

<b>General Information (Origin of Request)</b>		
<input type="checkbox"/> User Requirements (URD) <input checked="" type="checkbox"/> Other User Functional or Technical Documentation (SYS)		
<b>Request raised by:</b> 4CB	<b>Institute:</b> 4CB	<b>Date raised:</b> 20/10/2016
<b>Request title:</b> T2S enhanced bundling of messages during night-time settlement reporting		<b>Request ref. no:</b> T2S 0637 SYS
<b>Request type:</b> Common		<b>Urgency:</b> Normal
<b>1. Legal/business importance parameter:</b> Low	<b>2. Market implementation efforts parameter:</b> Low	
<b>3. Operational/Technical risk parameter:</b> Low	<b>4. Financial impact parameter:</b> Medium	
<b>Requestor Category:</b> 4CB	<b>Status:</b> Authorised at Steering Level	

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

In general, T2S is able to communicate using messages and files. T2S outbound messages are always sent on a unitary basis in real time, with the exception of the night time settlement results which are always sent in file mode. (cf. UDFS v2.2 p. 116 TABLE 21 - SETTLEMENT-RELATED MESSAGES SENT GROUPED INTO FILES).

Bundling messages into files provides several benefits:

- Cost reduction, both at T2S and VAN provider levels.
- Better capacity optimization at T2S.
- Better performance monitoring and response time reduction.

However, the current set-up of night-time settlement (NTS) reporting restricts these benefits. For outbound messages as well as for outbound files the T2S Actor is requested to setup a routing configuration. This routing configuration includes a size criterion. In case of files this leads to the problem that only at the end of the file bundling process the recipient can be defined and the file creation process is slow. If this size criterion is not applicable for files, the files creation process will be much faster and therefore less performance consuming.

Hence, in order to unlock the above mentioned benefits and to shorten the NTS reporting phase to deliver outbound files at a considerably earlier point of time ,this CR is raised.

The 4CB presented high level feasibility analysis on bundling of messages in the context of CR-0613<sup>1</sup>: This analysis focussed on changes for the existing NTS reporting, but could also potentially be used in the real-time settlement (RTS). During the CRG discussion on 13/09/2016 the 4CB clarified that they do not support the implementation of the original CR-0613, but the introduction of (up to two) new CRs.

This new CR will handle the changes to enhance the existing NTS reporting for a global positive effect.

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**Description of requested change:**

In the U2A screen "Routing" (Static Data / Network Configuration / Routings / New Routing), when the message type "NTSR.000" is chosen for the routing of NTS files, the setting of any size parameter will be disabled and any value entered before will be erased.

The size parameters refer to the following two fields:

- Size (Lower Bound)
- Size (Upper Bound)

Also the drop down list "Network Service" will only allow the usage of file channel related services.

<sup>1</sup> [http://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s\\_0613\\_sys.pdf](http://www.ecb.europa.eu/paym/t2s/progress/pdf/crg/t2s_0613_sys.pdf)

In order to make existing routing rules related to message type "NTSR.000" compliant to the new behaviour of the system, in those routing rules all entries for the parameters

- Size (Lower Bound)
- Size (Upper Bound)

have to be reset to the default value that indicates that size boundaries are not used. Furthermore parameter Network Service has to be set to FILESNF (keeping the network provider).

As a result, the mentioned changes will allow further improvements for outbound messages queries aiming at quicker response times.

As a second point, T2S will send a "final message" after NTS file bundling has been finished on T2S application side. For each recipient, the "final message" will report the number of all files prepared for exactly this recipient for the whole NTS period of the current business day:

- Each individual outbound file is counted (considering splitting).
- Outbound files are prepared and sent out for a recipient party. These recipient parties will be the receivers of the camt.019 message (on condition that they have subscribed to the message).

As "final message" the ISO message camt.019 (Return Business Day Information message) with the code "FNTS" (final NTS message) will be used. This dedicated camt.019 message informs about the end of the NTS reporting and not about a change of the system status, i.e. no operational day impact.

