Intraday Liquidity Standard
Business rules and technical specifications

May 2017

Business rules and technical specifications for Intraday Liquidity Reporting Standard

Key principles

IDL standard focuses on real-time reporting

"Before"

Current intraday liquidity experience

1. Suboptimal view on intraday liquidity positions, mainly based on internal forecasts, difficult to comply with new regulatory reporting and increased counterparty risk

2. Artificial and excess intraday liquidity funding and related cost, no visibility on incoming payments

3. Resource intensive and non real-time reconciliation, no clear reference payment & underlying transaction

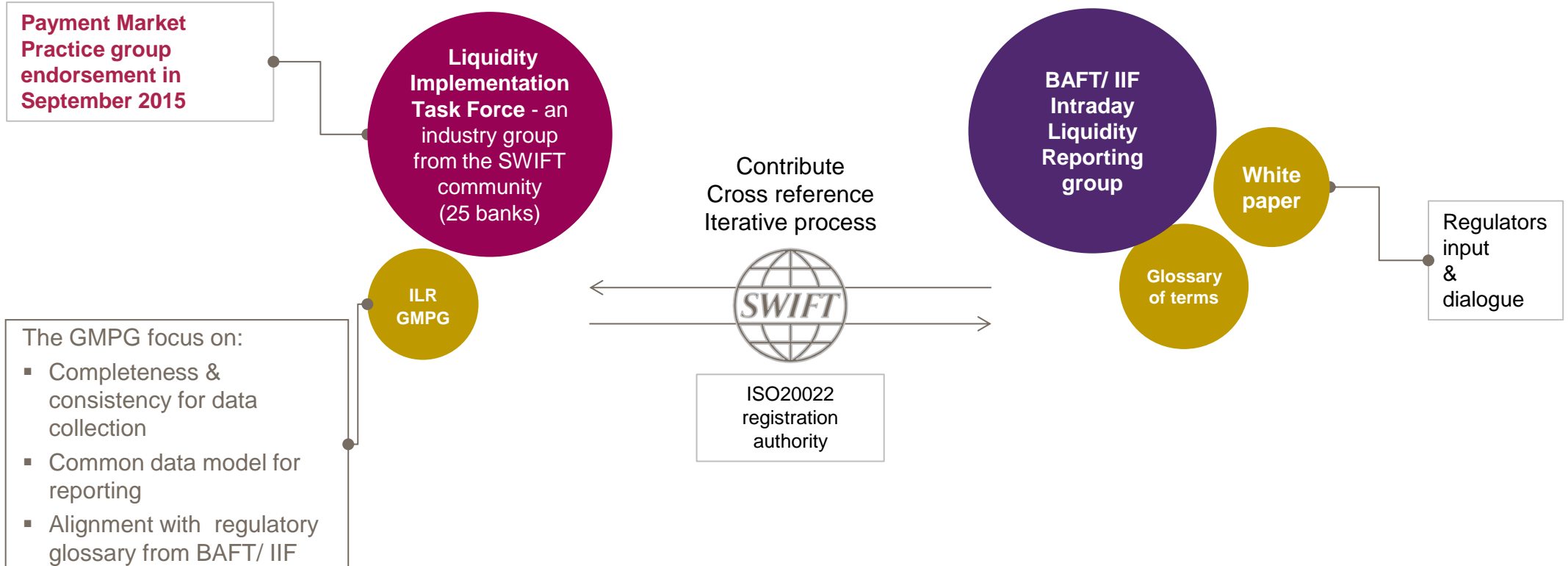4. Risk of missed deadlines on important timed payments. No visibility for regulatory reporting
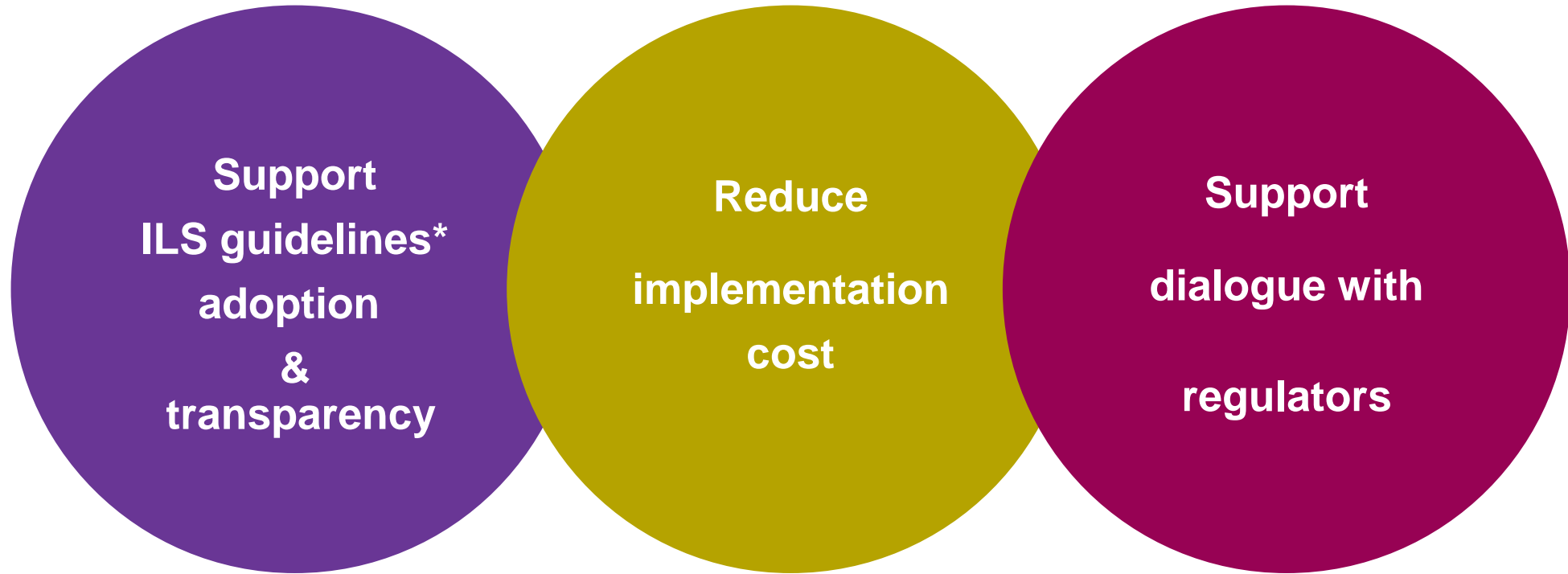
"After"

