

DERIVATIVES SERVICE BUREAU

TECHNOLOGY ADVISORY COMMITTEE

2024 – MEETING I

27<sup>th</sup> March 2024

MEMBER FINAL

# Agenda

- **Governance**
  - Competition Law Reminder
  - Roll Call
  - TAC Member Changes
  - TAC Charter
  - Zoom Update
  - Action Update
- **Existing Topics**
  - UPI Go-live
  - Industry Consultation Update
  - Tooling Update
  - 2024 POAP
  - Disaster Recovery Testing
  - CFI 2019/2021
  - Global Agile Architecture
  - DSB Release Process
  - DSB Change Process Update
- **New Topics**
  - FDL Topics
    - FDL - Archiving
    - FDL - Empty Files
- **Cyber Security**
  - Security Operations Centre
  - ISO27001
  - DORA
  - Supplier Risk Management
- **AOB**
- **Appendices**
  - A - TAC Members
  - B - Meeting Schedule
  - C - Bulletin Board Items
  - D - Annual Checklists
  - E - Actions

## Governance I of VII - Competition Law Reminder I of II

The purpose of this protocol is to remind attendees of Derivatives Service Bureau (DSB) Limited (“DSB”) Technology Advisory Committee, that all discussions at such meetings are subject to the application of EU, UK and other applicable national competition law (“Competition Law”).

Individual attendees are responsible for observing the requirements of Competition Law and should make themselves familiar with their legal obligations and their own organization policies.

The DSB is committed to compliance with Competition Law and advises that TAC participants follow the guidance set out below in order to ensure that all meetings remain in compliance with Competition Law.

1. A meeting agenda will be circulated in advance of a meeting. Any objections to, or potential concerns about, the proposed agenda in relation to Competition Law compliance should be raised prior to the meeting if practicable
2. Attendees must stick to the prepared agenda during the meeting and avoid discussion about other topics
3. Attendees must not seek, discuss, communicate or exchange any commercially or other business sensitive information about their organization or relating to competitors (whether before, during or after meetings). This includes, for example, any non-public information relating to prices, costs, revenues, business plans/marketing activities, individual terms and conditions, risk appetite or any other information which is likely to reduce strategic uncertainty in the market (i.e. which might result in less intensive competition than would normally occur)
4. Attendees must not reach any sort of agreement or understanding that is unlawful due to competition law (e.g. unlawful horizontal agreement, unlawful vertical agreement)

## Governance II of VII - Competition Law Reminder II of II

5. The TAC Secretariat will take minutes of the meeting, and supply these to each attendee in due course.
6. If the Chair considers that a discussion at the meeting may be inappropriate from a Competition Law perspective, he or she shall raise an objection and promptly bring that part of the discussion to an end. If another attendee, or the DDO, is concerned about a discussion from a Competition Law perspective, he or she shall bring it to the attention of the Chair, who will promptly bring that part of the discussion to an end. If other attendees attempt to continue that discussion, the Chair shall bring the meeting to an end. Every attendee is allowed to immediately leave the meeting in such situations. All such situations must be properly recorded in the minutes.
7. The minutes of the meeting must subsequently be read and approved by the attendees. If any matter discussed is not recorded in the minutes, or is recorded incorrectly, any attendee may raise an objection in writing and request an amendment.
8. Similar principles should be observed for any group email exchanges or other online group discussions operated by DSB, including those pertaining to TAC matters.

We remind attendees that breaching Competition Law has serious potential consequences for them as individuals and their organizations. Such consequences may include heavy fines, liability to pay compensation to affected individuals and businesses and, in certain cases, the imposition of criminal penalties, director disqualification orders and disciplinary action.

## Governance III of VII – Roll Call

The DDO will undertake the roll call.

## Governance IV of VII – TAC Member Changes

Since the last TAC meeting the DSB Board has approved the following TAC membership changes:

- Vishal Joshi, Head of Technologies – Reference Data Services joins the TAC as the member for Smartstream.

We would like to take the opportunity to welcome Vishal to the TAC and to thank Rocky for his contribution.

We would also like to send our thanks to Yuval Cohen who has left the DSB. We would like thank Yuval for his contribution to many of the TAC topics that have been discussed over the years and to wish him all the very best for the future.

## Governance V of VII – TAC Charter

2024 will see the end of the TAC's 3<sup>rd</sup> charter term. The 3<sup>rd</sup> charter term commenced at the start of the October meeting in 2022. The TAC's Charter is available on the DSB's website at the following location:

<https://www.anna-dsb.com/download/technology-advisory-committee-charter/>

A new bulletin board topic has been created to capture proposed changes from the TAC members. The topic can be viewed at the following location:

<https://www.anna-dsb.com/bulletin-board/tac-forum/tac-charter-amendments-for-the-2024-to-2026-term/#post-366>

We would ask that any feedback is received by cob Friday 9<sup>th</sup> August 2024 – this is to allow the TAC Charter to be revised in time for the DSB Board meeting in September.

Finally, in line with section 12 of the Charter, the DSB will be undertaking a further membership outreach to industry. Existing TAC members will be contacted at this time to confirm their ongoing participation for a further charter term.

## Governance VI of VII – Zoom Update

The DSB has been using Zoom webinars to host the meeting for the last two years. During that time some members have experienced organization restrictions which have prevented them using Zoom from their office and have had to find a workaround.

In addition, for Zoom the TAC members need to be presenters and Zoom manages the invites for this. This has led to confusion regarding the meeting – especially as the meeting invites are sent from Zoom.

The Zoom contract terminates on 31<sup>st</sup> March 2024. The TAC Secretariat reviewed the requirements from the software and have tested Teams Events. Teams has met all the requirements for the meeting, so it is proposed that this will be the last meeting hosted using Zoom and the TAC Secretariat will use Team Events for future meetings.

This will also bring the TAC into alignment with the Product Committee which has been using Teams for some time.

We would, of course, like to validate this with the members before taking this forward.

