Common Domain Model - Collateral Use Case Overview

2026

Collateral - Today's Challenge

CDM
COMMON DOMAIN MODEL

Guidelines outlined under BCBS/IOSCO and Basel III were translated by each regulatory regime spearheading collateral management as a key function in capital markets for both bilateral and cleared OTC. Compliance has increased processing volumes significantly and will continue to do so, the need for automation in collateral management processing. The industry is faced with many challenges which has led to fragmented implementations and operational inefficiencies.

Calculation Dependencies
Margin Monitoring
Margin Allocation
Documentation
Collateral Segregation
Establishing Custody Accounts
Eligibility Schedules
Risk Control
Optimisation
Regulatory Compliance
Reconciliation
Dispute Management
Efficient Settlement

INDUSTRY PARTICIPANTS

- Lack of industry standards - Every industry participant left to implement their own version
- Loss of inter-operability between solutions
- Pervasive reconciliation issues and other operational inefficiencies

Collateral- Benefits of CDM Standard Documentation

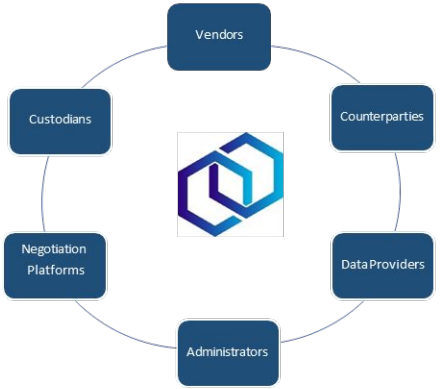
ISDA create

IM CSA Negotiated between parties

Standard CSA data ouput via ISDACreateAPI

```
{
  "agreementDate": {
    "day": 16,
    "month": 7,
    "year": 2020
  },
  "agreementType": {
    "governingLaw": "USNY",
    "name": "CREDIT_SUPPORT_ANNEX",
    "publisher": "ISDA",
    "vintage": 2018
  },
  "contractualParty": [
    {
      "value": {
        "meta": {
          "externalKey": "partyA",
          "globalKey": "65781808"
        },
        "name": {
```

Standard Representation Promotes Interoperability, Transfer of Clean Data and STP



Institutions can exchange CDM Standard for Documents including Eligibility Data to drive Collateral Processes

Use Cases and Benefits

- Fewer Reconciliations, Translations
- Shorter Processes
- Reduced Negotiation Timeframes
- Improved Onboarding
- Decreased Settlement Risks
- Cost Effective
- Secure transfer of information
- Mitigates Margin Disputes
- STP from Negotiation to Settlement
- Produces Clean Auditable data
- Facilitates Digitizing Legacy Data
- Matching counterparty
- Standards for Eligibility Data
- Advance Optimization Processing
- Improved Custodian Services and Interoperability
- Advanced processing of Contract Amendments

Collateral- ECS Challenges – No Standard Data Format

CDM
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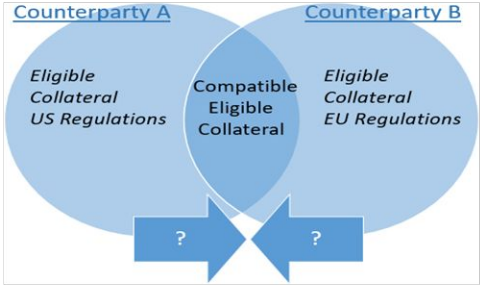
Challenges are observed today with constructing, negotiating and expressing ECS, many of these originate from lack of common data standards and the inability to connect process events.

- Observation of different regulations, agreeing on compatible eligible assets
- Challenges of collateral identity and categorization
- Understanding Asset economic identity to apply regulatory haircuts and confirm eligibility
- No common standards in place for representation of key features
- Currently no data standard used within documentation to describe the elements for eligible collateral – <u>many versions observed</u>:



	Items of Eligible Collateral (IM) and Eligible Currencies	[In respect of Party A's posting obligation]	[In respect of Party B's posting obligation]	[Valuation Percentage]
(A)	[ ]	[ ]	[ ]	[ ]%
(B)	[ ]	[ ]	[ ]	[ ]%
(C)	[ ]	[ ]	[ ]	[ ]%
(D)	[ ]	[ ]	[ ]	[ ]%
[FX Haircut Percentage]		[In respect of Party A's posting obligation: [8]% [, unless the Eligible Collateral (IM) is denominated in the Termination Currency specified with respect to Party B under the Agreement (including, without limitation, pursuant to this Annex), in which case, 0%.]		
		[In respect of Party B's posting obligation: [8]% [, unless the Eligible Collateral (IM) is denominated in the Termination Currency specified with respect to Party A under the Agreement (including, without limitation, pursuant to this Annex), in which case, 0%.]		
[Termination Currency][10]		With respect to Party A: [ ].		
		With respect to Party B: [ ].		
		In relation to a calculation pursuant to Section 6(e)(ii)(2) in respect of an Early Termination Date resulting from a Termination Event where there are two Affected Parties: [ ].		