IDL standard

1. Real-time visibility and regulatory reporting on liquidity **positions** and daily maximum intraday liquidity usage, based on transaction-by-transaction Nostro reporting

2. Intraday liquidity **optimisation**, visibility on incoming cash from moment payment is initiated, with tracking

3. Support real-time **reconciliation** through correct use of references across message types

4. Visibility on critical payments by nature to meet **time specific obligations**

LITF's "Global Market Practice Guidelines" to address industry challenges on real-time liquidity reporting

Payment Market Practice group endorsement in September 2015

Liquidity Implementation Task Force - an industry group from the SWIFT community (25 banks)

ILR GMPG

The GMPG focus on:

- Completeness & consistency for data collection
- Common data model for reporting
- Alignment with regulatory glossary from BAFT/ IIF

Contribute
Cross reference
Iterative process

SWIFT

ISO20022 registration authority

BAFT/ IIF Intraday Liquidity Reporting group

Glossary of terms
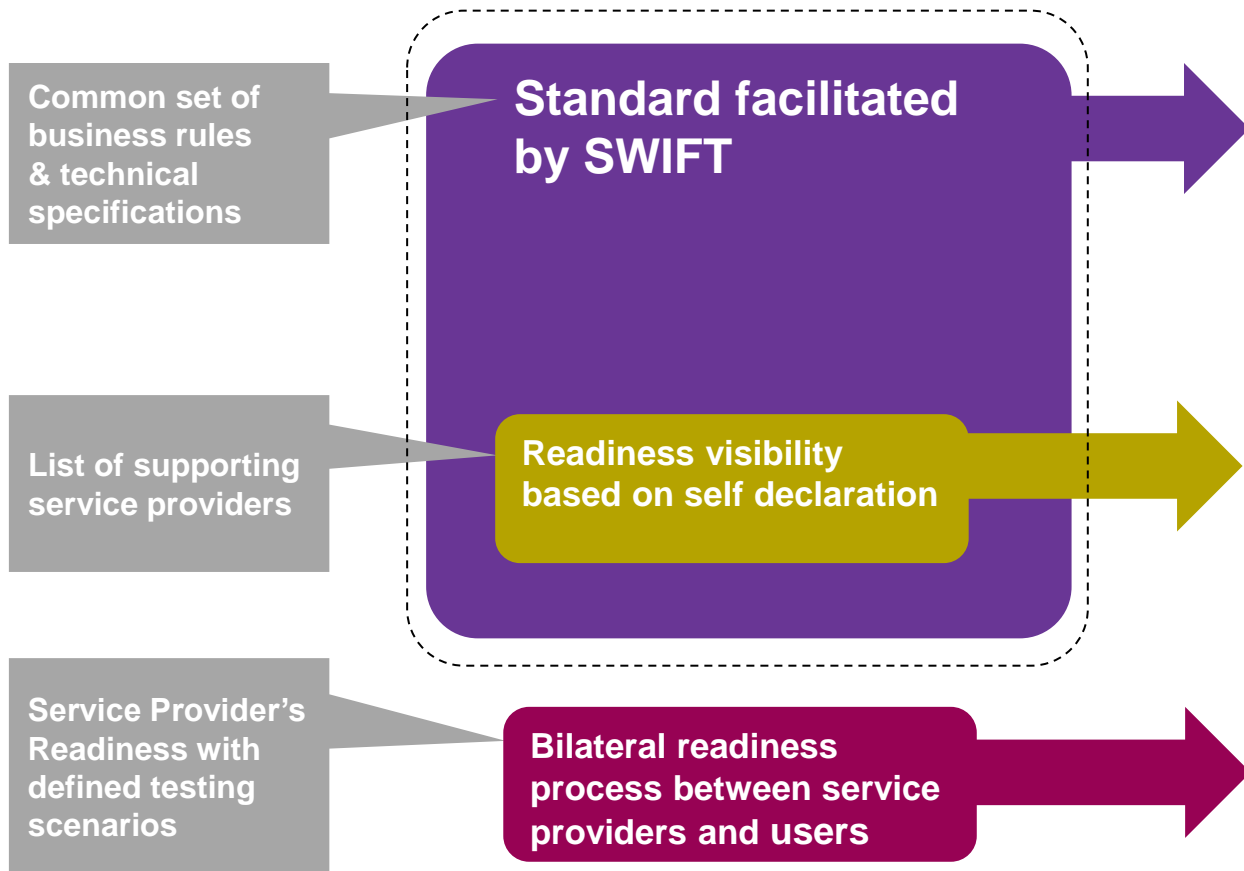
White paper

Regulators input & dialogue

Moving from Intraday Liquidity Reporting guidelines to an industry standard

A minimum common set of business rules & technical specifications across service providers

**Support
ILS guidelines*
adoption
&
transparency**

**Reduce
implementation
cost**

**Support
dialogue with
regulators**

IDL standard to support compliance with intraday liquidity regulatory requirements

Common set of business rules & technical specifications

List of supporting service providers

Service Provider's Readiness with defined testing scenarios

Standard facilitated by SWIFT

Readiness visibility based on self declaration

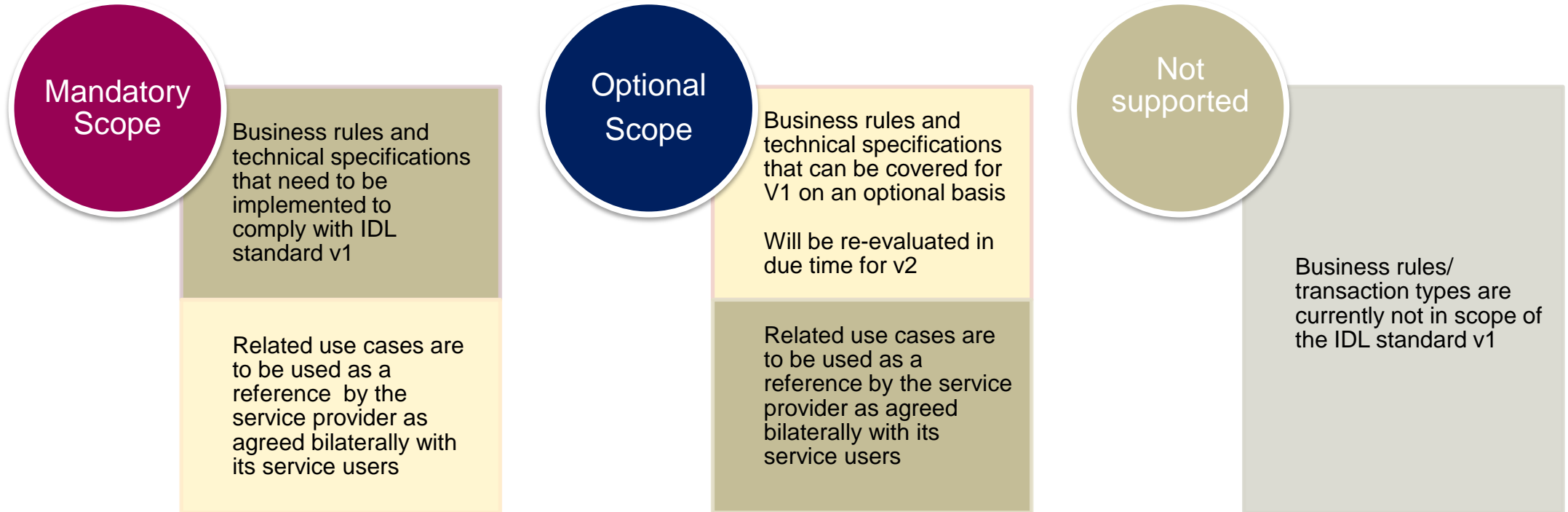**Bilateral readiness process between service providers and users**