The "FNTS" code will be provided as status within the field

/Document/RtrBizDayInf/RptOrErr/BizRpt/BizDayOrErr/BizDayInf/SysSts/Sts/Prtry/Id

The count of NTS files for the recipient will be provided in field

/Document/RtrBizDayInf/RptOrErr/BizRpt/BizDayOrErr/BizDayInf/SysInfPerCcy/ClsrInf/Rsn/Prtry

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#### Submitted annexes / related documents:

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#### Proposed wording for the SYS Change request:

UHB: The usage of fields 'Size (Lower Bound)', 'Size (Upper Bound)' and 'Network Service' will be adapted to the specific case of night-time settlement related messages.

#### UHB v2.2 Section 2.5.8.3 – Routing – New/Edit Screen

To be added to field description for 'Network Service': "For night-time settlement related messages, only file-based network services can be selected."

To be added to field description for 'Size (Lower Bound)': "For night-time settlement related messages, this field cannot be used."

To be added to field description for 'Size (Upper Bound)': "For night-time settlement related messages, this field cannot be used."

UDFS: The parameters available for night-time settlement related messages will be clarified. A new message usage for camt.019 as final message will be added.

#### UDFS v2.2 Section 1.3.1.5 Common rules for messages and files addressing, page 115

Footnote 64 to be updated as follows:

The exhaustive list of possible values for the type of message is given by the list of all the outbound messages included in section List of Messages [the exhaustive list of possible values for the type of message is NightTimeSettlementRelatedMessages", which refers to all the settlement-related messages (excluding copies of liquidity transfers) that, during the night-time settlement period, are sent by T2S grouped into files. For "NightTimeSettlementRelatedMessages" it is only possible to select file-based network services and it is not possible to define upper or lower bound size parameters.

#### UDFS v2.2 Section 1.3.1.5 Common rules for messages and files addressing, page 117

Table 24 – Usage of Network Services for outbound communication

SETTLEMENT DAY PERIOD	MATCHED ROUTING CONFIGURATION	OUTBOUND COMMUNICATION	COMPRESSED DATA
Real-time settlement	Default 1	All individual messages <= 32KB	No
	Default 2	All individual messages > 32KB	Yes
Night-time settlement	Default 1	All individual messages not listed in Table 21 – Settlement related messages sent grouped into files <= 32KB	No
		Files of messages included in Table 21 – Settlement related messages sent grouped into files <= 32KB	Yes
	Default 2	All individual messages not listed in Table 21 – Settlement related messages sent grouped into files > 32KB	No
		Files of messages included in Table 21 – Settlement related messages sent grouped into files > 32KB, regardless of file size	Yes

UDFS v2.2 Section 1.3.1.5 Common rules for messages and files addressing, page 118

Table 25 – Conditional routing configurations

SEQUENCE	ROUTING DESCRIPTION	MESSAGE TYPE	SIZE	CURRENCY	NETWORK SERVICE	PARTY TECHNICAL ADDRESS	COMPRESSION
1	Conditional 1	-	-	DKK	NetSrvA	<ou=dept_987, o=prtycctxxx, o=netprv>	ZIP
2	Conditional 2	-	-	DKK	NetSrvB	<ou=dept_987, o=prtycctxxx, o=netprv>	ZIP

						o=netprv>	
3	Conditional 3	NTSRM	-	DKK	NetSrvA	<ou=dept_987, o=prtycctxxx, o=netprv>	ZIP
43	Conditional 43	NTSRM	-	DKK	NetSrvB	<ou=dept_987, o=prtycctxxx, o=netprv>	ZIP

UDFS v2.2 Section 1.3.1.5 Common rules for messages and files addressing, page 118

