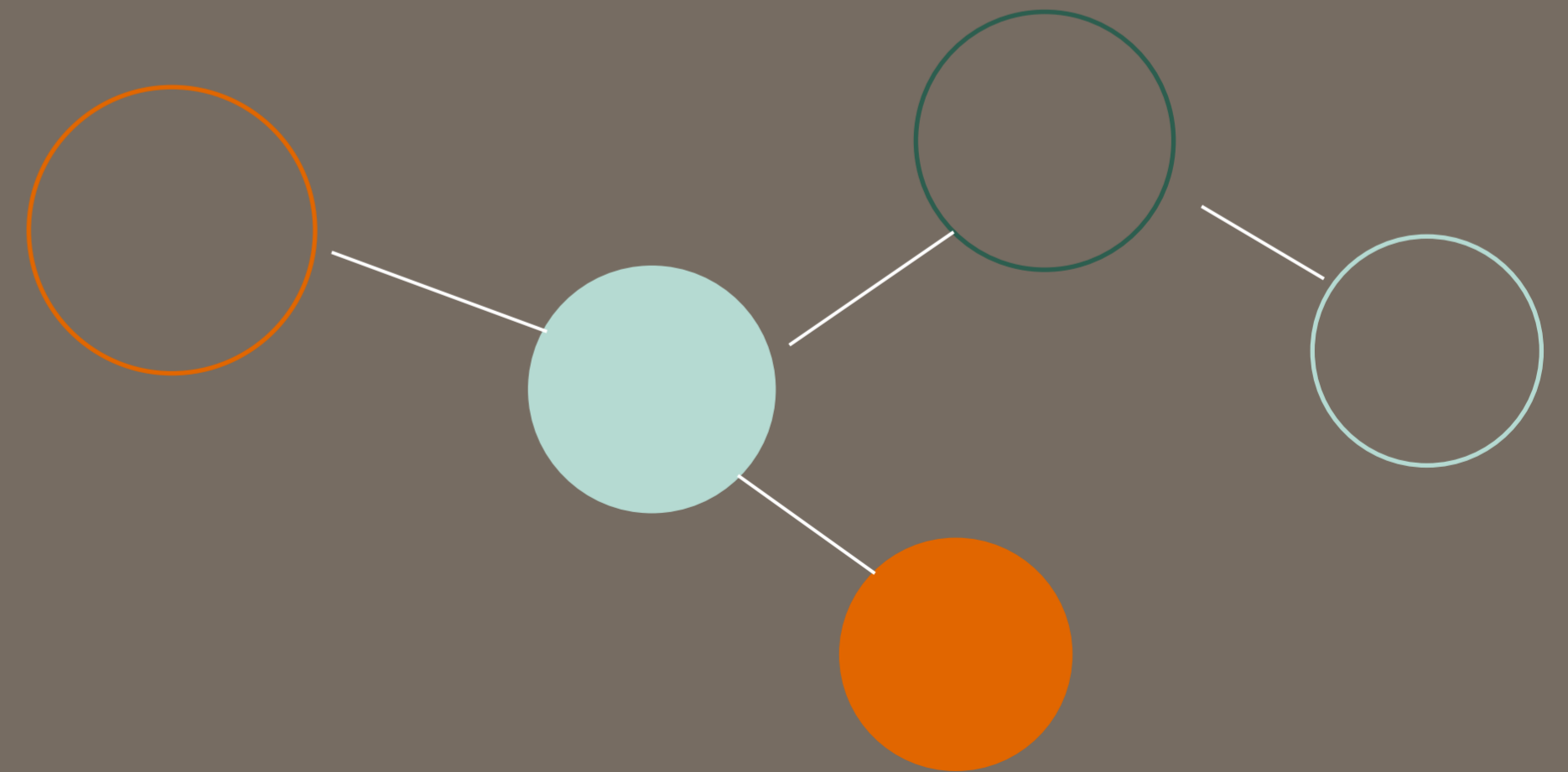




# The ISO 20022 Harmonisation Framework

*for*  
ISO 20022

*The trusted source for your ISO 20022 initiative*

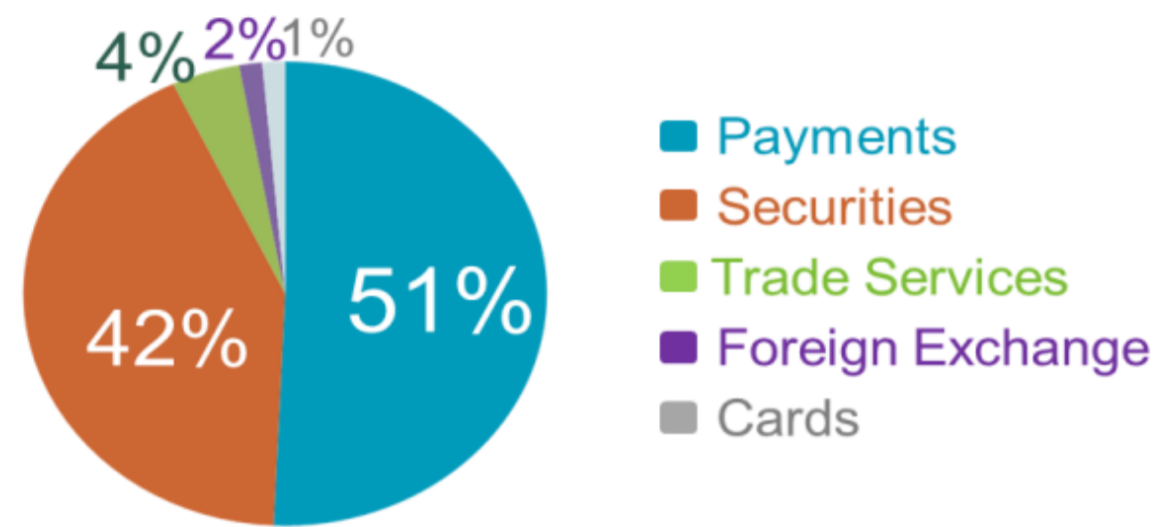


# ISO 20022 Adoption



# Market Infrastructures – Global ISO 20022 adoption

## Payments and securities initiatives



# 200 initiatives

Under discussion > planned > rollout > live

# 90 countries



# 1

SWIFT is  
not  
mandating  
migration



# 2

SWIFT will  
continue  
to support  
FIN

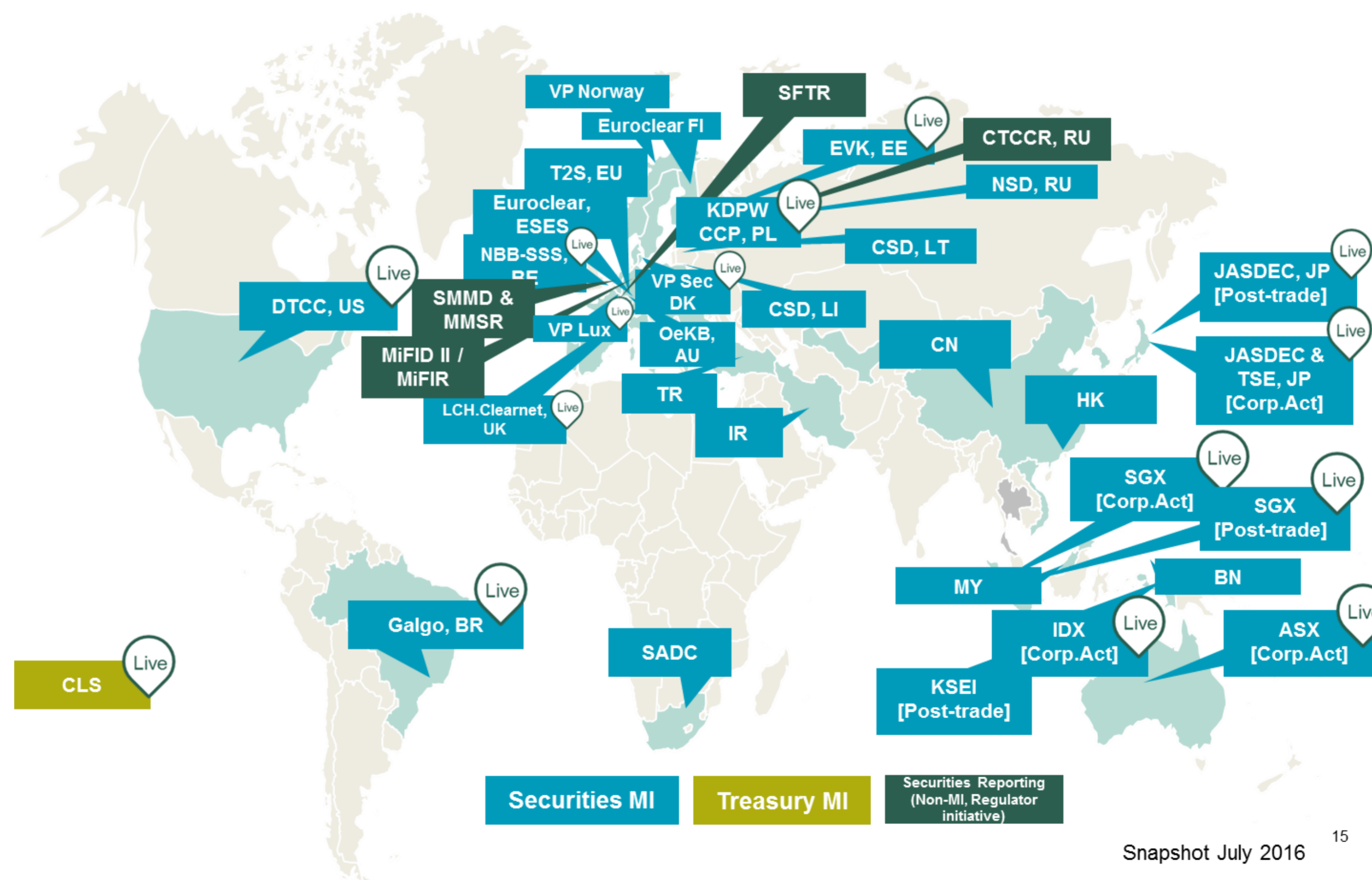
# Market Infrastructures – Global ISO 20022 adoption

## Securities initiatives under discussion and implementation

ISO 20022  
adoption mApp



Europe  
Asia Pacific  
Americas  
Middle East & Africa



# Adoption drivers for Securities Market Infrastructures (SMIs)

- **Renewal** of aging legacy systems and standards
- **Spill-over** of initiatives across systems part of the domestic ecosystem (eg. RTGS) or regionally/in neighbouring countries (such as T2S in Europe)
- **Oversight pressure** (regulators, governments, lobbyist...)
  - to change transaction processing methods within a bigger political or regional initiative (reg risk management)
  - To increase global interoperability in support of a country's ambition to expand internationally or open up to foreign participation domestically
- As part of the **long term roadmap** of the MI to be state-of-the-art at all time
- **For participants :**
  - **when CSD imposes the change**
  - **when connected to various MIs to look at efficiency gains and cost reduction** with the use of common standards and harmonised market practices around standards, but also around channels and implementation choices



# ISO 20022 Harmonisation



# Towards a harmonised use of ISO 20022

1

Less variation,  
more global  
market practice



2

Provide a predictable  
environment for  
MI communities  
(versions, release  
mgmt..)

3

Best practice sharing for  
community adoption &  
implementation

# Towards a harmonised use of ISO 20022

## 2013 – Sibos/SF Dubai

Bankers asked for a call of action – SWIFT needs to do something !



