



SWIFT offering for Cash DCPs in T2S

Info session on dedicated cash accounts in T2S hosted by the *National Bank of Belgium*

December 2014

Agenda

- Introduction

- TARGET2-Securities (T2S) and SWIFT
 - Payment Banks in T2S

- SWIFT's Solution for T2S

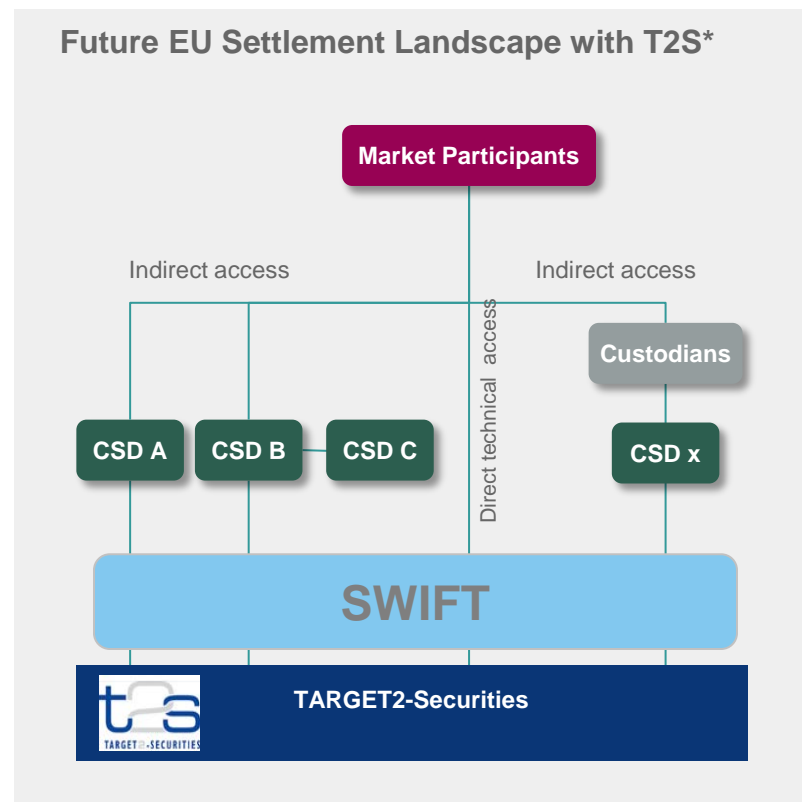
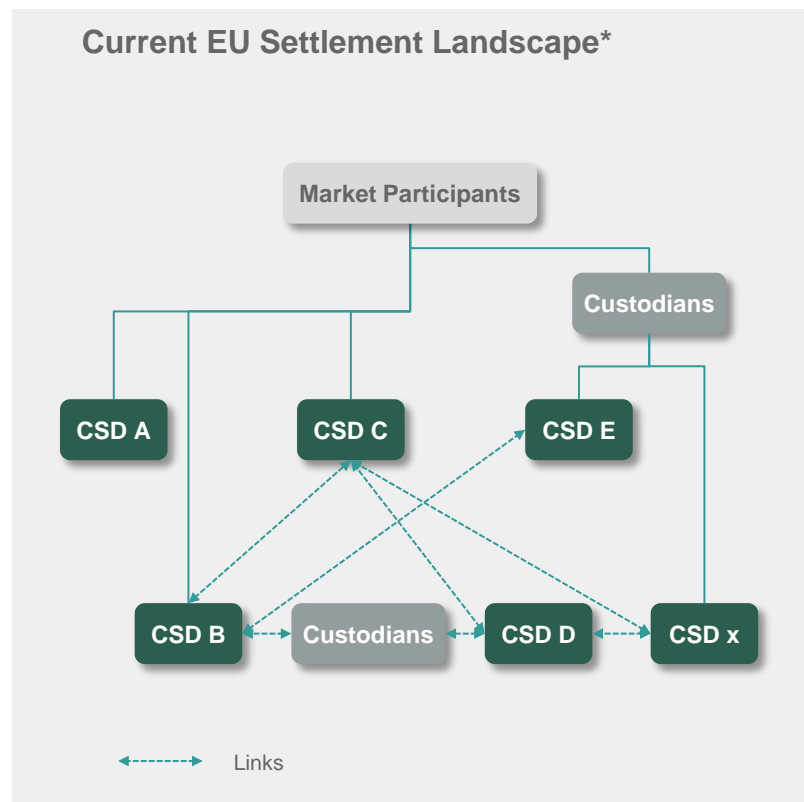
- Value Added Network (VAN)
 - User to Application (U2A) customer footprint
 - Application to Application (A2A) customer footprint
 - SWIFT Services

- Summary

- Q&A

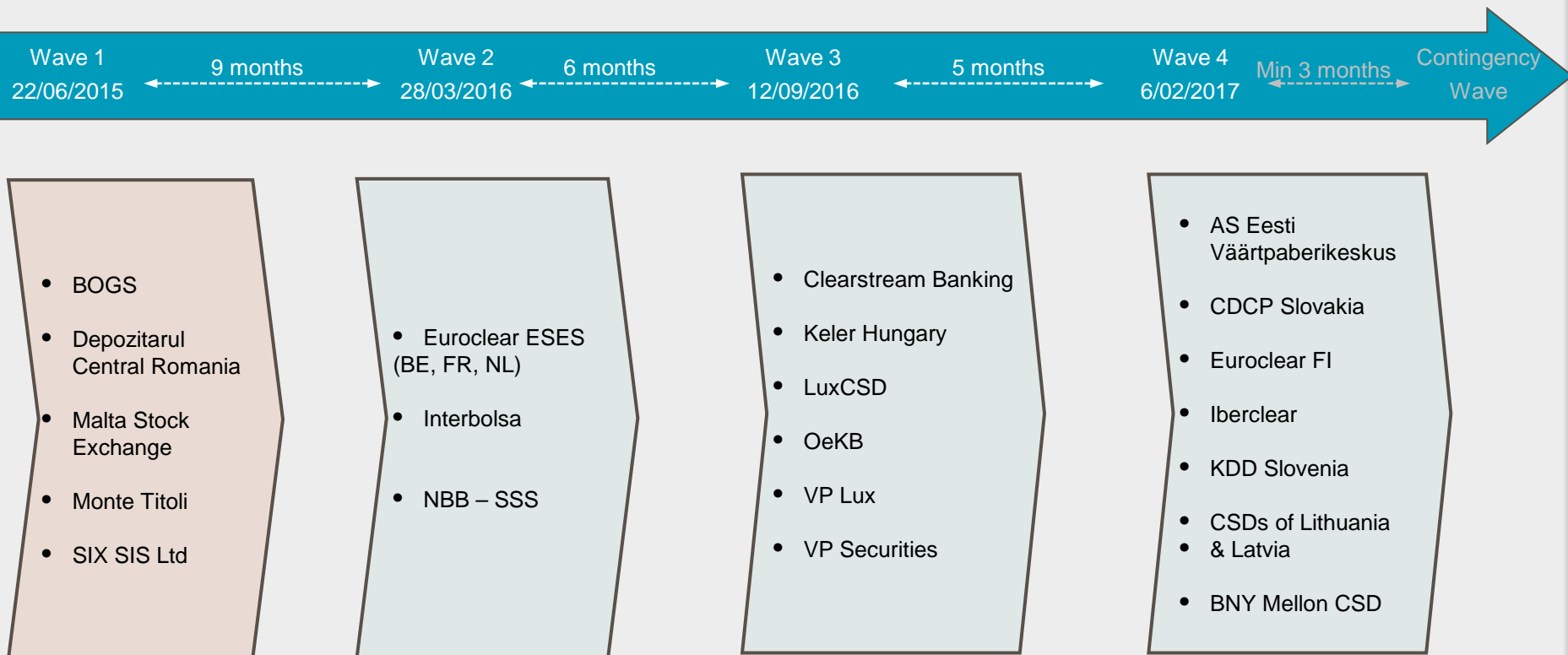


T2S – a single pan-European platform for securities settlement in central bank money