(ii) **Eligible Collateral.**

The following items: (i) will qualify as "Eligible Collateral" for Party A and Party B; and (ii) are identified by the appropriate ICAD codes, as defined in the Collateral Asset Definitions. Percentage shown is the Valuation Percentage applicable to the indicated combination of ICAD and Remaining Maturity.

	Remaining Maturity			
ICAD Code	One (1) year or under	More than one (1) year up to and including five (5) years	More than five (5) years up to and including ten (10) years	More than ten (10) years
GA-CA-GOV				
CA-TBILL	98%	N/A	N/A	N/A
CA-BOND	97%	97%	95%	93%
CA-RRB	98%	96%	94%	92%
GA-US-GOV				
US-TBILL	98%	N/A	N/A	N/A
US-TNOTE	98%	97%	95%	93%
US-TBOND	98%	97%	95%	93%

Eligibility criteria

Order	Field	Oper	Value	Outcome
1	Security Types	=	Bond, Equity	Accepted
2	Counterparty Own Issue	=	Yes	Not eligible
3	Asset Types	=	Cash	Not eligible
4	Bond Risk Profiles	=	Sovereign, Agency, Structured, Corporate, Convertible bond	Accepted
5	IM asset class. EU	=	C, D, E, F, G, H, I, J, K, L, N, Q-NFI, Q-FI	Eligible
	IM asset class. US	=	2, 3, 4, 5-a, 5-b, 6, 7, 8-a, 8-b	
	Final outcome		If none of the above criteria have been met	Not eligible

Haircut criteria

Group	Order	Field	Oper	Value	Outcome
1	1	Security Currency	Not in	EUR	8 %
2	1	IM asset class. EU	=	C, D, E, H, I, J, K	0.5 %
		Time To Maturity Security	<=	12 Months	
		Applied Rating	=	AAA LT, AA+ LT, AA LT, AA- LT	
2	2	IM asset class. EU	=	C, D, E, H, I, J, K	2 %
		Time To Maturity Security	>	12 Months	
		Time To Maturity Security	<=	60 Months	
		Applied Rating	=	AAA LT, AA+ LT, AA LT, AA- LT	
2	3	IM asset class. EU	=	C, D, E, H, I, J, K	4 %
		Time To Maturity Security	>	60 Months	
		Applied Rating	=	AAA LT, AA+ LT, AA LT, AA- LT	
2	4	IM asset class. EU	=	C, D, E, H, I, J, K	1 %
		Applied Rating	=	A+ LT, A LT, A- LT, BBB+ LT, BBB LT, BBB- LT	
		Time To Maturity Security	<=	12 Months	

Concentration limits

Limit Type	Limit	Granularity	Field	Oper	Value	Basis
Max	15.00 % 10,000,000.00 EUR	Per UPI	IM asset class. EU	=	F, G, L, N, Q-NFI	Contract Collateral Basis