- **Standard applies to cash reporting in the interbank space** and therefore includes Nostro Accounts and Custodian Cash Accounts;
- **Best matching between service provider's real-time reporting capabilities and user's essential requirements:** define minimum scope based on a large subset of LITF GMPG* to allow for an early readiness (to replace Q4/ 2017) with a broad adoption;
- **Adoption by Service providers on a voluntary basis**

- **Service provider will provide SWIFT with the authorization to publish its compliance with the IDL standard.**
  Compliance will be declared at BIC8 level for the minimum mandatory scope of real-time reporting.
  Support of optional reporting features can also be published on demand of the service provider.
  Implementation with respective customers will still be agreed bilaterally

- **Technical requirements include use cases** to support standard implementation across service providers that should be used as a reference by service users and service providers when running their bilateral testing. Use cases are provided for both mandatory and optional reporting features.

*GMPG: Global Market Practice Guidelines

The scope of IDL standard v1

Mandatory Scope

Business rules and technical specifications that need to be implemented to comply with IDL standard v1

Related use cases are to be used as a reference by the service provider as agreed bilaterally with its service users

Optional Scope

Business rules and technical specifications that can be covered for V1 on an optional basis

Will be re-evaluated in due time for v2

Related use cases are to be used as a reference by the service provider as agreed bilaterally with its service users

Not supported

Business rules/ transaction types are currently not in scope of the IDL standard v1

Potential developments for Intraday Liquidity

IDL value

In scope for IDL
Pragmatic short term deliverable

No gpi technical layer (UETR/ SLA ID)

Real-time transaction by transaction visibility
IDL standard with directory + readiness testing

- **Standard:** business rules and technical specifications for a large subset of LITF global market practice guidelines

- **Visibility of service provider's readiness <u>by BIC</u>** to encourage rapid take-up

- **Support dialogue with regulators** with pragmatic industry approach: focus of IDL v1 on foundational data common to all regulations based on subset of LITF guidelines

Q4/2017

Not in scope

(+) Standard scope extension in support of regulatory compliance
(+) Supporting liquidity optimization
(+) DLT shared ledger for real-time liquidity and Nostro Reconciliation

COMPLIANCE
- Visibility on time specific obligations
- Include rules for MT 545/ 547 usage in the liquidity context
- Extend scope to Market Infrastructures

OPERATIONAL EFFICIENCY
- Automated real- time reconciliation with the UETR for intraday reporting messages

STRATEGIC
- **Liquidity optimisation** through visibility on incoming cash with the tracker
- **Extending SLA identifier/ UETR** to other message types to get view of transaction life cycle
- **Real-time liquidity and reconciliation on DLT shared ledger** s (under evaluation with Proof of Concept in 2017)

TOOLS
- **Observer to monitor respect of Standard**
- **Analytics on Industry progress report**

Future IDL roadmap to be evaluated

Business rules for IDL standard

Roles in the Intraday Liquidity Standard

Two roles have been defined for the Intraday Liquidity Standard:

Service Provider

- the Service Provider is the Account Servicing Institution

Service User
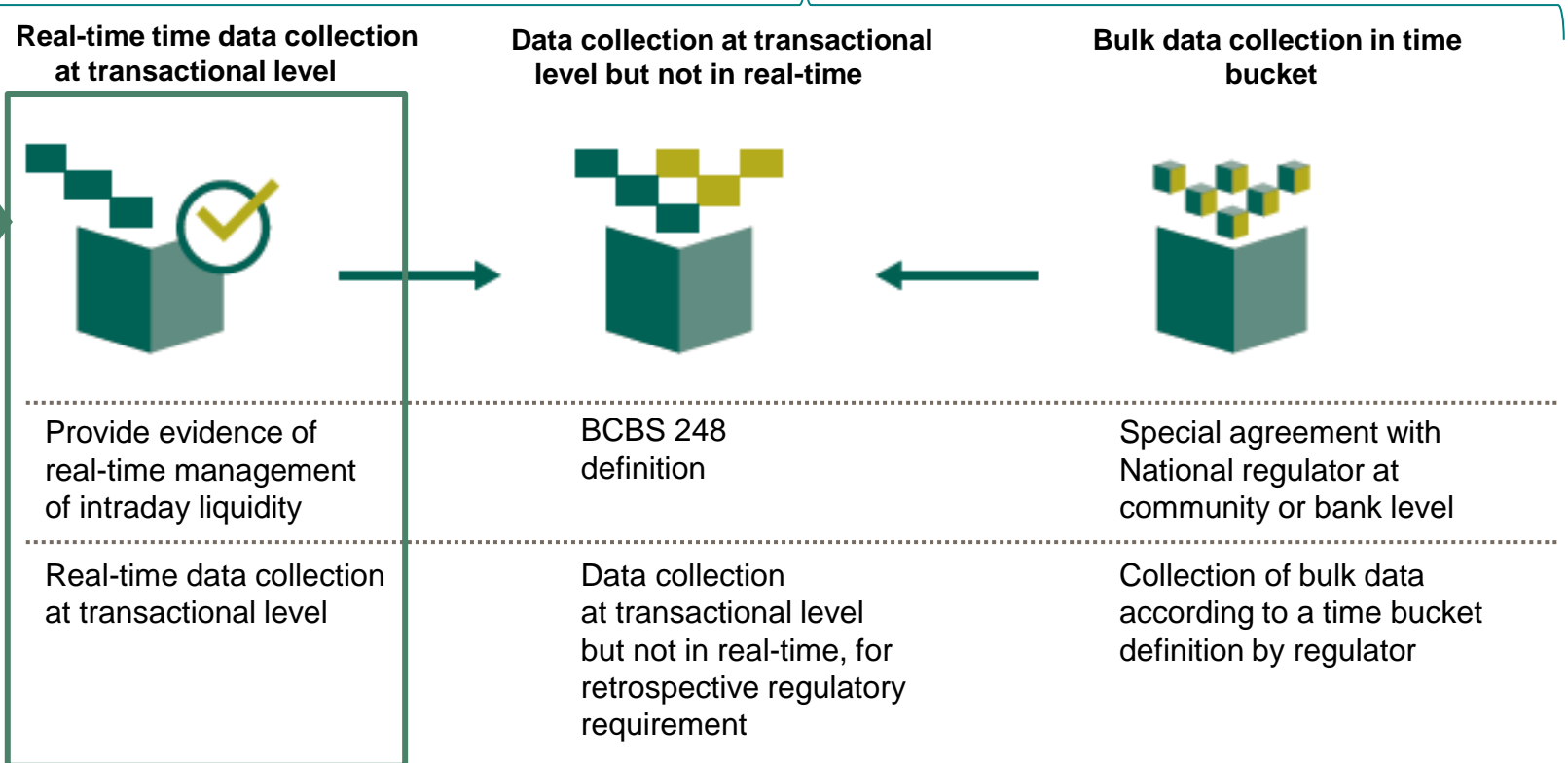
- the Service User is the Account Owner Institution

- **IDL standard has been defined at community level** by both liquidity service users and providers

- **IDL standard is based on the LITF Global Market Practice guidelines** published in 2015

- **IDL standard applies to the service providers within the scope of their business activity**

- **IDL adoption** will happen on a voluntary basis

- **Service providers** will give SWIFT the authorization to publish their compliance at BIC level on SWIFT.com

IDL standard provides a detailed implementation framework for the Global Market Practice Guidelines on real-time data collection

IDL Standard focuses on real-time reporting

- Increasing focus from regulators on ability to manage liquidity in real-time

- Many banks have a real-time liquidity monitoring/ management project in place

- Various regulators implement different reporting metrics based on different data aggregation models. Transactional data is required to enable banks to support aggregation at global level.