***Do the members agree with the proposal to use Team Events for future TAC meetings?***



## Governance VII of VII - Actions Update

Action	Description	Update	Slide#
2310-001	DSB to schedule a further UAT Disaster Recovery Test and to provide users with the dates of the production DR test in Q2 2024 as soon as they are agreed.	Pending	11
2310-002	DSB to create a new bulletin board topic to cover the remaining points regarding cleaning-up the GitHub repository and standardising documentation details in relation to the DSB Release Process.	Pending	21
2310-003	DSB to share thoughts on what changes to the system would be deemed to be breaking changes.	<i>Need to discuss users who validate response records against the current template version</i>	n/a

## Existing Topics – UPI Go Live I of III

### UPI Regulatory Mandate Update:

Following the successful implementation of the UPI Service on Sunday 15<sup>th</sup> October 2023, the US was the first G20 jurisdiction to commence UPI reporting for OTC derivatives on 29 January 2024. Over 2024 and 2025, five further mandates are scheduled:

- EU – 29 April 2024
- UK – 30 September 2024
- Australia – 21 October 2024
- Singapore – October 2024
- Japan – 7 April 2025

The current user numbers are:

User Types	Estimate Users 04 Sep 2023	UAT users 15 Mar 2024	OF WHICH: Production Users 15 Mar 2024
Power	120	152	82
Standard	60	64	38
Search Only	15	56	34
Infrequent	102	124	74
UAT Only	3	0	0
<b>TOTAL FEE PAYING</b>	<b>300</b>	<b>396</b>	<b>228</b>
Registered (Free users)		1094	1094

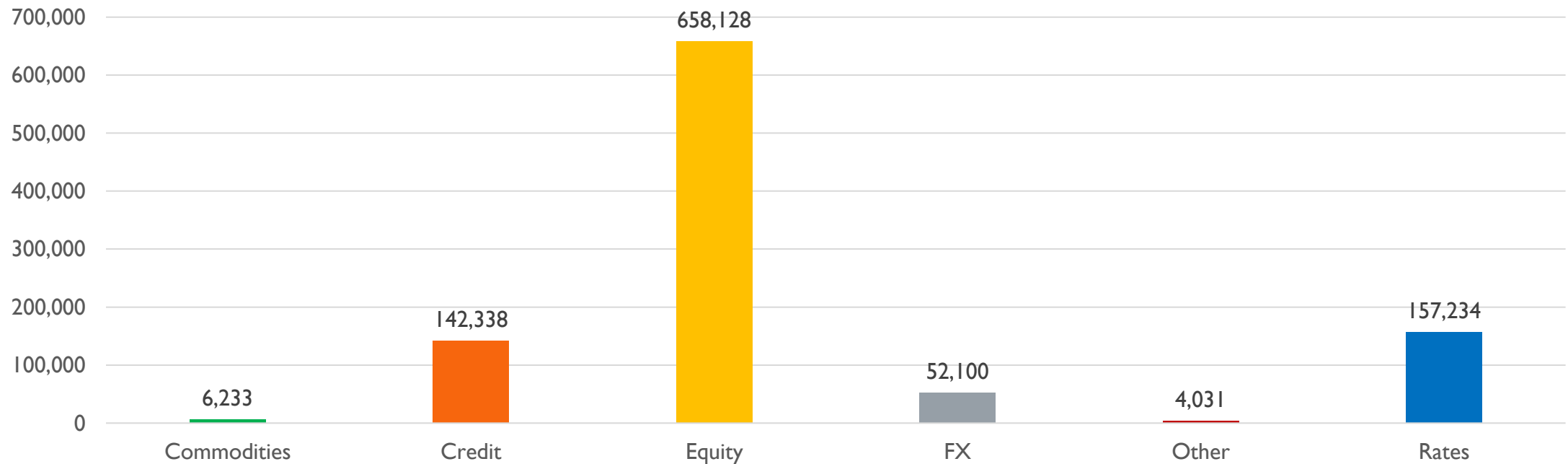
## Existing Topics – UPI Go Live II of III

### UPI Creation Volumes:

Since the UPI Service was launched, UPIs have been created in three ways:

- By users of the UPI Service
- By the DSB’s OTC ISIN pre-population process
- Indirectly by users creating OTC ISINs

As of 15 March 2024, a total of 1,020,064 UPIs had been created, with the following asset class splits:



## Existing Topics – UPI Go Live III of III

### **UPI UAT Environment Decommissioning:**

The TAC previously recommended the DSB to provide a third UAT environment for new UPI users to the DSB to onboard to. This environment was referred to as UAT3 (aka UPIUAT).

The TAC recommended that this additional environment would be implemented in a single region only (not contingent) and that the environment should be made available for a period of 9 months prior to the first regulatory mandate. The DSB launched the UAT3 environment from the start of April 2023, based on the CFTC mandate being confirmed as the 29<sup>th</sup> January 2024.

Since July 2023, all UPI functionality has been available in the UAT environment. The OTC ISIN pre-population process was also performed against the test OTC ISIN's in the UAT environment. The plan was always for users to migrate over to the original UAT environment. The DSB recognizes the short gap between the CFTC and ESMA compliance dates, where users remaining in UAT3 may be impacted by its decommissioning.

However, the DSB now needs to action the original plan to consolidate the environments, to ensure costs are contained. There are 76 organisations programmatically accessing UAT3. In addition, the DSB will be undertaking a further UAT DR test in May 2024 (see slide 16) and UPI users who wish to join this test will need to migrate over to UAT, which is the DSB's only contingent UAT environment.

The DSB will issue a notification to UAT3 users that they will need to migrate over to the UAT environment after the ESMA compliance date. The notification will include a brief guide to users to explain how they can use the Client Onboarding Service Platform (COSP) to migrate. Selecting to use the UAT environment has been available in the COSP since July 2023.

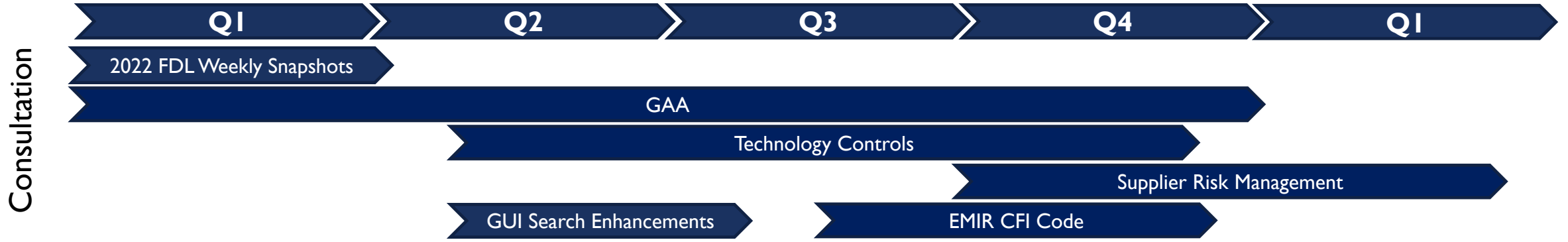
### **Notes:**

- UPI codes generated in the DSB UAT3 environment were specific to that environment. The UAT codes are different.
- The UAT environment is a totally separate environment with its own connection details – details are available via the UAT screen in the COSP
- Programmatic users should ensure that they can reach the UAT target network addresses which are different to UAT3.
- The DSB will target decommissioning the UAT3 environment in early May, soon after the ESMA regulatory mandate.

