

DERIVATIVES SERVICE BUREAU

TECHNOLOGY ADVISORY COMMITTEE

29th March 2023

MEMBER FINAL

# Agenda

- **Governance**
  - Competition Law Reminder
  - Roll Call
  - TAC Member Changes
  - Action Update
- **Existing Topics**
  - Basic Authentication Update
  - Disaster Recovery Testing
  - Weekly Snapshot
  - Dynamic Enumerations Update
  - CFI 2019
  - 2023 POAP
  - Machine Readable Validation & Reporting
  - Global Agile Architecture
- **New Topics**
  - Industry Consultation 2023
  - DSB Release Process
  - DSB Change Process Update
  - UAT2 Maintenance Window Review
- **UPI Update**
  - Baseline
  - Upscale
- **CISO Update**
- **AOB**
- **Appendices**
  - A - TAC Members
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## Governance I of IV - 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 I of IV - 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 II of IV – Roll Call

The DDO will undertake the roll call.

Please note that Chris Pulsifer is unable to make the meeting, Richard Gee has kindly offered to chair the meeting.

## Governance III of IV – TAC Member Changes

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

- Grzegorz Skrzypczynski, a Senior Data Science Expert from the European Central Bank joins the TAC as a regulatory observer.

We would like to take the opportunity to welcome Grzegorz to the TAC.

## Governance IV of IV - Action Update

Action	Description	Update	Slide#
2210-001	TAC Secretariat to provide the TAC members with an update on the outcome of the UAT DR Test and if successful to seek guidance on scheduling the production DR test.	Update provided on slide 9	9
2210-003	TAC Secretariat to provide the TAC members with an update on the TAC Bulletin board on completion of the DSB's additional CFI 2019 analysis	Update provided on slide 12	12
2210-003	TAC Secretariat to write to the TAC members requesting application for members of the CASC to oversee the GAA programme	Complete	16

## Existing Topics – Basic Authentication Update

### Background:

- At the March 2022 meeting, the TAC approved the update of the DSB’s ReST RoE to adopt RFC-7617 standards by enforcing the use of ‘Basic’ in the authorisation syntax (see table below)

### Update:

- The monitoring undertaken by the DSB revealed that a significant number of users were not ready for the release
- Users who were planning to release could also proceed – the current system already supports the change
- The DSB decided to postpone the release until after the year-end change freeze
- The number of non-compliant users has significantly improved
- 04/03/2023 - Users were notified of the revised date of the 19/03/2023
- 19/03/2023 – the change was successfully applied to production

Feature	RFC 7617	Current DSB ReST ROE
Syntax (in http header):	Authorization: <b>Basic</b> Base64(User:Password)	Authorization: Base64(User:Password)
Details:	<p>If the user agent wishes to send the user-id "Aladdin" and password "open sesame", it would use the following header field:</p> <p>Authorization: <b>Basic</b> QWxhZGRpbjpwcmVudS0yZmZQ==</p>	<p>Users should attach the authentication parameters to each of the REST methods’ header with:</p> <p>key = “Authorization” value = base64(username + “:” + password)</p> <p>The username and password are concatenated with a colon separator and encoded in <u>base64</u></p>

## Existing Topics – Disaster Recovery Testing

### **Background:**

During the October 2022 TAC meeting, the TAC members discussed the current status of the Disaster Recovery (DR) testing. The DSB were about to undertake a further test in the UAT environment to prove the addition of the “reverse-flow” capability as well as the ToTV DR option.

### **Update:**

Since the meeting, the team encountered a problem with the revised runbook and had to defer the November test. The test was rescheduled after the change freeze period and was undertaken between 17<sup>th</sup> February 2023 and the 4<sup>th</sup> March 2023.

There was one client connectivity issue which was raised and resolved during the test. This related to a change that had been made at the clients end which had not been reflected at the DSB side. The DSB is working with the client involved to address this for future tests.

There was a delay in restarting the flow of internal MIS information back from the secondary site to the primary, but this issue was resolved.