Collateral- Eligible Collateral Schedules

CDM
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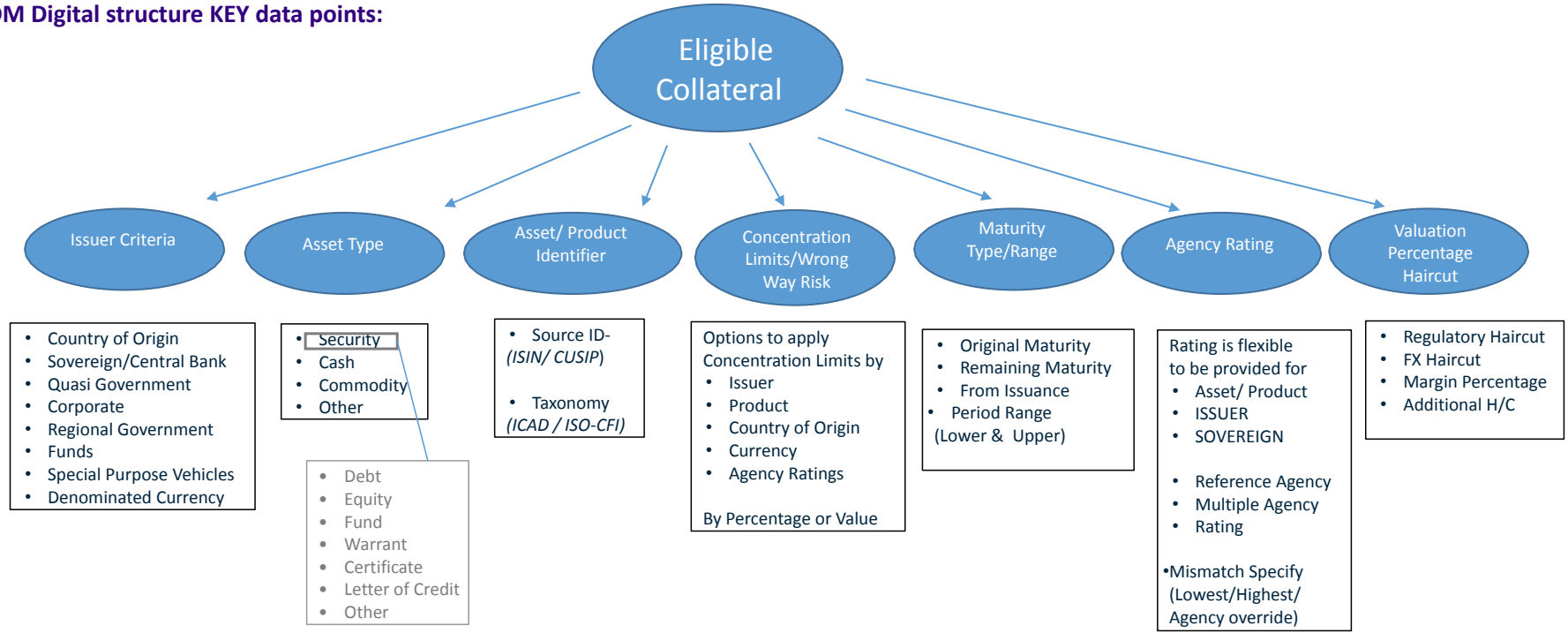
CDM Digital structure KEY data points:



Collateral - Structure to define Asset Types and Identify Issuers

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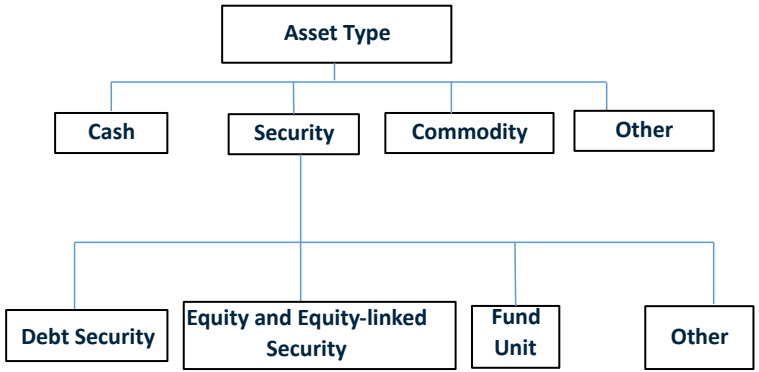
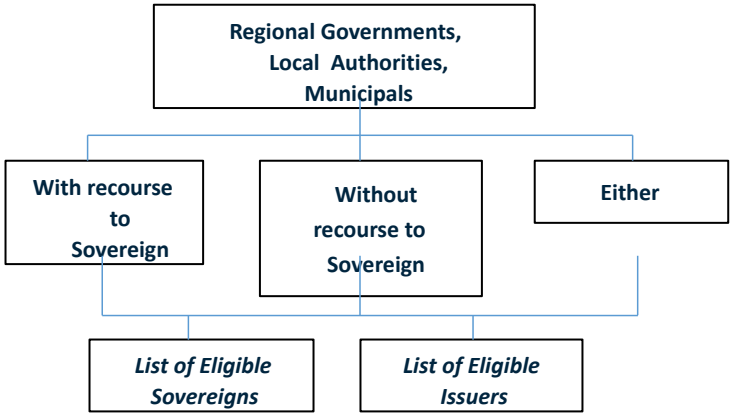
CDM will offer the flexibility to identify collateral asset types, with particular focus on securities, as most common form found in collateral schedules. However, this can be extended to cover many other assets.