# 21 endorsing MIs

## Oct 2015 – Third MI Summit Sibos Singapore

Charter approved  
Endorsing Ceremony  
Plans for operationalisation

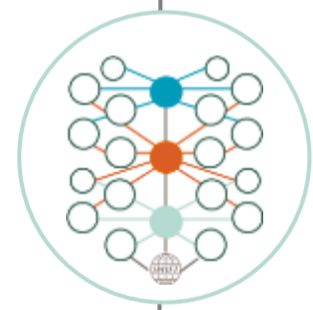


## May 2016 - Fourth MI Summit New York City

Presentation about progresses made on the operationalisation of the Charter  
Status on endorsements

## 2014 – First MI Summit Sibos Boston

Agree there is a problem to be resolved + SWIFT received mandate to come up with a proposal for industry



## April 2015 – Second MI Summit La Hulpe

Harmonisation Charter proposed + MyStandards as the platform to use for harmonisation + Agreed on work that needs to be done on Market Practices, etc.

# 23 MIs

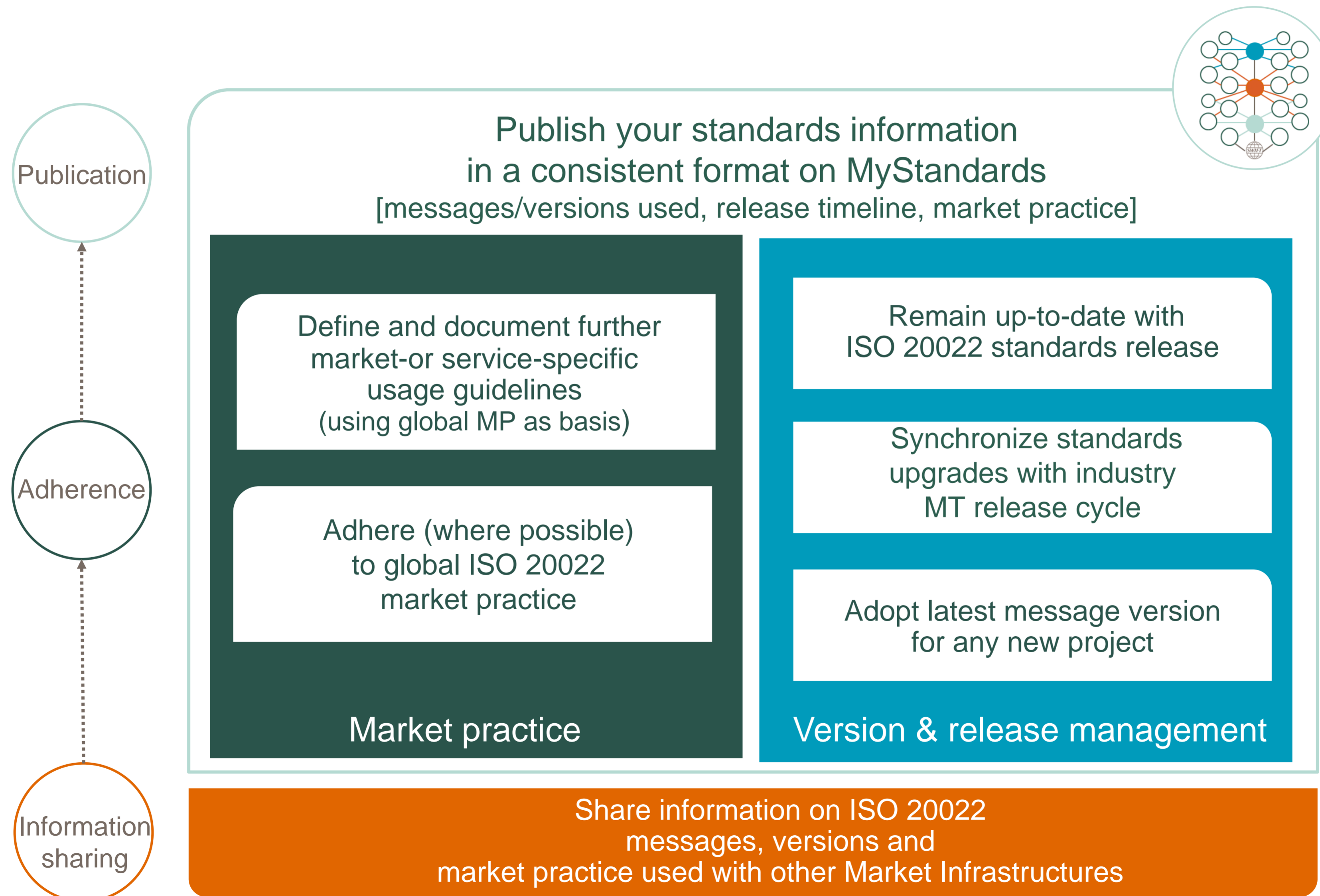
## Sept 2016 – Sibos Geneva



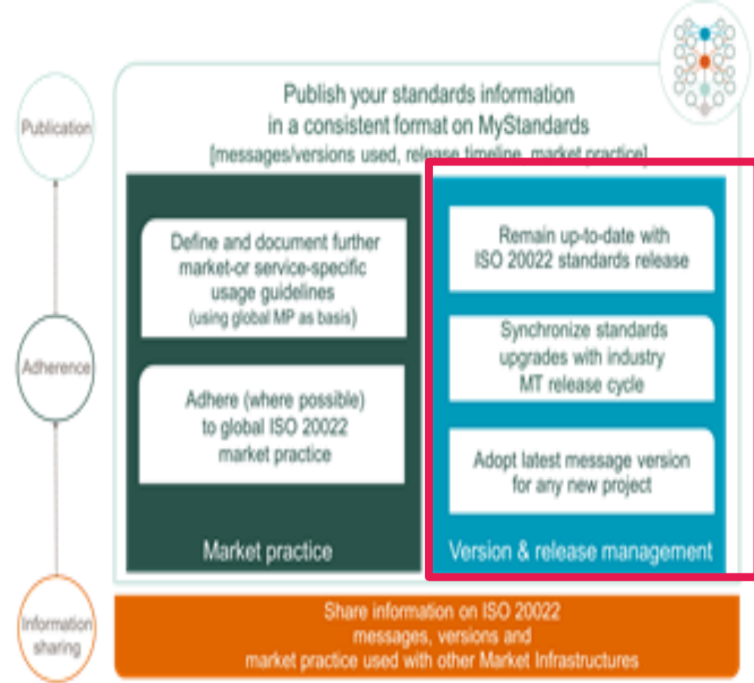
# More Endorsing MIs



# The ISO 2022 Harmonisation Framework - Principles



# ISO 20022 Harmonisation Framework – #1 Version & release management principles



1

Adopt latest message version for any new project

2

Synchronize standards upgrades with industry MT release cycle

3

Remain up-to-date with ISO 20022 standards release

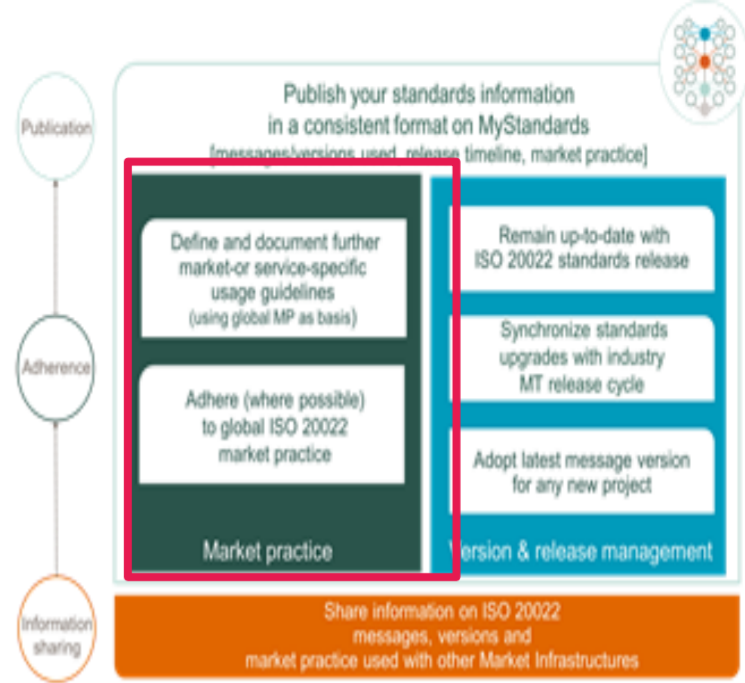
# ISO 20022 Harmonisation Framework – #2 Adherence to market practices

1

Adhere to global ISO 20022 market practice where possible and available

2

Define and document market or local specific usage guidelines (using global MP as a base)



# ISO 20022 market practice for securities and payments

## Available

## Ongoing

## Future

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"><li>• <b>Investment Funds</b><ul style="list-style-type: none"><li>- Defined by the Securities Market Practice Group (SMPG)</li><li>- Published on <a href="http://www.smpg.info">www.smpg.info</a> and MyStandards</li></ul></li><li>• <b>Settlement and related services used by TARGET2 Securities (T2S)</b><ul style="list-style-type: none"><li>- Published on MyStandards</li></ul></li></ul> | <ul style="list-style-type: none"><li>• <b>Settlement and reconciliation</b><ul style="list-style-type: none"><li>Creation of 'generic' settlement templates (for use outside T2S markets)</li></ul></li><li>• <b>Collateral management</b></li></ul>   | <ul style="list-style-type: none"><li>• <b>Corporate actions and proxy voting to be started in parallel</b></li><li>• <b>Cash management</b></li><li>• <b>Post-trade</b></li></ul> |
| <ul style="list-style-type: none"><li>• <b>High Value Payments</b><ul style="list-style-type: none"><li>- Sponsored by the Payments Market Practice Group (PMPG)</li><li>- 'Like-for-Like' approach</li><li>- Published on MyStandards</li></ul></li></ul>  | <ul style="list-style-type: none"><li>• <b>Real Time Payments</b><ul style="list-style-type: none"><li>- Ongoing work by ISO 20022 Real Time Payments Group (RTPG) – 70 stakeholders from 17 countries</li><li>- Covers payments initiation, clearing and settlement (pain and pacs)</li></ul></li><li>• <b>High Value Payments 'Plus' – Beyond like-for-like</b></li></ul> | <ul style="list-style-type: none"><li>• <b>Low Value Payments – Being considered under Real-Time Payments WG</b></li></ul>   |

# HVPS+ Core Group Composition

Participant	Institution
Bob Massina	APCA - Australia
Charlie Clarke	Payments Canada - Canada
Dave Hardingham	First Rand Bank Ltd – South Africa
Desmond Leung	Hong Kong Interbank Clearing Limited – Hong Kong
Gina Russo	Federal Reserve Bank of New-York - US
Ilze Prinsloo	Standard Bank – South Africa
Jette Simson	EBA Clearing - France
Leslie Lee	Federal Reserve Bank of New-York - US
Lorenzo Giammo	Banca di Italia - Italy
Michael Knorr	PMPG Member representing the US
Nick Davey	Bank of England - UK
Peter Hittinger	PMPG Member representing The Netherlands
Robert Pepitone	The Clearing House - US
Sabine Simoens (New participant)	Deutsche Bundesbank - Germany
Sylvain Dauge	Société Générale - France
Tim Decker (New participant)	PMPG member representing the UK
Name to be confirmed	ECB

# New membership from September 2016: Term Of Reference

## Core Members

ISO 20022 Market Infrastructures Summit members with ISO20022 migration plans & PMPG sponsored Banks