- The failover activity was completed in 2.5 hours
- The failback activity was completed in 3.5 hours

### **Next Steps:**

The DSB now need to consult the TAC members regarding the scope and schedule for the Production DR test. Two options to consider are:

- ***Internal Failover Test***

We have an option to execute the runbook, proving the service fails over to the secondary site and proving the production RTO. Once this is proven we can stop the service in the secondary site and bring it back up from the primary site.

This validates the runbook and RTO but does not validate user connectivity.

- ***Repeat the UAT test scope in the Production environment***

The TAC will need to agree the duration of the failover period – especially given the UPI implementation plans from April to October.

This validates the runbook and proves users cannot to and use the secondary site.

## Existing Topics –Weekly Snapshot

### **Update:**

- The weekly snapshot development was implemented in UAT on 27<sup>th</sup> December 2022
- An issue was reported in UAT and a decision was made to postpone the 5<sup>th</sup> February 2023 production release
- The issue has been addressed and was deployed into UAT on the 8<sup>th</sup> March 2023
- The target date for Production deployment has been rearranged for Sunday 2<sup>nd</sup> April 2023

### **Future Plans:**

Following the release into UAT we have received the following feedback. The DSB would like to obtain the TAC's feedback on both points:

- A symbolic link pointing to the most recent snapshot would be helpful
- The snapshot files should be broken up into smaller consumable units

# Existing Topics – Dynamic Enumerations Update

## **Update:**

Following the implementation of the Dynamic Enumerations version of the OTC ISIN product templates on the 26<sup>th</sup> June 2022, we would like to remind users that

- Support for the legacy denormalised product templates will end on 1<sup>st</sup> July 2023
- The UPI templates that have been introduced are based on the normalised codesets

## Existing Topics – CFI 2019 I of II

The regulators have provided feedback to the DSB on the proposed approach to CFI 2019 presented to them by the DSB. As a result of the feedback received the DSB is undertaking further analysis into the approach, including when this could be scheduled with BAU resource. A further outreach was recently posted on the CFI 2019 bulletin board item with a view to discussing the five points with the TAC today.

### ***1. File Download Separation for CFI?***

For the pre-population process, where the OTC ISIN record will be updated with the UPI identifier, the TAC SSC discussed and concluded that not all users may want to receive the updates and suggested separating both the FIX Subscription notifications and the File Download (FDL) updates from the usual channels. This means that OTC ISIN users will have to undertake additional effort to process the UPI Codes assigned to OTC ISINs but will not be impacted if UPI codes are not required e.g.: if they do not maintain a local cache of OTC ISINs.

While we have previously discussed CFI FIX subscriptions, with the proposal to have a separate subscription topic for CFI updates, we have not had a similar discussion regarding the FDL area.

***Do the TAC members have a view if the FDL should also be separated?***

### ***2. CFI Migration Process Duration & Daily Update Volumes***

How long should the CFI migration process take? Bearing in mind the current population of 100 million ISINs, growing at a rate of 1.8 million a month, a related question is what is an acceptable volume of daily updates for OTC ISIN (and UPI users) to receive if they are processing either FIX Notifications or the daily FDL file?

## Existing Topics – CFI 2019 II of II

### 3. CFI Update Maintenance

Requested CFI version changes from the Maintenance Agency will be more frequent, possibly annually. This will mean that all response templates will have to change to incorporate the new derived CFI version and depending on the scope of the changes, some request and response templates will also be updated to include additional attributes.

The DSB has recently received several challenges regarding changes to Product Templates.

***Are the members able to reach out to their respective technical teams to validate if more frequent updates is sustainable in the longer term?***

### 4. CFI Release Member Implementation

How long would members firms require to implement a CFI update?