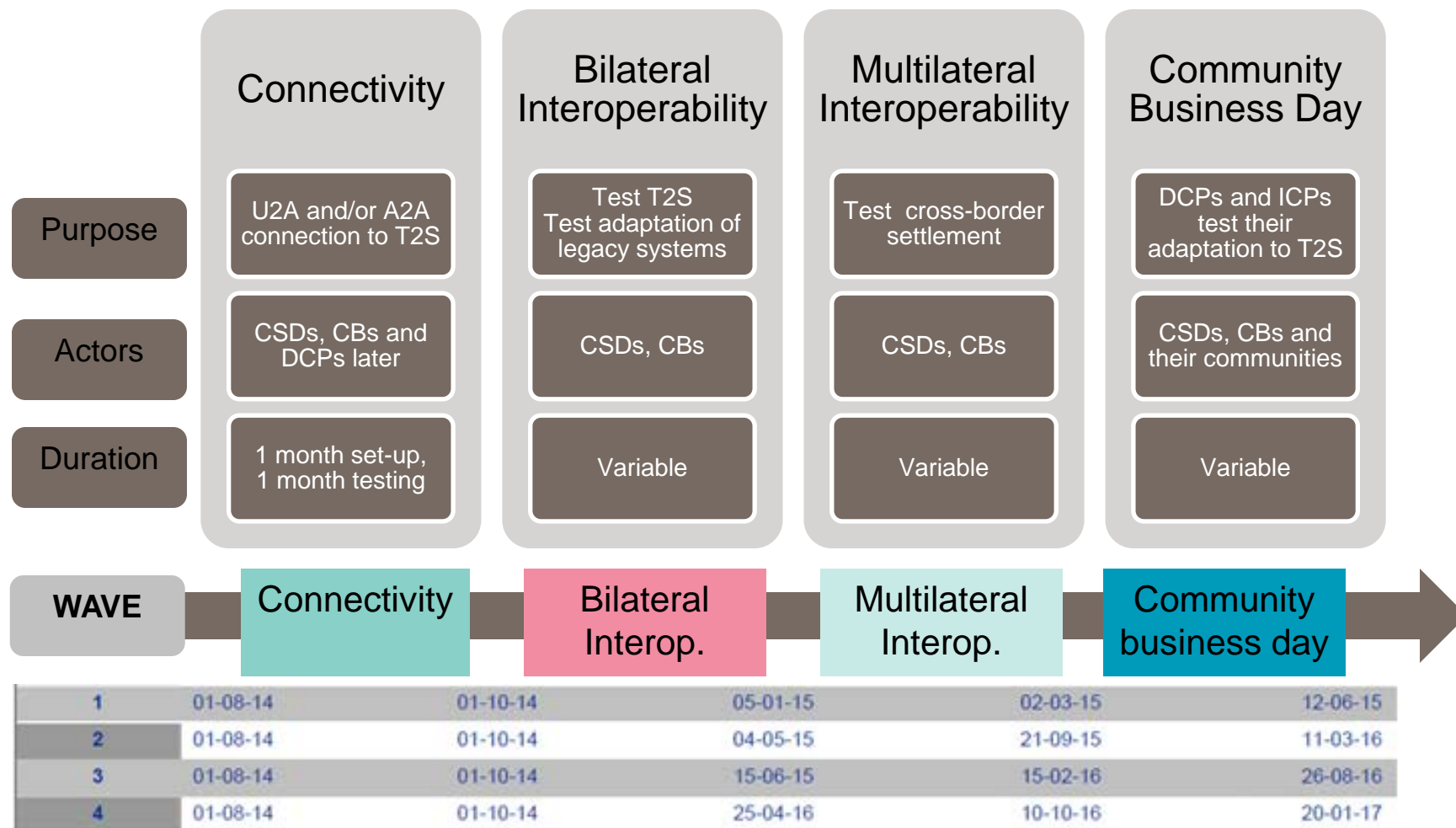
T2S Migration plan and timeline

CSDs



Overview of User Testing

*Four testing stages times four waves**



* Source T2S info session on testing and migration

Payment Banks in T2S

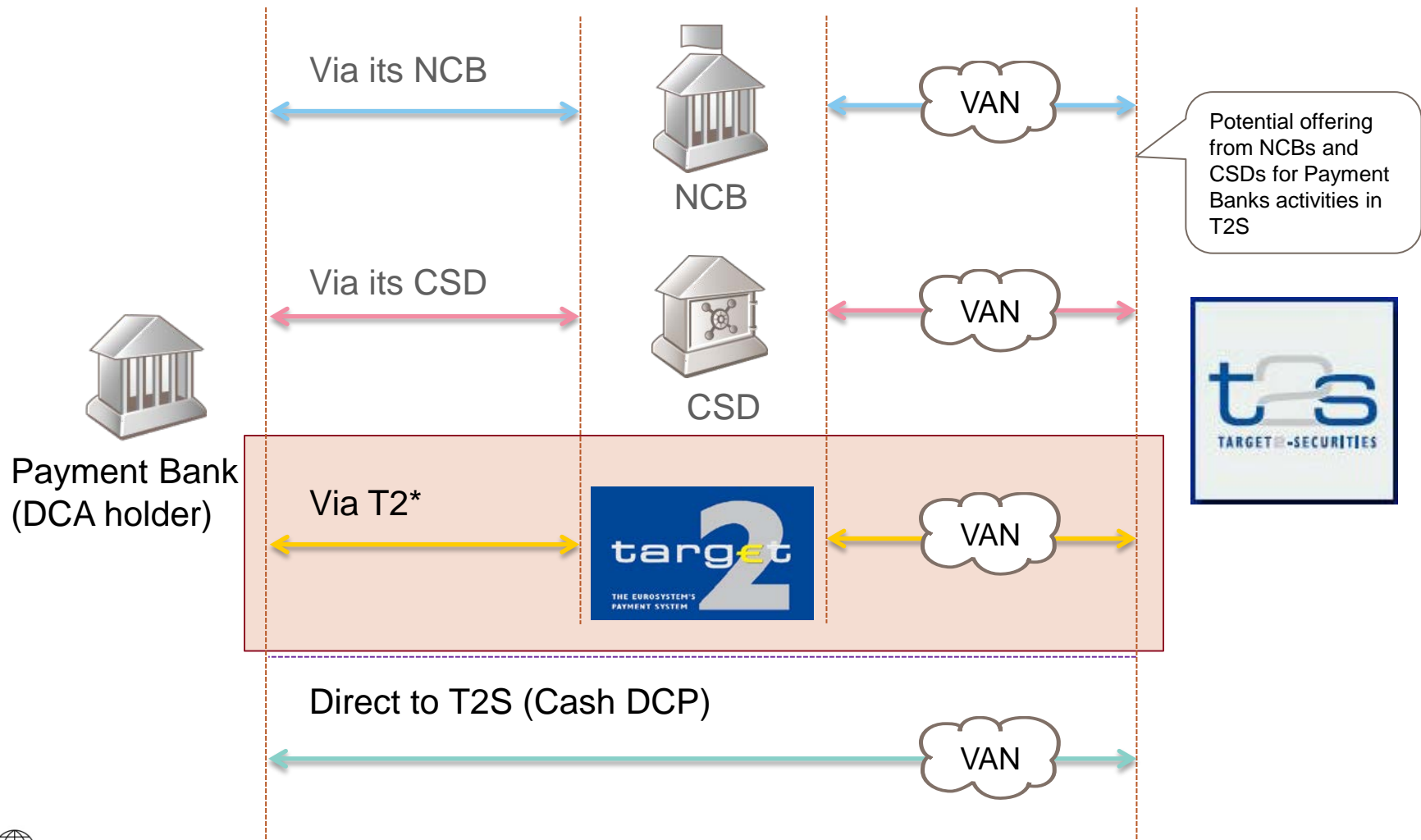
Role



- Dedicated Cash Account (DCA) holder: Provide the **cash side** in T2S
 - DCA is extension of RTGS account held at T2 (EUR) or other RTGS (non EUR), under National Central Bank responsibility
 - National Central Bank creates DCAs
- Allow Payment Bank customers access to DCAs
- Operate DCAs and Credit Memorandum Balance (CMBs)
- Offer client-collateralisation services in T2S

DCA holders in T2S

Potential communication channels to T2S



* It is also possible to authorise third party (such as local CSD) to push liquidity from T2 RTGS account to DCA

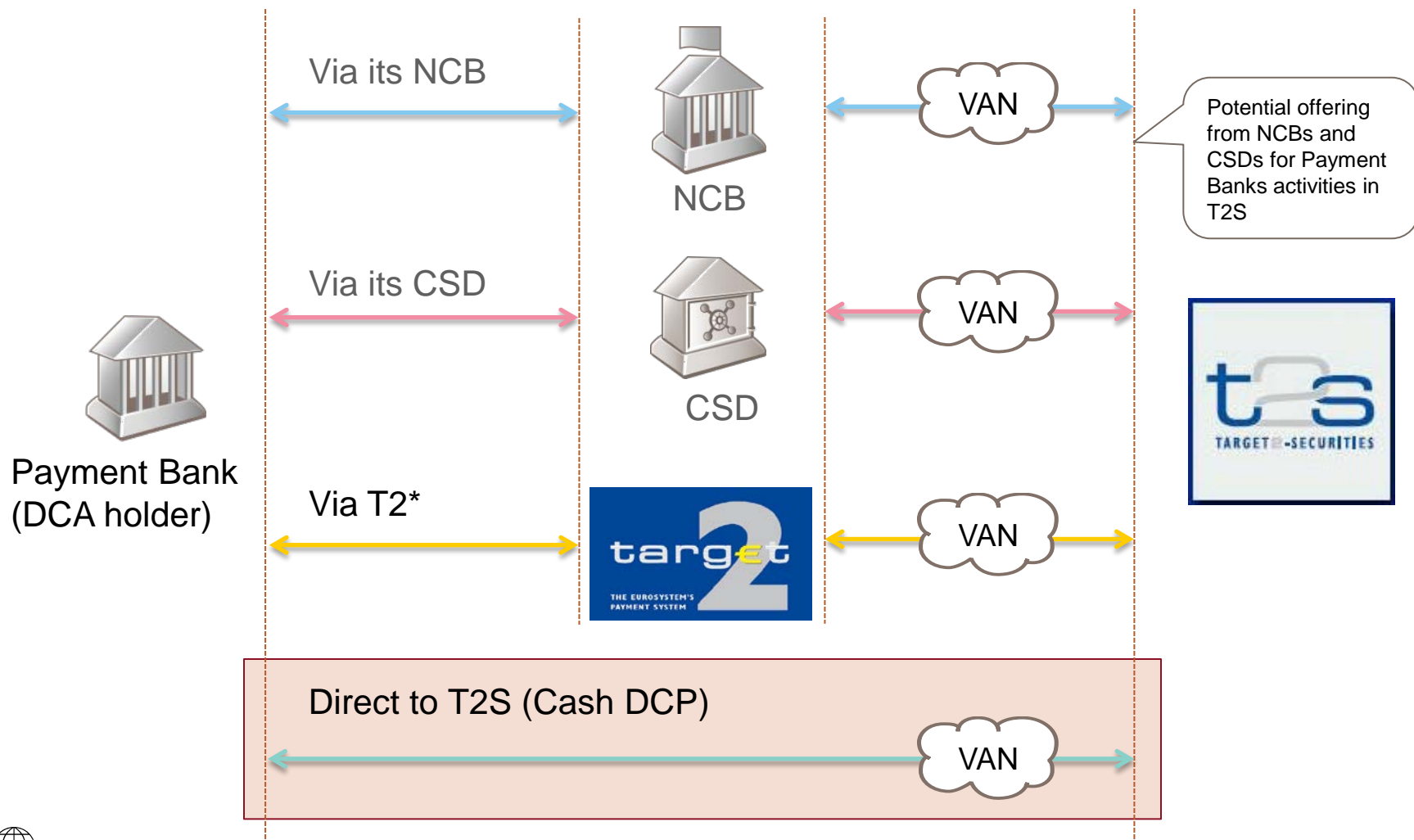
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- ❑ Introduction
 - ❑ TARGET2-Securities (T2S) and SWIFT
 - ❑ Payment Banks in T2S
- ❑ **SWIFT's Solution for T2S**
 - ❑ Value Added Network (VAN)
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 - ❑ Application to Application (A2A) customer footprint
 - ❑ **SWIFT Services**
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- ❑ Q&A



