

# ISLA 2021 CDM Roadmap

January 2021



Digital Strategy & Analysis

*What is the ISLA Digital Roadmap?  
ISLA Member pain points. Association CDM development alignment.  
Ringfencing ISLA IP. Monetisation of Digital footprint. Governance architecture.*

CDM Minimum Viable Product

*Develop on CDM Pilot to create MVP for SL  
Extend product model/lifecycle events: Allocation, Returns & billing.  
Incorporate GMSLA elements*

Legal Document Digitisation

*Complete Clause Library & Taxonomy for GMSLA  
including draft wording*

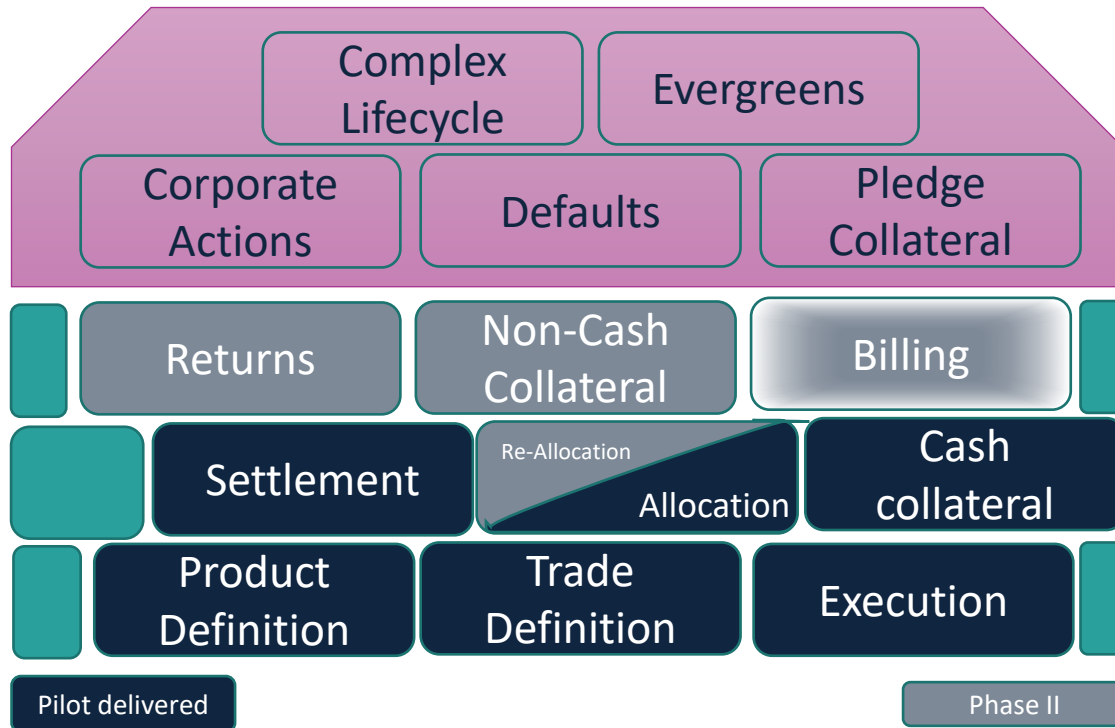
Digital Advocacy

*Event and regulatory engagement. Membership bilateral meetings to promote CDM usage (~53% of DSG survey reported CDM likely, extremely likely or is in budget for 2021)*

# CDM Phase II Scope: A MVP for Securities Lending

## Goal Statement:

*Develop the CDM sufficiently to ensure that a firm can use it to enter a loan of equities or fixed income, with a principal or agent counterpart, settle it, define its collateral schedule, cash or non-cash, bill for it and then exit the loan early or at term.*



## Key Deliverables

- Minimum viable product for a securities loan
- Model Re-allocation event inc. basic cancel and amend
- Model Part & Full-Return event
- Model Billing function for lifecycle events modelled
- Model Non-Cash Collateral schedule and link to trade
- Assist members in testing and using model

## Resource schedule

- Target start mid-February
- Eight 2-week sprint cycles (see later slide)
- End mid 2021