# Industry Consultation Update

## 2023 Industry Consultation:

The DSB has now completed the 2023 Industry Consultation topics.



2022 FDL Weekly Snapshots, GUI Search Enhancements and EMIR CFI Code were all software releases undertaken in 2023.

Further information is available in this pack on the following topics:

- GAA – Slide 20
- Technology Controls – Slide 14
- Supplier Risk Management – Slide 30 (note this topic started later than planned in Q4 2023 but was completed in Q1 2024)

## 2024 Industry Consultation:

The DSB will be undertaking its annual industry consultation exercise for 2024 for the 2025 OTC ISIN and UPI service proposition. A verbal update on the status will be provided in the meeting.

We would like to ask the TAC if there are any topics they would like to be included in the 2024 survey. If there are any topics then please email them to the TAC Secretariat.

PUBLIC

**Key:** Complete

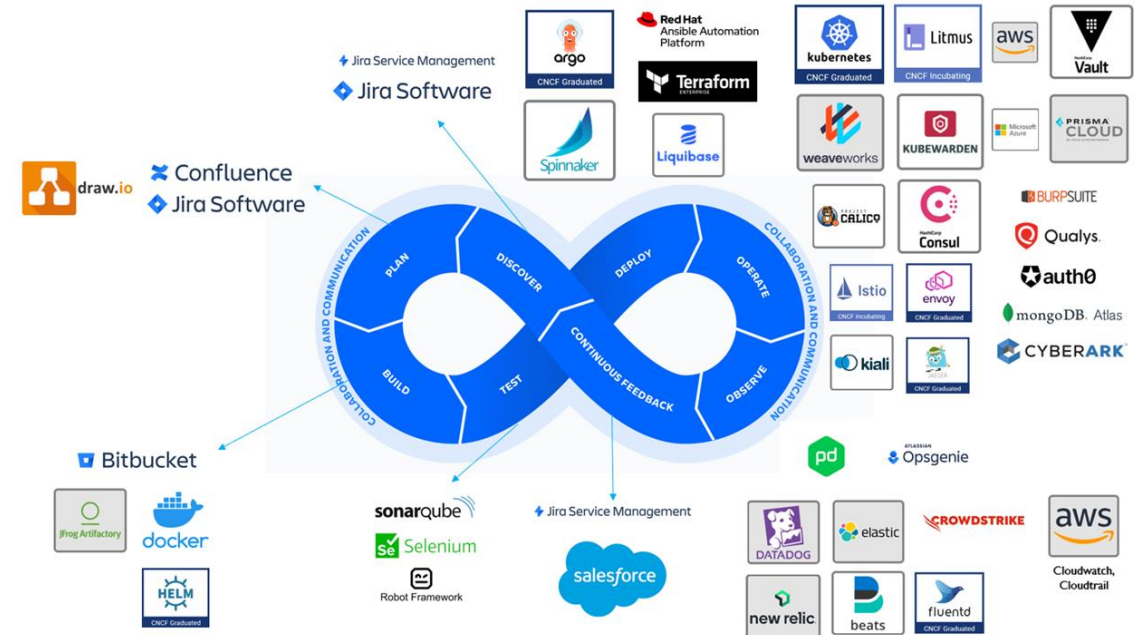
# Existing Topics – Technology Controls :Tools

As part of 2022 Industry consultation process the DSB agreed to undertake the following in 2023:

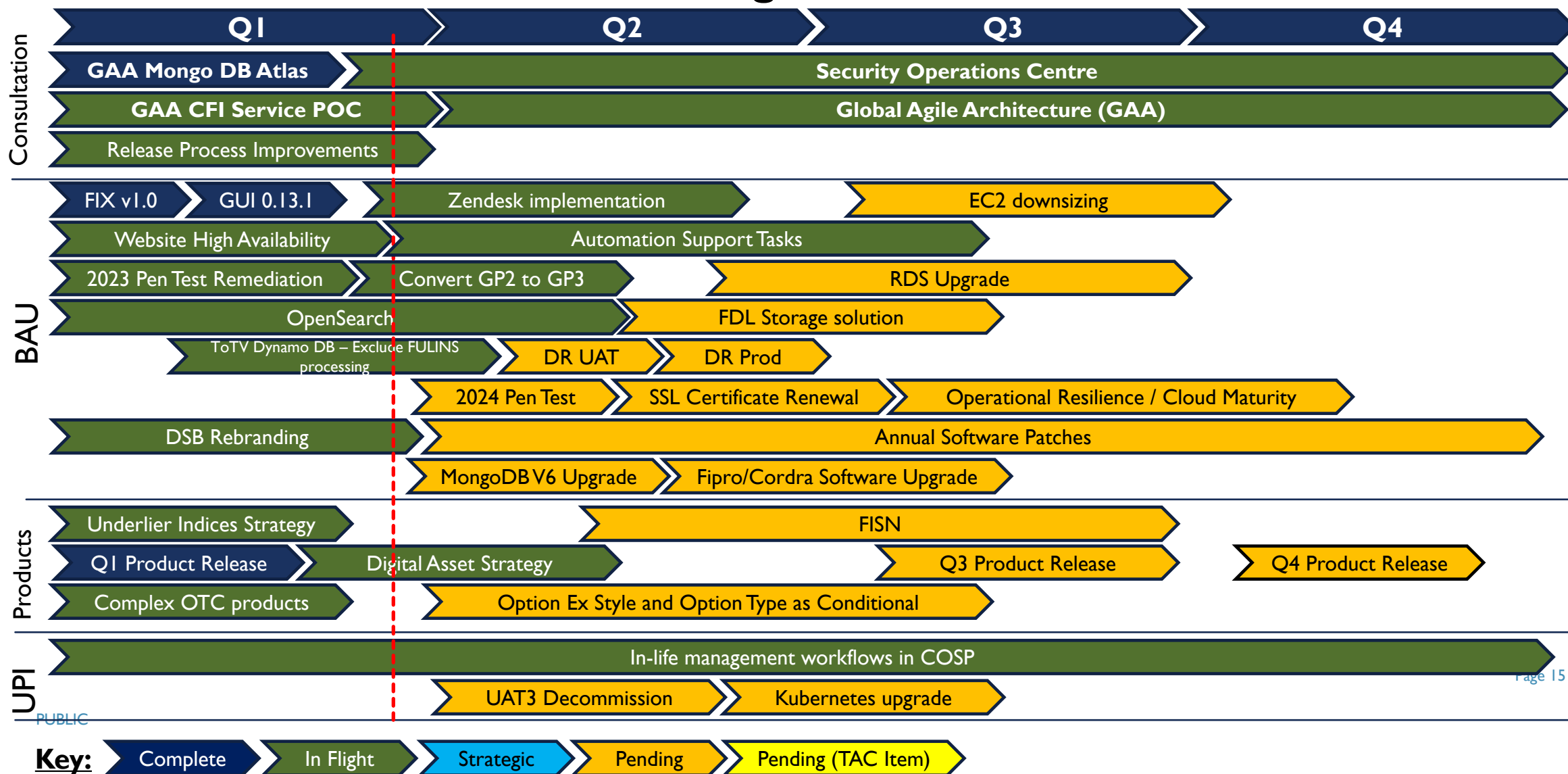
- Review current toolsets and understand if and how these tools and associated processes can be optimised to support increased operational controls, automation and visibility
- Provide a risk-based assessment of our existing detective control tools and propose and changes and improvements where required
- Provide a cost benefit analysis associated with any proposed change