Table 26 – Usage of network services for outbound communication

SETTLEMENT DAY PERIOD	MATCHED ROUTING CONFIGURATION	OUTBOUND COMMUNICATION	COMPRESSED DATA
Real-time settlement	Default 1	All individual messages not in DKK <= 32KB	No
	Default 2	All individual messages not in DKK > 32KB	Yes
	Conditional 1	All individual messages in DKK <= 32KB	Yes
	Conditional 2	All individual messages in DKK > 32KB	Yes
Night-time settlement	Default 1	All individual messages not in DKK and not listed in Table 21 – Settlement-related messages sent grouped into files <= 32KB	No
		Files of messages not in DKK and included in Table 21 – Settlement-related messages sent grouped into files <= 32KB	No
	Default 2	All individual messages not in DKK and not listed in Table 21 – Settlement-related messages sent grouped into	Yes

		files > 32KB	
		Files of messages not in DKK and included in Table 21 – Settlement-related messages sent grouped into files > <del>32KB</del> , regardless of file size	Yes
	Conditional 1	All individual messages not in DKK and not listed in Table 21 – Settlement-related messages sent grouped into files <= 32KB	Yes
		<del>Files of messages not in DKK and included in Table 21 – Settlement-related messages sent grouped into files &lt;= 32KB</del>	<del>Yes</del>
	Conditional 2	All individual messages not in DKK and not listed in Table 21 – Settlement-related messages sent grouped into files > 32KB	Yes
		Files of messages not in DKK and included in Table 21 – Settlement-related messages sent grouped into files > <del>32KB</del> , regardless of file size	Yes

UDFS v2.2 Section 3.3.3.10.3 The message in business context (camt.019.001.04), page 1097  
 New Message usage for the related message described as follows:

Message usage : Final NTS Message

This message usage notifies the receiver that the Night Time Settlement cycle file bundling has been done and provides with the count of files produced during that phase.

Specific Message requirements

A Final NTS Message notification contains information on the end of Night Time Settlement cycle file bundling and the count of files produced during that phase.

<u>MESSAGE ITEM</u>	<u>DATA TYPE/CODE</u>	<u>UTILISATION</u>
<u>SystemDate</u> <u>Document/RtrBizDayInf/RptOrErr/BizRp</u> <u>t/BizDayOrErr/BizDayInf/SysDt</u>	<u>ISODate</u>	<u>Business date for the Night Time</u> <u>Settlement phase</u>
<u>Identification</u> <u>Document/RtrBizDayInf/RptOrErr/BizRp</u> <u>t/BizDayOrErr/BizDayInf/SysSts/Sts/Prt</u> <u>ry/ld</u>	<u>Exact4AlphaNumericText STAT T2S</u>	<u>Fixed value "FNTS"</u>
<u>ValidityTime</u> <u>Docu-</u> <u>ment/RtrBizDayInf/RptOrErr/BizRpt/Biz</u> <u>DayOrErr/BizDayInf/SysSts/VldtyTm</u>	<u>DateTimePeriodChoice</u>	<u>Time in which the current status</u> <u>became effective</u>
<u>Proprietary</u> <u>Document/RtrBizDayInf/RptOrErr/BizRp</u> <u>t/BizDayOrErr/BizDayInf/SysInfPerCcy/</u> <u>ClsrInf/Rsn/Prtry</u>	<u>RestrictedFINMax35Text</u>	<u>Count of Night Time Settlement files</u> <u>produced for the recipient</u>

Message usage example: camt.019.001.04 Final NTS Message

In this example, assuming current business date is 2010-01-01, the recipient is informed that the Night Time Settlement cycle file bundling has been done and that 100 files have been produced.

UDFS v2.2 Section 4.2 Index of Status Values and Codes, 4.2.1 ISO 20022 Codes, page 2024

<u>CODE</u>	<u>NAME</u>	<u>DEFINITION</u>
EODP	End of Day period	EODP
FNTC	First night-time cycle	FNTC
FNTS	<u>Final message for night-time settlement</u>	<u>FNTS</u>
LNTC	Last night-time cycle	LNTC
MTNW	Maintenance window	MTNW
<del>RTMS</del> RTMC	Real-time settlement <u>closure</u>	RTMC
RTMS	<u>Real-time settlement</u> <del>Start of Day period</del>	RTMS
SODP	Start of day period	SODP

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**High level description of Impact:**

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**Outcome/Decisions:**

\* CRG meeting on 26 October 2016: The CRG recommended to launch the detailed assessment on the Change Request in principle subject to some changes being incorporated in the Change Request.

\* CRG meeting on 12-13 December 2016: The CRG recommended the approval of the Change Request and its inclusion in the T2S Release 1.3 in principle subject to a final confirmation by the CRG members in a written procedure until 16 December 2016.