Potential regulatory approaches for IDL reporting as documented in the GMPG

Real-time time data collection at transactional level	Data collection at transactional level but not in real-time	Bulk data collection in time bucket
Provide evidence of real-time management of intraday liquidity	BCBS 248 definition	Special agreement with National regulator at community or bank level
Real-time data collection at transactional level	Data collection at transactional level but not in real-time, for retrospective regulatory requirement	Collection of bulk data according to a time bucket definition by regulator

IDL standard focuses on specific mandatory message types to support real-time reporting

Standard support the concept of a liquidity dashboard sourced with a short set of FIN messages
to monitor cash positions in real time across accounts in different currencies and to calculate retrospective BCBS metrics.

Mandatory real-time reporting of all cash debit/credit entries posted on the account at transactional level using debit and credit confirmations
 (MT 900, MT 910)

Mandatory daily end-of-day statement of account (MT 950/ MT 940) with provision of booked/ available balance

Opening	Intraday	Closing
MT 950 MT 940	MT 900 MT 910	MT 950 MT 940

Currently outside of IDL standard
The use of additional message types such as :
- the DvP/ RvP settlement confirmation: MT 545/ MT 547
- the (interim) balance report: MT941
- the transaction report: MT942

High level Intraday Liquidity Standard business rules

Liquidity user experience	Business rules for Service Providers
1. **Support real-time visibility and regulatory reporting on liquidity positions and daily maximum intraday liquidity usage**	▪ **Report systematically and in real-time** each individual intraday debit/ credit entry booked on the cash Nostro or Custodian account for all types of entries within the specified use cases
2. **Provide timed information on each intraday liquidity movement**	• **Provide the exact time** at which the debit or credit entry has affected the service user's account position in the intraday reports
3. **Support real-time reconciliation with underlying payment transaction**	• **Provide the reference of the underlying transaction/ entry account information** in the intraday reports • **Provide the daily end-of day balance** in the end of day statement even if there has been no movement on the account in the course of the day

Customer experience: Real-time reporting (1/2)

Customer experience

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Business rules for service providers

Real-time visibility on liquidity positions

A. Report systematically each individual intraday debit/ credit entry booked on the cash Nostro and Custodian accounts for all types of entries as per the use cases including : margin calls , book transfers with intraday settlement for which a payment instruction has been generated by the Account Owner or the single intraday settlement of transactions settled in bulk (for reference use cases 1 to 13) with the exception of:

1. Charges and interests: these entries will not be confirmed on an intraday basis but should be reported in the end of day statement to support reconciliation.
2. Batched transactions such as bulked payments processed through ACH's. Real time reporting will not apply to each transaction of the batch but rather to the settlement movement and the funding movement of the related account.
3. Charges, interests and fees that relate to the account management and service provision (usually billed on a monthly basis) are out of the scope of the intraday liquidity standard.

B. Optionally report on each individual intraday debit/ credit entry for the following entry types as a value-added for the Nostro Users (for reference use cases 14 to 17)
1. Book transfers with intraday settlement for which no payment instruction has been generated by the Service User;
2. The payment of a corporate action;
3. A payment instruction for which the account owner institution is not the end beneficiary. Some Account Users can use the data from the received payment message to feed their liquidity dashboard/ reconcile in real-time whilst some others don't and need a credit confirmation message for these types of entries as well.
   In addition a payment instruction cannot be considered as credit confirmation.
4. Transactions typically processed and settled at the end of the day (e.g. cheques) are reported within the end of day statement.

Customer experience: Real-time reporting (2/2)

Customer experience	Business rules for service providers

Real-time visibility on liquidity positions

C. **Use MT 900/ 910 to report each debit/ credit entry at individual transactional level** as per the defined use cases.

D. **Send debit/ credit confirmation** in real-time as soon as the debit/ credit entry has been booked on the account and has successfully been processed by the credit checking system.

E. **Common finality definition of the reporting**: from a liquidity perspective and for the purpose of this Standard finality/ irrevocability of a debit entry or of a credit entry occurs when the transfer of money is completed between the account servicer provider and the service account user, that is, the time at which the account is debited (except contradictory local regulation) or credited.

Provide timed information on each intraday liquidity movement using accurately the time stamping field

F. **For each entry reported on an intraday basis provide the exact time at which the debit or credit entry has affected the service user's account position):**

1. **The booking date and time reported also indicates that the funds are available at that date and time** (in that case date of posting will correspond to value date), except in case of forward or back value date (see time stamping specific use cases).