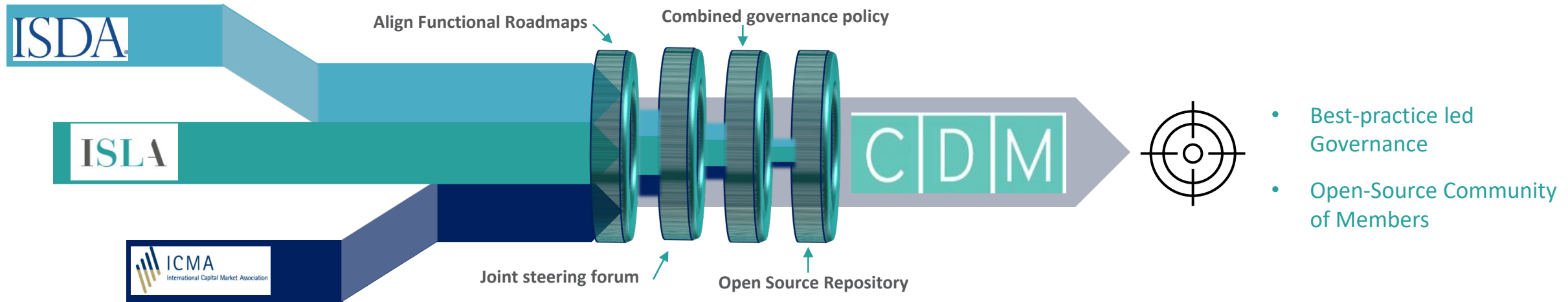
## Future Deliverables

- Backdated amends and cancels- automation
- Pledge collateral concepts
- Corporate actions- automation
- Billing adjustments for the above events
- Evergreen and cancellable trade types\*
- Clause library and legal agreement integration\*\*

*\*If time allows we have enough information left from pilot to develop these in this phase*

*\*\*This is largely due to wider CDM concepts required for integration that ISDA are working through*

Phase	Start	End	Status
Scoping & Engagement	01-Jan-21	19-Feb-21	C
Technical Readiness	22-Feb-21	26-Feb-21	G
Non- Cash Collateral	01-Mar-21	19-Mar-21	G
Part & Full Returns	10-Mar-21	09-Apr-21	N/S
Re-allocations	11-Apr-21	07-May-21	N/S
Billing	25-Apr-21	04-Jun-21	N/S
Product extensions	24-May-21	04-Jun-21	N/S
Prep broader public access	29-May-21	11-Jun-21	N/S



## Associations are collaborating towards the same future goal, to benefit the whole industry

- An open-source model moves cost of development away from TAs while retaining best practice governance
- ISLA & ISDA to begin sharing project management environments and align development goals Feb 2021; collateral big focus for both TAs
- ISLA pilot code will be contributed to CDM 3.0 released end Q1 2021
- ISLA drafting a governance proposal for review by ISDA late Q1 2021, outlining how an open-source community may work
- ISLA and ICMA already attend ISDA CDM Ex-Co and Architecture committee; ISDA have agreed to open up to ISLA members immediately
- ICMA and ISDA attend ISLA CDM WGs
- ICMA due to sign with REGnosys to further CDM development on repo; ISLA/ICMA to share functional roadmaps to realise synergies
- Ongoing discussions with PASLA, and others to keep up to date with work; presentation to RMA board mid- Feb of work to date

ISLA

**WG process**

# THEME #1 - SCOPE

Epics and User Stories



## Epics

The Candidate Requirements have been used to create an initial set of Epics



## User Stories

Describing technical and non-technical dependencies required in order to deliver the Candidate Requirements.



## Project Management

Two week sprints with an agreed set of deliverables.



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# THEME #1 - SCOPE

## Airtable – User Stories



A sample Kanban view of user stories which allows easy tracking and planning of tasks