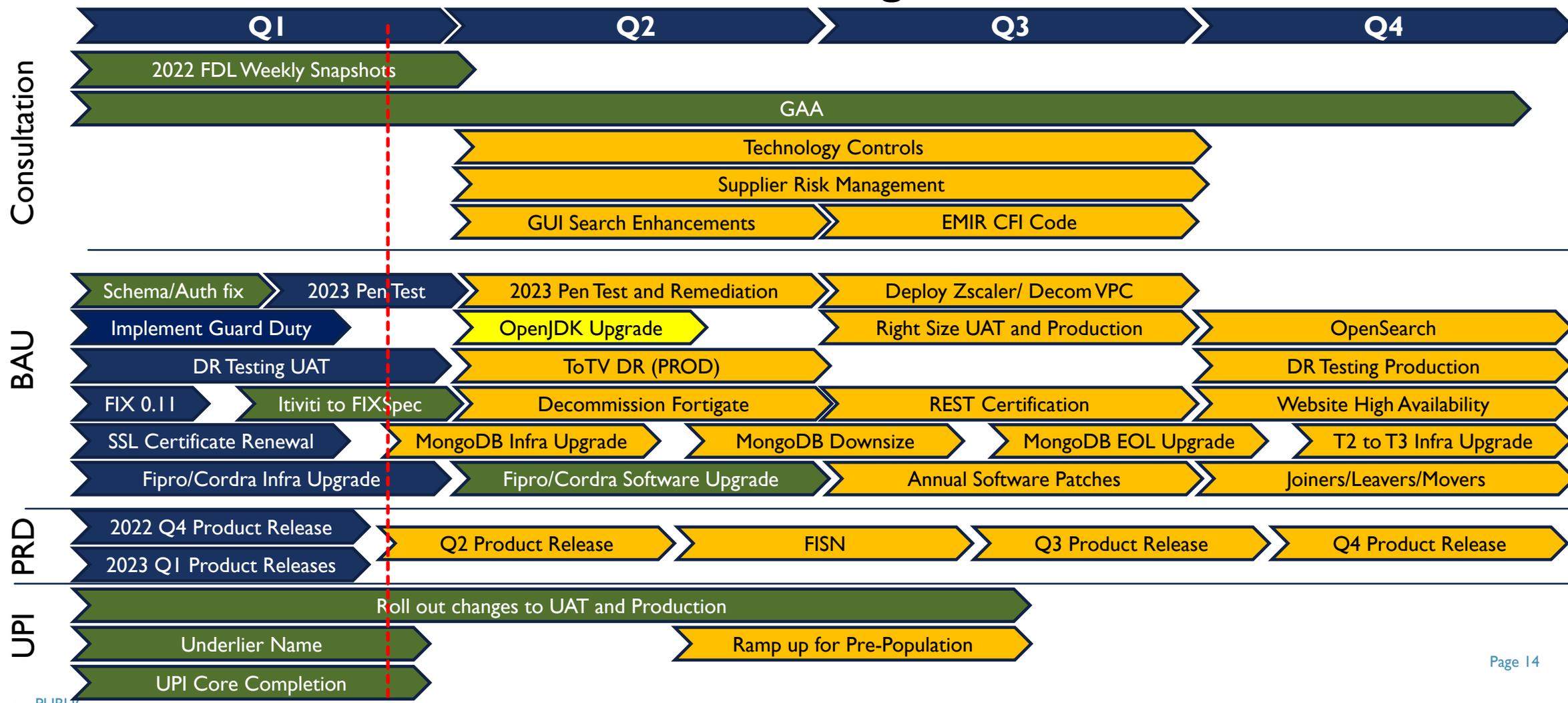
### 5. CFI 2019 – Initial Release Timing

Does the TAC have a view as to the timing of the initial CFI 2019 release, given that industry will shortly be adopting the UPI and changing all OTC ISIN response templates to incorporate the UPI Identifier? The CFI 2019 release will impact the full set of ISIN and UPI templates. The known key dates are shown opposite:

#### UPI Key Dates:

- 17/04/2023 UPI UAT Launch
- 17/07/2023 UPI Applied to OTC ISIN UAT
- 16/10/2023 UPI Production Launch
- 16/10/2023 OTC ISIN Pre-population Start
- 28/01/2024 OTC ISIN Pre-Population End
- 29/01/2024 CFTC Mandate
- 29/04/2024 ESMA Mandate
- 30/09/2024 FCA Mandate
- 21/10/2024 ASIC Mandate

# 2023 Plan on a Page



**Key:** Complete (Dark Blue) | In Flight (Green) | Strategic (Light Blue) | Pending (Yellow) | Pending (TAC Item) (Light Yellow)

# Existing Topics - Machine Readable Validation & Reporting

## Machine Readable Validation:

The DSB are exploring the request from the ROC's Oversight Arrangements Group (OAG) to make the full set of UPI validation rules available to users so that they do not have to implement any bespoke logic.

