ISO 20022 Messaging Solutions

Collateral Management

January 16th 2018 - Fifth meeting of the AMI-SeCo HSG's Collateral Management Harmonisation Task Force (CMH-TF)

ISO 20022 and ISO 15022 Collateral Management offering
What is available…

- Current offering consists of two suite of messages, addressing both "bilateral" & "triparty" message standardisation requirements.

  - *Bilateral Collateral Management* messages are based on ISO 20022 development methodology covering x-asset & x-segment, life cycle activity

  - *Clearing* (ISO 20022) a few ISO 15022 MTs not used, background

  - *Triparty Collateral Management* messages are based on ISO 15022 Standards & in use for more than 10 years, globally.

Collateral Management

Processes	Messaging solutions	Coverage

Collateral Management

Processes

Upstream
- *Margining*
- *Eligibility*

Downstream
- *Settlement*
- *Reporting*
- *Reconciliation*

Messaging solutions

Bilateral Collateral Management
- *ISO 20022*
- *MX Messaging*

Tri-Party Collateral Management
- *ISO 15022*
- *MT Messaging*

Settlement and Reconciliation
- *ISO 15022 / 20022*
- *MT / MX Messaging*
- *Status linked reporting*
- *Asset movement*

Coverage

Multi asset class
Business line agnostic
Fully STP

CCP – Cleared flow
Clearing member
Buy side

Interoperable
Standardised

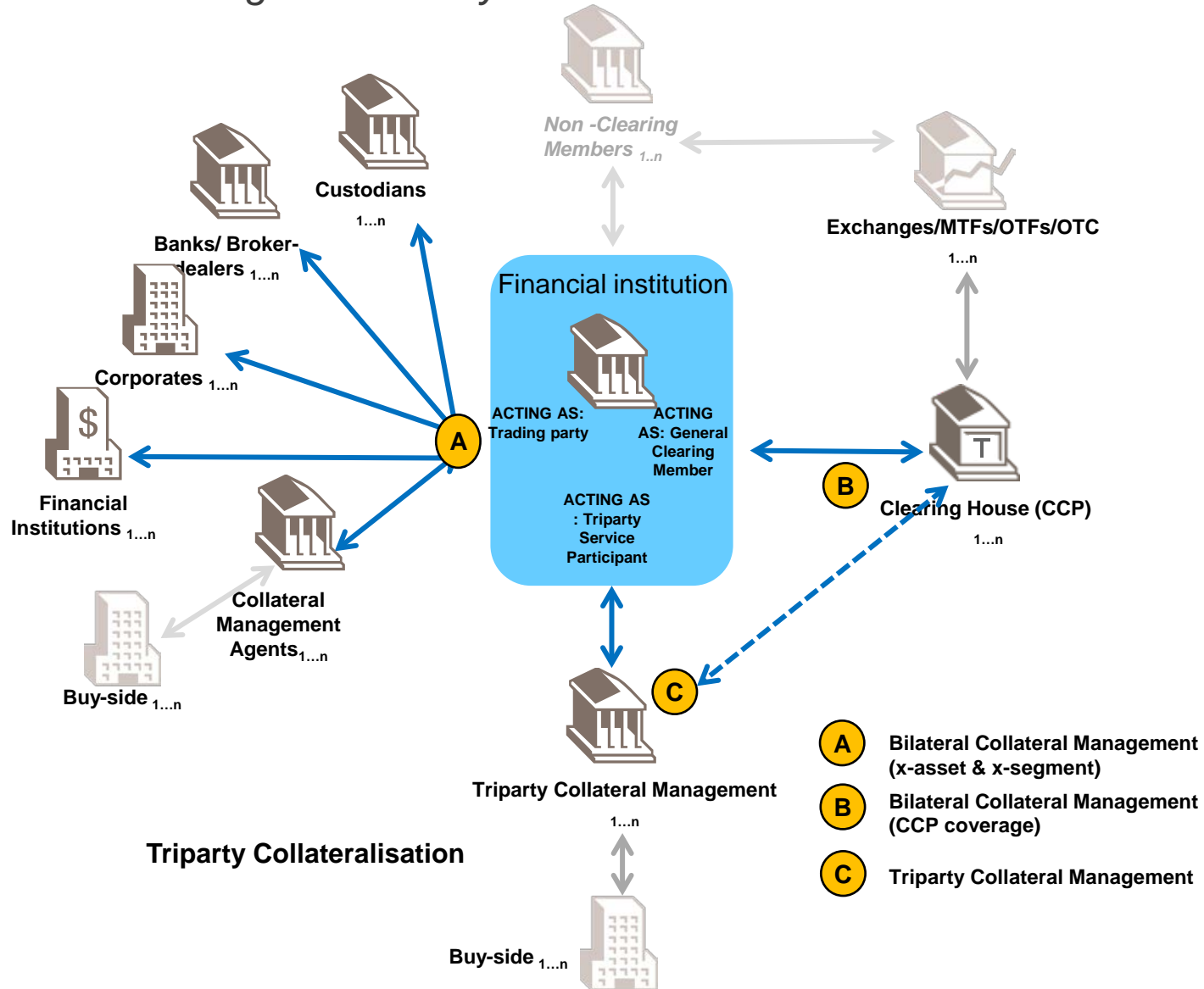*Bilateral (I) CSD flow*
CSD (I)CSD flow

Securities messages
Cat 5
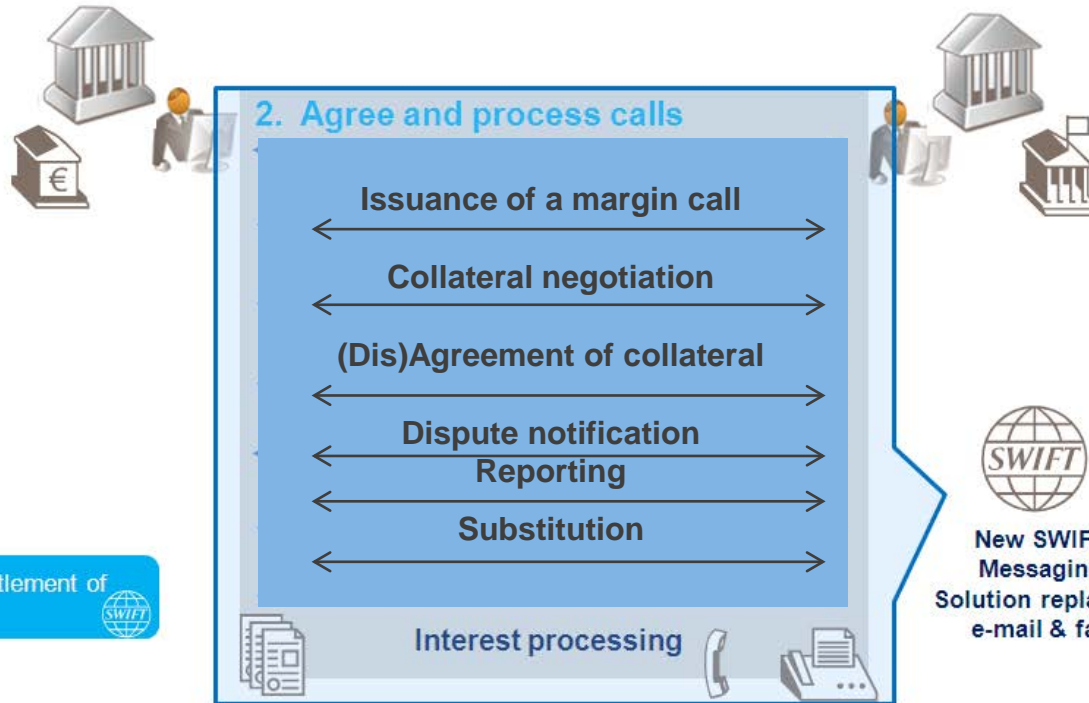*Equities / FI*

Payment messages
Cat 1,2
Statements Cat 5, 9

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Positioning of current ISO 20022 and ISO 15022 messaging offering
Upstream Business Models…

Collateral management ecosystem

Custodians 1...n

Banks/ Broker-dealers 1...n

Corporates 1...n

Financial Institutions 1...n

Collateral Management Agents 1...n

Buy-side 1...n

Non -Clearing Members 1...n

Exchanges/MTFs/OTFs/OTC 1...n

Financial institution

ACTING AS: Trading party

ACTING AS: General Clearing Member