The screenshot shows an Airtable Kanban view for 'User Stories' under the project 'CDM for Securities Lending'. The interface includes a top navigation bar with tabs for 'Engagement Themes', 'Epics', 'User Stories', 'Engagement Milestones', 'Issue Tracker', 'Sprints', and 'CDM Shared Projects'. The main view is organized into four columns: 'Not Started', 'Up Next', 'In Progress', and 'Completed'. Each column contains several user story cards. Each card displays the story title, type (e.g., 'User story', 'Technical story'), details, engagement milestones, and collaborators. For example, in the 'Not Started' column, story 86 is 'Extend User Guide to...' and story 87 is 'Conceptual Model of...'. In the 'Up Next' column, story 78 is 'Conceptual Model of...' and story 79 is 'Logical Model of exte...'. In the 'In Progress' column, story 85 is 'Approach to cross in...' and story 84 is 'Environment setup f...'. In the 'Completed' column, story 13 is 'Securities Lending Tr...' and story 26 is 'Securities Lending F...'. The interface also includes a left sidebar with view options (Grid, Grid by Sprint, Grid by Demo, Kanban, Calendar, Grouped) and a 'Create a view' section. The bottom of the screen shows record counts for each column: 4 records in 'Not Started', 3 records in 'Up Next', 3 records in 'In Progress', and 68 records in 'Completed'.

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# THEME #1 - SCOPE

## Airtable – Issue tracker



CDM for Securities Lending

Engagement Themes | Epics | User Stories | Engagement Milestones | Issue Tracker

Grid view | 2 hidden fields | Filter | Grouped by 2 fields | Sort | Color

Ticket Id	Priority	Status	Due Date	Over Due ...	Category	Assignees	Brief Description	Detailed Description	User Story	Epics (from User Stories)	Resolution	Raised By	
<b>CRITICAL</b> Count 1													
ASSIGNEES: ISLA 1													
2	ISLA002	Critical	Open	7/30/2020	Not Overdue	Product Model	ISLA	Does a Securities Lending transaction have the ...	Ensure the appropriate con...	Conceptual Model of Secur...		Nigel Cobb	
<b>HIGH</b> Count 9													
ASSIGNEES: ISLA 4													
3	ISLA001	High	Open	7/30/2020	Not Overdue	Product Model	ISLA	What is the correct securities lending product ta...	Is there an equivalent of th...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...	Under SFTR they have brok...	Saeid Attarian
4	ISLA003	High	Open	7/30/2020	Not Overdue	Product Model	ISLA	Does Delivery Method needs to be defined sepa...	Confirm whether there are ...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...	You could have different D...	Saeid Attarian
5	ISLA004	High	Open	7/30/2020	Not Overdue	Product Model	ISLA	Are there are any other Duration Types apart fro...	We will build a validation lo...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...	Duration Type can be Ever ...	Saeid Attarian
6	ISLA006	High	Open	7/30/2020	Not Overdue	Product Model	ISLA	Is Minimum Fee required as part of SFTR?	To ensure the model is buil...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Saeid Attarian
ASSIGNEES: Working Group 5													
7	ISLA005	High	Open	7/30/2020	Not Overdue	Product Model	Working Gro...	At what level is Minimum Fee applied? (Product...	Is minimum fee based on tr...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Saeid Attarian
8	ISLA007	High	Open	7/30/2020	Not Overdue	Product Model	Working Gro...	Should CDM introduce a validation logic for Div...	CDM can provide the optio...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Saeid Attarian
9	ISLA008	High	Open	7/30/2020	Not Overdue	Product Model	Working Gro...	At what level should rebate be defined (within P...	Can rebate sit at portfolio l...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Nigel Cobb
10	ISLA009	High	Open	7/30/2020	Not Overdue	Product Model	Working Gro...	How should Collateral Provisions be incorporate...	Collateral Provisions: It is cl...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Nigel Cobb
11	ISLA0010	High	Open	7/30/2020	Not Overdue	Product Model	Working Gro...	Confirm if Delivery Method is needed for Collat...	We need to confirm diffe...	Conceptual Model of Securiti...	CR#1 - Securities Lending Prodi...		Saeid Attarian

Each issue is linked to a user story and epic, enabling easy tracking and reporting