2. **The time stamp will provide correct level of granularity** indicating hour and minutes as per the technical specifications

3. **Time Zone** will always be indicated by means of the offset against the UTC (Coordinated Universal Time - ISO 8601). Offset will be determined by the Time zone of the account booking location. In most cases this will correspond to the settlement time zone of the currency but there will be cases where the account will be operated in another location than the currency settlement time zone. A same currency may also have different settlement time zone (e.g. USD clearing in CHATS).

4. **Exception:** in the case that the payment instruction is used for the confirmation of a credit entry (see section A) the message time stamping of the payment instruction message will be used as the time stamping for the credit entry.

Customer experience: real-time reconciliation

Customer experience	Business rules for service providers

Support real-time reconciliation with underlying payment transaction

Report on all entry types on the daily end of day statement.

A. **Provide the exact mapping from the payments instruction to the intraday report & end of day reporting**. through the correct reference of the underlying transaction in the reporting messages including when the cash movement has not been initiated by the service user.

B. **Provide account number information in the intraday reporting messages as per the standard** and also ensure consistency (same account number and format) across intraday and end of day reporting. Example to report on multi-currency account: need to use Account Number + add three letters currency code in field 25 of both MT 950 and MT 900/ 910

C. **Send a daily end of day statement and provide both the daily end-of day "closing balance booked funds" and " closing available balance" systematically even if there has been no movement on the account in the course of the day**. These balances will normally be the same except when the booked balance contains transactions with "forward value date".

D. **The opening balance reported in the end of day statement** must match with the "closing available booked balance" of the previous day.

Time stamping

Implementation rules for forward/ back value entries

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Recommendations for liquidity usage calculation purpose

Message time stamping – recommendation for data usage by the user

Time stamping

Recommendation for **back value** entries

Recommendation for **forward value** entries

Recommendations for data usage in the liquidity usage curve

A. It is understood that entries with back value date don't have an impact on the intraday position and risk related to that specific day. They should therefore be affected to the position according to the date/time at which they have been booked on the account (see use cases).

B. In case of Forward Value transaction the date reported in posting will differ from value date. Transaction should be deducted from the Booked balance to calculate the available balance (see use cases)

Message time stamping– Special use cases

Recommendation

Liquidity user's timeline for liquidity usage calculation

1. On 2nd February a credit entry is booked on the account with value on 1st February.

2. However the confirmation (MT 910) is sent on 2nd February at 2.30 am CET after the end of day statement has been sent.

3. Field 13D of MT 910 contains following information: 1502020230 (+1)

4. Field 32A of MT 910 contains following information: 150201

5. Credit amount is added to available balance of the end of day statement dated 1st February to be used as an opening liquidity position balance at the start of 2nd February.
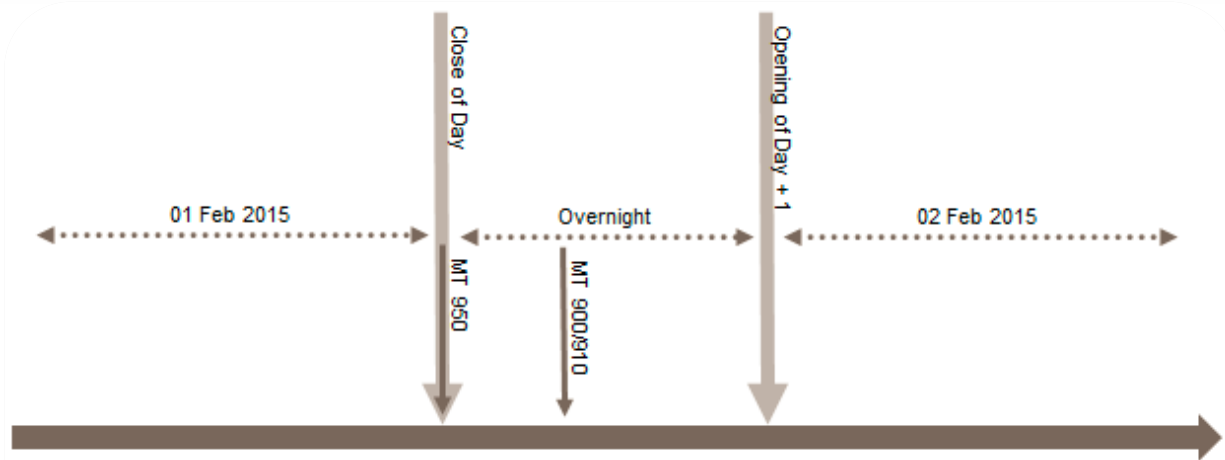
MT 900 / MT 910	32A - Value Date	13D - Timestamp	Balance Value
Example 1	01 Feb 2015	02 Feb 2015 – 2.30 am	Considered for calculation of the actual opening balance on 02 Feb 2015: addition of all entries booked overnight to the MT 950 reported closing balance for the liquidity position). MT 900 / MT 910 will be reported in MT 950 of the 02 Feb 2015

# Message time stamping – Special use cases

Use case 2 – Rule for implementation

Recommendation

Liquidity user's timeline for liquidity usage calculation

1. On 2nd February at 11.20 am CET a credit entry is booked on the account with back value to 1st February. MT 910 is sent as a confirmation to this credit entry.