Payment Banks in T2S

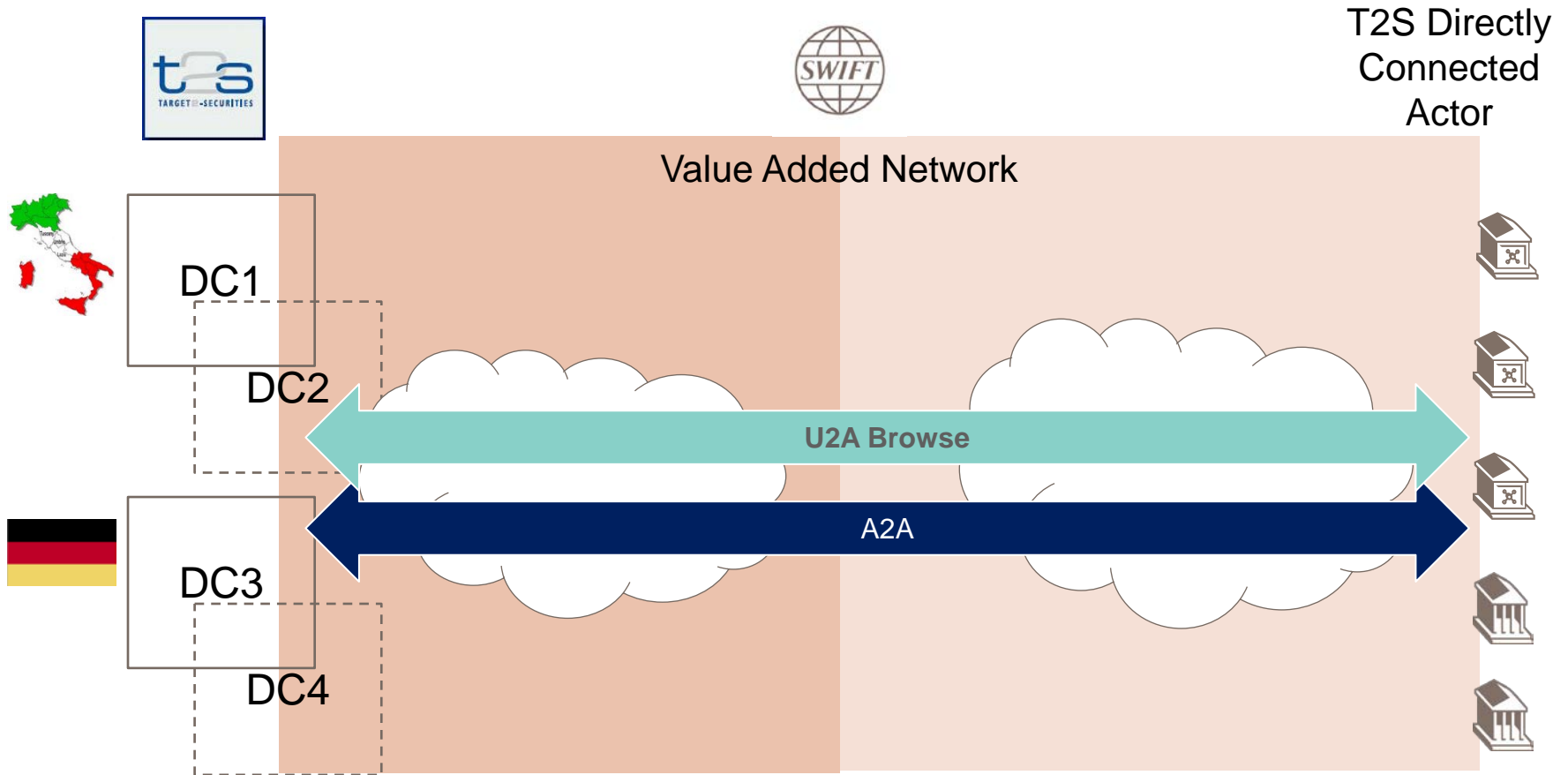
Potential communication channels to T2S



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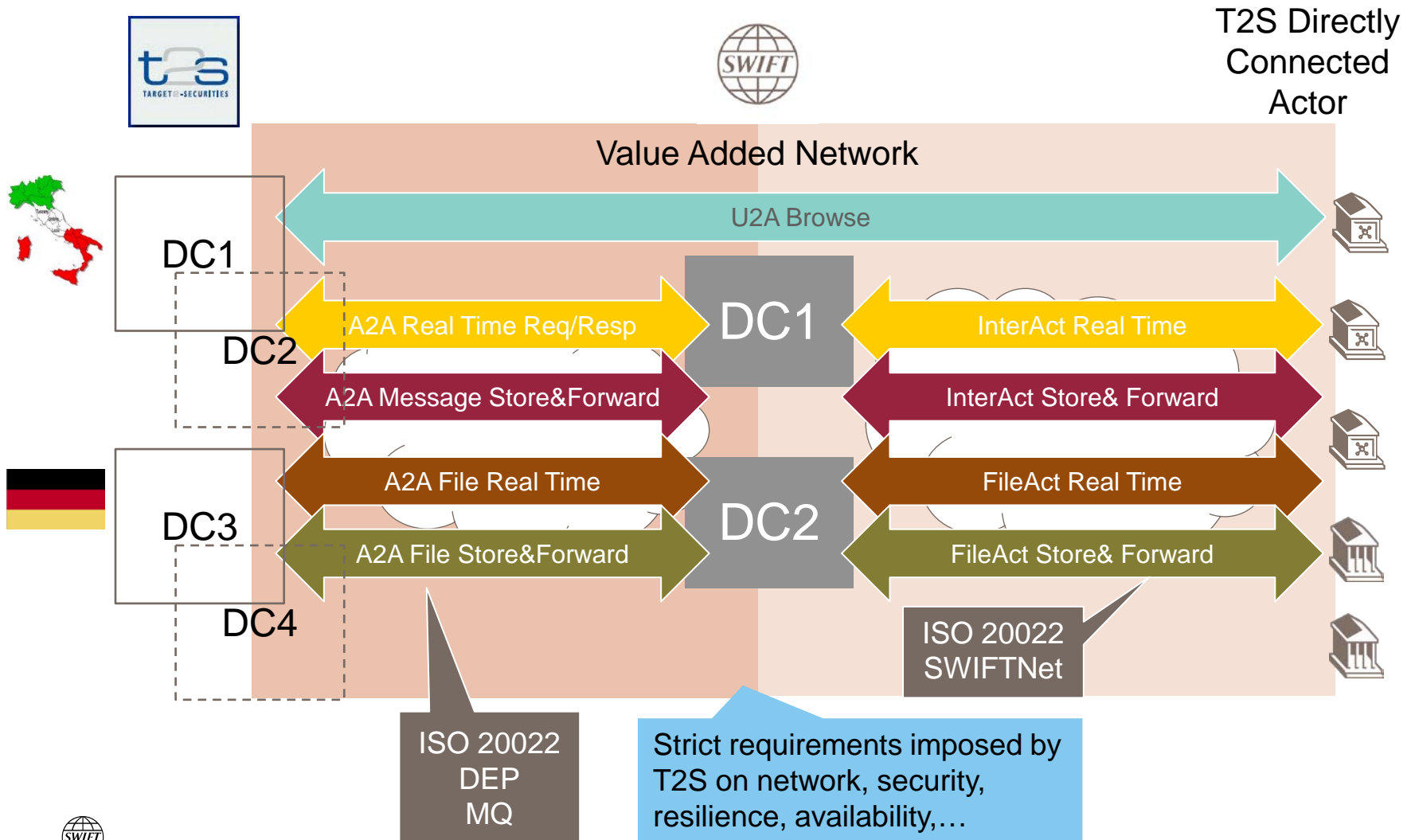
SWIFT's VAN Solution for T2S

Messaging Services – A2A and U2A



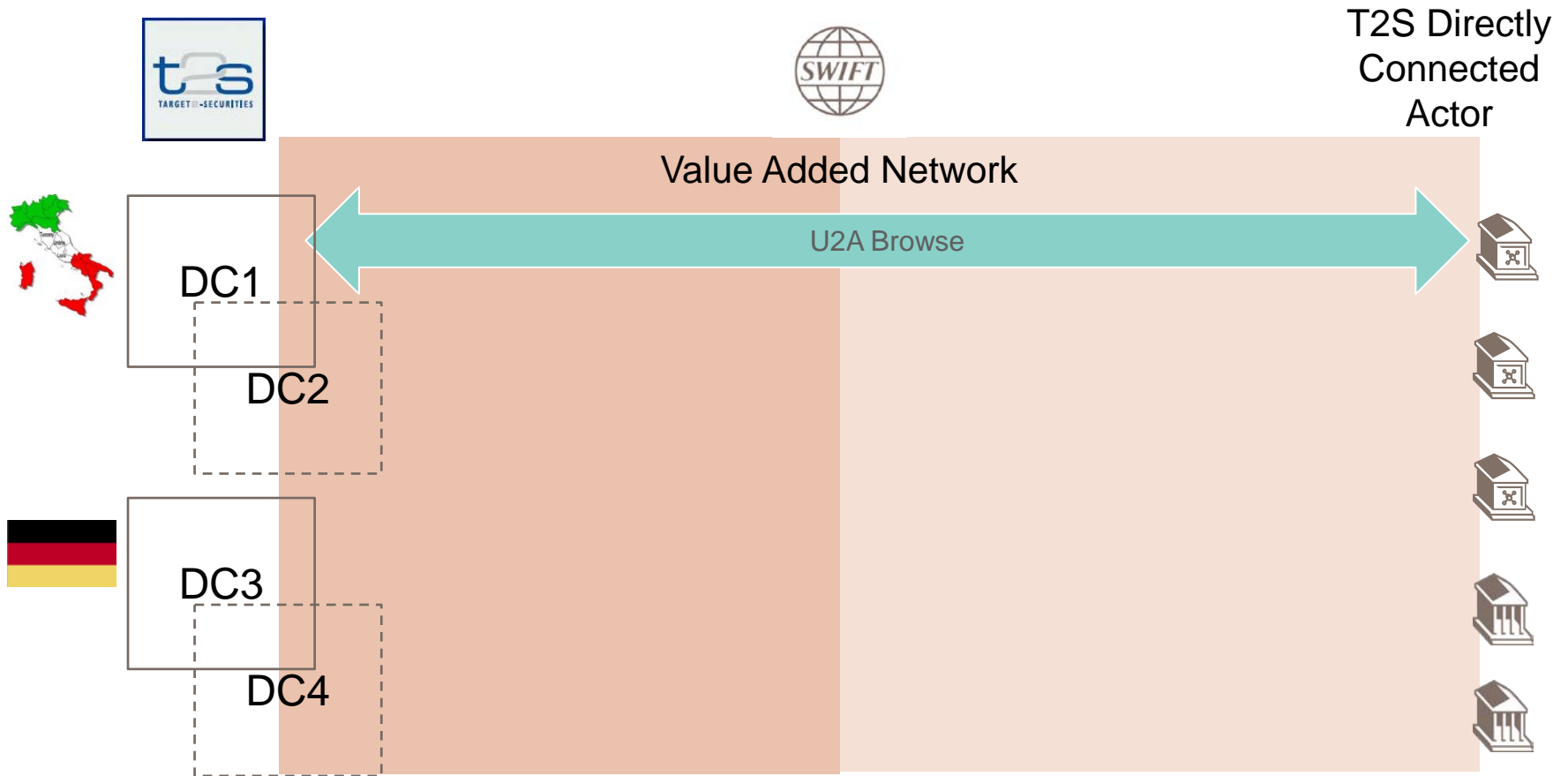
SWIFT's VAN Solution for T2S

Messaging Services – detailed view on A2A



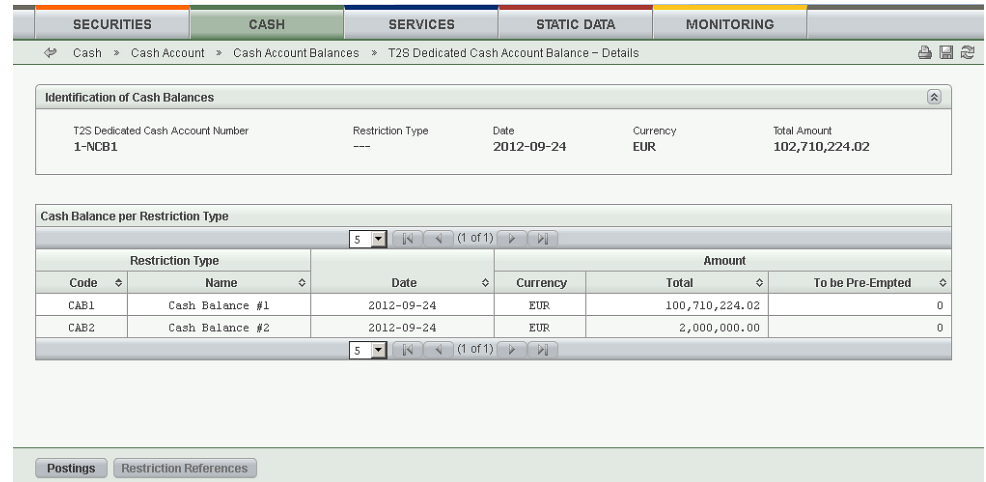
SWIFT's VAN Solution for T2S

Messaging Services – detailed view on U2A



T2S User to Application (U2A)

What is it?



The screenshot displays the T2S Graphical user interface. At the top, there are tabs for SECURITIES, CASH, SERVICES, STATIC DATA, and MONITORING. The CASH tab is selected. Below the tabs, a breadcrumb trail shows the navigation path: Cash > Cash Account > Cash Account Balances > T2S Dedicated Cash Account Balance - Details. The main content area is titled 'Identification of Cash Balances' and contains a table with the following data:

T2S Dedicated Cash Account Number	Restriction Type	Date	Currency	Total Amount
1-NCB1	---	2012-09-24	EUR	102,710,224.02

Below this, there is a section titled 'Cash Balance per Restriction Type' with a dropdown menu set to 'S' and a page indicator '(1 of 1)'. It contains a table with the following data:

Restriction Type		Date	Currency	Amount	
Code	Name			Total	To be Pre-Empted
CAB1	Cash Balance #1	2012-09-24	EUR	100,710,224.02	0
CAB2	Cash Balance #2	2012-09-24	EUR	2,000,000.00	0

At the bottom of the interface, there are two buttons: 'Postings' and 'Restriction References'.

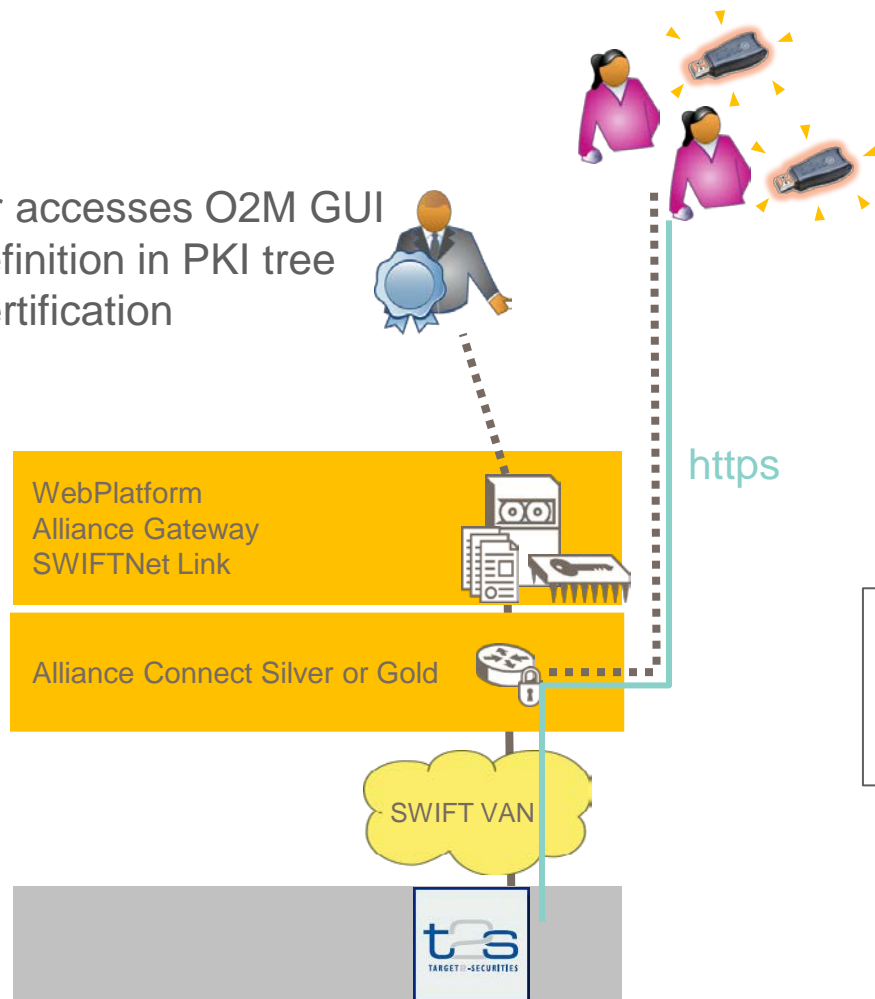
- T2S Graphical user interface
- Provides **Browse** access to all functionality also available in A2A mode + additional features (querying and maintaining data)
- Business functionality most relevant to Payment Banks:
 - Liquidity management
 - Static data

T2S User to Application (U2A)