## Advisers

Market Infrastructures that have already adopted ISO20022 and accept to share their experience



## Observers

Parties (Market Infrastructures, Banks, Vendors, Standardisers, Market Practice Setters) who want to be kept informed

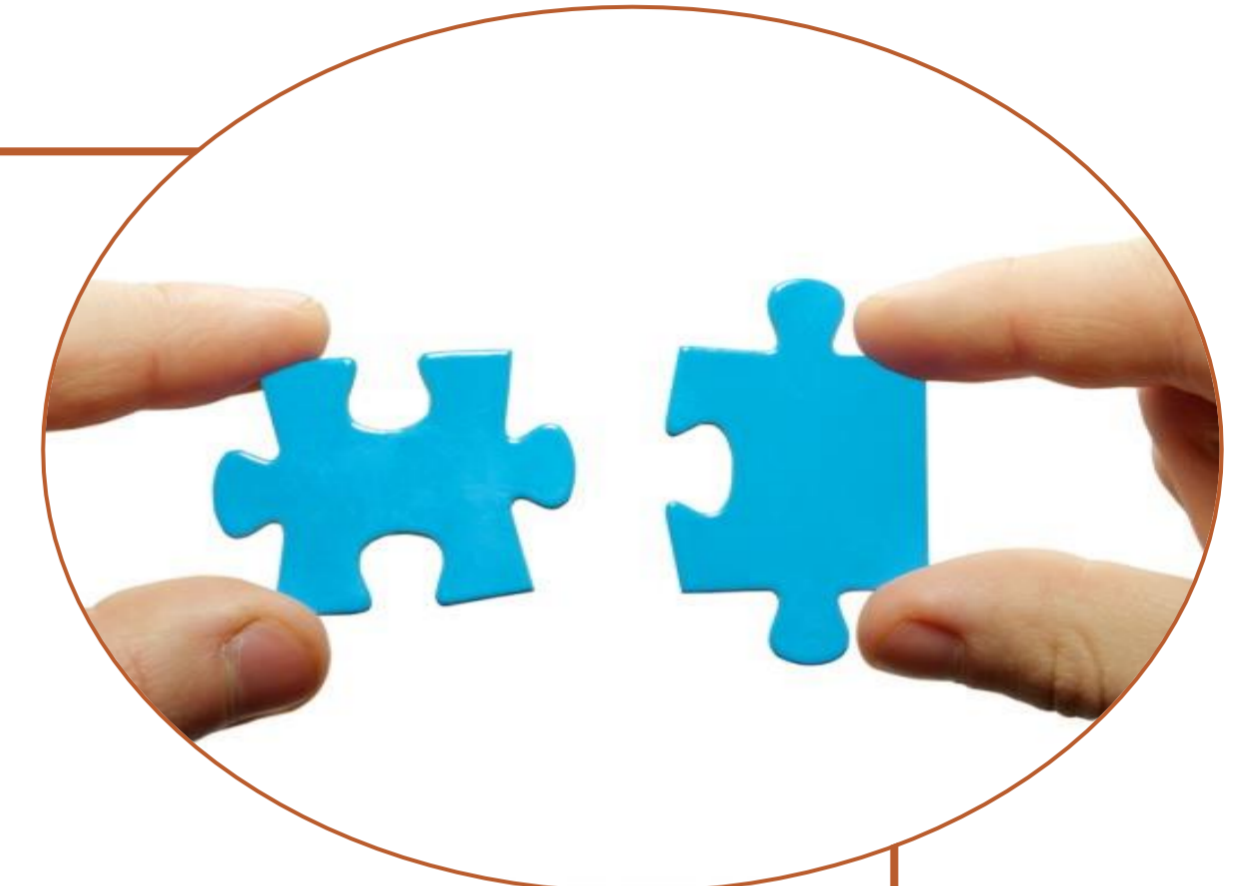


Membership Requests: [patrik.neutjens@swift.com](mailto:patrik.neutjens@swift.com)



Ensure a common roll-out and implementation of ISO 20022 for HVPS communities who wish to move beyond the existing pure 'like-for-like' HVPS guidelines

## Phased delivery



Phase 1: Market Practice & Implementation Guidelines :  
(pacs.008, pacs.009, pacs.010, pacs.002, pacs.004, camt.029, camt.056)  
Mid 2017 (currently working on pacs.008)

Phase 2: Additional messages such as for Liquidity Management  
Date to be determined



# Calendar of events

## Events

- 14 April 2016: Kick-Off Conference Call
- 23 & 24 June 2016: 2-day physical Workshop
- 7 September 2016: Follow-Up Conference Call



## Events

- 3 & 4 October 2016: 2-day physical Workshop
- Mid-December: Additional Workshop (TBC)

Core Members, Advisers and Observers have free access to the documentation (MyStandards) and are invited to comment/provide feedback at all time





# The ISO 20022 Harmonisation Framework – Endorsing (E) and Supporting \*\* (S) MIs

## Payments markets

- ACH Colombia (E)
- APCA (S)
- Banca d'Italia (S)
- Bank of Canada (E)
- Bank of England (S)
- Deutsche Bundesbank (S)
- EBA (S)
- ECB (S)
- Payments Canada (Ex-CPA) (E)
- PMPG (S)
- Hong Kong Interbank Clearing (E)
- National Bank of Ukraine (E)
- National Bank of Belgium (S)
- SADC \* (E)
- Reserve Bank of South Africa (S)
- The Clearing House (S)
- US Federal Reserve (S)

## Securities markets

- ASX (Australia) (E)
- Barbados Stock Exchange & Barbados Central Securities Depository (E)
- Clearstream (E)
- DTCC (S)
- Euroclear (E)
- Hong Kong Exchanges and Clearing (E)
- The Central Securities Depository of Poland KDPW (E)
- Jasdec (S)
- LCH (E)
- Russia's National Settlement Depository (E)
- OeKB (CSD Austria) (E)
- Ukrainian National Securities and Stock Market Commission (E)
- VP Lux (E)
- VP Securities Denmark (E)
- VPS Norway (E)
- SGX (Singapore) (E)