## Outcome:

- Current Toolset was in excess of 50 individual tools across the development lifecycle
- All tools have been catalogued and consolidated
- “Buy, Hold, Sell, Future” modelled against every toolset
- Processes baked into BAU to drive compliance and alignment with tool strategy avoiding additional spend
- All Tooling is now formally under ownership of the Platform Engineering Team
- Target state Tooling strategy now identified
- Two consolidation and remediation actions of the high priority items were also undertaken:
  - Centralised logging of all application or infrastructure logs into a single repository; AWS Opensearch
  - Where possible all operational “Monitoring” functionality has been moved to AWS Opensearch



# 2024 Plan on a Page as at 14/03/24



## Existing Topics – Disaster Recovery Testing

### **Background:**

During the October 2023 meeting, the TAC members proposed that a further UAT DR test should be undertaken and the DSB targeted Q4 2023 for this activity. This was to be followed by a Production DR Test in Q2 2024.

To recap, the DSB will invoke contingency during the routine downtime window. The service will be started from the secondary region and will run there for a period of two weeks. During this two-week period, the DSB will in effect be running in reverse, with the secondary site becoming primary and the primary site becoming secondary. This ensures that the DSB remains contingent during the test. At the end of the two-week period, the service will be stopped in the downtime region and restarted from the original primary region.

### **Update:**

Since this meeting, the DSB has not undertaken the UAT test. The main factor has been the potential to impact UAT users who are preparing for UPI compliance effective dates – the first one being at the end of January 2024 and the next one being at the end of April 2024. A further consideration was a clash with the annual penetration test which is taking place during the first two weeks of April.

### **Next Steps:**

The DSB would like to propose that the UAT DR test is rescheduled after the next regulatory mandate. Subject to a successful UAT test, the DSB would then undertake the Production test before the end of Q2 2024:

- ***UAT Test***  
12:30PM UTC Saturday 11<sup>th</sup> May to 00:30AM UTC Saturday 25<sup>th</sup> May 2024
- ***Production Test***  
12:30PM UTC Sunday 16<sup>th</sup> June 00:30AM UTC Sunday 30<sup>th</sup> June 2024



## Existing Topics – CFI 2019/2021 I of III

As the original Technical Approach for CFI 2019/2021 did not include the UPI, the Technical Approach document has been updated to reference UPI updates:

### **1. Implementation Outline:**

1. Deployment of new versions of JSON record templates. There is no technical limitation on whether the UPI or ISIN should be deployed first, a proposal will be shared with the PC and TAC in Q1 2024.
2. Update/migrate existing UPIs and ISINs with latest CFI in the background while the system is operational. New version of existing UPIs and ISINs will be recorded in the File Downloads.
3. Deployment of JSON request templates containing latest CFI, CFI 2021. The DSB recommends making new JSON request templates available once all existing UPIs and ISINs have been updated i.e. it will not be possible to send in a request with 2021 values until the migration is completed. Once JSON request templates containing CFI 2021 are deployed, request containing either CFI 2015 or CFI 2021 attributes names / values are possible.
4. After the migration, old versions of existing UPIs and ISINs will only be available from historical File Downloads.

### **2. The DSB proposes updating UPI and ISIN record templates:**

1. Add a new component “CFI-2021”.
2. Add “CFI 2015” and “CFI 2021” in the /Parents component.

## Existing Topics – CFI 2019/2021 II of III

### 3. Increment the template version.

As part of the CFI 2019/2021 Migration, the DSB will increment the Record schema for cases where existing records are migrated. All ISIN & UPI Record schema will be incremented to Minor Version 2. Please see the below table for examples of the Minor Version incrementation:

Product	Template Version Pre CFI 2019/2021	Template Version Post CFI 2019/2021
ISIN	Rates.Swap.Fixed_Float.InstRefDataReporting.V1M1.json	Rates.Swap.Fixed_Float.InstRefDataReporting.V1M2.json
ISIN	Rates.Swap.Basis.InstRefDataReporting.V2M1.json	Rates.Swap.Basis.InstRefDataReporting.V2M2.json
UPI	Rates.Swap.Basis.UPI.V1.json	Rates.Swap.Basis.UPI.V1M2.json
UPI	Foreign_Exchange.Option.NDO.UPI.V1.json	Foreign_Exchange.Option.NDO.UPI.V1M2.json

Any new templates that are deployed before the CFI migration process completes will be:

- ISIN -V1M1 (M1 to align with the ISIN template versioning post pre-population process)
- UPI –V1

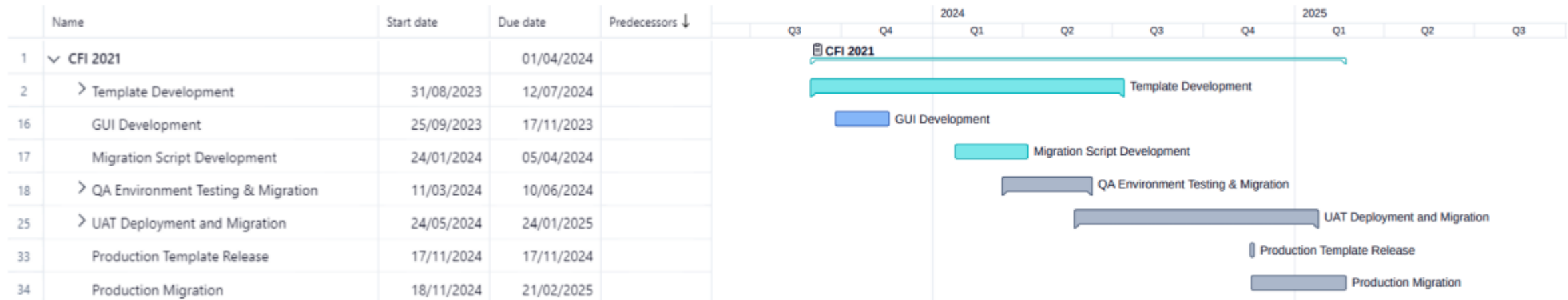
Once the CFI migration is complete, new templates' Minor Version will be incremented to M2 for OTC ISIN and UPI.