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## THEME #2 – ENVIRONMENT

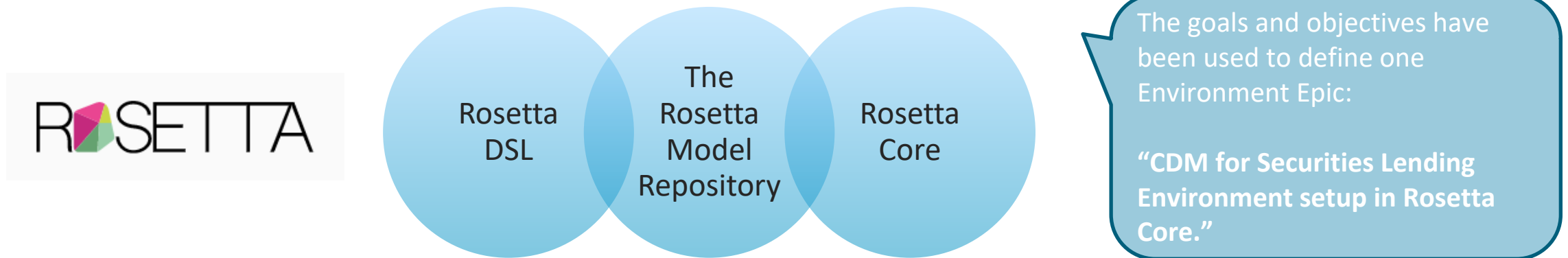
### Rosetta



REGnosys will use Rosetta as the development environment and suite of technical tools to accelerate delivery of the CDM for Securities Lending.

Rosetta is a domain-model development toolkit that allows users to efficiently design and develop domain models, map them to other models, databases or messaging formats, and to test and deploy model-based processes, applications and services.

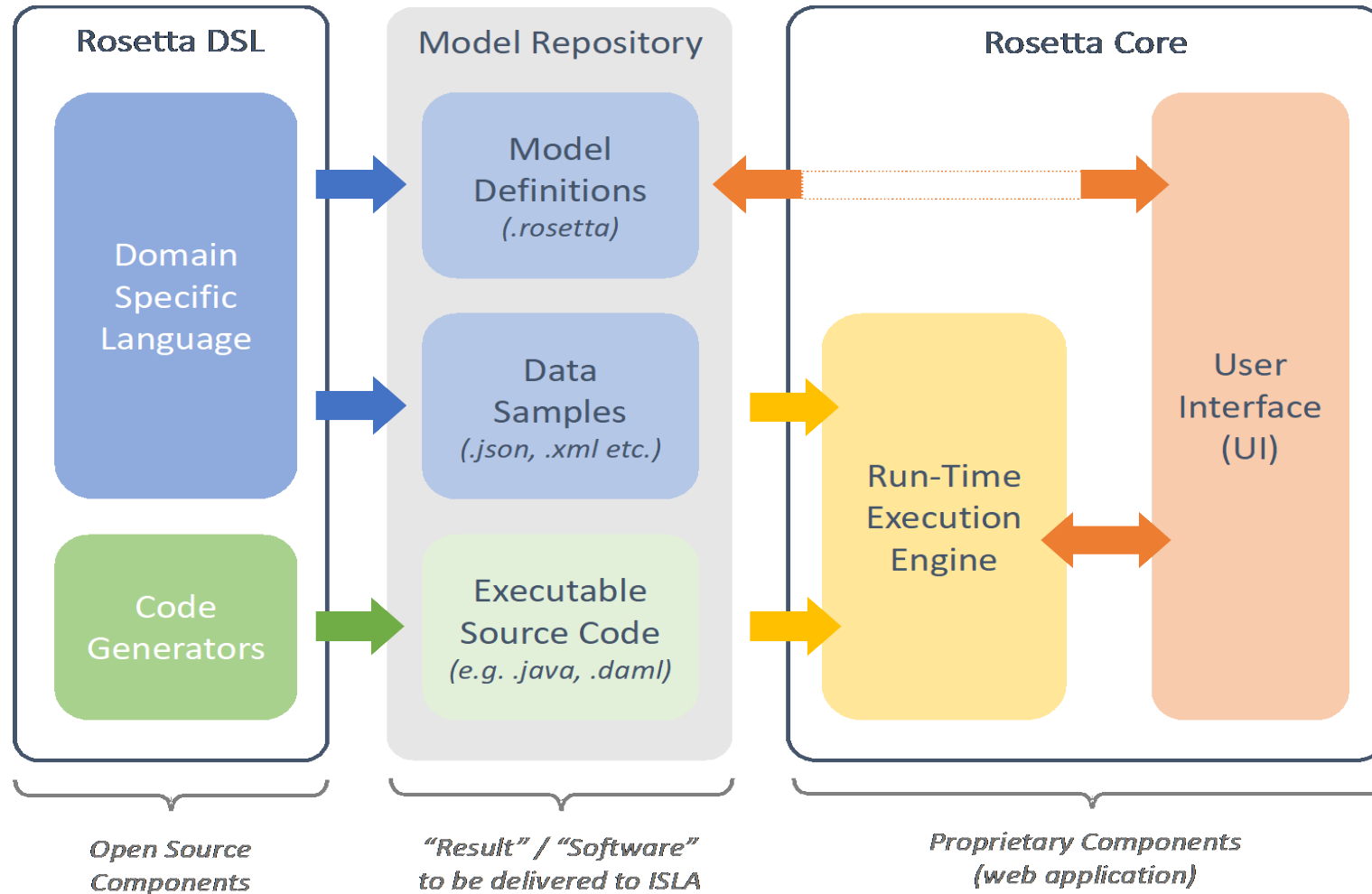
At a high level, Rosetta is made of three components, being a mixture of open-source and proprietary components and which are described in the below diagram.