## FX markets

- CLS (E)

Today

\*\* supporting (MIs that are part of the Summit except PMPG)

\* SADC Banking Association (representing the following countries: Angola, Botswana, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia, Zimbabwe)



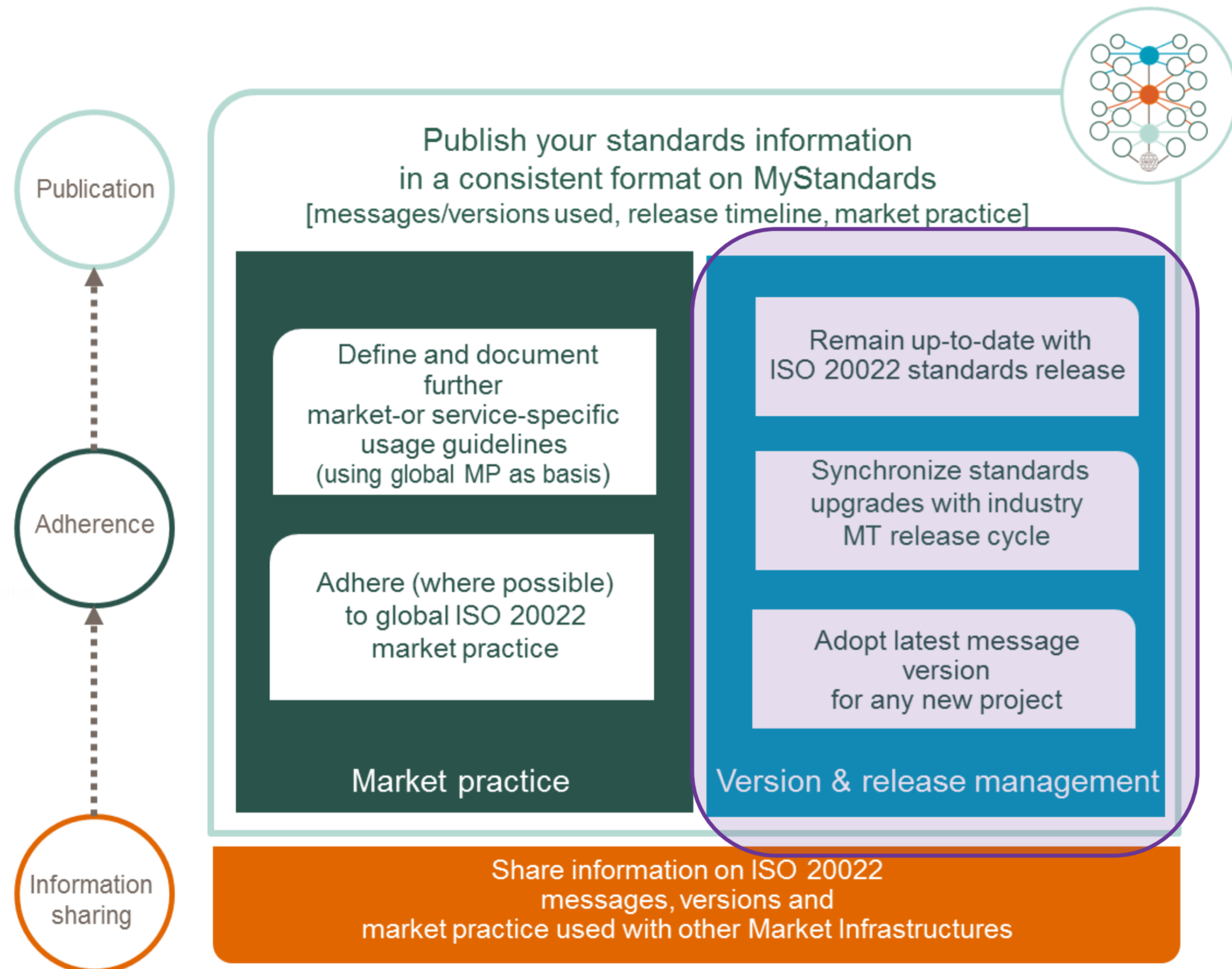
[www.swift.com](http://www.swift.com)



# Turning the ISO 20022 Harmonisation Charter into an operational reality

Version and release management for ISO  
20022

# Positioning version and release cycle alignment in the Harmonisation Charter



The pure ISO 2022 standard leaves too much flexibility, preventing consistency and cost efficiencies

**Versions:** several versions of a same message can be used forever, at discretion of FMI for its community

**Release cycle:** each FMI can decide independently when to adopt new message versions

A call for alignment ...