ACTING AS: Triparty Service Participant

Clearing House (CCP) 1...n

Triparty Collateral Management 1...n

Buy-side 1...n

Triparty Collateralisation

A — Bilateral Collateral Management (x-asset & x-segment)

B — Bilateral Collateral Management (CCP coverage)

C — Triparty Collateral Management

Bilateral Collateral Management Solution

1. Data capture and margin call calculation (in-house flows)

2. Agree and process calls

    Issuance of a margin call

    Collateral negotiation

    (Dis)Agreement of collateral

    Dispute notification
    Reporting
    Substitution

    Interest processing

3. Booking and settlement of collateral

New SWIFT Messaging Solution replacing e-mail & fax

- Provides an end to end electronic messaging solution around collateral processes

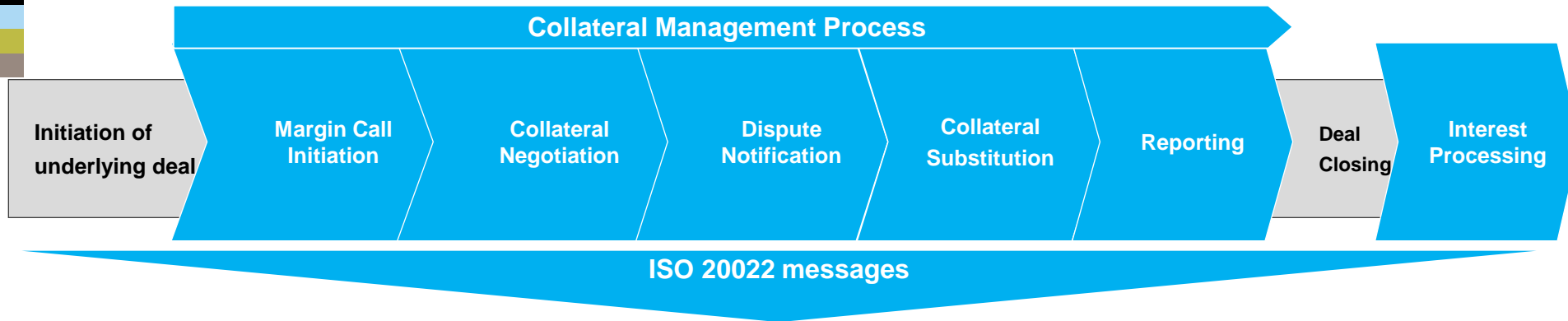- Cross asset & cross segment solution, complementary with downstream settlement processes

- Enables monitoring & mobilisation of collateral in the business chain

- Development based on ISO 20022 methodology

- Complementary to Clearing solution, addressing the communication needs of CCP to GCM/ICM and NCMs

# Bilateral Collateral Management Messaging Solution

Collateral Management Process

| Initiation of underlying deal | Margin Call Initiation | Collateral Negotiation | Dispute Notification | Collateral Substitution | Reporting | Deal Closing | Interest Processing |

ISO 20022 messages

Margin Call	Collateral Proposal	Dispute	Substitution	Reconciliation	Interest Processing
▪ Margin Call Request (colr.003) ▪ Margin Call Response (colr.004)	▪ Collateral Proposal (colr.007) ▪ Collateral Proposal Response (colr.008)	▪ Margin Call Dispute Notification (colr.009)	▪ Collateral Substitution Request (colr.10) ▪ Collateral Substitution Response (colr.011) ▪ Collateral Substitution Confirmation (colr.012)	▪ Collateral Exposure Report (colr.016)	▪ Interest Payment Request (colr.013) ▪ Interest Payment Response (colr.014) ▪ Interest Payment Statement (cole.015)