At the last TAC Meeting the DSB proposed that the rules, not currently defined in the machine-readable repository which is implemented in FIX Orchestra, be expanded to include the rules not currently defined. This is now being possible since the extensions to the Orchestra standard. The repository is not currently exposed to users, so would also need to be published.

This remains a target for the DSB to progress, however, the UPI focus has been on the launch of the UPI service into UAT in April. Additionally, the current thinking is that CFI 2019 may well be a greater priority for the ROC. We plan to return to this topic at the next meeting.

```

<!-- the field type is enumerated to: BasisPoints, MonetaryValue, Percentage, Yield, PNDG -->
<fixr:fieldRef id="20020" instanceName="StrikePrice">
  <fixr:rule name="Decimal number 18.13" type="decimalNumber 18.13" presence="required" >
    <when>StrikePriceType StrikePriceType == ^MonetaryValue</when>
  </fixr:rule>
  <fixr:rule name="Decimal number 11.10" type="decimalNumber 11.10" presence="required" >
    <when>StrikePriceType == ^Percentage || StrikePriceType == ^Yield</when>
  </fixr:rule>
  <fixr:rule name="Decimal number 18.17" type="decimalNumber 18.17" presence="required" >
    <when>StrikePriceType StrikePriceType == ^BasisPoints</when>
  </fixr:rule>
  <fixr:rule name="Strike Price forbidden" presence="forbidden">
    <when>StrikePriceType == PNDG || not exists StrikePriceType</when>
  </fixr:rule>
</fixr:fieldRef>
  
```

## MRER:

A verbal update on this topic will be provided during the meeting, including plans to discuss with interested TAC members regarding the possible options.



## Existing Topics – Global Agile Architecture

### **GAA Initiation:**

- After the last TAC meeting, the DSB undertook an outreach to the TAC members to ask for members of the GAA subcommittee
- The feedback deadline was 23<sup>rd</sup> November 2022, four members volunteered as well as one regulatory observer  
Membership can be view [here](#)<sup>1</sup>.
- The forum met on the 30<sup>th</sup> November 2022 and agreed the following:
  - To re-use the Cloud Architecture Forum subcommittee details – given this was the basis of the GAA
  - The forum would not require a chair
  - The GAA meeting frequency would be monthly
  - Information would be shared with the GAA members via email

### **GAA Activity:**

- An initial scoping paper was shared with the GAA members on the 9<sup>th</sup> January 2023, this focused on two key topics:
  - Automated Deployments
  - MongoDB Database Review
- The MongoDB Database Review findings were shared with the GAA on 6<sup>th</sup> March 2023
- The Automated Deployments paper has been drafted and will be shared with the GAA before the end of the month.

### **Next Steps:**

- GAA Meeting to agree work for initial sprints
- Sprints to commence 3<sup>rd</sup> April 2023

<sup>1</sup><https://www.anna-dsb.com/cloud-architecture-sub-committee-members/>

## **New Topics I of IV – Industry Consultation 2023**

The DSB will be undertaking its annual industry consultation exercise for 2023 for the 2024 OTC ISIN service provision. The timeline for the 2023 exercise is being finalised, a verbal update on this will be provided during the meeting.

The DSB has reached out to the members of the two Industry Representation Groups, the Product Committee and the TAC to ask if there are any topics for inclusion.

