

General Information (Origin of Request)		
<input type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
Request raised by: 4CB	Institute: 4CB	Date raised: 22/11/2016
Request title: Character Set X: Align discrepancies between UDFS, UHB, DMT and SWIFT Handbook		Request ref. no: T2S 0645 SYS
Request type: Common	Urgency: Normal	
1. Legal/business importance parameter: Medium	2. Market implementation efforts parameter: Low	
3. Operational/Technical risk parameter: Low	4. Financial impact parameter: Low	
Requestor Category: 4CB	Status: Authorised at steering level	

Reason for change and expected benefits/business motivation:

To ensure the coexistence of ISO 20022 and ISO 15022, T2S uses the character set X.

1. There is a misalignment between the UDFS and the UHB on the one side, and the SWIFT User Handbook on the other side, as to what characters are recognised as part of the character set X.

According to the UDFS and the UHB: the Characters used in all text fields must correspond to character set X, i.e., a-z A-Z 0-9 / - ? : () . , ' + { } CR LF.

According to the SWIFT User Handbook: '{' and '}' (curly brackets) are not defined as valid characters in the character set X.

- ⇒ U2A and the DMT were implemented following the UDFS and UHB requirements and therefore compliant with the requirement stated in the UDFS chapter 3.2.1.2.2. Therefore it is currently possible to enter curly brackets via U2A or DMT into T2S.
- ⇒ The A2A message schemas were created according to the SWIFT User Handbook definition of the set X characters, which do not recognize curly brackets as valid characters.

This discrepancy causes invalid A2A messages to be sent by T2S in case curly brackets were entered via U2A or DMT and are reported back to the customer via A2A.

2. A discrepancy between the UDFS and the UHB has been detected regarding the definition of Set X Characters: The UHB identifies ';' Semicolon' as a valid Set X character, whereas the UDFS and SWIFT User Handbook do not. Instead, the UDFS and the SWIFT User Handbook identify ':' Colon' as a valid Set X character.
 - ⇒ In the current implementation, Colon is accepted by both A2A and U2A whereas Semicolon is not.
3. A discrepancy between section 3.2.1.2.2 of the UDFS, the rest of the UDFS, the UHB and the SWIFT User Handbook has been detected regarding the definition of Set X Characters: The UHB, and the SWIFT User Handbook identifies '0-9' as a valid Set X characters, whereas the UDFS does not. Instead, section 3.2.1.2.2 of the UDFS does not mention '0-9' as valid Set X characters.

Description of requested change:

- As the described issue can arise via U2A and DMT, both need to be aligned with the SWIFT User Handbook definition of set X characters, i.e., a-z A-Z 0-9 / - ? : () . , ' + CR LF
- For U2A it is requested to introduce new field rules for all text fields where the character set X applies. The field rules will consist of two parts:
 - ⇒ Disallow the character " {" as valid character.

⇒ Disallow the character “}” as valid character.

- Additionally, the DMT shall reflect the same rules for the related reference and identification fields affected by this CR.
- The UHB and UDFS need to be updated to align accordingly

Submitted annexes / related documents:

Proposed wording for the Change request:

The UDFS needs to be updated as per below:

- UDFS v2.2 Section 3.2.1.2.2 Assuring the interoperability between ISO 15022 and ISO 20022 in T2S, page 984

The following information needs to be updated:

CoexistenceCharacterSetXRule

Characters used in all text fields must correspond to character set X, that is a-z A-Z 0-9 / - ? : () . , ' + { } CR LF.

- UDFS v2.2 Section 3.2.1.3 T2S-specific schema customization, page 998

Removal of “{” and “}” in table 196 - CHARACTER SETS USED IN MT MESSAGES

X	Y	Z	Character	Description
...
*		*	{	Opening curly bracket
*			}	Closing curly bracket
*		*	CR	Carriage return
*		*	LF	Line Feed

- UHB v2.2 Section 1.2.2.4 Field Types and Properties, page 58

The “SWIFT-x characters description table” needs to replace ‘; Semicolon’ with ‘: Colon’ and remove “{” and “}”

Character	Description
a - z	26 small characters of the Latin alphabet
A - Z	26 capital characters of the Latin alphabet
0 - 9	10 numeric characters
/	Solidus (Slash)
-	Hyphen
?	Question Mark
;	Semicolon Colon
(Opening parenthesis
)	Closing parenthesis
.	Full stop
,	Comma

+	Plus
	Space (blank)
{	Opening curly bracket
}	Closing curly bracket
CR	Carriage return
LF	Line Feed