Generic messages : **Collateral Management Cancellation Request, Collateral Management Cancellation Status**
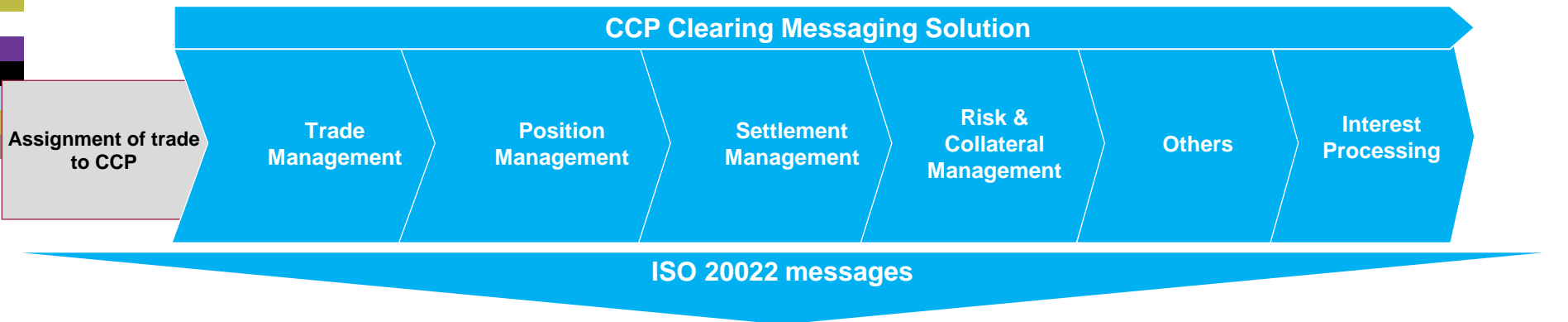
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CCP Clearing Messaging Solution
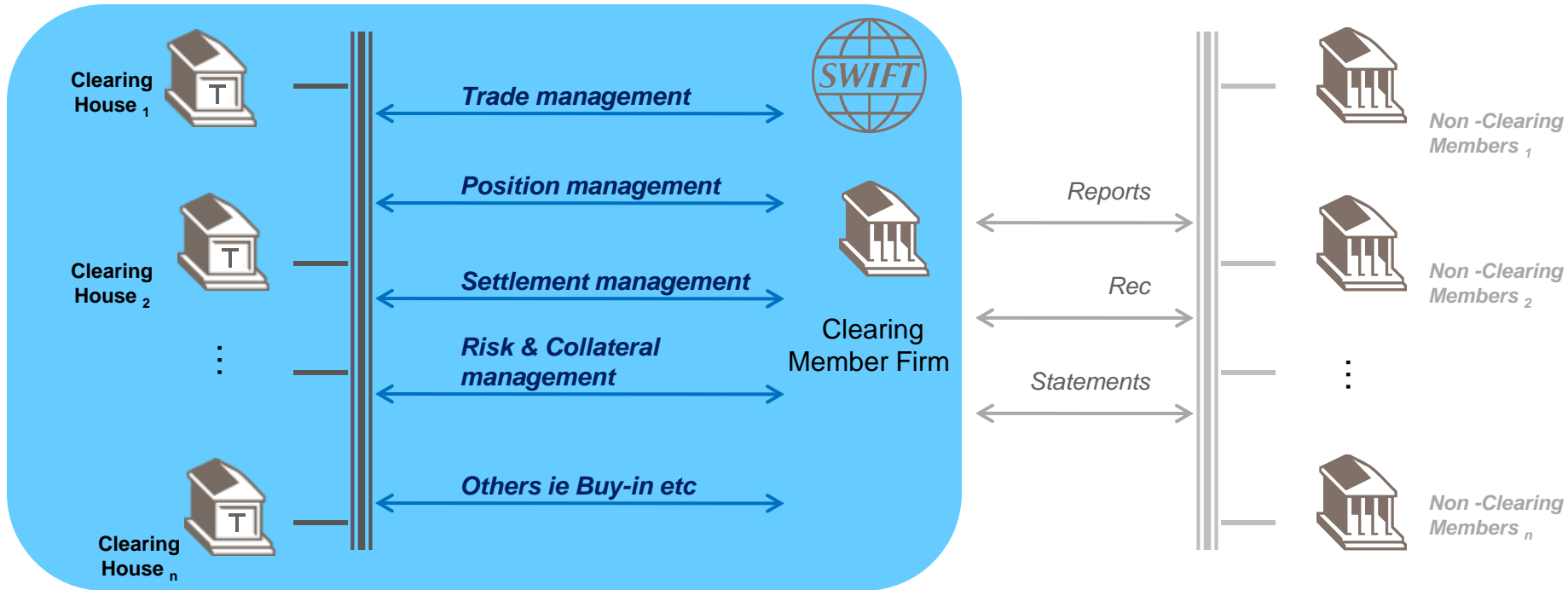
- New messaging solution based on ISO 20022 methodology
- Servicing the communication and standardisation requirements of Clearing houses and GCM/ICM/DCM for cash markets (FI & equities)
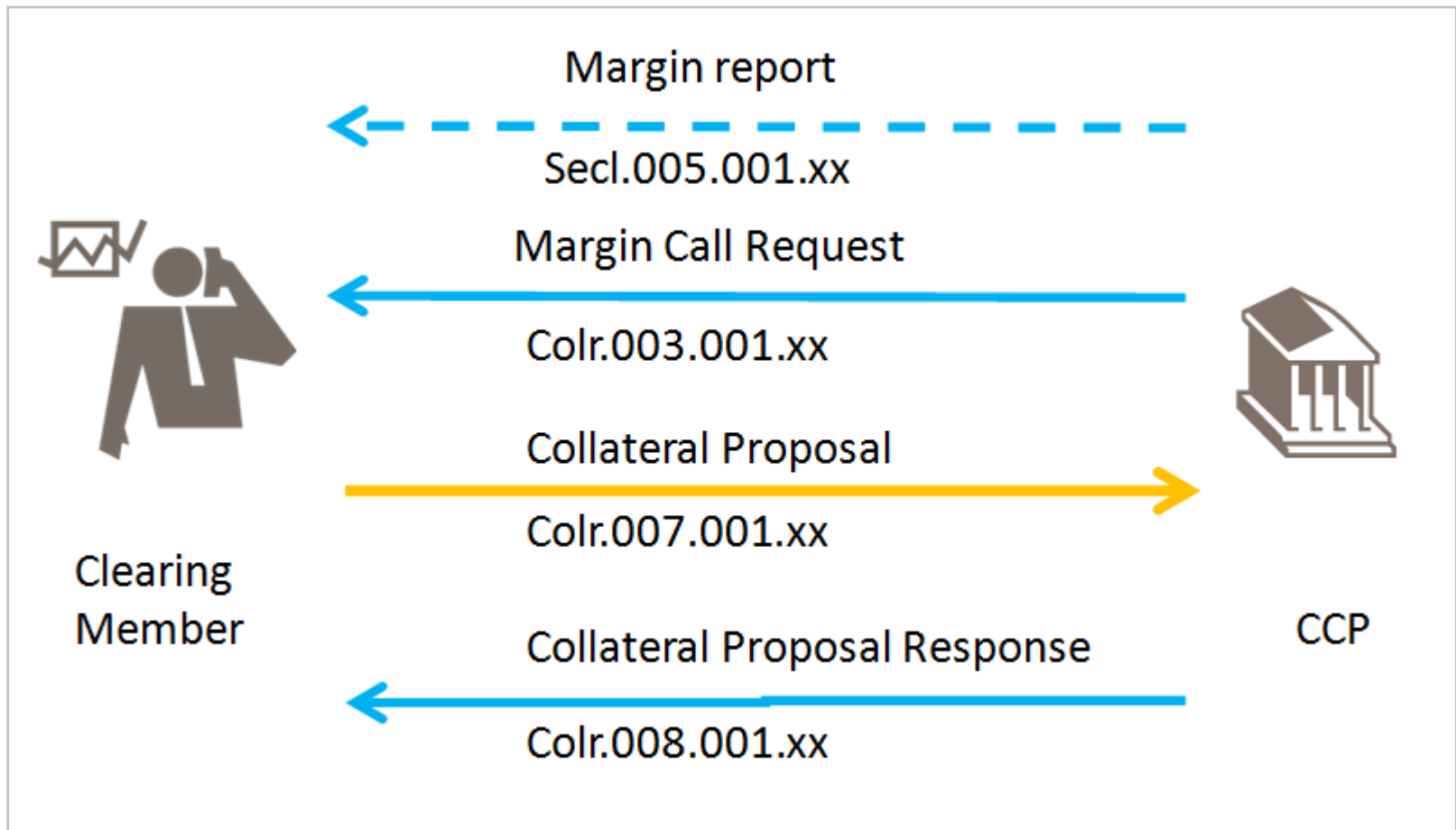
CCP Clearing Messaging Solution