# Best practice 1: Categorizing Change Requests

**SWIFT analyses impact of MCRs on ISO 20022 base messages**

No impact

Optional impact

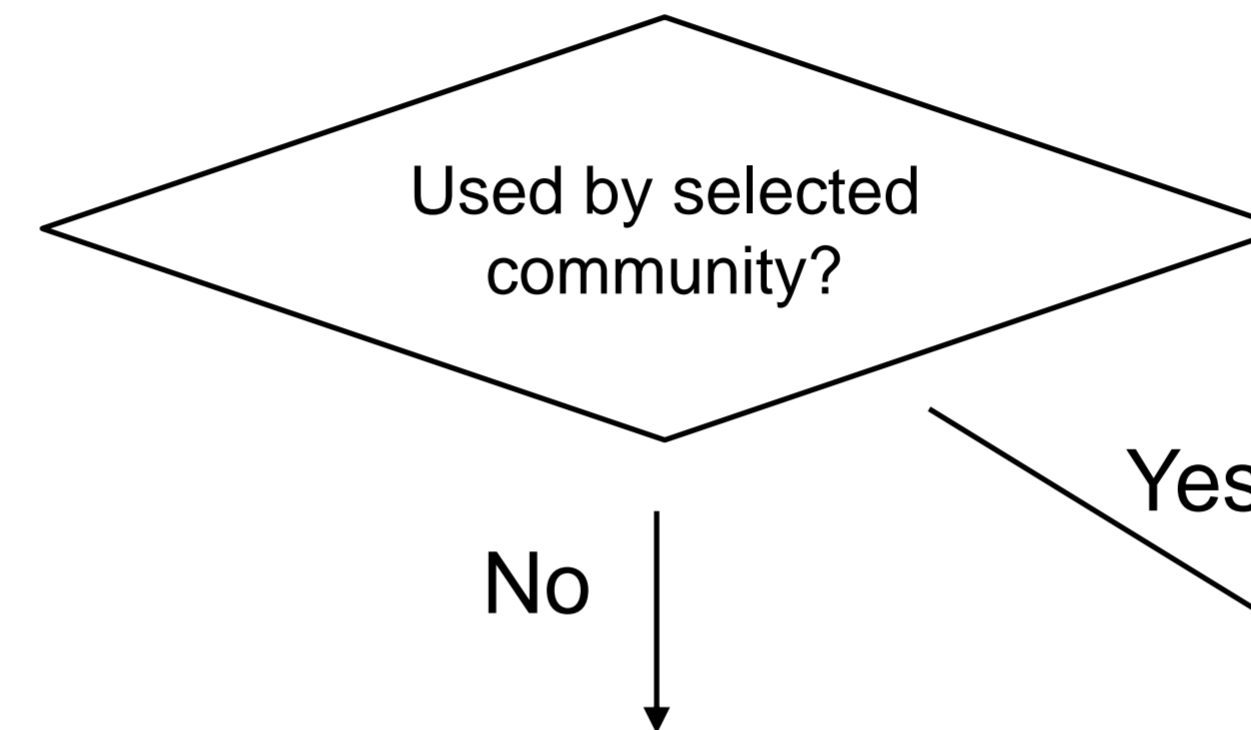
Unclassified impact

Mandatory impact

Add optional field

Reduce length of optional field

Add mandatory field



**FMI analyses impact on its community**

**No change**

**Technical change**

**Business change**

Version increase	No	Yes	Yes
Back-office update	No	No	Yes

- Well-developed business areas: many messages are stable, often “no change”
- Many CRs extend functionality i.e. addition of optional fields hence “technical change”
- Small category of “business changes” driven by business needs/regulatory changes

Working groups and ISO 20022 submitting organisations will leverage categorization to bundle changes and reduce the number of versions (and hence releases).

Note: correct processing of inbound traffic requires MI to indicate how it will handle (ignore versus reject) of new optional fields that it doesn't use. Today often done through a general policy.



## Best practice 2: Upgrade with every new message version

- **To allow Financial Institutions to use 1 version across FMIs**
- **FMI to upgrade to every new message version**
  - If and when it arrives
  - Independent of the reason (technical/business) for the new message version
  - Exceptional deviation from best practice: FMI can decide to support the previous version in addition, should that particular community require so
- **Remarks**
  - Applies to steady state situation only, so not during migration
  - Mature business areas will not necessarily face an upgrade every year thanks to bundling
  - The option to support 2 message versions is not available in case of business change

# Version management approach illustrated

Year	1	2	3	4	5	6	7	8	9
Type of change	B	\	B	B	T	T	\	T	B
Message version	1	1	2	3	4	5	5	6	7
FMI supported version	1	1	2	3	4	5	5	6	7
FI external version	1	1	2	3	4	5	5	6	7
FI back-office version	1	1	2	3	3	3	3	3	7

A fictitious - yet representative - example where the FMI supports 1 message version only.

- With every change (Business or Technical) the message version is increased
- FMI upgrades to every new version when it becomes available, so “FMI supported version” identical to “message version”
- FI uses latest available version globally for all communication with FMI, hence “FI external version” matches “FMI supported version”
- FI only needs to update back-office when there is a business change, hence “FI back-office version” can lag behind version used externally (“FI external version”)

Over 9 years, there are 7 new message versions.

The FI internally only has to update his back-office 3 times out of 7.

## Best practice 3: Apply annual release cycle

- **Use an annual release cycle i.e. new message versions can be introduced once per year, at fixed moment**
- **Milestones are very similar as those for the FIN/MT release cycle, widely used in the financial industry for over 30 years**
- **Key points when comparing FIN/MT and ISO 20022 release cycle**
  - Most milestones (type, date) match
  - FIN/MT cycle is governed by SWIFT, whereas the governance of ISO 20022 lies with ISO
  - 31 December documentation milestone will be implemented to mimic the FIN/MT deliverable (quality, completeness, publication on MyStandards)
  - 30 April milestone: additional milestone given the increased importance of Usage Guidelines in ISO 20022 context
- **Will be applicable as of Standards Release 2018, with go-live in November 2018**
- **So will be used for the Change Requests due 1 June 2017**
- **SWIFT already started adapting its internal processes to support this timeline and deliverables**