With the functional flexibility to capture detail of its identity including specific issuer name and use of common identifiers



Other issuer types include:

- Sovereign Central Banks
- Corporate
- Supranational Debt
- SPV and Funds

Collateral - Eligible Collateral Schedules

CDM
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An Eligible Collateral Schedule is represented in the CDM through the specification of criteria that can be used to "filter" whether a piece of collateral is eligible or not.

Asset Type – is used to specify criteria related to the nature of the asset, such as its type (cash, equity, debt, etc), country of origin or denominated currency

Issuer Type – is used to specify criteria related to the issuer of the asset, such the type of issuer (government, corporate, etc), specific issuer name, or agency rating

The combination of these terms allows a wide variety of eligible collateral types to be represented and can be applied across industry use cases for OTC, Securities Lending, Repo, Cleared and ETD. s

Treatment – is used to specify the valuation percentage, any concentration limits and whether the criteria specify inclusion or exclusion conditions

Solving problems for Global Banks, Custodians, Data Providers, Vendors and connecting solutions.

Standard data for Eligible Collateral information facilitates DLT, Smart Contract and technology to be built to add further efficiencies to processes

Collateral- CDM Object Builder

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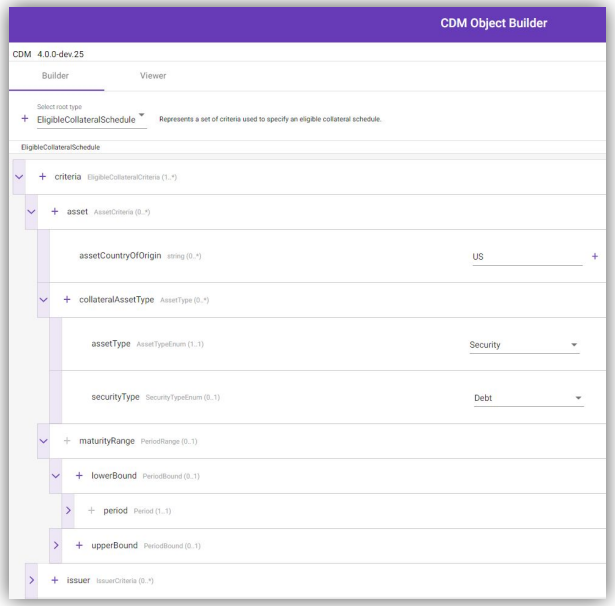
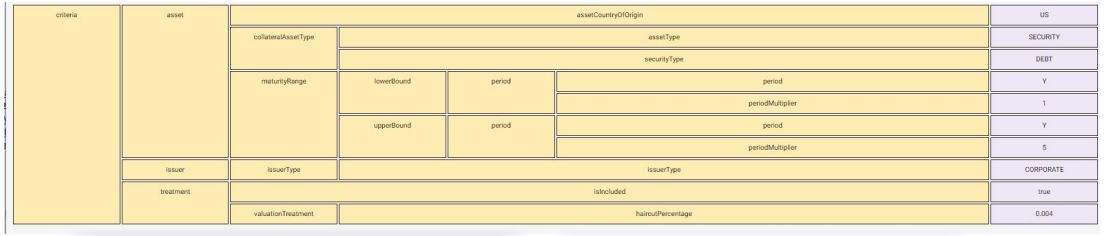
REGnosys on behalf of ISDA have developed a user interface (UI) this allows you to create CDM Eligible Collateral schedule information using drop down functions. The user can create, import, share or inspect in CDM JSON and view in a tabular format. The Object Builder has been contributed to FINOS






```
{
  "criteria": [
    {
      "asset": [
        {
          "assetCountryOfOrigin": [
            {
              "value": "US"
            }
          ],
          "collateralAssetType": [
            {
              "assetType": [
                "SECURITY"
              ],
              "securityType": [
                "DEBT"
              ]
            }
          ],
          "maturityRange": {
            "lowerBound": {
              "period": {
                "period": [
                  "Y"
                ],
                "periodMultiplier": 1
              }
            },
            "upperBound": {
              "period": {
                "period": [
                  "Y"
                ],
                "periodMultiplier": 5
              }
            }
          }
        }
      ],
      "issuer": [
        {
          "issuerType": [
            {
              "issuerType": [
                "CORPORATE"
              ]
            }
          ]
        }
      ],
      "treatment": {
        "isIncluded": true,
        "valuationTreatment": {
          "haircutPercentage": 0.004
        }
      }
    }
  ]
}
```