SWIFT customer footprint

Security Officer accesses O2M GUI

- End user definition in PKI tree
- Setup for certification



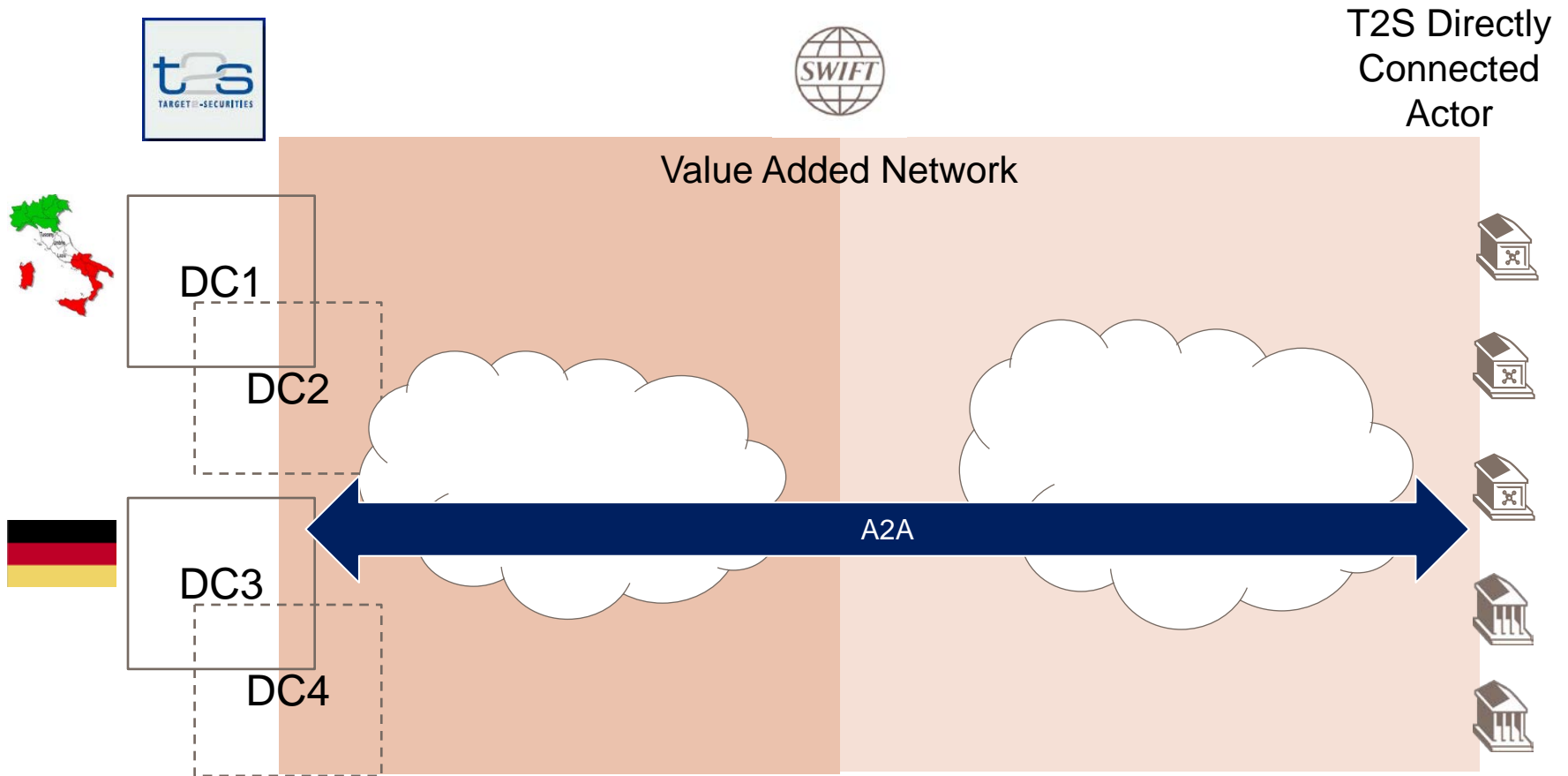
Operators

- USB personal token
- Internet Explorer (or other supported browser) on the user PC

Some installation and setup to be performed such as USB drivers on user PC, .pac browser configuration file on user PC, Firewall rules

