFI  
/Document/AppHdr/To/FIId/FinInstnId/BICFI  
/Document/AppHdr/Rltd/Fr/FIId/FinInstnId/BICFI  
/Document/AppHdr/Rltd/To/FIId/FinInstnId/BICFI  
/Document/RptQryReq/RptQryCrit/SchCrit/PtyId/Id/AnyBIC
```

Before:

Pattern: [A-Z]{6,6}[A-Z2-9][A-NP-Z0-9]([A-Z0-9]{3,3}){0,1}

<BICFI>MARKDEFFXXX</BICFI> -> allowed
<BICFI>0815DEFFXXX</BICFI> -> not allowed
<BICFI>MARKDE1FXXX</BICFI> -> not allowed
<BICFI>MARKDEF0XXX</BICFI> -> not allowed

After:

Pattern: [A-Z0-9]{4,4}[A-Z]{2,2}[A-Z0-9]{2,2}([A-Z0-9]{3,3}){0,1}

<BICFI>MARKDEFFXXX</BICFI> -> allowed
<BICFI>0815DEFFXXX</BICFI> -> allowed
<BICFI>MARKDE1FXXX</BICFI> -> allowed
<BICFI>MARKDEF0XXX</BICFI> -> allowed



C – Light maintenance (3/4):

New element name for interbank settlement amount / date

Description:

Correct element name from “Inter Bank Settlement Amount” to “Interbank Settlement Amount” as well as from “Inter Bank Settlement Date” to “Interbank Settlement Date”. Impact on documentation side only.

Impacted message types (2):

camt.005, camt.007

XML paths:

/Document/ModifyTx/Mod/PmtId/LngBizId/IntrBkSttlmAmt
/Document/GetTx/TxQryDef/TxCrit/NewCrit/SchCrit/PmtSch/PmtId/LngBizId/IntrBkSttlmAmt
/Document/GetTx/TxQryDef/TxCrit/NewCrit/SchCrit/PmtSch/PmtId/LngBizId/IntrBkSttlmDt

Before:

```
<IntrBkSttlmAmt Ccy="EUR">100</IntrBkSttlmAmt>  
<IntrBkSttlmDt>2024-12-27</IntrBkSttlmDt>
```

After:

```
<IntrBkSttlmAmt Ccy="EUR">100</IntrBkSttlmAmt>  
<IntrBkSttlmDt>2024-12-27</IntrBkSttlmDt>
```



C – Light maintenance (4/4): Externalised reservation type code list

Description:

Reservation type code list has been externalised and is not hardcoded in message schema anymore. Business rule added to restrict default reservation codes to Cash Reservation “CARE”, Highly Urgent Payment Reservation “HPAR” and Urgent Payment Reservation “UPAR” only.

Impacted message types (1):

camt.048 (CoCo specific)

XML paths:

/Document/ModifyRsvatn/RsvatnId/Cur/Tp/Cd

/Document/ModifyRsvatn/RsvatnId/Dflt/Tp/Cd

Before:

<Cd>CARE</Cd>

After:

<Cd>CARE</Cd>



D – Structured remittance changes (1/4): Simplification of amounts

Description:

- a) Referred document information amount and referred document amount elements have been simplified and harmonised.
- b) Related business rules IV00290 and IV00310 have been adjusted to new element structure.
- c) New business rule has been added to allow only one occurrence of Credit Note “CREN”, Due Payable “DUPA” and Remitted “REMI” amounts to ensure interoperability.
- d) Data type has been changed to allow active currency codes only.

Impacted message types (2):

pacs.008, pacs.009

XML paths (listed for pacs.008 only, equivalent list applies for pacs.009):