## Existing Topics – CFI 2019/2021 III of III

The CFI 2019/2021 project is on schedule with development and migration scripts underway. The development for the Rates Asset Class has been completed, with FX and Commodities in progress. A more detailed view of the plan can be provided upon request.

The GAA has been reviewing an alternative approach to CFI, which will be discussed during the GAA segment of the session.

Regular updates on project progress will be provided to the DSB Board, CDIDE, TAC and PC.



## Existing Topics – Global Agile Architecture



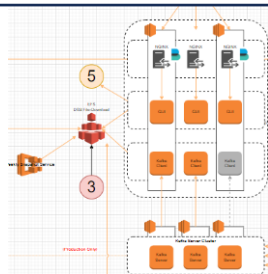
**MongoDB Atlas**

- *Phase 1 – Migration from locally hosted MongoDB to MongoDB Atlas - Complete*
  - Rollout completed for UAT2 and Production in February 2024
  - Implemented in AWS with Active/Passive configuration
  - Option to host in either GCP or Azure now possible
- *Phase 2 – Single Global Cluster - Started*
  - Active/Active database across regions, move replication away from application level
  - Awaiting delivery of application software changes (due Q2 2024)
- *Phase 3 – Atlas Search - Started*
  - Initial investigation undertaken
  - Simplified adoption, but change in search syntax needs discussion with the committee

- Strategic alternative to dealing with CFI Maintenance Agency updates
- Terms of Reference completed
- Options are considering user feedback from the UPI migration
- Further engagement with the TAC and PC planned on PoC completion to discuss options



**CFI POC**



**FDL Replication Review**

- Review of the file download application replication
- Proposal to change the production mechanism to remove application replication
- Estimate early Q2 start, following CFI PoC completion

## Existing Topics – DSB Release Process

### Update:

Following the initial discussion in March 2023, the TAC held a further discussion at the October 2023 meeting about the proposed improvements to the DSB’s release process. After that discussion, the DSB has made the changes to the [Release Notes](#)<sup>1</sup> area of the DSB’s website.

In addition, the information being shown in the page for each release has been extended as previously discussed. Further details will be provided with the different type of releases as they take place in 2024. This includes some of the other topics which have been previously discussed:

- Where possible, to provide an early draft of product template changes alongside draft documentation
- Document changes are to be provided in a redline version to clearly show what has changed between versions
- Work with the DSB Secretariat to ensure that change documentation clearly identifies the Request, Record and codeset changes
- Work with the TAC to review the GitHub product definitions<sup>2</sup> structure, (see new bulletin board topic<sup>3</sup>)
- To improve the ordering of the releases in the list and to undertake a general cleanup

Finally, any guidance would be appreciated from the TAC on restructuring the DSB’s email notifications to allow organisations using “bots” to automatically process these notifications, specifically to assist with clearly marking the changes which are deemed breaking.

### Upcoming Releases

Release Notes	UAT Release	Production Release	Category	Status	Backwardly Compatible
<a href="#">2024 GUI Release</a>	14 February 2024	3 March 2024	GUI enhancements	In UAT	Yes

### Release Milestones and Documentation

Milestone	Date	Status	Notification	Templates (Github)	User Documents
UAT Release	14 February 2024	Completed	<a href="#">Link</a>	N/A	
UAT2 Release	2 March 2024	Completed	<a href="#">Link</a>	N/A	
Production Release	3 March 2024	Completed	<a href="#">Link</a>	N/A	

<sup>1</sup><https://www.anna-dsb.com/release-notes/>

<sup>2</sup><https://github.com/ANNA-DSB/Product-Definitions>

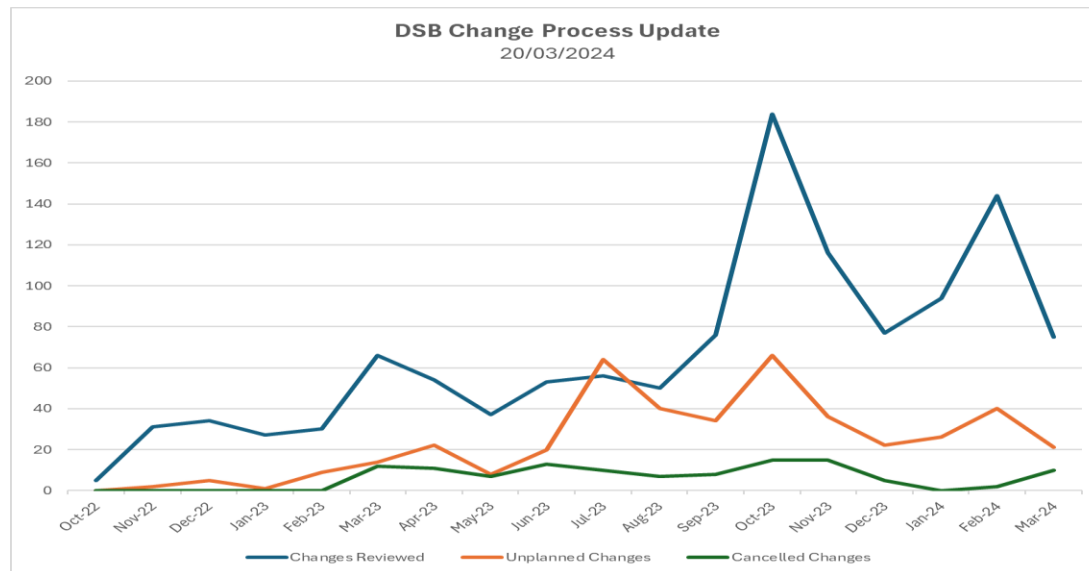
<sup>3</sup><https://www.anna-dsb.com/bulletin-board/tac-forum/github-review-and-finalising-the-release-process/#post-367>