## New Topics II of IV – DSB Release Process I of II

### **Background:**

- The DSB was asked to postpone the last three product template releases for the OTC ISIN service.
- The postponement requests were received very close to the implementation, from a single different client in each of the cases.
- The TAC were consulted in two out of the three requests. The TAC were not supportive of the requests, due to:
  - This was a single client request
  - Other clients were ready to implement, including TAC members
  - The need to keep the DSB release schedule on track
- Questions from the first client were shared with the TAC members. The TAC were not supportive of extending the notice period but were keen to understand what can be done to avoid these situations from arising in the future. As a reminder:
  - DSB Notifications are sent out in advance, where the change is considered breaking the DSB must give 90-days notice
  - Each DSB notification contains a link to the release instructions on the DSB's website<sup>1</sup>
- The DSB held meetings with each of three clients concern, the following is a summary of those discussions:
  - 90 Days notice should start when the change is released to the UAT environment
  - Structural changes to templates, e.g.: where a section is moved, must be considered a breaking change and clearly highlighted
  - The DSB should provide details of changes between the draft and final versions of the document to allow clients who proceed at risk on the draft documentation to see what, if anything, has changed in the final version
  - The DSB should consider publishing draft JSON templates earlier in the process and again highlight changes from draft to final
  - The Go/No-go point is too close to the release date
  - Clients should be involved in the Go/No-go discussion
  - For data validation changes, the DSB should undertake analysis early in the process to identify the clients who are currently sending data that will be caught by the new rules and to undertake this outreach early in the process

# New Topics II of IV – DSB Release Process II Of II

## Next Steps:

- Publish draft JSON templates with the draft documentation
- Show any changes made between the draft and final versions of the documentation
- Ensure releases with breaking changes are clearly marked
- Email notifications to clearly identify breaking changes - ideally to support those organisations who automatically read these notifications – do the TAC have any suggestions on this?

## Release Milestones

February 2023 Release	Milestones	Status	Notification
Draft Documentation Available	28 November 2022	Completed	
Final Documentation Available	28 November 2022	Completed	<a href="#">2022-11-28_Notification</a>
UAT Release	17 December 2022	Completed	<a href="#">2022-12-17_Notification</a>
Final Go/No-Go Decision	22 February 2023	Completed	<a href="#">2023-02-23_Notification</a>
Production and UAT2 Release	26 February 2023	Completed	<a href="#">2023-02-26_Notification</a>

## JSON and Documentation Links

Product Templates	Links
Templates	<a href="#">Link</a>
Documentation	<a href="#">Product Definitions Annex 7</a>

## Notes:

- The TAC were approached after the first postponement request and asked if 90 days should commence when the changes are placed into UAT. The feedback received was that:
  - 90 days should remain from the initial notification
  - UAT duration of 6-weeks is sufficient, although longer UAT periods could be considered for larger releases

## Questions:

- Should the DSB consider generating a difference report for the JSON templates with each release?
- If so, are the TAC able to recommend any tooling?
- Could we consider introducing a template heatmap? One idea would be to provide a view which RAG's the templates by asset class e.g.
  - Red – template is broken by this change
  - Amber – template is impacted by this change, but not considered breaking
  - Green – template is unaffected by this change

# New Topics III of IV – 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, PROD, PROD-DR
- The CAB meets every week to review changes to these environments
- This topic provides an update on the change volumes observed 6 months down the line
- The data was collected at cob Friday 17<sup>th</sup> March 2023

Review Month	Changes Reviewed	Unplanned Changes	Total Changes
09/2022	5	0	11
10/2022	31	2	26
11/2022	34	5	45
12/2022	27	1	21
01/2023	30	9	39
02/2023	53	9	62
03/2023	41	12	49
<b>Total:</b>	<b>221</b>	<b>37</b>	<b>258</b>

Status	Number
Released	221
Release – Scheduled	17
Cancelled	12
Postponed	8
<b>Total:</b>	<b>258</b>

# New Topics IV of IV – UAT2 Maintenance Window Review

## **Background:**

The OTC ISIN service currently has two UAT environments:

- UAT – our next release environment
- UAT2 – our as-production environment

UAT currently has a midweek maintenance window, but UAT2

does not. In addition, we are regularly having to extend the UAT2 weekend maintenance window due to the UAT2 downtime window matching production. The operating hours are available on the DSB’s website<sup>1</sup>.