CCP Clearing Messaging Solution

| Assignment of trade to CCP | Trade Management | Position Management | Settlement Management | Risk & Collateral Management | Others | Interest Processing |

ISO 20022 messages

Trade Management	Position Management	Settlement Management	Risk & Collateral Management	Others	Interest Processing
▪Trade Leg Notification (secl.001) ▪ Trade Leg Statement (secl.003) ▪ Trade Leg Notification Cancellation (secl.002)	▪ Net Position (secl.004) ▪ **Margin Report (secl.005)** ▪ **Margin Call Request (colr.003)** ▪ **Margin Call Response (colr.004)** ▪ **Margin Call Dispute Notification (colr.009)**	▪ Settlement Obligation Report (secl.010) ▪ Securities Transaction Pending Report (semt.018) ▪ Bank To Customer Account Report (camt.052) ▪ Bank To Customer Statement (camt.053)	▪ **Collateral Proposal (colr.007)** ▪ **Collateral Proposal Response (colr.008)** ▪ **Collateral Substitution Request (colr.010)** ▪ **Collateral Substitution Response (colr.011)** ▪ **Collateral Substitution Confirmation (colr.012** ▪ **Collateral Management Cancellation Request (colr.005)** ▪ **Collateral Management**	▪ Default Fund Contribution Report (secl.006) ▪ Buy-in Notification (secl.007) ▪ Buy-in Response (secl.008) ▪ Buy-in Confirmation (secl.009)	▪ Interest Payment Request (colr.013) ▪ Interest Payment Response (colr.014) ▪**Interest Payment Statement (colr.015)**