# Existing Topics – DSB Change Process Update

## Background:

- Following the service outage in August 2022, the DSB reviewed the Technology Change management process and introduced a new governance forum, the Change Advisory Board (CAB), the first CAB was held on 21<sup>st</sup> September 2022
- The CAB covers change in any of the DSB’s customer facing environments UAT, UAT-DR, UAT2, UAT3, PROD, PROD-DR
- The CAB meets every week to review changes to these environments
- This topic provides an update on the change volumes observed since the new forum began
- The data was collected after the CAB meeting on Wednesday 20<sup>th</sup> March 2024

Review Month	Changes Reviewed	Unplanned Changes	Cancelled Changes
Oct-22	5	0	N/A
Nov-22	31	2	N/A
Dec-22	34	5	N/A
Jan-23	27	1	N/A
Feb-23	30	9	N/A
Mar-23	66	14	12
Apr-23	54	22	11
May-23	37	8	7
Jun-23	53	20	13
Jul-23	56	64	10
Aug-23	50	40	7
Sep-23	76	34	8
Oct-23	184	66	15
Nov-23	116	36	15
Dec-23	77	22	5
Jan-24	94	26	0
Feb-24	144	40	2
Mar-24	75	21	10
<b>Total</b>	<b>1209</b>	<b>430</b>	<b>115</b>



## New Topics – FDL - Archiving

### **Background:**

Following the introduction of weekly snapshots, DSB users can build, or validate against, a local cache by first applying the latest weekly snapshot followed by any delta files already produced that week. This means that the DSB users no longer need to process every delta file that has been produced. The DSB reached out to the TAC members last year to understand if the DSB could reduce the number of file download delta and snapshot files held on the system. The TAC were supportive of this proposal but sought an indication of potential cost savings associated with this initiative.

Since then, the DSB has reached out to internal teams for their input into the proposal. One change that has been proposed is to introduce a longer period on a different storage solution to provide Technical Support with a bigger window of opportunity to investigate issues. This came about because of a problem with an FDL file from November being reported to Technical support in January.

### **Proposal:**

- To retain two weekly snapshots as well as all delta files created after these snapshots in the file download area
- To retain 6 months of information in a separate area to support TS investigations
- To move data after this period to long term storage, which itself will be subject to the DSB's data retention policy

### **Cost:**

- This approach is forecast to save the DSB €690 / month leading to an annual saving of €8,280

## New Topics – FDL – Empty Files

### **Background:**

A second topic was raised with the TAC last year after user feedback was received mainly from new users to the DSB consuming the UPI FDL. The concern being that if there is no data on a specific day, it is impossible to tell if there is no data or if the job simply hasn't run. While not likely in the ISIN FDL, this situation is more likely for the UPI FDL, specifically for some asset classes.

There was a lot of feedback from the TAC members on this topic, however, a conclusion wasn't reached. The DSB took onboard the feedback and made a suggestion, which could address the concerns raised by the new users, but does not impact the existing ISIN users, unless they choose to reference the new file.

### **Proposal:**

On completion of the daily delta and snapshot processing, the DSB would create a trigger file in the root folder for the processing day. The file would be the very last action undertaken in the daily generation process and would be a signal to users that the processing has completed, and they can now consume the FDL files for that day. The filename below in red is just a proposed name for the trigger file. For example:

```
/file-download/isin/2023/20230912/
```

```
../
```

```
Processed-20230912.txt
```

```
Commodities/
```

```
Credit/
```

```
Equity/
```

```
Foreign_Exchange/
```

```
Other/
```

```
PUBLIC Rates/
```

**We would welcome the TAC's feedback on this proposal.**



# CYBER SECURITY

# Cyber Security Update – SOC (Security Operations Centre)

- In 2023 the TAC approved the creation of a SOC to increase the DSB’s cyber resilience. The MSP is now building the SOC.
- Recruitment has almost been completed:
  - 80% of the vacancies have been filled.
  - The Head of SOC joined on 4th March 2024.
- Security operations processes are being defined with clear roles and responsibilities.
- A detailed implementation plan is being developed.

# Cyber Security Update – ISO27001

## **Introduction:**

- ISO27001 is the globally accepted Information Security Standard.

## **DSB's Adoption:**

- The implementation of the ISO27001 requirements for the DSB are well underway. It is planned to commence the certification process with the external certifying body from July 2024.
- The certification scope focusses on the ISIN platform and supporting processes first. The scope will be extended to the UPI at a later point in time once the UPI processes are fully operational across multiple jurisdictions. That way the DSB can apply any lessons learned from already established ISIN processes to the UPI.

## **Costs:**

- The initial certification costs in FY24 would be approx. €4.7k.
- The annual surveillance audit would be €1.75k.
- The total cost over a 3-year certification cycle would be €8.2k.

## **Next steps:**

- Continue with the implementation process
- Agree the schedule with the external auditor

# Cyber Security Update – DORA I of II

## **Background:**

- The Digital Operational Resilience Act (DORA) is a new EU regulatory framework that will apply **indirectly** to third-party tech vendors through contractual provisions that financial entities will be required to include in service agreements and **directly** to third-party tech vendors which are determined to be “critical” because of their services to Financial Entities. It shifts the focus from guaranteeing firms’ financial soundness to also ensuring they can maintain resilient operations through severe operational disruption caused by cyber security and information and communication technology (ICT) issues.
  
- DORA is underpinned by five pillars of resilience:
  1. ICT Risk Management
  2. ICT-related Incident Reporting
  3. Digital Operational Resilience Testing
  4. ICT Third Party Risk Management
  5. Information and Intelligence Sharing
  
- It is possible DSB Services will be indirectly subject to DORA, and it is currently unclear whether DSB will be classified as a “critical” third-party tech vendor. The definition of what constitutes a critical third-party tech vendor is subject to further policy development on the criteria. If the DSB is classified as a critical third-party vendor, the DSB would be subject to direct supervision under the European Supervisory Authorities (ESA) and need to follow more onerous processes which would likely require additional resources and tooling.
  
- An objective of DORA is to provide EU regulatory authorities with oversight of ICT Third-Party Providers (ICT TPPs) which have a substantial, important and systemic impact on the EU financial system, such as cloud service providers, where historically regulators have had little visibility of such ICT TPPs. In contrast, DSB’s governance structure provides regulators with substantial oversight of its activities.

# Cyber Security Update – DORA II of II

## **DSB Assessment Update:**

The DSB conducted an internal assessment whether the DSB would meet the indicators of critical third-party tech vendor.