### **UAT Environment:**

Saturday 12:30:00 PM UTC to Saturday 00:30:00:00 AM UTC

An extended UAT weekend maintenance may be required for releases accompanied with a notification to be sent to users.

A mid-week UAT maintenance occurs every Wednesday whenever required with a window of: Wednesday 2:00 AM UTC to Wednesday 7:00 AM UTC

### **UAT2 Environment:**

The UAT2 environment’s operating hours mirrors the Production environment, however, an extended weekend maintenance may be required for releases accompanied with a notification to be sent to users.

## **Proposal:**

The DSB would like to propose the following changes:

- The DSB includes the UAT2 environment in the optional mid-week maintenance window to allow the DSB a second option to undertake routine maintenance on the UAT2 environment and to reduce the demands at the weekend
- To rearrange the weekend downtime window for UAT2 so it does not clash with UAT or Production. The proposal would be:
  - UAT 00:30 Saturday to 12:30 Saturday
  - UAT2 12:30 Saturday to 00:30 Sunday
  - Prod 00:30 Sunday to 12:30 Sunday

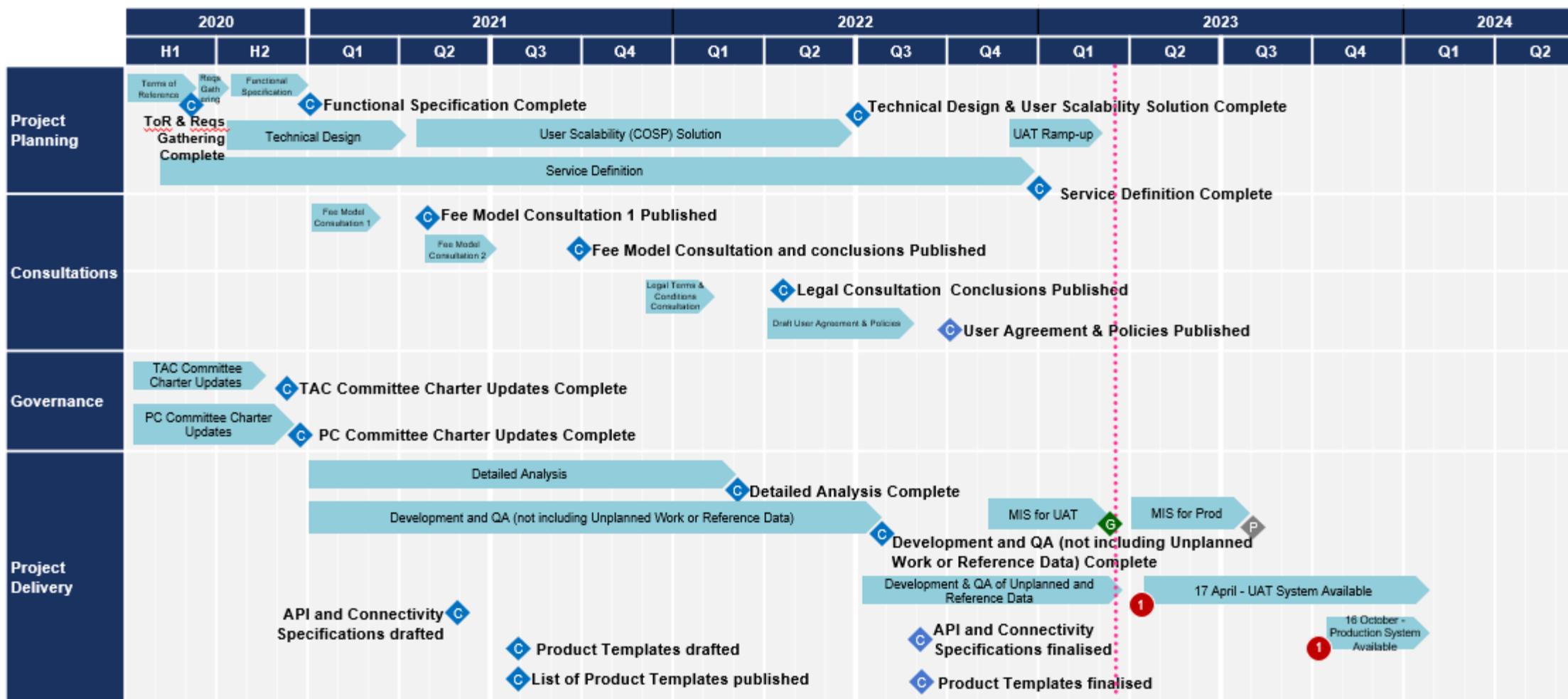
***TAC Decision: Do you the TAC agree with the proposal to allow a midweek maintenance window for UAT2 and to alter the UAT2 downtime window from “00:30 Sunday to 12:30 Sunday” to “12:30 Saturday to 00:30 Sunday”?***