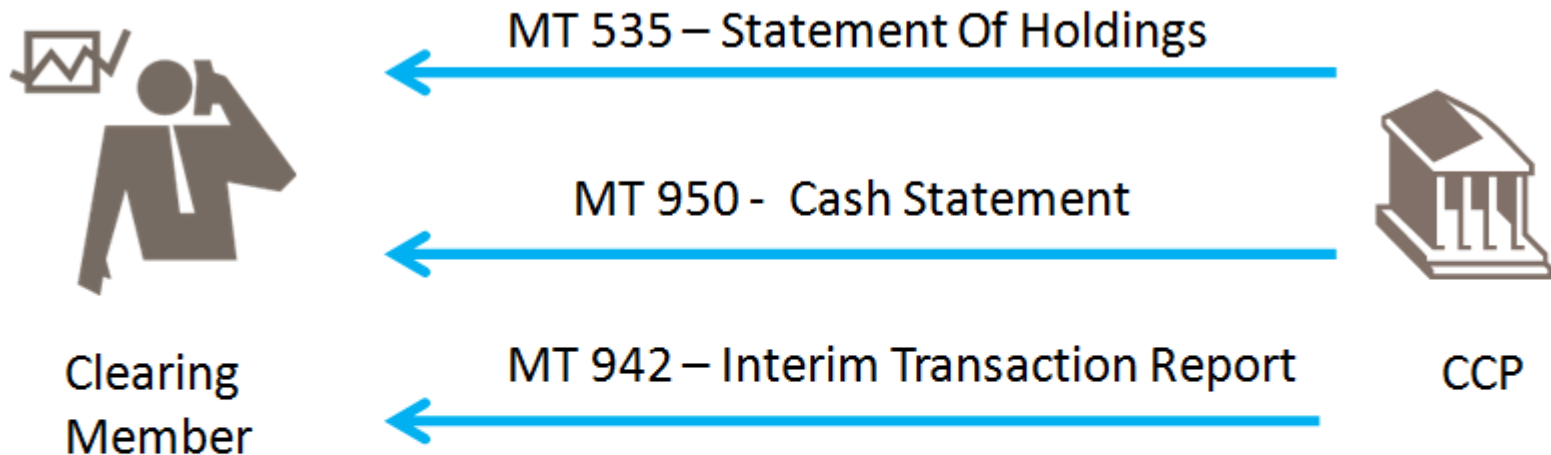# Most used messages on the SWIFT Network

Automated Margining and Substitution – Using ISO 20022 Colr. and Secl. series messages

Margin report

← — — — — — — — — — —

Secl.005.001.xx

Margin Call Request

← ——————————————

Colr.003.001.xx

Collateral Proposal

———————————————→

Colr.007.001.xx

Clearing Member   CCP

Collateral Proposal Response

← ——————————————

Colr.008.001.xx

Most used messages on the SWIFT Network

Automated Reporting – Using ISO 15022 Settlement and Reconciliation messages

MT 535 – Statement Of Holdings

MT 950 - Cash Statement

MT 942 – Interim Transaction Report

Clearing Member

CCP

Option 1:
- Use of existing – *MT 15022 messages*
- EOD / Intraday Cash and Securities Report
- Quantity and Identification of financial instrument

Automated Reporting – Using commonly used ISO 20022 Settlement and Reconciliation messages

semt.002 – Securities Balance Custody Report

camt.053 - Bank to Customer Statement

camt.052 – Bank to Customer Acount Report

Clearing Member

CCP
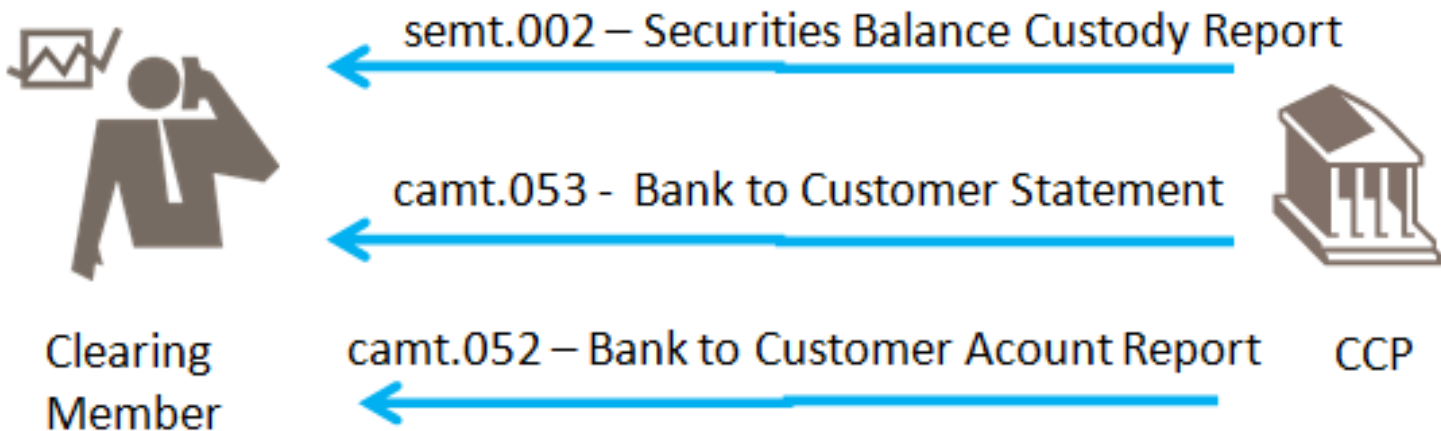
Option 1:
- Use ISO 20022 semt and camt messages
- EOD / Intraday Cash and Securities Report
- Quantity and Identification of financial instrument