The UI can be used for predefined common eligibility profiles to import and edit and producing industry compatible consumable data output. The current UI gives the user the ability to also validate and construct many version of eligible collateral as CDM data and has the scope to be development further and built into services for use cases beyond collateral

Commitment to CDM Adoption: Collateral Use Cases

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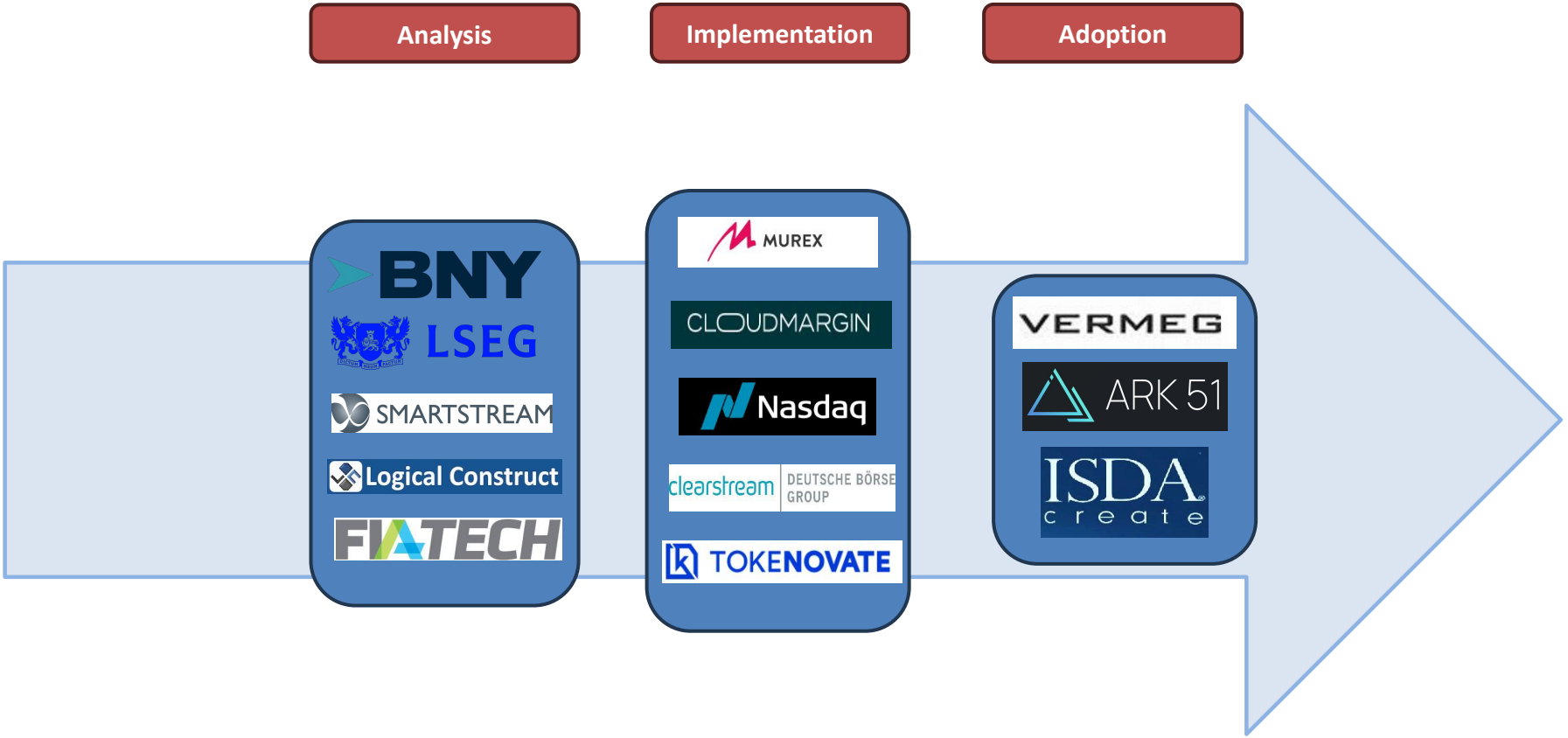
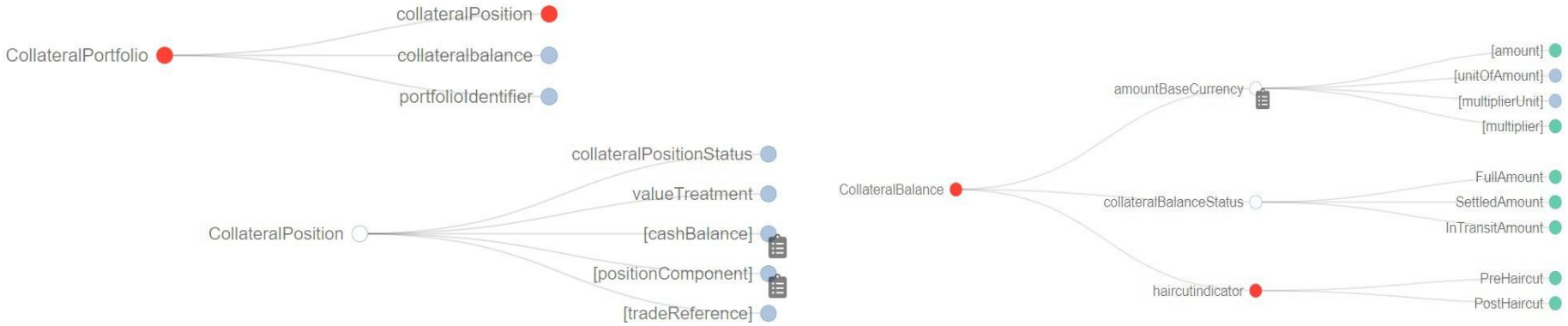