```
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/DuePyblAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/DuePyblAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/DscntApldAmt/Amt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/DscntApldAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/CdtNoteAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/CdtNoteAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/TaxAmt/Amt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/TaxAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/RmtdAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/LineDtls/Amt/RmtdAmt/Ccy  
  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/DuePyblAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/DuePyblAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/DscntApldAmt/Amt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/DscntApldAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/CdtNoteAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/CdtNoteAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/TaxAmt/Amt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/TaxAmt/Ccy  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/RmtdAmt  
/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocAmt/RmtdAmt/Ccy
```



D – Structured remittance changes (2/4): Simplification of amounts*

Before:

▼ Remittance Information	0	1
≡ Unstructured	0	*
▼ Structured	0	*
▼ Referred Document Information	0	*
> Type	0	1
≡ Number	0	1
📅 Related Date	0	1
▼ Line Details	0	*
> Identification	1	*
≡ Description	0	1
▼ Amount	0	1
> 📅 Due Payable Amount	0	1
> 📄 Discount Applied Amount	0	*
> 📄 Credit Note Amount	0	1
> 📄 Tax Amount	0	*
> 📄 Adjustment Amount And Reason	0	*
> 📄 Remitted Amount	0	1

After:

▼ Remittance Information	0	1
≡ Unstructured	0	*
▼ Structured	0	*
▼ Referred Document Information	0	*
> Type	0	1
≡ Number	0	1
> Related Date	0	1
▼ Line Details	0	*
> Identification	1	*
≡ Description	0	1
▼ Amount	0	1
▼ Remittance Amount And Type	0	*
> Type	1	1
> 📄 Amount	1	1
> Adjustment Amount And Reason	0	*
✔ Textual : Remittance Amount And Type Guideline		

* Pictures show “Referred Document Information Amount” element, same structure applies to “Referred Document Amount” element



D – Structured remittance changes (3/4): Simplification of amounts

1-to-1 mapping table: legacy amount type to generic Remittance Amount And Type:

1. Due Payable Amount = DUPA
2. Discount Applied Amount:
 - Additional Promotional Discount (APDS) = APDS
 - Standing Discount (STDS) = STDS
 - Terms Discount (TMDS) = TMDS
3. Credit Note Amount = CREN
4. Tax Amount
 - City Tax (CITY) = CITY
 - County Tax (CNTY) = CNTY
 - Local Tax (LOCL) = LOCL
 - Province Tax (PROV) = PROV
 - State Tax (STAT) = STAT
5. Remitted Amount = REMI



D – Structured remittance changes (4/4): New datatype DateAndType1

Description:

Enhanced structure of related date element has been implemented with new datatype “DateAndType1” replacing datatype “ISODate”.
New related date codes supported: Invoice Date “INDA”, Payment Due Date “PADD”, Next Billing Date “NXBD” and Not Available “NTAV”

Impacted message types (2):

pacs.008, pacs.009

XML paths:

/Document/FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/RfrdDocInf/RltdDt

Before:

```
<RltdDt>2024-12-10</RltdDt>
```

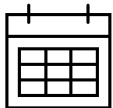
After:

```
<RltdDt>  
  <Tp>  
    <Cd>PADD</Cd>  
  </Tp>  
  <Dt>2024-12-10</Dt>  
</RltdDt>
```



Key messages and next steps

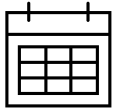
- First step of ISO 20022 message unfreeze will be implemented in June 2026
- User testing to commence end of March 2026
- Non-binding schema to be published in June / July 2025
- Impact of CR T2-0132 on payments community is limited
- T2-0132 introduced changes are of technical nature. Business changes with functional impact need to be raised by T2 community separately if applicable
- Real-time ISO message maintenance releases have hygiene effect which aim to enable the European market for future developments in the messaging space
- Two-step ISO unfreeze approach allows for:
 - preventing congestion of changes with planned HVPS+ updates in November 2025 and November 2026 (end of hybrid address grace period)
 - sufficient testing of first larger step by all TARGET Services stakeholders



Annex A – TARGET ISO MR deployment calendar*

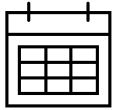
		2025			2026													
	Service	Exception	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
			<small>R2025.NOV</small>	<small>(Dropped - R2026.FEB)</small>	<small>R2026.JUN</small>	<small>R2026.SEP</small>	<small>R2026.NOV</small>											
EAC	T2		MR2019		MR2025 (or MR2024)								MR2026					
	T2S		MR2019		MR2025 (or MR2024)								MR2026					
	TIPS		MR2019		MR2025 (or MR2024)								MR2026					
		EPC/NPC		MR2019														
	ECMS		MR2019		MR2025 (or MR2024)								MR2026					
		seev	MR2025										MR2026					
UTEST	T2		MR2019					MR2025 (or MR2024)							MR2026			
	T2S		MR2019					MR2025 (or MR2024)							MR2026			
	TIPS		MR2019					MR2025 (or MR2024)							MR2026			
		EPC/NPC		MR2019														
		ECMS		MR2019					MR2025 (or MR2024)						MR2026			
		seev	MR2025											MR2026				
PROD	T2		MR2019									MR2025 (or MR2024)					MR2026	
	T2S		MR2019									MR2025 (or MR2024)					MR2026	
	TIPS		MR2019									MR2025 (or MR2024)					MR2026	
		EPC/NPC		MR2019														
		ECMS		MR2019									MR2025 (or MR2024)					MR2026
		seev	MR2024	MR2025														MR2026

* Subject to CR detailed assessments



Annex B - High-level timetable for CR T2-0132 on ISO MR2020-MR2024

Activities / Milestones	Date / Timeslot	
Start of detailed re-assessment (MR2020-MR2024) – based on final message version for MR2024 published by ISO	10 June 2024	✓
Delivery of detailed re-assessment to ECB	26 August 2024	✓
Steering level approval of detailed re-assessment	30 September 2024	✓
Steering level approval of dependent changes requests (e.g. T2S-0807 and TFOS change requests T2S-0823, T2S-0824 and T2S-0825)	End October 2024	✓
Start of CR implementation	18 November 2024	✓
Delivery of non-binding schemas (with 4 batches) via MyStandards	17 June 2025 – 8 July 2025	
Batch #1	17 June 2025	
Batch #2	24 June 2025	
Batch #3	1 July 2025	
Batch #4	8 July 2025	
Delivery of binding XSD schemas via MyStandards	25 November 2025 (9 days before EAC Deployment)	
Deployment of CR in EAC	5 December 2025 (with Package 1)	
Deployment of CR in UTEST	27 March 2026 (with Package 1)	
Deployment of CR in PROD	13 June 2026	

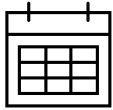


Annex C - High-level timetable for CR T2-0147 on ISO MR2025

Activities / Milestones	Date / Timeslot
Drafting of T2 ISO MR Change Request on MR2025 – based on high-level and detailed impact analysis of MCR 2025	September/October 2024 (16 September 2024 – 21 October 2024) ✓
Delivery of T2 ISO MR Change Request on MR2025 to ECB and review by technical groups (T2-WG)	22 October 2024 – 5 November 2024 ✓
Start of detailed assessment for MR2025 – based on draft message version for MR2025 published on MyStandards	27 January 2025
Delivery of detailed assessment to ECB	8 April 2025
Trilateral group preparation of proposal to governance groups and steering level with business preference to include MR2025 (and fall-back to maintain MR2024) in June 2026 release	8 April 2025 – End April 2025
Steering level approval of detailed assessment	15 May 2025
Check implementation against final ISO version ¹	May 2025
Start of CR implementation	15 May 2025

¹ To mitigate the risk of implementation, the final ISO MR2025 version of base messages should be checked before start of implementation.

- **High-level timetable is under discussion and subject to CR detailed assessment**



Annex D - High-level timetable for CR to be drafted on (Real-time) ISO MR2026

Activities / Milestones	Date / Timeslot
(MIB) Approval of ISO MR2026 CR and publication of draft message version for MR2026 on MyStandards	December 2025
Start of detailed assessment for MR2026 – based on draft message version for MR2026 published on MyStandards	January 2026
Delivery of detailed assessment to ECB	Mid-March 2026
Steering level approval of detailed assessment	Early April 2026
Start of implementation together with publication of final message version for MR2026 by ISO	Mid-April 2026
Check implementation against final ISO version ¹	May 2026
EAC Deployment	Mid-/End August 2026
UTEST Deployment	End September 2026
PROD Deployment	November 2026

¹ To mitigate the risk of implementation, the final ISO MR2026 version of base messages should be checked before start of implementation.

- **High-level timetable is under discussion and subject to CR detailed assessment**