Automated Reporting – Using ISO 20022 Colr. series messages

Collateral And Exposure Report

Colr.016.001.xx

Clearing Member

CCP

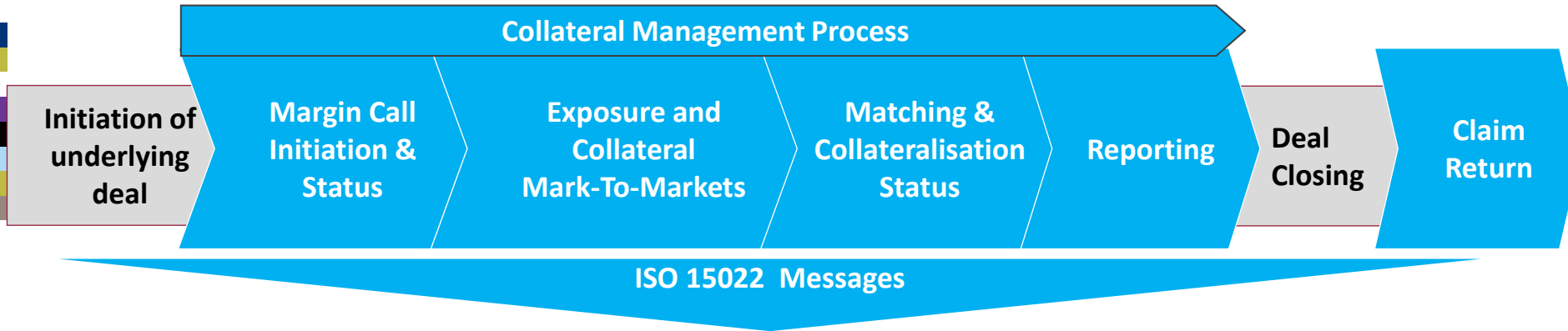**Option 2:**
- Comprehensive detailed report:
  - Cash & Stock Valuation
  - EOD / Intraday Reporting
  - Exposure details / valuations
  - Confirmation of Exposure
  - Account Identification
  - Status Update
  - Margin Amounts
  - Accrued interest
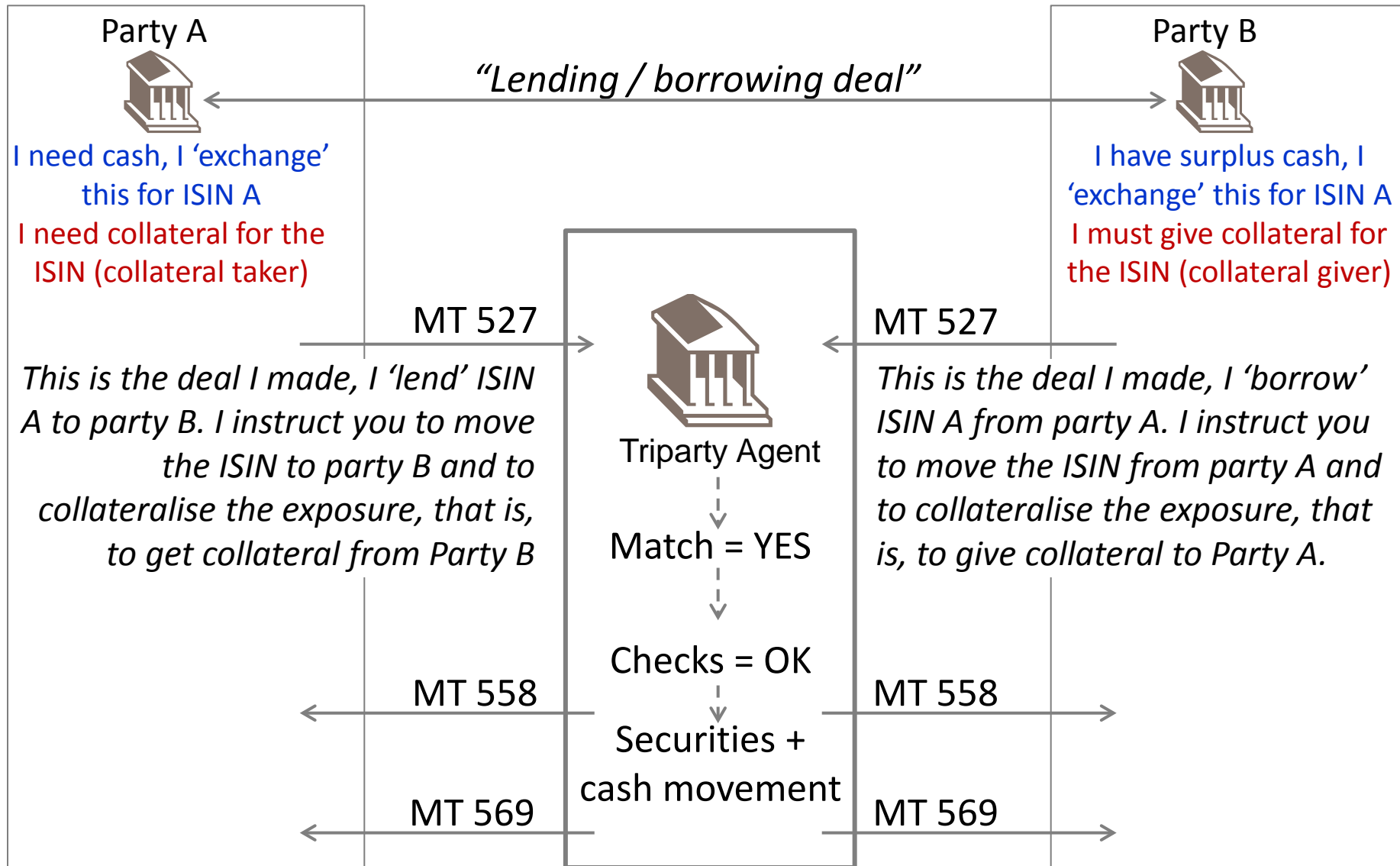
Triparty Collateral Management Messaging Solution

Collateral Management Process

| Initiation of underlying deal | Margin Call Initiation & Status | Exposure and Collateral Mark-To-Markets | Matching & Collateralisation Status | Reporting | Deal Closing | Claim Return |

ISO 15022 Messages

Margin Call & Status	MTM & Collateral Valuation	Status update	Reporting	Claim
▪ **MT527** Triparty Collateral Instruction	▪ **MT569** Triparty Collateral and Exposure Statement	▪**MT558** Triparty Collateral Status Advice	▪**MT569** Triparty Collateral and Exposure Statement	▪**MT527** Triparty Collateral Instruction ▪**MT558** Triparty Collateral Status Advice

- Life-cycle of a triparty transaction: from matching to settlement
- Complies with regulatory requirements (US FED)
- Provides real time instruction, status and collateral position reporting
- Implemented by more than 150 institutions globally, facilitates single-window approach through Standards and SWIFT network

Triparty Collateral – basic scenario

Party A

"Lending / borrowing deal"

Party B

I need cash, I 'exchange' this for ISIN A
I need collateral for the ISIN (collateral taker)

I have surplus cash, I 'exchange' this for ISIN A
I must give collateral for the ISIN (collateral giver)

MT 527

MT 527

This is the deal I made, I 'lend' ISIN A to party B. I instruct you to move the ISIN to party B and to collateralise the exposure, that is, to get collateral from Party B

Triparty Agent

This is the deal I made, I 'borrow' ISIN A from party A. I instruct you to move the ISIN from party A and to collateralise the exposure, that is, to give collateral to Party A.