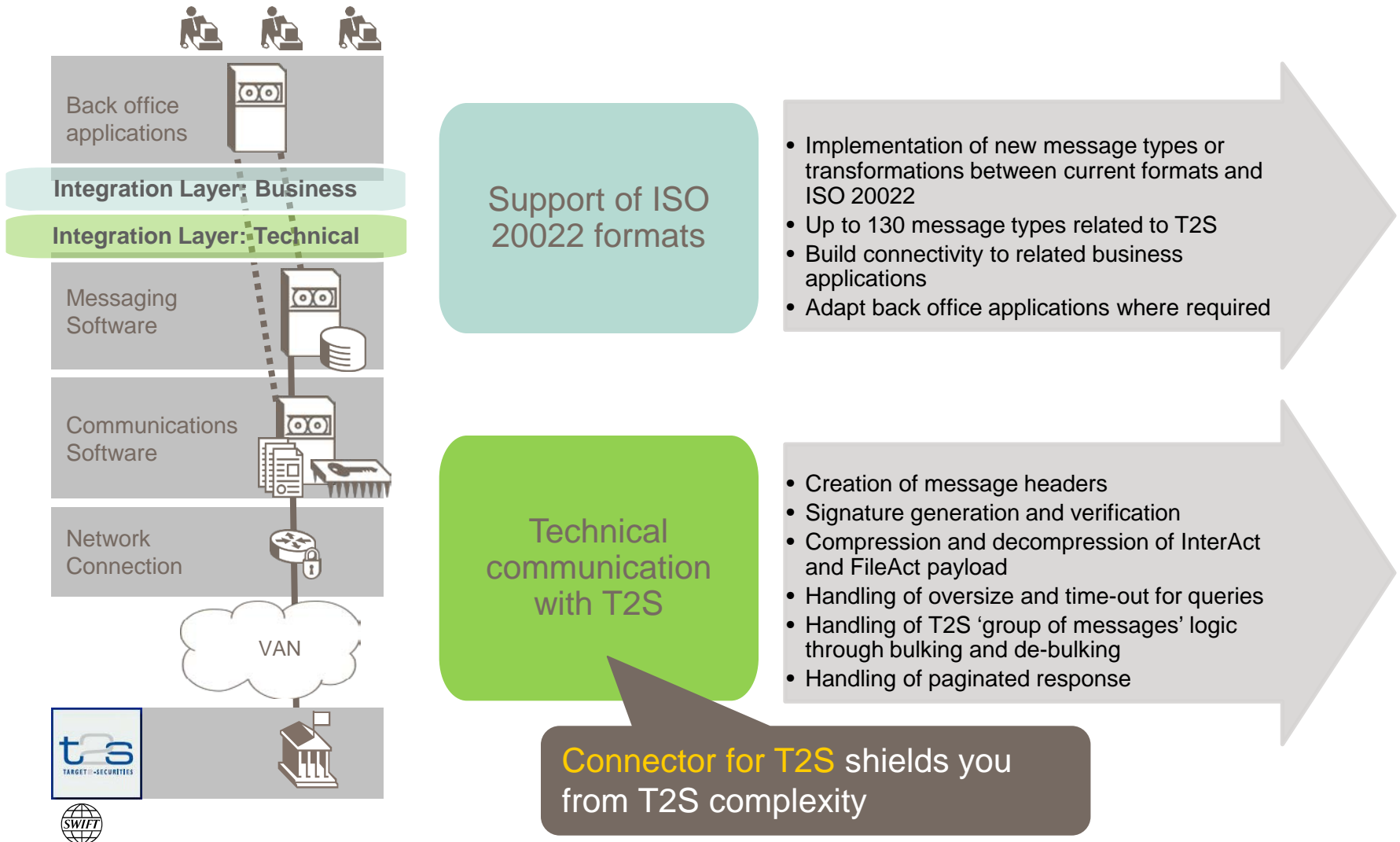
SWIFT's VAN Solution for T2S

Messaging Services – focus on A2A set up

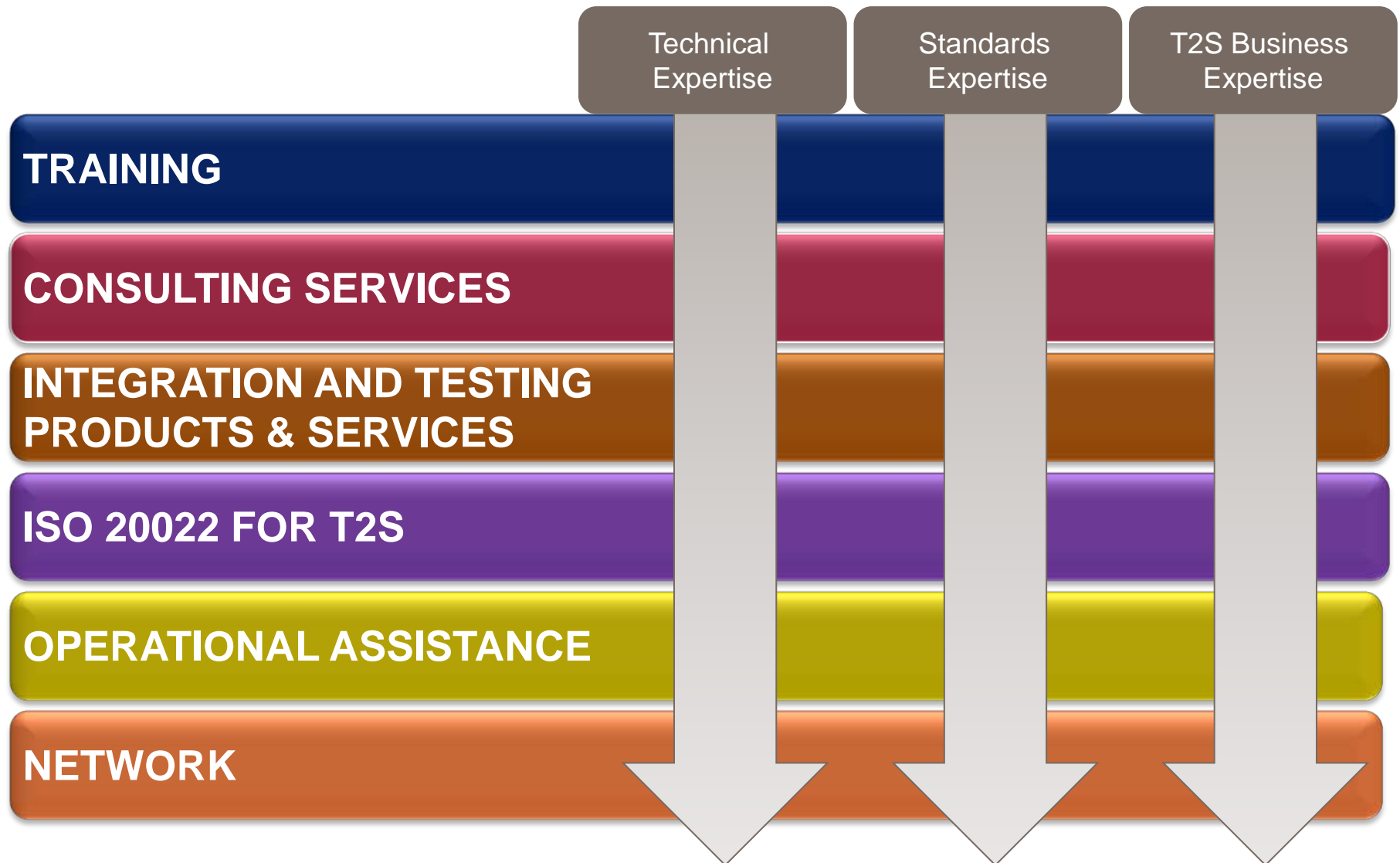


A2A connectivity to T2S

Related integration activities

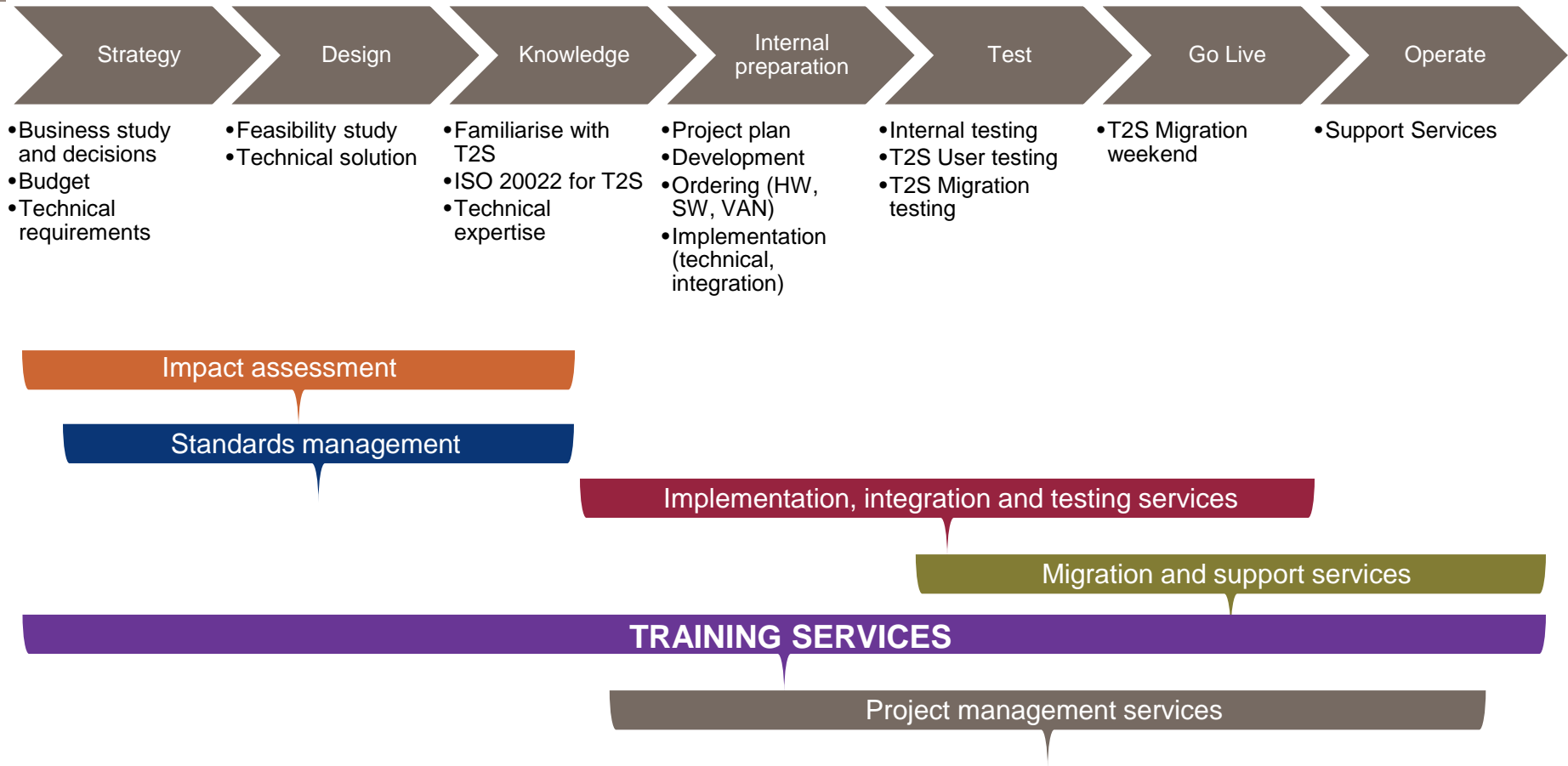


SWIFT offering for cash DCPs in T2S

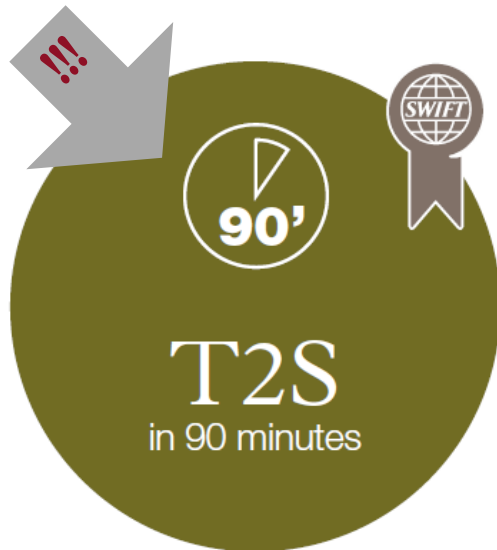


SWIFT Services

With you at every step of the way



Get ready for T2S with SWIFT Training



- > What is T2S, what is its purpose and how will you be impacted?
- > How does T2S work and how is SWIFT involved?



- > ISO 15022 enhanced messages, the new processes and flows behind T2S
- > Case scenarios to illustrate new guidelines and points of attention for implementation



- > ISO 20022 for securities in the settlement and reconciliation lifecycles
- > Case scenarios to illustrate detailed message content



Get ready for T2S with SWIFT Training

New!



- > Use of BAH both for securities and payments ISO 20022 messages
- > The chain and various scenarios between participants, CSDs and the T2S platform



- > Settlement transaction, maintenance and restriction lifecycle and external settlement in T2S
- > Case scenarios to illustrate T2S business processes and message flows in the core business areas

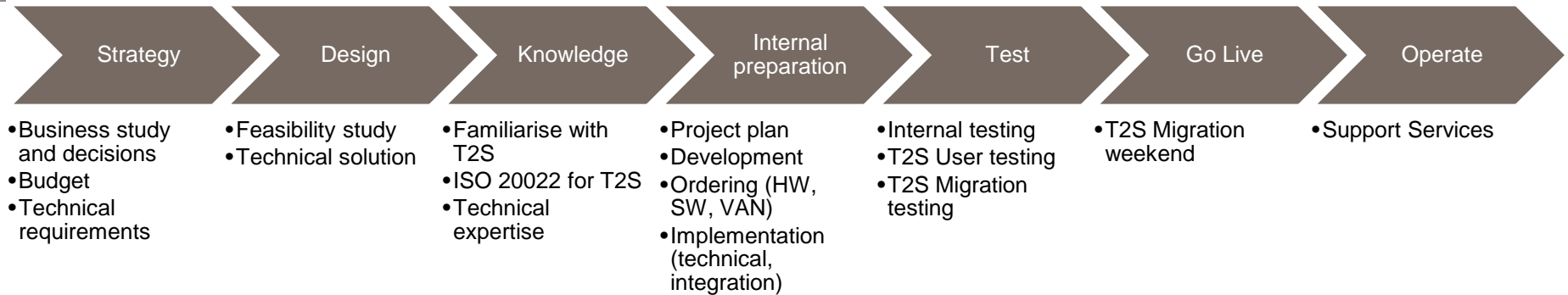


- > Cash and liquidity management, autocollateralisation and bilateral collateral management in T2S
- > Case scenarios to illustrate T2S business processes and message flows in the core business areas



SWIFT Services

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IMPACT ASSESSMENT

Standards management

Implementation, integration and testing services

Migration and support services

Training services

Project management services



www.swift.com/products_services/industry_initiatives/target2_securities_overvi

Impact assessment for T2S

Overview

Business Impact Assessment

- T2S business processes in the area of liquidity management.
- Exploring the message flows between a cash DCP and T2S from account creation to the end of day cash sweep procedures.
- Defining the new message requirements underlying the future state business model.

Targeted areas

- Liquidity management operations
- Queries and reports
- Auto-collateralisation principles
- Account structure
- End-of-day cash sweep operations
- T2S accounting day
- Focus on message content and message workflows

Volume projections and message transformation efforts estimates

- Provide an estimation of future volumes and optimised messaging model in a post-T2S environment.
- Identify the messages that need to be implemented and the integration and the infrastructure needs.



Liquidity transfers in T2S

	Execution	Frequency	From T2S side	From T2 side
Immediate Liquidity Transfer Orders	Immediate execution	Once	Outbound Internal	Inbound* Outbound**
Predefined Liquidity Transfer Orders	Time/Date Business Event	Once	Outbound	N/A
Standing Liquidity Transfer Order	Time/Date Business Event	On a regular basis	Outbound	Inbound*** (only start of business day)

*Inbound via T2SI – camt.050 (core service of T2)

** Outbound via T2SI – camt.050 or via MT 202 (Value-added service of T2)

***Inbound Standing Liquidity Transfer Order via Static data in ICM (core service of T2)



Payment Banks in T2S

Functions and Communication channels

Function	Activity area	Communication channel
Securities eligibility for client-collateralisation	Static data	T2S (A2A/U2A)
Securities valuation for client-collateralisation	Static data	T2S (A2A/U2A)
CMB Configuration	Static data	T2S (U2A)
CMB Limits (for PB clients)	Static data	T2S (A2A/U2A)
Release of reimbursement	Client-collateralisation	T2S (A2A/U2A)
Liquidity transfers – outbound (from T2S), internal (between DCA)	Liquidity management	T2S (A2A/U2A)
Liquidity monitoring - Notifications	Liquidity management	T2S (A2A)
Liquidity monitoring – Reports (cash, balances, limits,...)	Liquidity management	T2S (A2A: Push/Pull) T2S (U2A: Pull)
Liquidity monitoring – Queries (intraday balances, limits,...)	Liquidity management	T2S (A2A/U2A)
Liquidity transfers - inbound/outbound	Liquidity management	T2 to T2S
Liquidity monitoring - Notifications, Queries (intraday balances)	Liquidity management	T2 to T2S
Eg: CMB, Liquidity transfers	Static data, Client-collateralisation, Liquidity management	NCB to T2S
Eg: Liquidity monitoring - reports	Static data, Client-collateralisation, Liquidity management	CSD to T2S

Functions in **bold** are performed at minimum

Potential offering from NCBs and CSDs for Payment Banks activities in T2S

Message selection and transformation efforts estimates

Implementation Effort	Business process	Message type	Message category	Message name	Message type	New business process	Message type	Change	MT equivalent	Info	CSD relevance	Average size (KB)
Simple	Reconciliation	Account Mgt	Report	acmt.025 AccountQueryList	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Account Mgt	Report	acmt.026 AccountListReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.003 GetAccount	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.005 GetTransaction	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.009 GetLimit	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.018 GetBusinessDayInformation	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.024 ModifyStandingOrder	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.025 Receipt	TRUE	FALSE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.050 LiquidatingCreditTransfer	TRUE	FALSE	Y	A2A	MT2002	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.051 LiquidatingDebitTransfer	TRUE	FALSE	Y	A2A	MT2002	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.052 Bank To Customer Account Report	TRUE	FALSE	Y	A2A	MT940	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.053 Bank To Customer Statement	TRUE	FALSE	Y	A2A	MT940	O	0	0
Simple	Reconciliation	Cash Mgt	Confirmation	camt.054 Bank To Customer Debit Credit Notification	TRUE	FALSE	Y	A2A	MT900	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.064 Limit Utilisation Journal Query	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.065 Limit Utilisation Journal Report	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.066 IntraBalanceMovementInstruction	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	StatusAdviceNo	camt.067 IntraBalanceMovementStatusAdvice	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Confirmation	camt.068 IntraBalanceMovementConfirmation	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.069 GetStandingOrder	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.072 IntraBalanceMovementModificationRequest	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Instruction	camt.074 IntraBalanceMovementCancellationRequest	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Admin. Exception	camt.077 BillingReportRequest (former InvoiceQuery)	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Admin. Exception	camt.078 BillingReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.080 IntraBalanceMovementQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.081 IntraBalanceMovementModificationQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Query	camt.082 IntraBalanceMovementCancellationQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.092 IntraBalanceMovementCancellationReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.094 IntraBalanceMovementPostingReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Cash Mgt	Report	camt.095 IntraBalanceMovementPendingReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Collateral Mgt	Query	colr.001 CollateralValueQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Collateral Mgt	Report	colr.002 CollateralValueReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Admin. Exception	Admin. Exception	head.001 BusinessApplicationHeader	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Admin. Exception	Admin. Exception	head.002 BusinessFileHeader	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Query	reda.010 SecurityQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Report	reda.012 SecurityReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Query	reda.016 PartyQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Report	reda.017 PartyReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Query	reda.019 SecuritiesAccountQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Reference Data	Report	reda.021 SecuritiesAccountReport	TRUE	TRUE	Y	A2A	TRUE	O	0	0
Simple	Reconciliation	Securities Mgt	Report	semt.002 SecuritiesBalanceStatusReport	TRUE	FALSE	Y	A2A	MT535	O	0	48.3
Simple	Reconciliation	Securities Mgt	Instruction	semt.013 IntraPositionMovementInstruction	TRUE	FALSE	Y	A2A	MT535	O	0	41.1
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.014 IntraPositionMovementStatusAdvice	TRUE	FALSE	Y	A2A	MT524	O	0	22.1
Simple	Reconciliation	Securities Mgt	Confirmation	semt.015 IntraPositionMovementConfirmation	TRUE	FALSE	Y	A2A	MT544	O	0	25.5
Simple	Reconciliation	Securities Mgt	Report	semt.016 IntraPositionMovementPostingReport	TRUE	FALSE	Y	A2A	MT508	O	0	25.7
Simple	Reconciliation	Securities Mgt	Report	semt.017 SecuritiesTransactionPostingReport	TRUE	FALSE	Y	A2A	MT536	O	0	49.9
Simple	Reconciliation	Securities Mgt	Report	semt.018 SecuritiesTransactionPendingReport	TRUE	FALSE	Y	A2A	MT537	O	0	97.9
Simple	Reconciliation	Securities Mgt	Report	semt.019 SecuritiesSettlementTransactionAlignmentRequest	TRUE	FALSE	Y	A2A	MT538	O	0	85
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.020 SecuritiesMessageCancellationAdvice	TRUE	FALSE	Y	A2A	MT509	O	0	2.34
Simple	Reconciliation	Securities Mgt	Query	semt.024 SecuritiesAccountPositionQuery	TRUE	FALSE	Y	A2A	MT544	O	0	5
Simple	Reconciliation	Securities Mgt	Query	semt.026 SecuritiesSettlementTransactionQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Query	semt.028 IntraPositionMovementQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Query	semt.030 SecuritiesSettlementConditionsModificationRequestQuery	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Report	semt.031 SecuritiesSettlementConditionsModificationRequestReport	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Report	semt.033 SecuritiesTransactionCancellationRequestReport	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Report	semt.034 IntraPositionMovementPendingReport	TRUE	FALSE	Y	A2A	MT509/44.4778	O	0	5
Simple	Reconciliation	Securities Mgt	Response	semt.040 SecuritiesAccountPositionResponse	TRUE	TRUE	Y	A2A	TRUE	O	0	5
Simple	Reconciliation	Securities Mgt	Instruction	semt.020 SecuritiesTransactionCancellationRequest	TRUE	FALSE	Y	A2A	MT540.43	O	0	42.6
Simple	Reconciliation	Securities Mgt	Query	semt.021 SecuritiesTransactionStatusQuery	TRUE	FALSE	Y	A2A	MT543	O	0	11.7
Simple	Reconciliation	Securities Mgt	Instruction	semt.022 SecuritiesSettlementTransactionInstruction	TRUE	FALSE	Y	A2A	MT540.43	O	0	5
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.024 SecuritiesSettlementTransactionStatusAdvice	TRUE	FALSE	Y	A2A	MT548	O	0	78.1
Simple	Reconciliation	Securities Mgt	Confirmation	semt.025 SecuritiesSettlementTransactionConfirmation	TRUE	FALSE	Y	A2A	MT544.47	O	0	85.8
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.027 SecuritiesTransactionCancellationRequestStatusAdvice	TRUE	FALSE	Y	A2A	MT549	O	0	5
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.028 SecuritiesSettlementTransactionAlignmentRequestStatusAdvice	TRUE	FALSE	Y	A2A	MT578	O	0	111
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.029 SecuritiesSettlementAlignmentRemovalAdvice	TRUE	FALSE	Y	A2A	MT578	O	0	315
Simple	Reconciliation	Securities Mgt	Instruction	semt.030 SecuritiesSettlementConditionsModificationRequest	TRUE	FALSE	Y	A2A	MT530	O	0	23.2
Simple	Reconciliation	Securities Mgt	StatusAdviceNo	semt.031 SecuritiesSettlementConditionsModificationStatusAdvice	TRUE	FALSE	Y	A2A	MT549	O	0	5
Simple	Reconciliation	Securities Mgt	Instruction	semt.032 SecuritiesSettlementTransactionGenerationNotification	TRUE	FALSE	Y	A2A	MT540	O	0	5