\* CRG on 16 December 2016: During a written procedure from 13 - 16 December 2016, the CRG recommended the approval of the Change Request and its inclusion in the Release 1.3.

\* OMG on 20 December 2016: During a written procedure from 13-20 December 2016, the Operations Managers Group did not identify any blocking operational impact. The OMG was in favour of adding the Change Request to the T2S Release 1.3.

\* Advisory Group on 22 December 2016: Following a written procedure from 16 to 22 December 2016, the AG was in favour of approving the Change Request and its inclusion in T2S Release 1.3.

\* CSD Steering Group on 23 December 2016: Following a written procedure from 16 to 23 December 2016, the CSG adopted the resolution to approve the Change Request and its inclusion in T2S Release 1.3.

\* CRG teleconference on 11 January 2017: The CRG had a preference to keep the Change Request T2S-0637-SYS in the scope of the T2S Release 1.3 in line with its previous recommendation during the CRG meeting on 12-13 December 2016.

\* CRG on 2 February 2017: During a written procedure from 31 January to 2 February 2017, the CRG agreed to make some updates in the wording of the Change Request.

\* CRG on 13 February 2017: The CRG was informed of the correction of three minor updates in the wording of the Change Request.

**EUROSYSTEM ANALYSIS – GENERAL INFORMATION**

<b>Impact On T2S</b>	<b>Static data management</b>		<b>Interface</b>	
		Party data management		Communication
		Securities data management	x	Outbound processing
		T2S Dedicated Cash account data management		Inbound processing
		Securities account data management		
	X	Rules and parameters data management		
	<b>Settlement</b>		<b>Liquidity management</b>	
		Standardisation and preparation to settlement		Outbound Information Management
		Night-time Settlement		NCB Business Procedures
		Daytime Recycling and optimisation		Liquidity Operations
		Daytime Validation, provisioning & booking	<b>LCMM</b>	
		Auto-collateralisation		Instructions validation
				Status management
	<b>Operational services</b>			Instruction matching
		Data Migration		Instructions maintenance
		Scheduling	<b>Statistics, queries reports and archive</b>	
		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		

<b>Impact on major documentation</b>			
<b>Document</b>	<b>Chapter</b>	<b>Change</b>	
Impacted GFS chapter			
Impacted UDFS chapter	1.3.1.5 Common rules for messages and files addressing  3.3.3.10 ReturnBusinessDayInformationV04 (camt.019.001.04)  <a href="#">4.2 New message usage for "Final NTS Message" - New code "FNNTS"</a>	New message usage for "Final NTS Message"	
Additional deliveries for Message Specification	Camt.019.001.04	Message customization to include the needed element for count of NTS messages and related documentation	
UHB	2.5.8.3 Routing - New/Edit Screen	Description of the aforementioned cross-field validations.	
External training materials			
Other documentations	Camt.019.001.01 example for message usage "Final NTS Message"	A new xml message has to be drafted according to the description provided.	
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>From a functional viewpoint the bundling of messages during night-time settlement reporting shall be enhanced by disabling the use of the size boundaries and taking FILESNF as mandatory Network Service.</p> <p>In addition a "final message" will be sent after NTS file bundling and report the number of all files prepared for this recipient. Functional test will check the correct bundling, the changes in the U2A screen "Routing" and the sending of the "final message"</p> <p>A new camt.019 message usage notifying the receiver that the Night Time Settlement cycle file bundling has been done and providing the count of files produced during that phase will be introduced.</p>
Summary of project risk
No
Security analysis
No potentially adverse effect was identified during the security assessment.

DG - MARKET INFRASTRUCTURE & PAYMENTS  
 MARKET INFRASTRUCTURE MANAGEMENT

ECB-PUBLIC



12 December 2016

## Cost assessment on Change Requests

T2S-637-SYS – T2S enhanced bundling of messages during night-time settlement reporting			
One-off	Assessment cost*		
	- Preliminary	2,000.00	Euro
	- Detailed	10,000.00	Euro
One-off	Project phase costs	131,608.86	Euro
Annual	Operational costs	9,320.61	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).