The Data Migration Tool File Format Specification document needs to be updated as per below:
- DMT File Format Specification Chapter 2.2.4 "Character Set"

All characters belong to the **SWIFT X Character Set**. The character set is as follows:

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
0 1 2 3 4 5 6 7 8 9
/ - ? : () . , ' + ↵
CR LF Space

High level description of Impact:

Outcome/Decisions:

- * CRG meeting on 12/13 December 2016: The CRG agreed to put the Change Request on hold.
- * CRG meeting on 24 January 2017: The CRG recommended to launch the detailed assessment of the Change Request and asked the 4CB to check the feasibility to deliver the Change Request in the T2S Release 2.0.
- * Advisory Group on 02 February 2017: In a written procedure from 26 January 2017 to 02 February 2017, the Advisory Group was in favour of launching the detailed assessment on the Change Request.
- * CSD Steering Group on 03 February 2017: In a written procedure from 26 January 2017 to 03 February 2017, the CSD Steering Group was in favour of launching the detailed assessment on the Change Request.
- * OMG on 16 February 2017: During a written procedure from 26 January 2017 to 16 February 2017, the Operations Managers Group did not identify any blocking operational impact.
- * Operational Mangers Group on 29 May 2017: Following a written procedure from 22 - 29 May 2017, the Operations Managers Group reconfirmed that the Change Request does not have any blocking operational impact.
- * CRG meeting on 07 June 2017: The CRG acknowledged the importance of the Change Request and was in favour of recommending it for approval and inclusion into T2S Release 2.0. However the CRG was of the opinion that the Change Request should be classified as 'corrective maintenance' and agreed to seek the guidance from the steering level.
- * CSG meeting on 13 June 2017: The CSG decided that the classification of change requests should not be a blocking factor for the CRG to proceed with their change management activities.
- * CRG teleconference on 23 June 2017: The CRG recommended the approval of the updated Change Request and its inclusion in the T2S Release 2.0.
- * PMG on 21 July 2017: During a written procedure from 19 to 21 July 2017, the Project Managers Group was in favour of adding the Change Request to Release 2.0 from a planning perspective based on their endorsement of the Service Transition Plan v.0.7 for Release 2.0.
- * Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) on 27 July 2017: Following a written procedure from 21 to 27 July 2017, the AMI-SeCo was in favour of approving the Change Request and its inclusion in T2S Release 2.0
- * CSD Steering Group on 28 July 2017: Following a written procedure from 21 to 27 July 2017, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 2.0

EUROSYSTEM – GENERAL INFORMATION

Impact On T2S	Static data management		Interface	
		Party data management		Communication
		Securities data management		Outbound processing
		T2S Dedicated Cash account data management		Inbound processing
		Securities account data management		
		Rules and parameters data management		
	Settlement		Liquidity management	
		Standardisation and preparation to settlement		Outbound Information Management
		Night-time Settlement		NCB Business Procedures
		Daytime Recycling and optimisation		Liquidity Operations
		Daytime Validation, provisioning & booking	LCMM	
		Auto-collateralisation		Instructions validation
				Status management
	Operational services			Instruction matching
	X	Data Migration		Instructions maintenance
		Scheduling	Statistics, queries reports and archive	
		Billing		Report management
		Operational monitoring		Query management
				Statistical information
			Legal archiving	
	All modules (Infrastructure request)			
	No modules (infrastructure request)			
	Business operational activities			
	Technical operational activities			

Impact on major documentation				
Document	Chapter		Change	
Impacted GFS chapter				
Impacted UDFS chapter				
Additional deliveries for Message Specification				
UHB				
External training materials				
Other documentations				
Links with other requests				
Links	Reference		Title	
OVERVIEW OF THE IMPACT OF THE REQUEST ON THE T2S SYSTEM AND ON THE PROJECT				
Summary of functional, development, infrastructure and migration impacts				
<p>Changes for all DMT processes that check characters belonging to the SWIFT X Character Set, namely 29 different input flows, have to be performed.</p> <p>Testing the respective alignment</p>				
Summary of project risk				
None				
Security analysis				

No potentially adverse effect was identified during the security assessment.



19 May 2017

Cost assessment on Change Requests

T2S-0645-SYS – Character Set X: Align discrepancies between UDFS, UHB, DMT and SWIFT Handbook			
One-off	Assessment cost*		
	- Preliminary	2,000.00	Euro
	- Detailed	10,000.00	Euro
One-off	Project phase costs	68,176.66	Euro
Annual	Operational costs	5,591.44	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).