Collateral- CDM Margin Call / Positions / Balances and Exposure

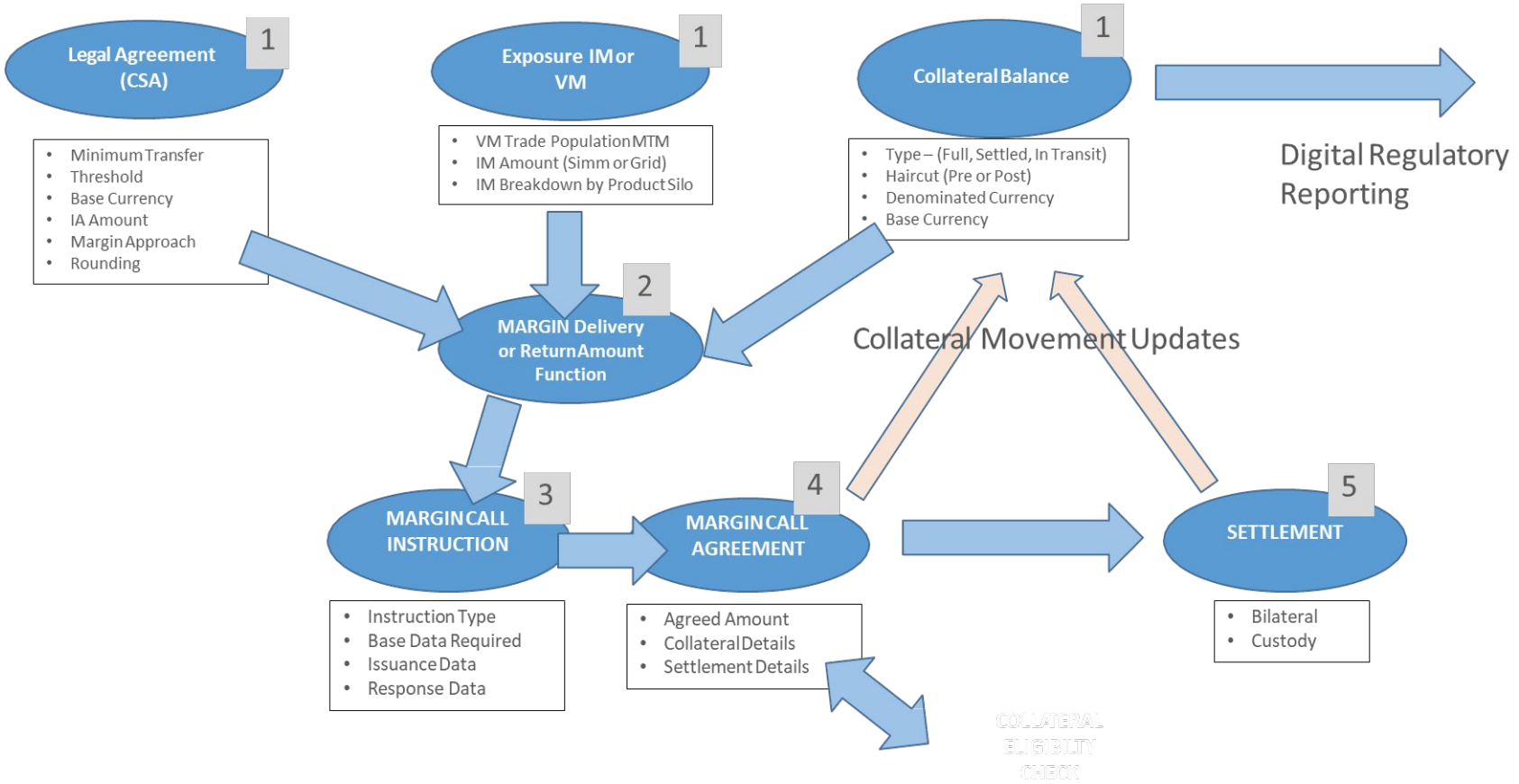
Data to support the Collateral Margin Call process and its related components for Collateral Balance , Collateral Positions and Exposure are now represented in the CDM.