# UPI Update I of II – Baseline I of II - Progress

## UPI Baseline Progress:

- Project remains on track for a UAT Launch on 17 April 2023 and Production launch on 16 October 2023
- UPI Product documentation published in September 2022
- UPI Legal Terms and Conditions Consultation Report published on 12<sup>th</sup> April 2022
- DSB Access and Usage Agreement and Policies for 2023 published on 28<sup>th</sup> September 2022
- Non-standard template changes completed in January 2023
- GUI Release completed in January 2023
- Authority User Type core development complete
- 3<sup>rd</sup> UAT environment built & testing near completion
- ISIN Pre-population script in testing
- Remaining API development for FIX remains on track
- MIS Analysis completed
- Inbound and outbound reference data mechanism in testing, including handling of Alternate IDs
- Signing of reference data vendor contracts delayed but targeted for 24 March 2023

# UPI Update I of II – Baseline II of II - Plan on a Page



1 Availability of UAT and Production services based on 29 January 2024 (CFTC Regulatory Mandate)

## UPI Update II of II – UPI Upscale

### UPI Upscale Progress:

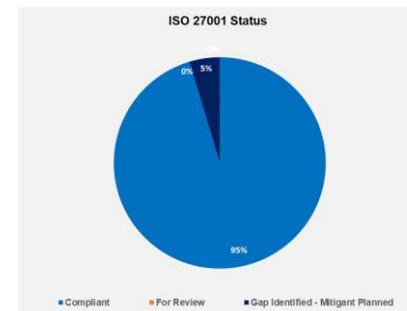
- The Client Onboarding & Support Platform (COSP) will be available at the launch of the UPI Service in UAT, in order to enable fee-paying users of the UPI service to set-up their client profile, configure GUI users and API connections for UAT (depending on User Type), and to enable Registered users to sign up
- Prior to the launch of the UPI Service in Production, workflows will be available to:
  - Allow the review and digital signature of the DSB UPI Subscription Form (planned for July 2023)
  - Manage billing details and payment for the service (planned for September 2023)
- Implementation of the COSP is on track – build of COSP customer facing environment is complete
- Work is scheduled for the new User Type for (regulatory) Authorities to be added to the COSP:
  - A dedicated User Type of ‘Authority’ based on the ‘Search Only API’ profile has already been developed (as per UPI Baseline update)
  - COSP workflow build is scheduled (notably, suppression of the payment workflow, as Authorities have free access) and will be released in July 2023
  - Draft Additional Terms to govern access for Authorities are being reviewed by the CDIDE
- Alternative ID permissioning workflow has been built in the COSP and operational procedure to request permission from data vendors for use of Alternate IDs is agreed
- Operational readiness is nearing completion – including training and mobilization of the DSB UPI Support team, readiness of procedures and MIS

# CISO Update

The following progress has been made on the CISO related items since the last meeting:

## ISO27001

- Items planned to be mitigated reduced down from 22 to 5 (5/103 = 5%)
- Now ready to seek external ISO27001 accreditation.
- Accreditation costs & timing to be agreed with the DSB Board



