Digital Update – Roadmap 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)*
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.
## Timelines

<table>
<thead>
<tr>
<th>Phase</th>
<th>Start</th>
<th>End</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scoping &amp; Engagement</td>
<td>01-Jan-21</td>
<td>19-Feb-21</td>
<td>C</td>
</tr>
<tr>
<td>Technical Readiness</td>
<td>22-Feb-21</td>
<td>26-Feb-21</td>
<td>G</td>
</tr>
<tr>
<td>Non-Cash Collateral</td>
<td>01-Mar-21</td>
<td>19-Mar-21</td>
<td>G</td>
</tr>
<tr>
<td>Part &amp; Full Returns</td>
<td>10-Mar-21</td>
<td>09-Apr-21</td>
<td>N/S</td>
</tr>
<tr>
<td>Re-allocations</td>
<td>11-Apr-21</td>
<td>07-May-21</td>
<td>N/S</td>
</tr>
<tr>
<td>Billing</td>
<td>25-Apr-21</td>
<td>04-Jun-21</td>
<td>N/S</td>
</tr>
<tr>
<td>Product extensions</td>
<td>24-May-21</td>
<td>04-Jun-21</td>
<td>N/S</td>
</tr>
<tr>
<td>Prep broader public access</td>
<td>29-May-21</td>
<td>11-Jun-21</td>
<td>N/S</td>
</tr>
</tbody>
</table>
Trade Association Collaboration

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
WG process
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.
THEME #1 - SCOPE
Airtable – User Stories

A sample Kanban view of user stories which allows easy tracking and planning of tasks.
### THEME #1 - SCOPE

**Airtable – Issue tracker**

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

<table>
<thead>
<tr>
<th>ASSESSED</th>
<th>Priority</th>
<th>Status</th>
<th>Due Date</th>
<th>Category</th>
<th>Assignee</th>
<th>Brief Description</th>
<th>Detailed Description</th>
<th>User Story</th>
<th>Resolution</th>
<th>Created By</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISLA</td>
<td>Critical</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>ISLA</td>
<td>Does a Securities Lending transaction have the...</td>
<td>Ensure the appropriate con...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>ISLA</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>ISLA</td>
<td>What is the correct securities lending product ta...</td>
<td>Is there an equivalent of th...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>ISLA</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>ISLA</td>
<td>Does Delivery Method needs to be defined separa...</td>
<td>Confirm whether there are ...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>ISLA</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>ISLA</td>
<td>Are there any other Duration Types apart fro...</td>
<td>We will build a validation lo...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>ISLA</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>ISLA</td>
<td>Is Minimum Fee required as part of SFTP?</td>
<td>To ensure the model is built...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>Working Group</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>Working Group</td>
<td>At what level is Minimum Fee applied? (Product...</td>
<td>Is minimum fee based on ...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>Working Group</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>Working Group</td>
<td>Should CDM introduce a validation logic for Div...</td>
<td>CDM can provide the opti...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>Working Group</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>Working Group</td>
<td>At what level should rebate be defined within P...</td>
<td>Can rebate sit at portfolio l...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>Working Group</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>Working Group</td>
<td>How should Collateral Provisions be incorporate...</td>
<td>Collateral Provisions It is d...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
<tr>
<td>Working Group</td>
<td>High</td>
<td>Open</td>
<td>7/30/2020</td>
<td>Not Overdue</td>
<td>Product Model</td>
<td>Working Group</td>
<td>Confirm if Delivery Method is needed for Collat...</td>
<td>We need to confirm differ...</td>
<td>Conceptual Model of Security</td>
<td>CR1 - Securities Lending Proc</td>
</tr>
</tbody>
</table>
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.

The goals and objectives have been used to define one Environment Epic:

“CDM for Securities Lending Environment setup in Rosetta Core.”
Rosetta Core is available under a free "community edition"
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.
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 file is available when an ISLA specific workspace is created by authorized users.

× Workspace Manager
THEME #4 – PRODUCT AND EVENT MODELLING

Core Modelling Artefacts

Extend Securities Lending Product model
Use of existing CDM models.
Extend existing model definitions

Extend Securities Lending Event model.
Extend functions built in initial phase to cover re-allocation and settlement of the return leg
Create new function to cover the Billing process for products and events currently in scope

Second phase to consider further terms from GMSLA for termination events, as well as ancillary documentation on collateral schedules and billing methodologies

The goals and objectives have been used to define one Product Modelling and three Function Modelling Epics
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
1. Click to edit Master footnote styles
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”