Match = YES

Checks = OK

MT 558

MT 558

Securities + cash movement

MT 569

MT 569

There may be various MT 54x + payment messages to move securities & cash to the appropriate accounts

Triparty Collateral in context of CCP Links

CCPs using triparty agents to handle collateral management operations

Trade agreement & Novation

Exchange or MTF

Lender   *Borrower*

Clearing House

Clearing Member (GCM/DCM (eg Bank/B/D))

Margin Management & Reporting

Instruction (MT 527)

Instruction (MT 527)

Status & Reporting (MT 558, MT 569)

Status & Reporting (MT 558, MT 569)

Triparty Collateral Management Agent
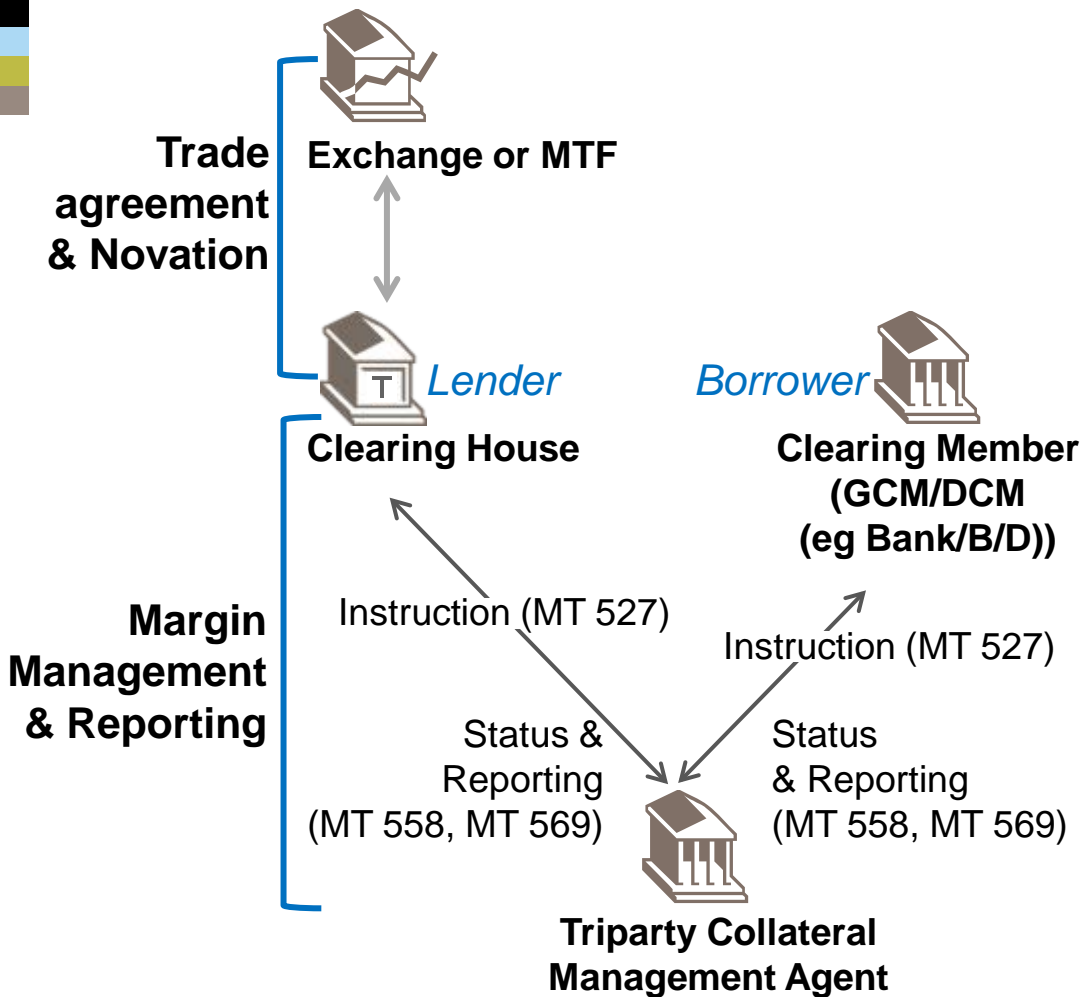
- Due to the regulatory push towards CCP Clearing for standardised products, there is an additional demand on high quality collateral

- In order to leverage their security holdings & meet the margining timelines with required quality of collateral, market participants are looking to leverage their triparty collateral management arrangements vis a vis the CCPs.

"Eligibility Haircut Concentration Limit Profile messages" – on hold

Scope: automate the setting up and the management of collateral profile (eligible financial instruments, application of haircuts and concentration limits to address asset volatility and to maintain collateral liquidity. Today process is manual and takes weeks.

Regulatory compliance is driving the need for full automation for collateral portfolio profiles as part of a communication workflow between MI's, Counterparties and Clients

The scope of the project is the design of ISO 20022 messages to cover:

- The initiation/Amendment/Termination of a collateral profile with Eligible securities, Haircuts and Concentration limits
- The communication of a status following the receipt of the above data.
- The communication of a cancellation request following the sending of the above data.
- The communication of a end of day or intraday report following the receipt of the above messages.