69 messages selected to cover all relevant processes

Implementation project estimates

Integration complexity	Number of message types
Simple	15
Moderate	22
Complex	32
Total	69

Activities	Effort
Project Management Preparation	
Technical Analysis	
Functional Requirements Mapping Analysis	152

Activities	Effort
Project Management	
Technical Implementation	
Mapping Implementation Unit Tests	

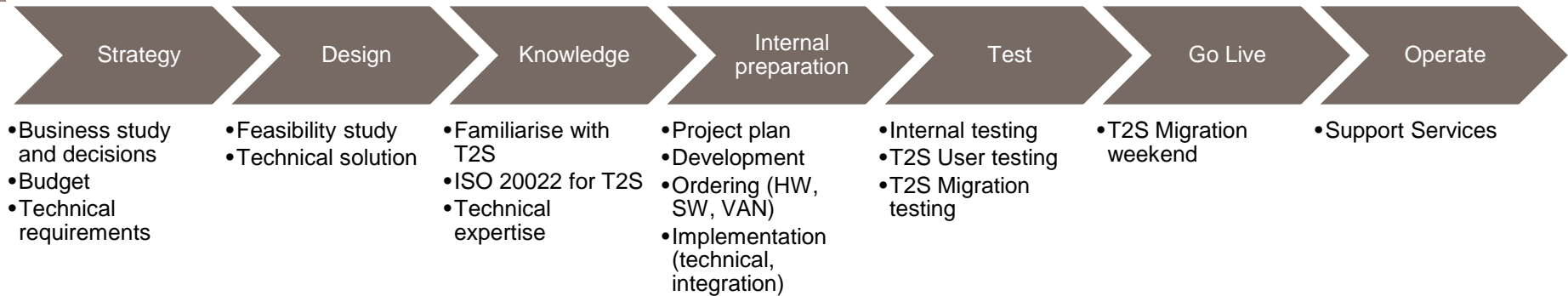
Quality Assurance	
End-to-end Flow Acceptance Tests	
Test Data Collection	
Test Documentation	

	506
TOTAL	658



SWIFT Services

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Impact assessment

STANDARDS MANAGEMENT

Implementation, integration and testing services

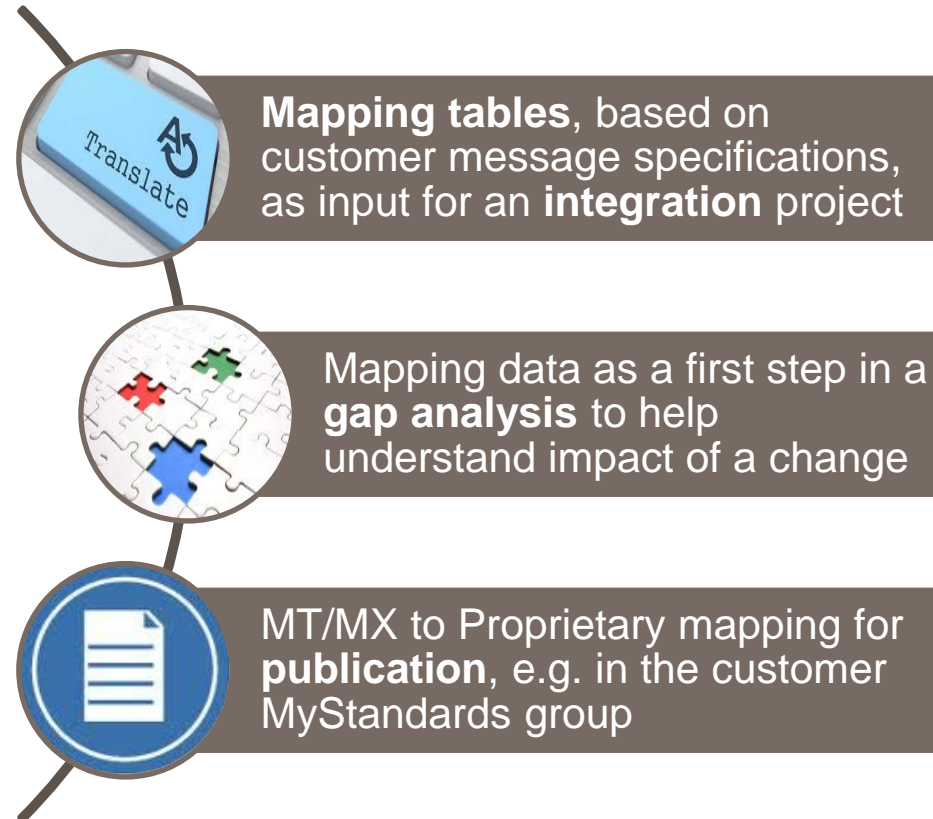
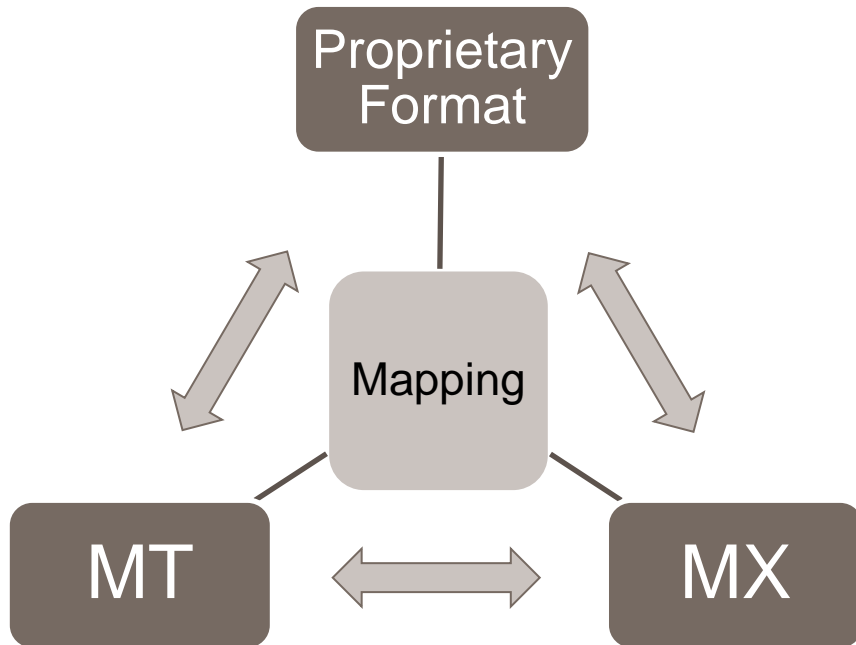
Migration and support services

Training services

Project management services



Purpose of Mapping



Where does Standards Mappings fit in our portfolio of Consulting Services



Readiness
Portal



Business Case

**Business and
Technical
Impact
assessment**

**Community
consultation
and
implementation
strategy**

**Solution
design**

**New message
development
& registration**

Gap analysis

**Business
mapping**

**Market
practice
management**

**Implemen-
tation
services**

Integration services

**Testing
assistance**

**Community
testing
services**

**Go Live
assistance**

**Support
Services**

Standards Mapping can be an
element of various Consulting
Services

End-to-end project management

Training and knowledge transfer

Generic ISO 20022 courses and Initiative specific training



Standards Mapping Process overview

1. Scope and project initiation

- Agree Message flows to be mapped
- Catalogue Message Definitions of source
- Agree equivalent target formats
- Obtain customer specifications
- Agree Project Plan



2. Formalise Message Definitions

- Load source and/or target definitions into MyStandards collection
- Define restrictions as per customer specifications
- Verify consistency with customer specifications



3. Perform Mapping Analysis

- For each Target message:
- Define source field
- Define conversion logic from source to target
- Annotate Target message definition with source and logic



4. Generate Mapping Report

- Show translation from source to target format
- Excel is usual report format
- Tailor report format to customer needs and preferences



5. Present and Review final Mapping

- Prepare draft set of mappings
- Review with target audience for format, clarity, ease of use and manipulation
- Update of the mapping, depending on output from review round(s)

Mapping Report

Spreadsheets from MyStandards

Name	Sequence / Choice	Type / Code	Mult.	XML Tag	Annotation Sequence	Annotation Field Tag	Annotation Format Option	Annotation Description	Annotation Format	Annotation Qualifier	Annotation Code	Annotation Sequence	Annotation Field name	Annotation Data Code Qualifier
Transaction Identification Details	Sequence	Settlement [1..1]		<TxIdDtls>	A1	20	C	Reference	:4!c/16x	RELA		-548-LINK-SUBSQA1	-548-LINK-MESSAGE.	-548-LINK-
Account Owner Transaction Identification	Sequence	Max35Text [1..1]		<AcctOwnrTxId>	A1	20	C	Reference	:4!c/16x	MITI		-548-LINK-SUBSQA1	-548-LINK-MESSAGE.	-548-LINK-
Market Infrastructure Transaction Identification	Sequence	Max35Text [0..1]		<MktInfstrctrTxId>	A1	20	C	Reference	:4!c/16x	MITI		-548-LINK-SUBSQA1	-548-LINK-MESSAGE.	-548-LINK-
Securities Movement Type	Choice	ReceiveDe [1..1]		<SeciesMvmntTp>	B	22	H	Indicator	:4!c/4!c	REDE	DELI	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-REDE
Delivery [DELI]		DELI			B	22	H	Indicator	:4!c/4!c	REDE	RECE	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-REDE
Receive [RECE]		RECE			B	22	H	Indicator	:4!c/4!c	REDE	RECE	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-REDE
Payment	Choice	DeliveryRe [1..1]		<Pmt>	B	22	H	Indicator	:4!c/4!c	PAYM	FREE	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-PAYM
Separate Settlement [FREE]		FREE			B	22	H	Indicator	:4!c/4!c	PAYM	APMT	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-PAYM
Against Payment Settlement [APMT]		APMT			B	22	H	Indicator	:4!c/4!c	PAYM	APMT	-548-SETTRAN-SEQB.	-548-TRANSACTION-IND.	-548-PAYM
Pool Identification	Sequence	Max35Text [0..1]		<PoolId>	A1	20	C	Reference	:4!c/16x	POOL		-548-LINK-SUBSQA1	-548-LINK-MESSAGE.	-548-LINK-
Corporate Action Event Identification	Sequence	Max35Text [0..1]		<CorpActnEvtId>	A1	20	C	Reference	:4!c/16x	CORP		-548-LINK-SUBSQA1	-548-LINK-MESSAGE.	-548-LINK-
Number Counts	Choice	NumberCo [0..1]		<NbCounts>				No equivalence in MT 548						
Total Number	Sequence	TotalNumb [1..1]		<TrfNb>										
Current Instruction Number	Sequence	Exact3Numb [1..1]		<CurInstrNb>										
Total Of Linked Instructions	Sequence	Exact3Numb [1..1]		<TrfOfLkdInstrs>										
Linkages	Sequence	Linkages17 [0..1]		<Lnkgs>				No equivalence in MT 548						
Processing Position	Choice	Processing [0..1]		<ProgPos>				No equivalence in MT 548						
Code	Choice	Processing [1..1]		<Cd>										