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# THEME #2 – ENVIRONMENT

## Rosetta Components



Rosetta Core is available under a free “community edition”

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# THEME #2 – ENVIRONMENT

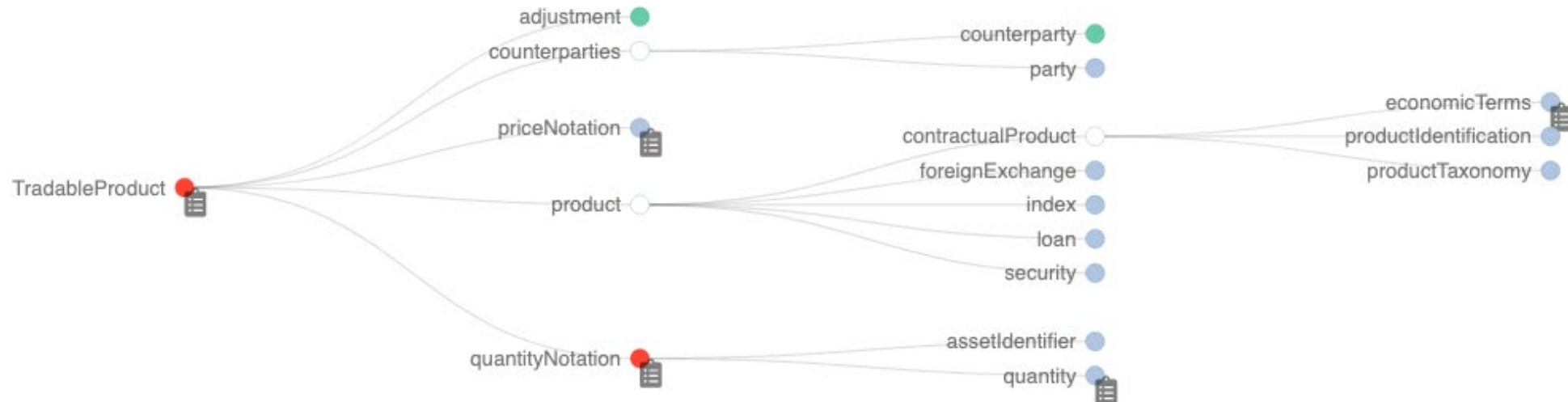
## Delivery and Demonstration Material



To accelerate integration efforts by ISLA members, each model release will contain an executable source code distribution, also available for download in Rosetta Core.

Initially provide support for the Java platform, which is widely adopted, open source and freely available.

Visualisation tools in Rosetta Core will help communicate the structure and functionality of the delivered model and demonstrate a path to standardisation of industry processes.



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# THEME #2 – ENVIRONMENT

## Rosetta Core



Files that represent the CDM for Securities Lending have been added to Rosetta Core.





A read only ISLA model is available to all registered users.

An editable files is available when an ISLA specific workspace is created by authorized users.