## Secure SDLC

- Adoption of Enterprise tooling software has been completed

## Security Operations Centre (SOC)

- Single bidder response to RFP – unable to verify if a cost effective option due to lack of comparable quotes
- Investigating the use of intelligent tooling in the first instance to mitigate the existing risks
- Approach to be agreed with the DSB Board

## Security Incident

- RCA produced – available on request by emailing DSB Technical Support (<mailto:technical.support@anna-dsb.com>)
- ***Do the TAC think we should form a security subcommittee to undertake internal reviews of such incidents?***

# 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	Rocky	Martinez	CTO
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
State Street FX Connect	TV	Rajkamal	Roka	Head of FX Regulatory Reform
Tradeweb	TV	Elodie	Cany	Director, Technology Product Development

## 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:	Will Palmer DSB Management Team
DSB TAC Secretariat:	Yuval Cohen DSB Technical Architect

## Appendix B - TAC Meeting Schedule

The following shows the TAC meeting dates & times:

Date	Description	Time
Wednesday 29 <sup>th</sup> March 2023	2023 Meeting 1	1pm BST (12pm UTC, 2pm CET, 8am EDT)
tbc	2023 Industry Consultation	1pm BST (12pm UTC, 2pm CET, 8am EST)
Wednesday 25 <sup>th</sup> October 2023	2022 Meeting 3	1pm BST (12pm UTC, 2pm CET, 8am EDT)

## Appendix C – TAC Bulletin Board Items

The following table details the active TAC Bulletin Board topics:

Created	Updated	Title	Posts	Link
23/04/2021	16/03/2023	CFI 2019	4	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/cfi-2019/#post-244">https://www.anna-dsb.com/bulletin-board/tac-forum/cfi-2019/#post-244</a>
08/03/2022	20/01/2023	DR Testing Options	3	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/action-2111-001-dsb-to-create-a-new-topic-on-the-tac-bulletin-board-regarding-the-future-dr-testing-options/#post-272">https://www.anna-dsb.com/bulletin-board/tac-forum/action-2111-001-dsb-to-create-a-new-topic-on-the-tac-bulletin-board-regarding-the-future-dr-testing-options/#post-272</a>
14/12/2022	13/01/2023	Release Notification Period Question and Publication of JSON Templates	3	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/release-notification-period-question-and-publication-of-json-templates/#post-307">https://www.anna-dsb.com/bulletin-board/tac-forum/release-notification-period-question-and-publication-of-json-templates/#post-307</a>
14/11/2022	14/11/2022	Product Template February 2023 Release	2	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/product-template-february-2023-release/">https://www.anna-dsb.com/bulletin-board/tac-forum/product-template-february-2023-release/</a>
15/03/2022	19/10/2022	DSB Software Version Levels	2	<a href="https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-software-version-levels/#post-276">https://www.anna-dsb.com/bulletin-board/tac-forum/dsb-software-version-levels/#post-276</a>

Please note: All 58 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	26/10/2022	Q4 2023	Items being progressed in 2023
D2	Penetration Testing	19/02/2023	Q1 2024	2023 Pen Test completed in Q1
D3	Disaster Recovery Testing	26/10/2023	Q1 2023	UAT DR Test completed 04/03/2023

## 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-276>

## 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

## 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.

## Appendix E – TAC Open Actions

Ref	Action	Update	Slides	Target	Status
2210-001	TAC Secretariat to provide the TAC members with an update on the outcome of the UAT DR Test and if successful to seek guidance on scheduling the production DR test.	Further update provided in the pack	9	29/03/2023	Propose to close
2210-002	TAC Secretariat to provide the TAC members with an update on the TAC Bulletin board on completion of the DSB's additional CFI 2019 analysis	Further update provided in the pack	12		Open
2210-003	TAC Secretariat to write to the TAC members requesting application for members of the CASC to oversee the GAA programme	Completed, GAA subcommittee formed	16	29/03/2023	Propose to close