ISO20022



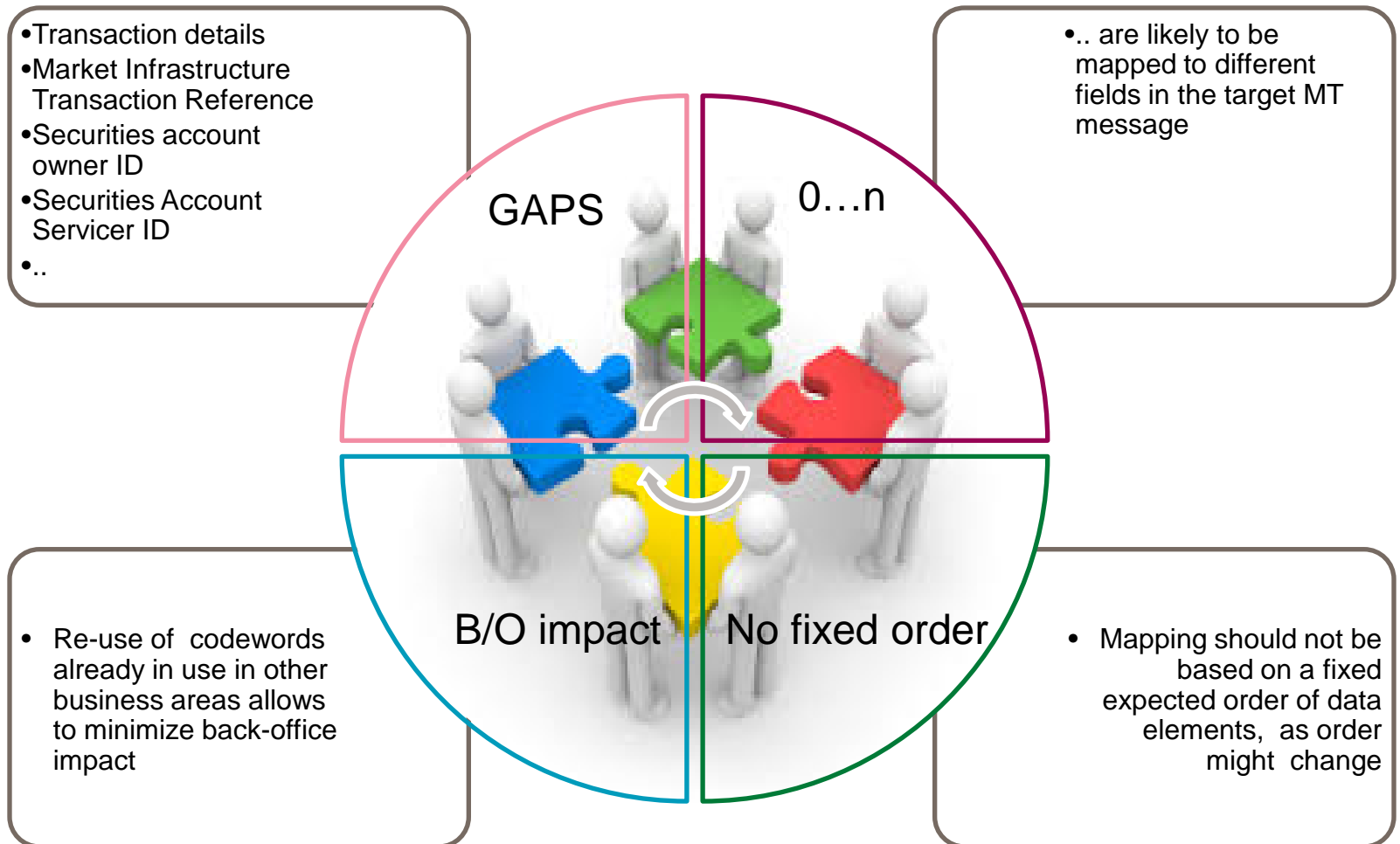
ISO15022



Internal customer format

MX-MT mapping 'hurdles'

Liquidity management in T2S



Mapping table extract

camt.052.001.03 into MT 941

	Index	Sequence / Choice	Type / Code	Mult.	XML Tag	Annotation n Sequencer (<<MT)	Annotation n Field T (<<MT)	Annotation Format Option (<<MT)	Annotation Description (<<MT Cash>>)	Annotation n Format (<<MT)	Annotation Qualifier/Subfield (<<MT)	Annotation n Code (<<MT)	Annotation n Message Type	Definition
Projected Cash Balance [PCAS]			PCAS				86		Projected Cash Balance New qualifier in field 86	/PCAS//!a6!n3!a15d	/PCAS/		941	Sum of projected cash balance on the T2S dedicated cash account, i.e. sum of cash balance + credit settlement instructions - debit liquidity transfer orders - debit settlement instructions.
Amount Of Outstanding Intraday Credit [AOIC]			AOIC				86		Amount of Outstanding Intraday Credit New qualifier in field 86	/AOIC//!a6!n3!a15d	/AOIC/		941	Amount of outstanding intraday credit from auto-collateralisation for the T2S dedicated cash account.
Total Sum Projected Cash Balance And Outstanding Intraday Credit [SPCA]			SPCA				86		Total Project Cash Balance and Outstanding Intraday Credit New qualifier in field 86	/SPCA//!a6!n3!a15d	/SPCA/		941	Sum of projected cash balance + sum of outstanding intraday credit from auto-collateralisation.
Cash Balance [CASH]			CASH				62	F	Book Balance, corresponding to the Cash Balance of the DCA account	/!a6!n3!a15d			941	Sum of cash balance on the T2S dedicated cash account.