- DORA Level I sets out 4 criteria to determine whether an ICT TPP is critical.
- For each of these 4 criterion, the ESAs have developed quantitative and/or qualitative indicators to help make the criticality determination:
  - The first step tests against six quantitative criticality indicators with thresholds. For those ICT TPs that fulfil all of the ‘step 1’ indicators, the ESAs will move to step 2.
  - The second step tests against five qualitative criticality indicators.

DSB initial assessment indicates:

- For step 1, DSB is likely to meet 4 of the 6 indicators, with less certainty over whether it would meet the two other indicators.
- For step 2, DSB is likely to meet 2 of the 5 indicators with:
  - Less certainty over whether it would meet two indicators; and
  - Certainty it would not meet one indicator

Whilst the DSB meets a number of the indicators, it is not yet possible to determine whether DSB will be deemed critical by the ESAs and thus require authorisation under DORA. These indicators are minimum relevant thresholds for the assessment of criticality and meeting these thresholds will not necessarily trigger determination as a critical ICT TPP. The ESAs have not yet finalised their methodology for determining critical ICT TPPs, stating they will do so before DORA applies on 17 January 2025.

# Cyber Security Update – Supplier Risk Management

## Requirement:

In the June 2022 TAC industry consultation meeting, a recommendation was made to the DSB Board for the DSB to document a supplier risk management policy and process, as well as conduct an RFP to identify possible solutions to manage supplier risk. This activity was included in the scope for 2023.

## Output:

- A third-party risk management policy has been created and approved by the CISO. It's an internal policy only that is not shared on the DSB website.
- The supplier risk management process has been drafted and is currently being finalised (due date: 31 Mar 2024).
- RFP was conducted. 4 out of 10 vendor responses were received.

## Options:

Vendor	Description	Pro's	Con's	Capex	Opex
SureCloud	Third-Party Risk Management (TPRM) and Governance, Risk and Compliance (GRC) software solution	Provides the most capabilities for TPRM and GRC e.g. vendor risk management, monitoring, on/offboarding, data privacy, compliance risk management, internal audit and BCP	Cost	Resources (1 month): €12k	License: €46k p.a. Resources: €55k p.a. Total: €101k p.a.
Bitsight	Provides TPRM, attack surface management, cyber security data and workflow risk control	Many TRPM and GRC capabilities and data sets	GRC is focused on DORA but not ISO27001	Resources (1 month): €12k	License: €29.5k p.a. Resources: €55k p.a. Total: €84.5k p.a.
Venminder	Provides TPRM platform with some Control Assessments capabilities	Many capabilities TPRM capabilities including Control Assessments via on-demand library of completed vendor control assessments, ongoing vendor monitoring	This is focused on TPRM only. It doesn't offer additional GRC modules to enable a single pane of glass and support compliance requirements for ISO 27001	Vendor implementation fee: €5.5k Resources (1 month): €12k Total: €17.5k	License: €18.4k p.a. Resources: €55k p.a. Total: €73.4k p.a.
RiskRecon	Provides a continuous cyber risk monitoring solution that delivers risk prioritized findings and action plans	Heavily focused on threat intelligence, vulnerability monitoring and management of TPRM	No onboarding, monitoring and offboarding capabilities of vendors. No additional GRC capabilities.	Resources (1 month): €12k	License: €43.3k p.a. Resources: €55k p.a. Total: €98.3k p.a.

***We would like to ask the TAC for their feedback on their preferred option and any recommendation for next steps on this activity?***

# AOB

## Further TAC Information:

- Website: <https://www.anna-dsb.com/technology-advisory-committee/>  
Members: <https://www.anna-dsb.com/technology-advisory-committee-members/>  
Charter: <https://www.anna-dsb.com/download/technology-advisory-committee-charter/>

## Appendices

- A – TAC Committee Members
- B – TAC Meeting Schedule
- C – TAC Bulletin Board Items
- D – Annual Checklists
  - D1 – Software Version Levels
  - D2 – Penetration Testing
  - D3 – Disaster Recovery Testing
- E – Actions



## Appendix A - TAC Committee Members

Institution	Category	First Name	Last Name	Position / Title
Asset Control	Industry	Martijn	Groot	VP, Marketing and Strategy
Bloomberg	Industry	Chris	Pulsifer	Software Development Manager
BVI	Industry	Felix	Ertl	VP, Legal
CFETS	Industry	Yan	Hui	RMB Derivatives Research & Development Manager
CFMMC	Industry	Huang	Lu	IT & Senior Economist
Citigroup	Industry	Souvik	Deb	VP, Regulatory Reform
CSIS	Industry	Billy	Chen	Monitoring Centre Director
Deutsche Bank AG	Industry	Amit	Bairagi	Product Owner
DTCC	Industry	Warren	Rubin	Director, Repository and Derivatives Services
FIX	Industry	Lisa	Taikitsadaporn	FIX Global Technical Committee
HSBC	Industry	James	Cowie	Americas Product Owner - Regulatory Reporting
Independent Expert	Industry	James	McGovern	Enterprise Architect & Security Leader
Independent Expert	Industry	Jim	Northey	ex officio as ISO TC 68 Chair Elect
ISDA	Industry	Ian	Sloyan	Head of Data & Digital Solutions
JP Morgan	Industry	Atara	Sender-Stein	Vice President, Software Engineering
LSEG	Industry	Niteen	Shastri	Assistant Vice President - Enterprise Content Technology - Shared Technology
Morgan Stanley	Industry	Bharat	Kanase	Vice President, Technology
Rabobank	Industry	James	Brown	Delivery Manager, IT Systems
SEB	Industry	Torbjörn	Cronbladh	Market Data Specialist and Product Owner
SIX Group Services AG	Industry	Richard	Gee	Head of Product Provisioning and Delivery
SmartStream	Industry	Vishal	Joshi	Head of Technologies – Reference Data Services
Standard Chartered Bank	Industry	Anthony	Brennan	Data Solutions Lead
State Street Bank	Industry	William	Rodiger	MD - Business Technology Solutions
Tahoe Blue Ltd	Industry	Jefferson	Braswell	Founding Partner
UBS	Industry	James	Colquhoun	Market Regulation Domain Architect
BGC Partners	TV	Jimmy	Chen	Development Manager
Refinitiv MTF	TV	Zintis	Rullis	Senior Technical Specialist
Tradeweb	TV	Elodie	Cany	Director, Technology Product Development
State Street	TV	Stuart	Oliver	FX Connect MTF Product Manager