A foundational structure to support the data required for the margin call process including:

- **Standard margin call action labels**
- **Base details for margin call data types and attributes to support unique features for issuance and response**
- **Collateral positions and ability to list collateral assets for responding to margin demands and for information purposes**
- **Collateral balance data requirements and aggregate values for margin call data and reporting**



Collateral- Margin Call connection to other CDM components



Collateral Validation Use Case – FINOS Hackathon Overview

CDM
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Goal: To showcase one of many end benefits of using the CDM's collateral representation as a function

"This is the collateral I have."

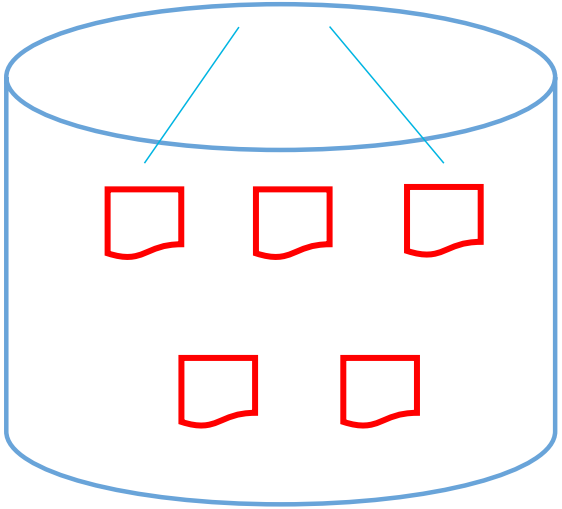
"Will you accept it?"

CHECK

1. Is an EU bond with 4 years remaining maturity eligible? If so, what are applicable haircuts?
2. Are JGBs with a 3-year remaining maturity eligible? If so, what are applicable haircuts?
3. Is GBP (cash) eligible? If so, what are applicable haircuts?
   Using the following files for the first use case:

   - EU 1-5 2%
   - EU 1-5 15%
   - US 1-5 2%
   - US 1-5 4% Corp
   - US 1-5 4%
   - US Cash

Collateral Criteria
As CDM Objects (in JSON)

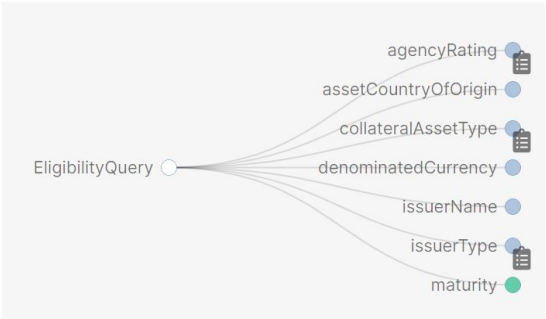


Eligible Collateral Schedule
(list of collateral accepted by counterparty)

Collateral Validation Use Case – FINOS Hackathon Overview

The CDM now offers a function that if presented with CDM standard data using the Eligible Collateral criteria can perform eligibility validation checks.