### × Workspace Manager

Active Workspace				
ISLA	Name	Owner	Version	Mode
	ISLA Latest	system	0.7.2	Read only

### Projects

Name	Latest Version
 ISDA Common Domain Model	2.95.4 <sup>1</sup>
 Demonstration Model	0.1.0 <sup>1</sup>
 CDM for Digital Regulatory R...	0.6.0 <sup>1</sup>
 CDM for Securities Lending	0.7.2 <sup>1</sup>

Pro | BETA

ISLA Latest ⓘ Help ⓘ

Files  Namespace ⓘ

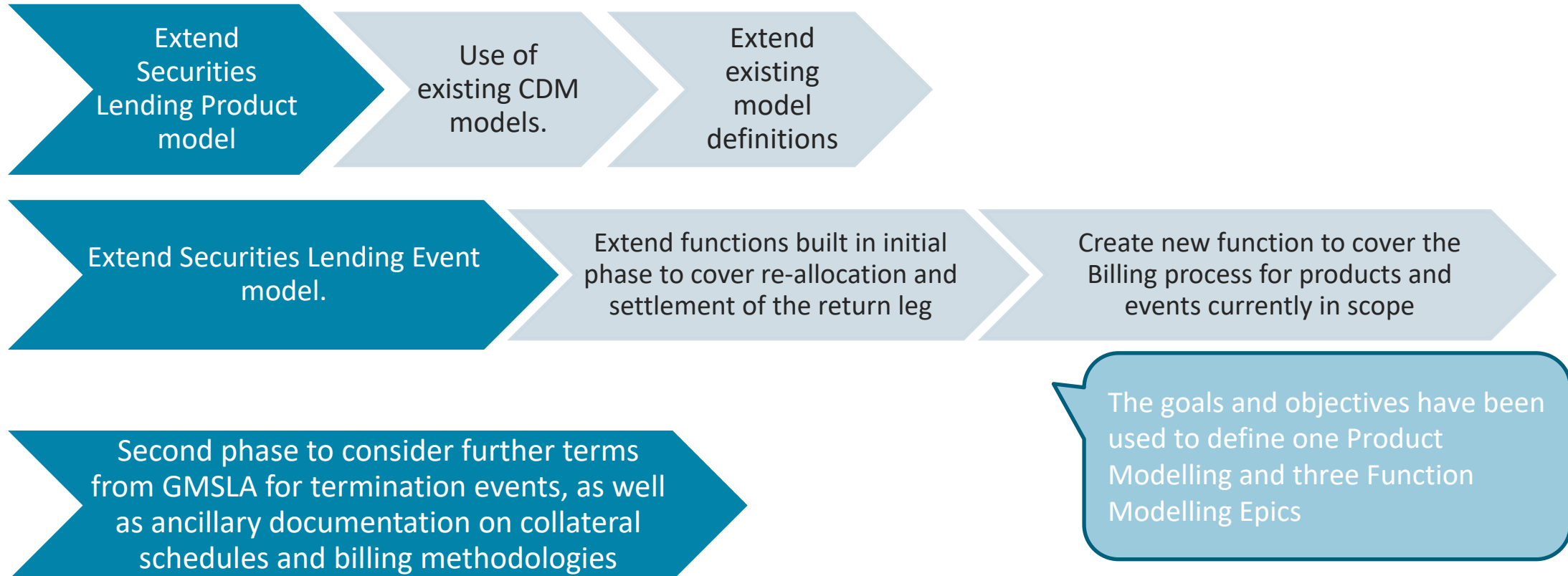
Textual Definition Graphical Regulation \* 🔍 📌 ↺ ↻ ⬅ ➡

```
15 type SecurityFinancePayout extends PayoutBase: <"Security payout specification in case
the product payout involves some form of security collateral, as in a securities
financing transaction.">
16 [metadata key]
17 securityLendingLeg SecurityLendingLeg (1..*) <"Each SecurityLeg represent a buy/
sell at different dates, typically 1 near leg and 1 far leg in a securities
financing transaction.">
18 // [synonym FpML_5_10 value "nearLeg"]
19 // [synonym FpML_5_10 value "farLeg"]
20 securityInformation Product (1..1) <"Specifies the reference asset. This is The
base type which all products extend (similar to FpML model). Within
SecurityPayout we include a condition which validates that the product must be
a Security (see below condition 'ProductMustBeSecurity').">
```

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# THEME #4 – PRODUCT AND EVENT MODELLING

## Core Modelling Artefacts



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# THEME #4 – PRODUCT MODELLING

## FpML and CDM



### ISDA Common Domain Model (CDM)

- Bootstrapping [ISDA CDM](#) (will be used as “Third Party Material” - i.e. excluded from the project deliverables).
- Inherit all ISDA CDM model components from the outset and will extend those by following the CDM design principles, reusing components wherever appropriate.
- CDM for Securities Lending shall eventually be contributed back and merged together with the ISDA CDM.
- The ISDA CDM is already supported by the Rosetta Model Repository and Rosetta Core has been extended to support editing of ISDA CDM model extensions.