# Illustration of Release cycle for SR 2016

*Proposal-> RMG Nov 2016*

Year	Month	FIN/MT			ISO 20022
20nn-1	1 June	<b>Change request submission deadline</b>	=	1 June	<b>Change request submission deadline</b>
	17 July	<b>High-level information published</b> Summary of (not yet approved) change requests received for SR 20nn	=	24 July	<b>High-level information published by SWIFT</b> Summary of (not yet approved) change requests received for SR 20nn
	July - Aug	<b>Approval</b> Maintenance Working Group Meetings end August	<>	July - Oct	<b>Approval</b> Submitting organisations send Maintenance Change Requests (MCR) to Registration Authority (RA) by 21 August, except for S&R and CA where it is by 15 September By 1 Oct: Standard Evaluation Group (SEG) approves MCRs, except for S&R and CA where it is by 31 Oct
	September October	SWIFT Board ratification SWIFT community country vote			
	20 Nov	<b>Updated high-level information published</b> Summary of approved change requests received for SR 20nn	=	20 Nov	<b>Updated high-level information published by SWIFT</b> Summary of approved change requests received for SR 20nn
	18 Dec	<b>Standards Release Guide (SRG) 20nn published</b> on www.swift.com and MyStandards Describes the changes to Standards messages effective as of November 20nn	=	Before 31 Dec	<b>Evaluation documentation 20nn published</b> On the publicly available <a href="http://www.iso20022.org">www.iso20022.org</a> (subject to confirmation by ISO 20022 Registration Management Group (RMG)) and on MyStandards
20nn	26 Feb	<b>Update to SRG 20nn published</b> on www.swift.com and MyStandards Updates to documents published on December 20nn-1	=	26 Feb	<b>Message schemas and full documentation published by SWIFT</b> On swift.com (User Handbook) as well as on MyStandards
		N/A	<>	30 April	<b>Publication of updated Usage Guidelines (if any)</b> FMI publishes on MyStandards update details for his service(s): changes to their usage guidelines if any
	1 May	<b>Vendor Test System</b>	=	21 May	<b>Vendor Test System</b>
	22 July	<b>SR 20nn available for pilot testing on Test&amp;Training system</b>	=	24 July	<b>SR 20nn available for pilot testing on Test&amp;Training system</b>
	20 Nov	<b>SR 20nn live on SWIFT FIN</b>	=	19 Nov	<b>SR 20nn live on SWIFTNet</b>

## Conclusions and next steps

### - Approach

- Categorize Change Requests into 3 groups
  - Upgrade with every new version, if and when it arrives
  - Do so in an annual release cycle, aligned with FIN/MT cycle, so go-live end of November
- 
- **Best practice recommendations, exceptions can be justified**
  - **Approach requested by FI, approved by FMI**
- 
- **Effective as of Standards Release 2018**
  - **Extensive communication to FMIs and FIs as of Sibos Geneva**
  - **SWIFT provides FMI community assistance with implementation of approach**

# The ISO 20022 Harmonisation Framework – Endorsing (E) and Supporting (S) MIs

## Payments markets

**ACH Colombia (E)**  
**APCA (S)**  
**Banca d'Italia (S)**  
**Bank of Canada (E)**  
**Bank of England (S)**  
**Deutsche Bundesbank (S)**  
**EBA (S)**  
**ECB (S)**  
**Payments Canada (Ex-CPA) (E)**  
**PMPG (S)**  
**Hong Kong Interbank Clearing (E)**  
**National Bank of Ukraine (E)**  
**National Bank of Belgium (S)**  
**SADC \* (E)**  
**Reserve Bank of South Africa (S)**  
**The Clearing House (S)**  
**US Federal Reserve (S)**

## Securities markets

- ASX (Australia) (E)
- Barbados Stock Exchange & Barbados Central Securities Depository (E)
- Clearstream (E)
- DTCC (S)
- Euroclear (E)
- Hong Kong Exchanges and Clearing (E)
- The Central Securities Depository of Poland KDPW (E)
- Jasdec (S)
- LCH (E)
- Russia's National Settlement Depository (E)
- OeKB (CSD Austria) (E)
- **!!!! SMPG !!!!! (S)**
- Ukrainian National Securities and Stock Market Commission (E)
- VP Lux (E)
- VP Securities Denmark (E)
- VPS Norway (E)
- SGX (Singapore) (E)

## FX markets

- CLS (E)

Tomorrow



[www.swift.com](http://www.swift.com)

## Exception scenario: Two versions supported by FMI, FI aiming at minimum work

Year	1	2	3	4	5	6	7	8	9
Type of change	B	\	B	B	T	T	\	T	B
Message version	1	1	2	3	4	5	5	6	7
FMI supported version	1	1	2	3	3,4	4,5	4,5	5,6	7
FI external version	1	1	2	3	3	5	5	5	7
FI back-office version	1	1	2	3	3	3	3	3	7

A fictitious example where the FMI supports 2 message version only.

- With every change (Business or Technical) the message version is increased
- FMI supports 2 versions when there are at least 2 versions, and where the version upgrade is not caused by a business change which invalidates any previous version of the message. Therefore in year 3 an FMI can only support version 2, and in year 4 only version 3.
- However in year 5 it can support both versions 3 and 4 as it concerned a technical change. As a maximum of 2 versions are supported, the FMI has to perform an upgrade in year 6 to support versions 4 and 5. Year 7 brings no change, and year 8 a technical change. The business change in year 9 means that a single version only (version 7) is supported in that year.

## Exception scenario: Two versions supported by FMI, FI aiming at minimum work

Year	1	2	3	4	5	6	7	8	9
Type of change	B	\	B	B	T	T	\	T	B
Message version	1	1	2	3	4	5	5	6	7
FMI supported version	1	1	2	3	3,4	4,5	4,5	5,6	7
FI external version	1	1	2	3	3	5	5	5	7
FI back-office version	1	1	2	3	3	3	3	3	7

A technical change implemented by the FMI causes the FI to update its external version if the version used by the FI is no longer supported by the FMI (which supports 2 versions only). This is the case in year 6. The FI will change to the most recent version (version 5 here) for two reasons:

- Cost of moving from version 3 to version 4, or from version 4 to version 5 is equal as a technical change only requires updating the message identifier in the technical headers;
- Moving to latest version increases probability that in upcoming years fewer changes are required. In this example, upgrading to version 5 in year 6 helps the FI to avoid updating its external version in year 8

Note:

- The FI back-office version used in this scenario is the same as in the previous scenario, as the possible optimisations don't apply to business changes.
- An FI will only benefit the efficiency gain from this upgrade strategy if **all** FMIs the FI works with apply this "support 2 version" approach