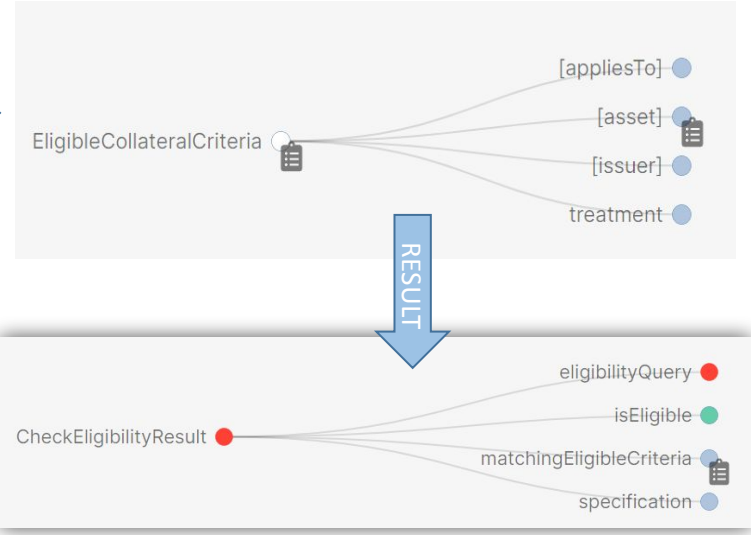
CDM Collateral available to Deliver



"Will you accept it?"

CDM FUNCTION CHECK

CDM Eligible Collateral list accepted by counterparty



This function has since been applied to a Repo use case explored by ICMA, based on an application that defines collateral bond baskets using the CDM Collateral structure.

Collateral to post can be validated against the eligibility information of the baskets and be used to define a REPO product, choosing the bond meeting a set of criteria to allocate the securities for delivery.

More use cases can be explored and the CDM model is extendable to accommodate further scope and opportunities.

CDM – Collateral Use Cases – Next Steps

As demonstrated, the CDM has a robust standard data structure for representing the necessary criteria for Documentation and Eligible Collateral across the various industry product silos.

Additional features and functions have been applied as use cases emerge. ISDA and the other trade associations intend to focus on the following in 2026:

- Support adoption with firms committed to eligible collateral and digital documentation use cases
- Further develop pipeline for eligible collateral and digital documentation
- Increase CDM-collateral use case awareness via trade press, industry conferences, ISDA events, and social media
- Extend CDM, as identified by adopters
- Promote and distribute CDM Collateral user startup guidance resources
- Expand eligibility checking function use cases; apply and validate, based on feedback
- Support industry efforts focused on data standards for collateral facilitating DLT, Smart Contracts and innovative technology
- Extend and enrich the CDM model for more collateral use cases

Get Involved

FINOS: The Home of CDM
Join Working Groups

CDM
COMMON DOMAIN MODEL

Steering Working Group

Developing the technical and modelling guidelines, setting and revising the project's strategic roadmap, and for vetting proposed changes.

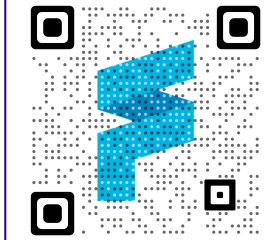
Monthly, Tuesdays
11AM EST (4 PM BST)

Contribution Review Working Group

Reviews approves, and implements contribution proposals to the CDM.

Semi-monthly, Tuesdays
10 AM EST (3PM BST)

FINOS Community Calendar



Collateral Working Group

Provides the CDM framework for harmonization of data and processes for collateral flows and documentation.

Monthly, Wednesdays
10AM EST (3PM BST)

Derivatives Working Group

Focused on swaps, structured products, options, FX, post-trade events.

Semi-monthly, Wednesdays
11:30 AM EST (4:30PM BST)

Tokenized Assets Working Group

Working to Introduce tokenisation attributes to the existing asset model.

Monthly, Wednesdays
10AM EST (3PM BST)

Technology Architecture Working Group

Aligns architecture tooling services, infrastructure, development practices, and deployment to existing and future technologies.

Semi-monthly, Thursdays
9AM EST (2PM BST)

Physical Risk Working Group

Integrating physical risk into the global banking system through an open-source framework.

Monthly, Wednesdays
9 AM EST (2PM BST)

Smart Contract Task Force

Task force dedicated to the operationalisation of the CDM.

Monthly, Fridays
9:30 AM EST (2:30 PM BST)

CDM | COMMON DOMAIN MODEL

TRADE HEADER

THE LINUX FOUNDATION

A 90-minute, self-paced Express Learning course – teaches how to use CDM to standardize data for various financial products, including derivatives, securities, and repos and apply business events to related transactions.

ENROLL TODAY!

How to get involved

Info hub for FINOS including user documentation downloadable distributions: Homepage | Common Domain Model (finos.org)