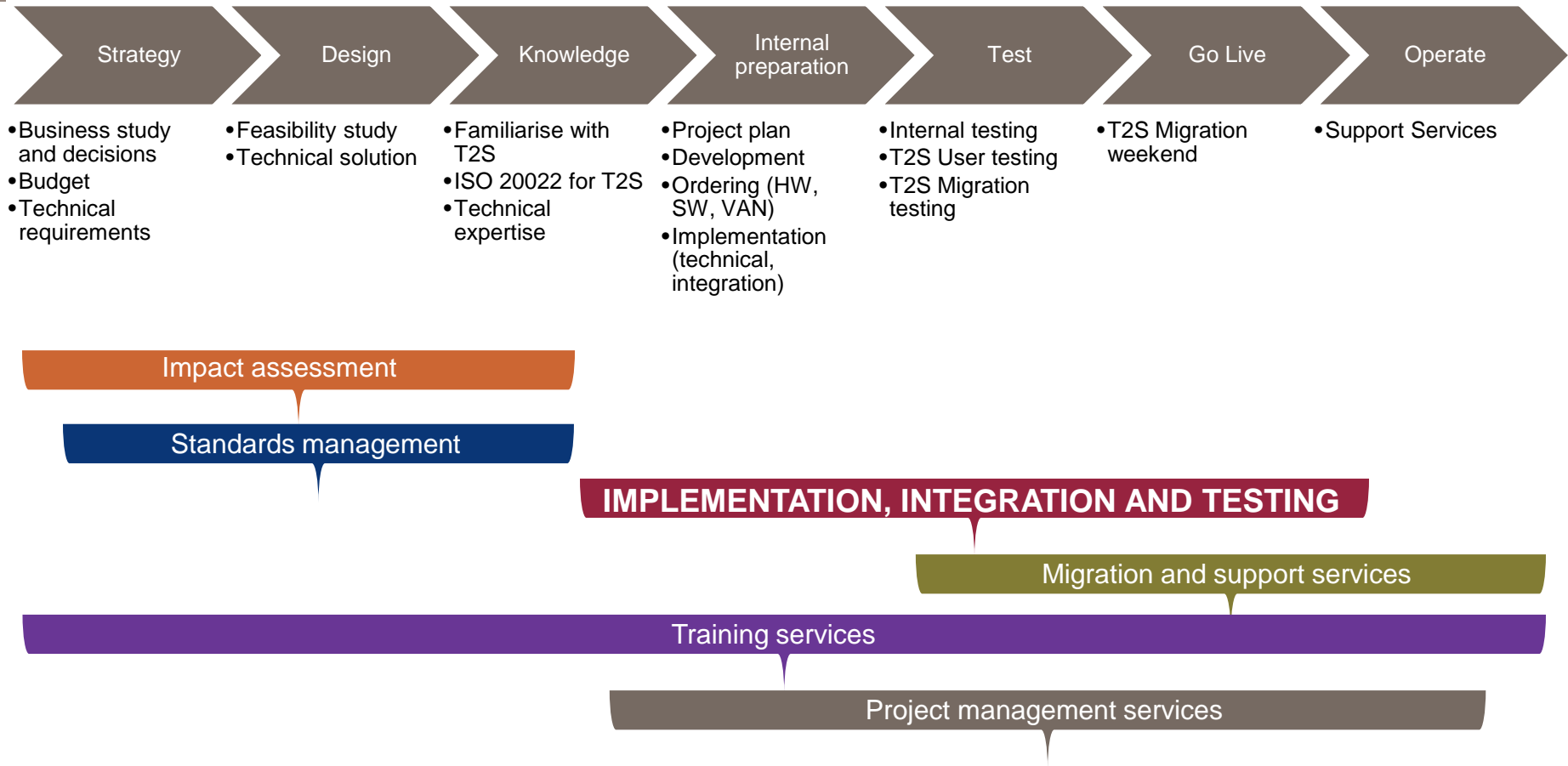
ISO 20022

FIN MT

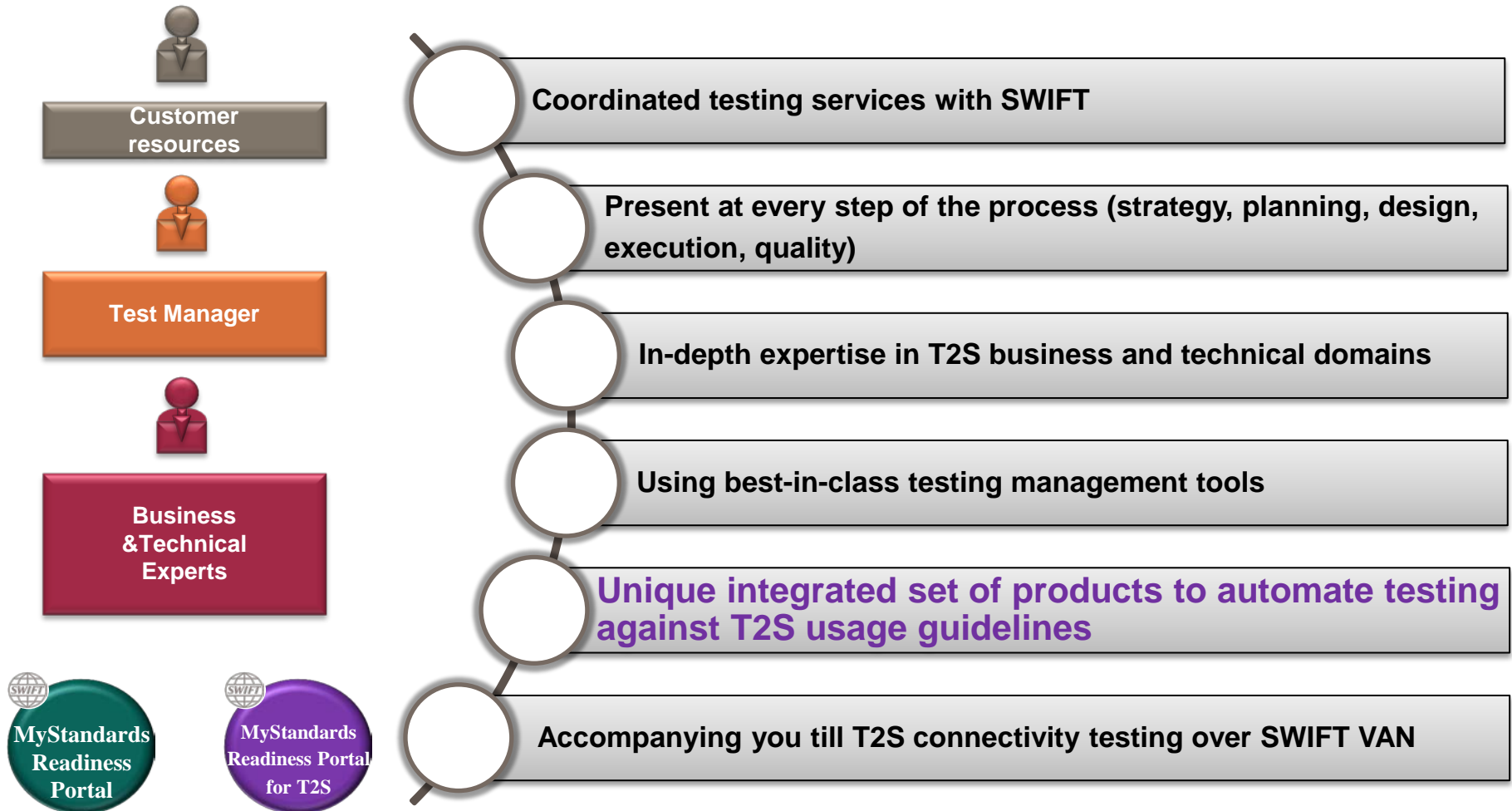


SWIFT Services

With you at every step of the way



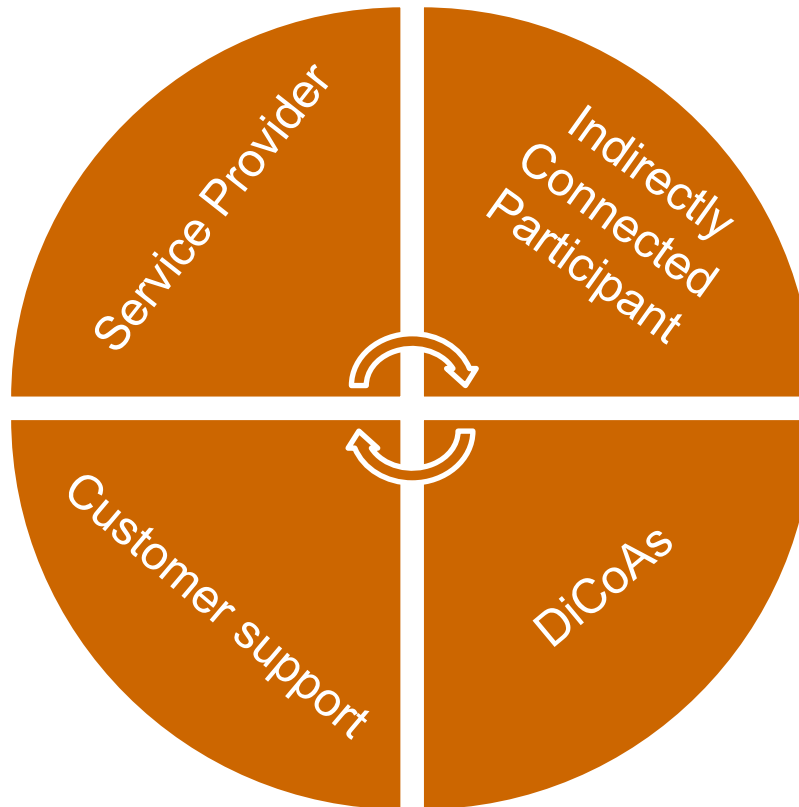
Getting Ready for T2S User Testing Execution



On-boarding

- On-boarding your staff and create expertise & knowledge
- Certification CSD / NCB
- Help the community get ready and on board.

- Support specific to T2S-related issues



- Access to central documentation
- Adopt ISO standards and shield your BO with transformation layer (integration)
- Testing / certification
- On-boarding over SWIFT (CUG)

- Registration process for DiCoAs

Check list to effectively connect to T2S and start testing...



▪ A2A access

What can be done **prior to VAN registration** opens for DCPs:

- ✓ Confirm your volumes assumptions
- ✓ Get a VAN quotation
- ✓ Get information on the service and select the environments to connect to
- ✓ Go through the subscription guides (both VAN and T2S)
- ✓ Consider an infrastructure sizing exercise with VAN to ensure that the infrastructure is properly sized for T2S activity
- ✓ Ensure capability to generate valid ISO messages in compliance with T2S usage guidelines
- ✓ Ensure capability to meet T2S technical requirements (header generation, signature etc).
- ✓ Get informed by your CSD and NCB of what T2S expects in terms of static data set up before operating in a testing environment .

▪ U2A access:

What can be done prior to VAN registration opens for DCPs:

- ✓ Order your tokens
- ✓ Go through the U2A set-by-step guide
- ✓ Security Officer to set up the tokens (check firewalls, put certificates, assign to physical users, ...).

After VAN registration opens for DCPs: same process as for A2A.

Only **after VAN registration** opens for DCPs:

- ✓ Fill in the registration form as described in the subscription guide
- ✓ Get approval from your CSD, NCB and then Eurosystem
- ✓ Get provisioned on the VAN service.
- ✓ Start entering data into T2S to set up testing environment



A2A and U2A registration and set up documentation



SWIFT's VAN Solution for T2S Subscription process

Step by step

For any A2A and U2A Customer

EXTERNAL PRESENTATION

BIC/DN in T2S messages for A2A
3 layers

'Layer3' => DN

Used within SWIFTNet services

→ is T2S Technical Address'

→ provide in SWIFT subscription & T2S registration

'Layer2' => BIC/DN

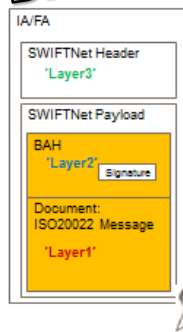
Used within BAH/BFH

→ is T2S Business Sender (BIC11) and T2S Business Signer (DN)

'Layer1' => BIC

Used within ISO20022 Message

→ are Party fields



Focus on DN complexity

How to subscribe

- Pre-requisite: have a T2S VAN Quotation obtained from SWIFT for each relevant BIC8.

The Quotation is mandatory. It captures T2S VAN volumes (which SWIFT is obliged to obtain from each DiCoA under the licence agreement signed with the Eurosystem), summarizes the price conditions to be applied to the specific DiCoA and its validity period.

- For every relevant BIC8: a user authorised to fill in e-orders on swift.com for the relevant BIC8(s) will fill in an e-order available at this link:

http://www.swift.com/ordering/old_ordering_configuration/existing_customers/subscribe_to_target2_securities.page?

- E-orders exist for either target2_securities or target2_securities

Pre-requisites and procedure

How to fill in the T2S VAN e-order (2/8)

Usual e-order info, except for the mandatory SWIFT Quotation reference



U2A setup steps with SWIFT - details

Steps	Description
(a) Registration with SWIFT to T2S connectivity services	Refer to section 5.2 Subscription of “ SWIFT’s VAN Solution for T2S Service Description ” document.
(b) Order personal tokens	Boxes of 10 personal tokens can be ordered/purchased on swift.com in the ordering section . You can use personal tokens that you already have, if those were ordered no earlier then Oct2013. See also screenshots .
(c) Create certificate DN	This step handled by the Security Officers using the SWIFTNet Online Operations Manager (O2M). Refer to section Certificate Management of “ O2M User Guide ” available on the SWIFT UHB. See also screenshots .
(d) Install token driver	The token driver installation package is available on the SWIFT Certificate Centre (www.swift.com/certificates) in the getting started section. Refer to the “ token Installation Guide ” available on the SWIFT UHB.
(e) Activate the token	This step is handled by the end-user using the SWIFT Certificate Centre, accessible over internet or MV-SIPN. Refer to “ SWIFT Certificate Centre portal user guide ” available on the SWIFT UHB. See also screenshots .
(f) Check Network configuration requirements	Refer to appendix A.2 of the “ SWIFT’s VAN Solution for T2S Service Description ” + Knowledge Base tip 5018711 – which URLs and IP addresses are used in the T2S U2A (Browse) flow .
(g) Define certificate DN in T2S static data	Refer to T2S documentation.
(h) Prepare end user workstation	Refer to appendix A.3 of the “ SWIFT’s VAN solution for T2S service description ” for the different requirements (.pac file, Browser settings, allow Java applet, system requirements)
(i) Access U2A	Refer to appendix A.1 of the “ SWIFT’s VAN solution for T2S service description ” for the URL of the different T2S U2A environments. See also screenshot .

BIC/DN in T2S messages for A2A

3 layers

'Layer3' => DN

Used within SWIFTNet services

➔ is T2S 'Technical Address'

➔ provide in SWIFT subscription & T2S registration

'Layer2' => BIC/DN

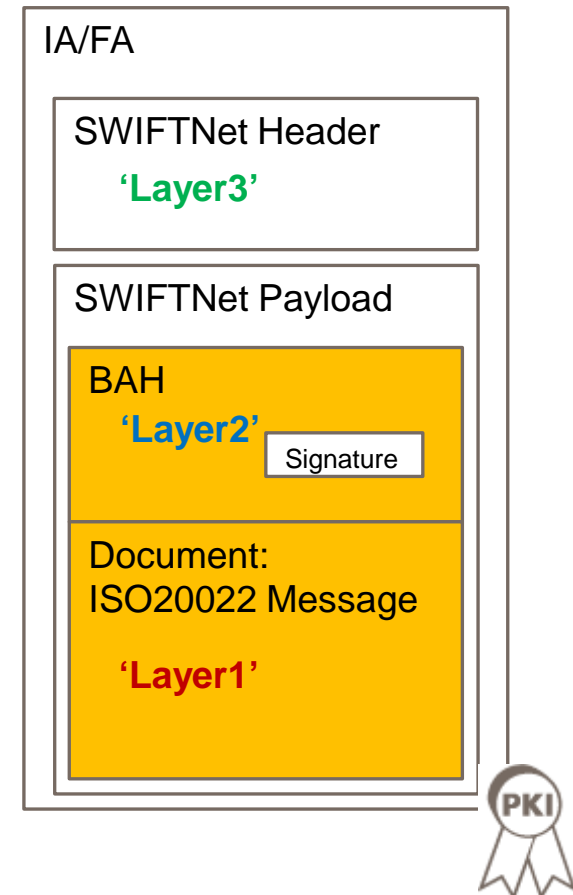
Used within BAH/BFH

➔ is T2S Business Sender (BIC11) and T2S Business Signer (DN)

'Layer1' => BIC

Used within ISO20022 Message

➔ are Party fields



Key Documents and Links

SWIFT

- SWIFT Information Centre for T2S, on swift.com ([here](#))
- SWIFT's training on T2S ([here](#))
- SWIFT's VAN Solution for T2S Service Description (available on demand)
- SWIFT's VAN Solution for T2S Subscription form ([here](#))
- Price List for SWIFT's VAN Solution for T2S ([here](#))
- MyStandards Readiness Portal for T2S ([here](#))
- Personal Token ordering form ([here](#))

T2S

- ECB Website ([here](#))
- T2S Connectivity Guide ([here](#))
- T2S Message Validation Service (for CSD/NCB, planned by July 2014)

Agenda

- Introduction

- TARGET2-Securities (T2S) and SWIFT
 - Payment Banks in T2S

- SWIFT's Solution for T2S

- Value Added Network (VAN)
 - User to Application (U2A) customer footprint
 - Application to Application (A2A) customer footprint
 - SWIFT Services

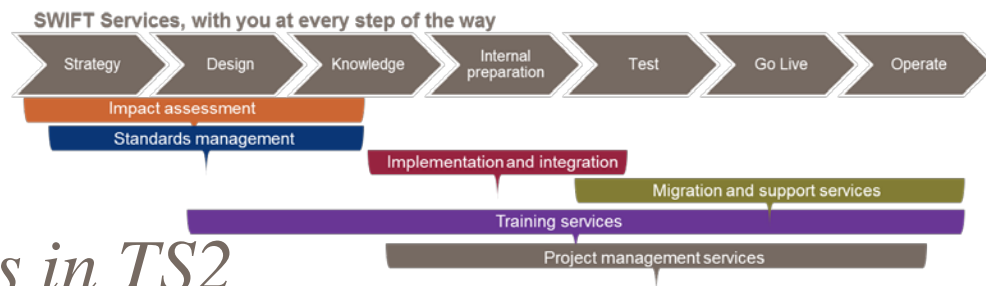
- Summary

- Q&A



Summary

Dedicated cash accounts in TS2



- Analyse your NCB/CSD offering for T2S
- Analyse the most cost-effective infrastructure set up to connect
 - User to Application (U2A)
 - Alliance Connect Silver or Gold
 - Alliance Gateway for access to PKI certificate management
 - Potentially Application to Application (A2A)
- USB personal tokens for U2A
- Leverage SWIFT products and services for T2S



Thank
you

Questions?
Please contact us on
swift.t2s.team@swift.com