## Observers

Organisation	Name	Position / Title
CFTC	Robert Stowsky	IT Specialist
ECB	Grzegorz Skrzypczynski	Senior Data Science Expert
ESMA	Olga Petrenko	Senior Officer, Markets
FCA	Paul Everson	Senior Associate – Market Oversight
JSDA	Eiichiro Fukase	Counsellor to the Chairman (for Fintech, Financial Products and Global Regulation)

DSB TAC Sponsor:

Marc Honegger  
DSB Board Member

DSB TAC Chair:

Chris Pulsifer  
Bloomberg

Designated DSB Officer:

Andy Hughes  
DSB Management Team

DSB CISO:

Christiane Baetz  
DSB Management Team

DSB TAC Secretariat:

Cristina Scurr  
DSB PMO

## Appendix B - TAC Meeting Schedule

The following shows the TAC meeting dates & times:

Date	Description	Time
<b>Wednesday 27<sup>th</sup> March 2024</b>	<b>2024 Meeting 1</b>	<b>1pm GMT (1pm UTC, 2pm CET, 9am EDT)</b>
<i>Tbc June 2024</i>	2024 Industry Consultation	1pm BST (12pm UTC, 2pm CET, 8am EST)
Wednesday 30 <sup>th</sup> October 2024	2024 Meeting 2	1pm GMT (1pm UTC, 2pm CET, 9am EDT)

## Appendix C – TAC Bulletin Board Items

The following table details the active TAC Bulletin Board topics:

Created	Updated	Title	Posts	Link
19/03/2024	19/03/2024	GitHub Review and Finalising the Release Process	1	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/tac-charter-amendments-for-the-2024-to-2026-term/#post-366">https://www.anna-dsb.com/bulletin-board/tac-forum/tac-charter-amendments-for-the-2024-to-2026-term/#post-366</a>
18/03/2024	18/03/2024	TAC Charter Amendments for the 2024 to 2026 term	1	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/tac-charter-amendments-for-the-2024-to-2026-term/#post-366">https://www.anna-dsb.com/bulletin-board/tac-forum/tac-charter-amendments-for-the-2024-to-2026-term/#post-366</a>
15/11/2023	16/11/2023	Large FX FDL Delta Files for the 7 <sup>th</sup> and 8 <sup>th</sup> November	2	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/large-fx-fdl-delta-files-for-the-7th-and-8th-november-2023/#post-352">https://www.anna-dsb.com/bulletin-board/tac-forum/large-fx-fdl-delta-files-for-the-7th-and-8th-november-2023/#post-352</a>
15/03/2022	19/10/2023	DSB Software Version Levels	3	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-software-version-levels/#post-346">https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-software-version-levels/#post-346</a>
17/08/2023	15/09/2023	UPI FDL Service Query (Publish Empty Files if No Data)	10	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/upi-fdl-service-query-publish-empty-files-if-no-data/">https://www.anna-dsb.com/bulletin-board/tac-forum/upi-fdl-service-query-publish-empty-files-if-no-data/</a>
17/08/2023	1/09/2023	DSB Security operations Update	11	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-security-operations-update/#post-321">https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-security-operations-update/#post-321</a>
25/08/2023	25/08/2023	OTC ISIN FDL Archiving Proposal	2	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/otc-isin-fdl-archiving-proposal/">https://www.anna-dsb.com/bulletin-board/tac-forum/otc-isin-fdl-archiving-proposal/</a>

Please note: All historical topics remain on the bulletin board, only the ones deemed active have been listed above for reference

## Appendix D – Annual Checklists

The following table details the items which will be checked on an annual basis:

Appendix	Item	Last Review	Next Review	Comments
D1	Software Version Levels	27/10/2023	Q4 2024	Updated after rebuild of all environments
D2	Penetration Testing	19/02/2023	Q3 2024	2024 Pen Test scheduled
D3	Disaster Recovery Testing	27/10/2023	Q3 2024	

## Appendix D I - Software Version Levels

The DSB's software version policy is to remain within one major version of the latest version in industry.

This is to ensure that we remain current particularly in relation to security updates.

All upgrades are anticipated to be transparent to the DSB user base (i.e.: backwardly compatible)

The key software versions are available to the TAC members via the bulletin board via the following link:

<https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-software-version-levels/#post-346>

## Appendix D2 – Penetration Testing

This table below details the DSB’s Penetration Testing history:

Environment	Start	End	Description	Outcome	Notes
UAT	15 September 2017	22 September 2017	Gotham Digital Science	Success	
UAT	04 December 2018	12 December 2018	Gotham Digital Science	Success	
UAT	02 December 2019	09 December 2019	AON	Success	
UAT	03 December 2020	09 December 2020	Jumpsec	Success	
UAT	29 November 2021	03 December 2021	Jumpsec	Success	
UAT	28 November 2022	02 December 2022	Jumpsec	Partial	
UAT	04 February 2023	19 February 2023	Jumpsec	Success	Testing brought forward
UAT	02 April 2024	12 April 2024	FSP	Pending	Testing scheduled

## Appendix D3 – Disaster Recovery Testing

This table below details the DSB's DR testing history:

Environment	Start	End	Description	Outcome	Notes
UAT	16 July 2021	10 September 2021	Full migration of DSB service to the DR region using the UAT environment	Success	Runbook revised and optimised
UAT	19 November 2022	03 December 2022	Full migration of DSB service to the DR region using the UAT environment, including ToTV and reverse DR flow	Postponed	Issue identified due to changes made
UAT	17 February 2023	04 March 2023	Full migration of DSB service to the DR region using the UAT environment, including ToTV and reverse DR flow	Success	One client connectivity issue observed, RTO met.
PROD	06 August 2023	06 August 2023	Internal failover/failback test	Success	Internal test only, no clients involved
UAT	11 May 2024	25 May 2024	Full migration of DSB service to the DR region using the UAT environment, including ToTV and reverse DR flow	Pending	
Prod	16 June 2024	30 June 2024	Full migration of DSB service to the DR region using the UAT environment, including ToTV and reverse DR flow	Pending	

## Appendix E – TAC Open Actions

Ref	Action	Update	Slides	Target	Status
2310-001	DSB to schedule a further UAT Disaster Recovery Test and to provide users with the dates of the production DR test in Q2 2024 as soon as they are agreed.		11	27/03/2024	Pending
2310-002	DSB to create a new bulletin board topic to cover the remaining points regarding cleaning-up the GitHub repository and standardising documentation details in relation to the DSB Release Process.		21	27/03/2024	Pending
2310-003	DSB to share thoughts on what changes to the system would be deemed to be breaking changes.	<i>Need to discuss users who validate response messages against the current record template.</i>			c/f