2. Field 13D of MT 910 contains following information: 1502021120 (+1)

3. Field 32A of MT 910 contains following information: 150201

4. This credit entry is used for the calculation of the available liquidity position balance on 2nd February and will be reported in the end of day statement of that day.

	Close of Day		Opening of Day +1	
01 Feb 2015		Overnight		02 Feb 2015
	MT 950			MT900/MT910
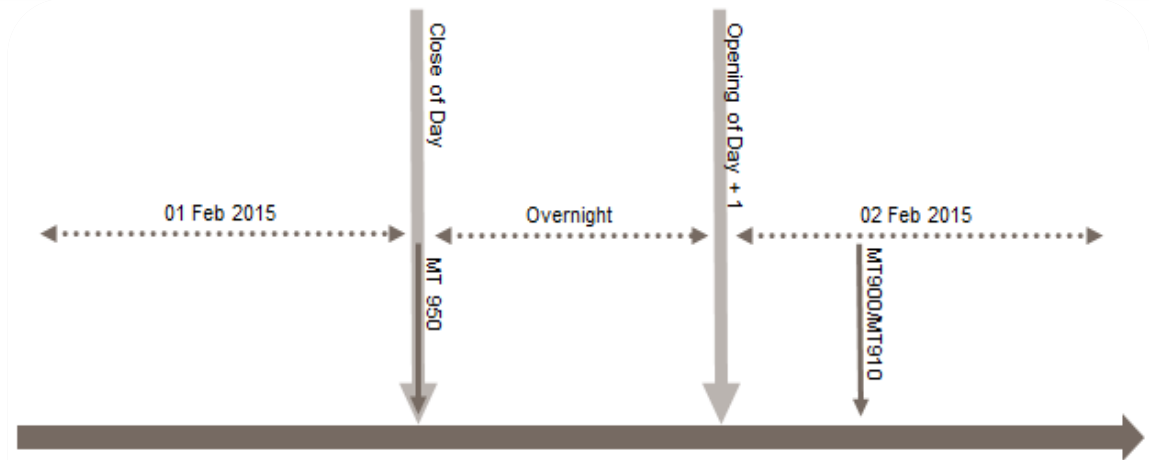
MT 900 / MT 910	32A - Value Date	13D - Timestamp	Balance Value
Example 2	01 Feb 2015	02 Feb 2015 - 11.20 am	Considered for calculation of the available balance on 02 Feb 2015, at 11.20 am

Technical specifications for IDL standard

Intraday Liquidity Standard technical specifications for Nostro and Custodian Accounts

Feature	Specification
Time Stamping of Debits/Credits	• Mandatory use of MT 900/910 mandated for the purpose of Intraday Liquidity Standard as per use cases. • MT 900/910: mandatory use of field 13D in UTC time with offset to provide exact time stamp on when the debit/credit was booked on the account (even in case of back or forward value date). • The time stamp will provide correct level of granularity in DD/HH/MM.
Reference of the underlying transaction	• Mandatory use of related reference field in MT 900/910/103/202 as per slides on "mapping of references".
Balance information	• MT 950/940 mandated on a daily basis • Each statement will at least contain an opening and a closing balance even if there has been no movement since the last statement was sent. • Mandatory use of Field 64 - Closing Available Balance (in addition to booked balance as per standard) in case the booked balance contains forward value transactions. • Mandatory use of Field 60a and 62 option M - Intermediate opening/closing balance in case several statement messages are sent during the day • The opening balance (field 60a) must match with the "closing available booked balance"(field 64) of the previous day. However if there are still some postings after the closing statement has been sent at the end of the day, these transactions will be added to the opening balance of the next day and will be reported in the next end of day statement.
Account information	• For MT 900/910 and MT 950 : mandatory use of field 25a – Account Identification; no letter option, with consistent content and format for the two messages for the same account.