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ISO 20022 messages creation and maintenance

Process and Timeline

ISO 20022: The actors (1/2)

Submitting organisations

Communities of users or organisations that want to develop ISO 20022 compliant messages to support their financial transactions

Could be

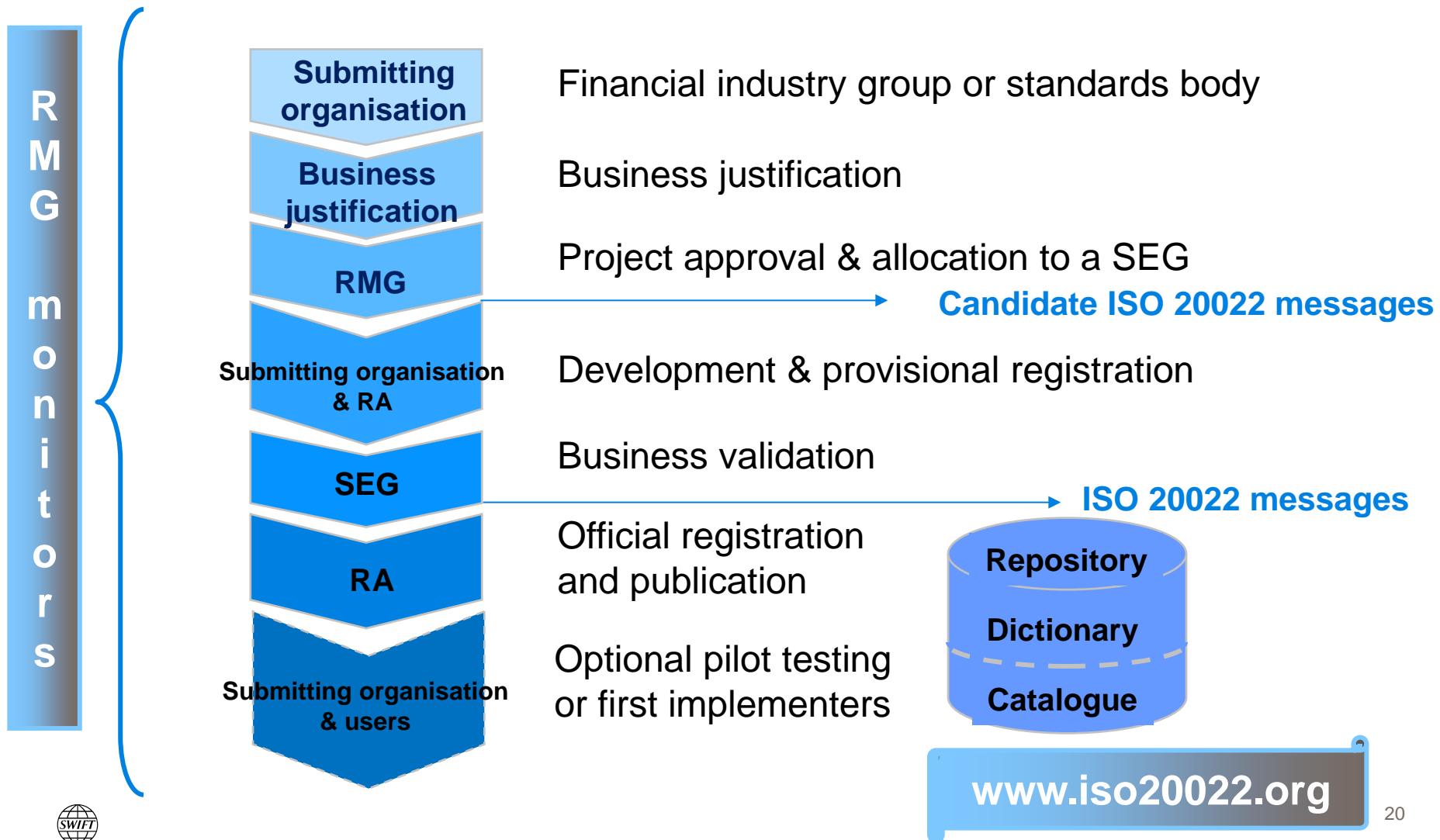|		
ANBIMA	DTCC	Omgeo
ASF	Early Warning Services	Payments UK
Banco de España	EPC	PBOC
Bank of England	ESMA	RU-CMPG
Banque de France	Euroclear	SABS
Berlin Group	European Central Bank	SPRING
BIAN	FED	SWIFT
CBI Consortium	FFI	Target
CFETS	FISD	TC68/SC7/TG1
CFTC	FPL	Tieto Corporation
China UnionPay	FpML	TWIST
Clearstream	IFX Forum	T2S
CLS	ISITC	UN/CEFACT
Danish Bankers Association	nexo A.I.S.B.L.	etc.
Deutsche Bundesbank	OAGi	

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ISO 20022: The actors (2/2)

- ## Registration Management Group, RMG
  - Overall governance, court of appeal
  - Approve business justifications for new message standards
  - Approve new member entities
  - Create Standard Evaluation Groups (SEGs) and SubSEGs

- ## Standards Evaluation Groups, SEGs and SubSEGs
  - Represent future users in specific financial areas
  - Validate new candidate messages and change requests

- ## Registration Authority, RA
  - Ensure compliance
  - Maintain and publish ISO 20022 Repository

- ## Technical Support Group, TSG
  - Assist RMG, SEGs, RA and submitting organisations

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ISO 20022 Registration Process

RMG monitors

Step	Description
Submitting organisation	Financial industry group or standards body
Business justification	Business justification
RMG	Project approval & allocation to a SEG
Submitting organisation & RA	Development & provisional registration
SEG	Business validation
RA	Official registration and publication
Submitting organisation & users	Optional pilot testing or first implementers

Candidate ISO 20022 messages

ISO 20022 messages

Repository

Dictionary

Catalogue

www.iso20022.org

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ISO 20022 Registration Process: Yearly Maintenance Process

Timing

Timing	Step	Description
By June 1	Users CRs	Users introduce Change Requests to the RA
By July 7	SEG	SEG screens Change Requests (CRs)
By August 21	Submitting organisation	Submitting organisation prepares 'Maintenance Change Request' with each CR implementation
By October 1	SEG	SEG approval/rejection
By December 1	Submitting organisation & RA	Development of new versions
By February 1	SEG	Validation of new versions
April-May	RA	Registration and publication
	Submitting organisation & users	First implementers

Repository

Dictionary

Catalogue