### Integration with other models

- As demonstrated in the Showcase Event at the conclusion of the first phase the CDM, and Rosetta, is able to support model to model mappings.
- The mappings allow existing data models to be integrated with the CDM creating an immediate path to adoption without significant engineering cost.
- Further model to model mapping work will need to be performed during the MVP phase to support the model changes being made, and any additional platforms which would like to connect to the CDM.

<https://www.isda.org/a/z8AEE/ISDA-CDM-Factsheet.pdf>

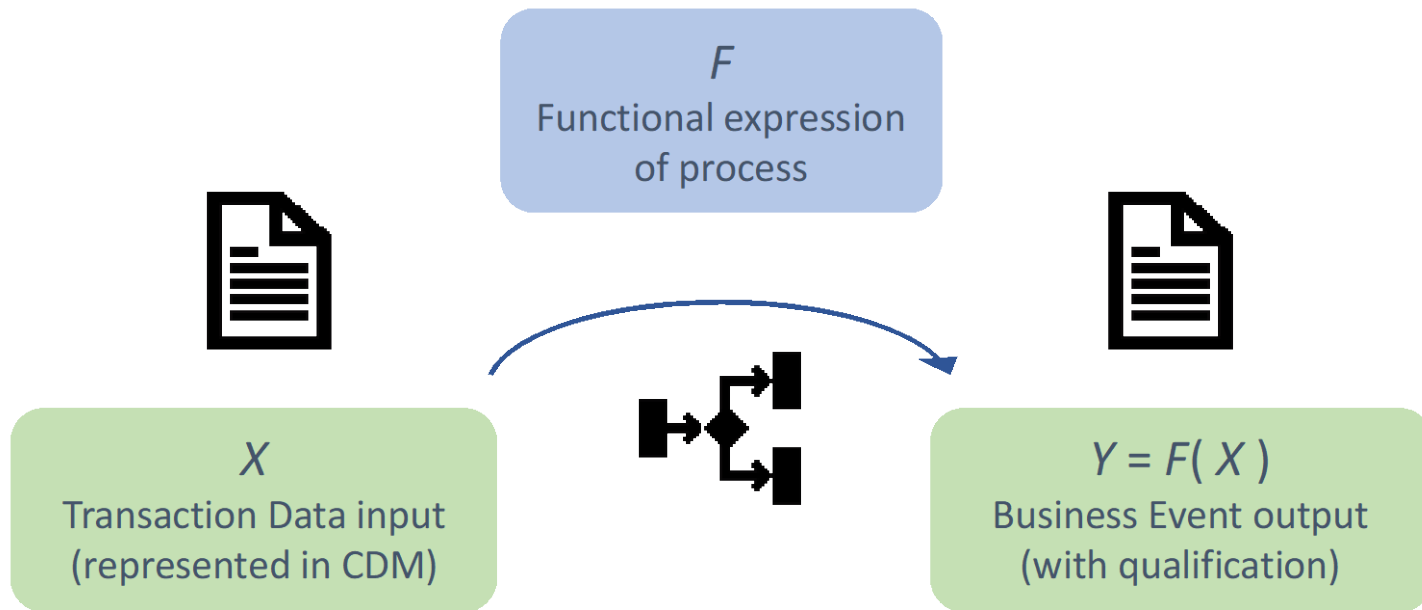
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# THEME #5 – FUNCTIONAL MODELLING

Standardised Functional Expression of Industry Processes



The CDM allows a *functional* approach to modelling processes, where events are represented by CDM *functions*:  $Y = F( X )$



The goals and objectives have been used to define three Functional Modelling Epics:

- “Allocation Function extended in the CDM”
- “Settlement Function extended in the CDM”
- “Billing Function modelled in the CDM”