

Testing - Approach and status

Context

Ensuring the **safety and functionality of DPS is delivered through a robust testing framework** deployed by Velonetic, LIMOSS, and Velonetic's customers, consistent with the best practice of agile builds.

The **framework consists of a multi-layered test plan** that aims to:

- 1) Test all elements of DPS from integration and basic stability to business suitability; and
- 2) Repeat test through regressions and defect management cycles to further strengthen our confidence in DPS prior to cutover.

Multiple layers of testing are deployed throughout the release cycles:

- **System Integration (SIT):** to confirm different code releases integrate and work well together;
- **Non-Functional (NFT):** to confirm the system is resilient, reliable, stable, and secure;
- **User Acceptance (UAT):** Is the DPS platform capable of performing the business tasks it is designed for, and is it doing it properly;
- **Business Operations Acceptance (BOAT):** to confirm that the DPS performs to back-office expectations, and there is operational resilience; and
- **Customer :** Through 3 pillars (Vanguard, LIMOSS Coordinated, and Enhanced) confirm that the market (and its vendors) are satisfied and comfortable with using the platform.

Testing has been ongoing for over a year, and, across the different test layers, DPS will go through a rigorous process covering **over 20 weeks of remaining repeat testing by DXC, Velonetic, and the market** ensuring confidence in the platform and satisfaction of the participants well before the cutover window.

Objectives

1

This document aims to:

Explain our testing framework:

- 1 • **Introduce our testing approach**, and how different test layers overlap and/or handover build increments sequentially.
 - **Deep dive into each test layer**, elaborate on entry and exit criteria as well as a summary of how each is conducted.
 - Provide **high-level status update** across each test layer.
 - Provide **zoom-ins on select topics** including clarity on our vendor testing and EDI testing approach.

2 Share results from previous test cycles

- Deep dive into PI-specific historical performance by testing layer (incl. number of tests run, defects identified, and status etc.).]

Results to be updated periodically and published with subsequent test cycles

Contents

Part 1: Testing framework

- Introduction to testing approach
- Deep dive into testing by layer
- High-level status update across the test phases

Part 2: Testing results

To be refreshed with every cycle

- Testing stage status deep-dives

Appendix

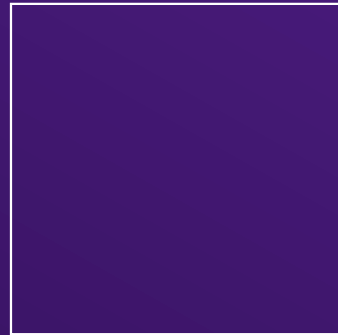
- Zoom in on NFT
- Zoom in on Vendor testing
- Reach-back testing approach
- Zoom in on EDIs
- Data migration assurance
- Constraints on dual run

Part 1: Testing framework

Key principles underpinning our testing framework

- 1 A multi-layered testing framework deployed sequentially and iteratively to each testing cycle to de-risk the program
- 2 SIT¹, UAT², NFT³ testing by internal teams aims to identify and address functional and non-functional defects before moving into Customer Testing
- 3 BOAT⁴ testing (heavily linked with UAT) aims to similarly test and de-risk back-end functionality
- 4 Vanguard spearheads Customer Testing, and provides early access to test connectivity, functionality and business scenarios. While Vanguard is de-risked by previous testing phases, it is early-testing and we expect to uncover defects ahead of wider Customer Testing
- 5 LIMOSS Coordinated and Enhanced Customer Testing are the final stages of testing, allowing market participants to get a detailed understanding of DPS and provide assurance ahead of cutover
- 6 Functional testing (UAT, Vanguard and Customer Testing) utilises a list of 150 comprehensive business scenarios covering >90% of core business requirements (with >10k individual test scripts). The business scenarios will be tested incrementally in line with the 4 distinct test cycles
- 7 Each cycle's testing includes testing of both newly released and all previous cycles' (regression testing) functionality
- 8 Defects uncovered at any stage in testing are deployed into a structured defect resolution framework; to date, most discovered defects have been resolved in <3 weeks ('hot fix' capability)

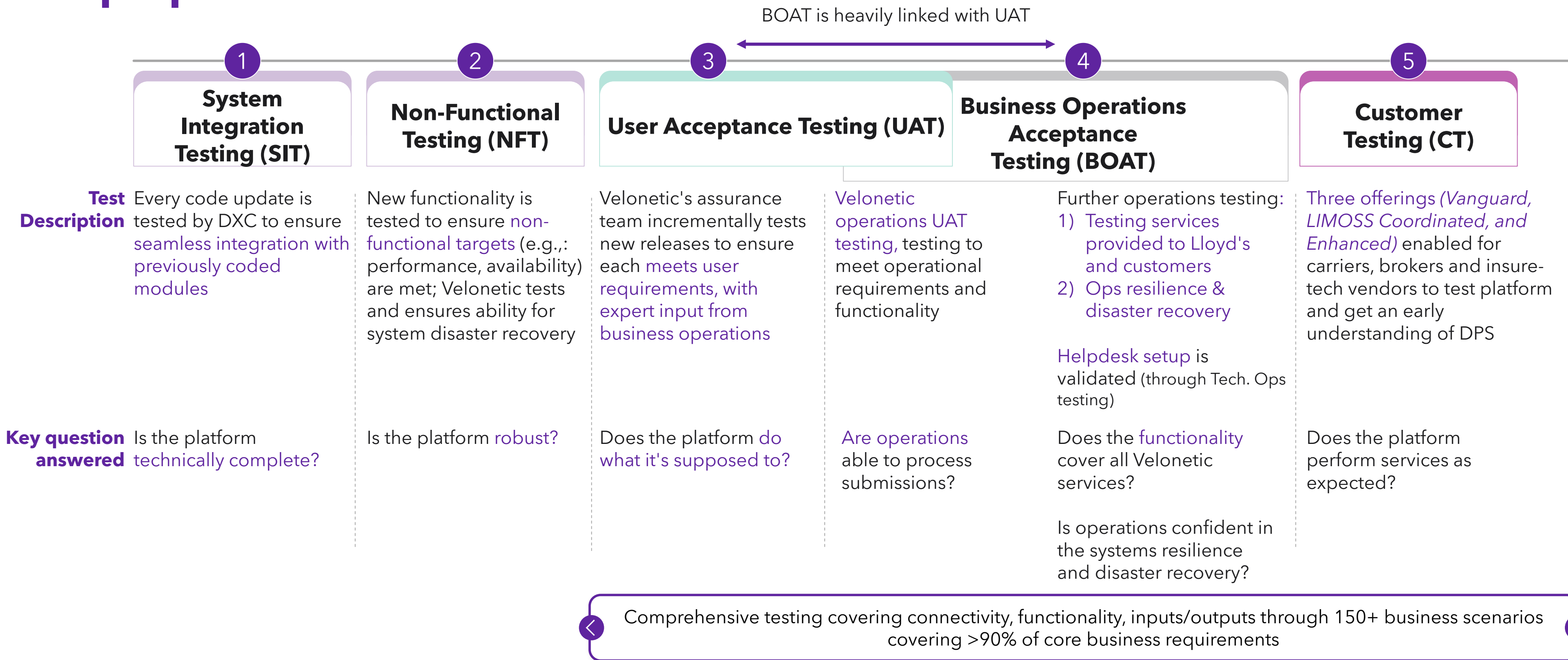
1. System Integration testing; 2. User Acceptance testing; 3. Non-functional testing; 4. Business Operations Acceptance testing



Introduction to testing approach

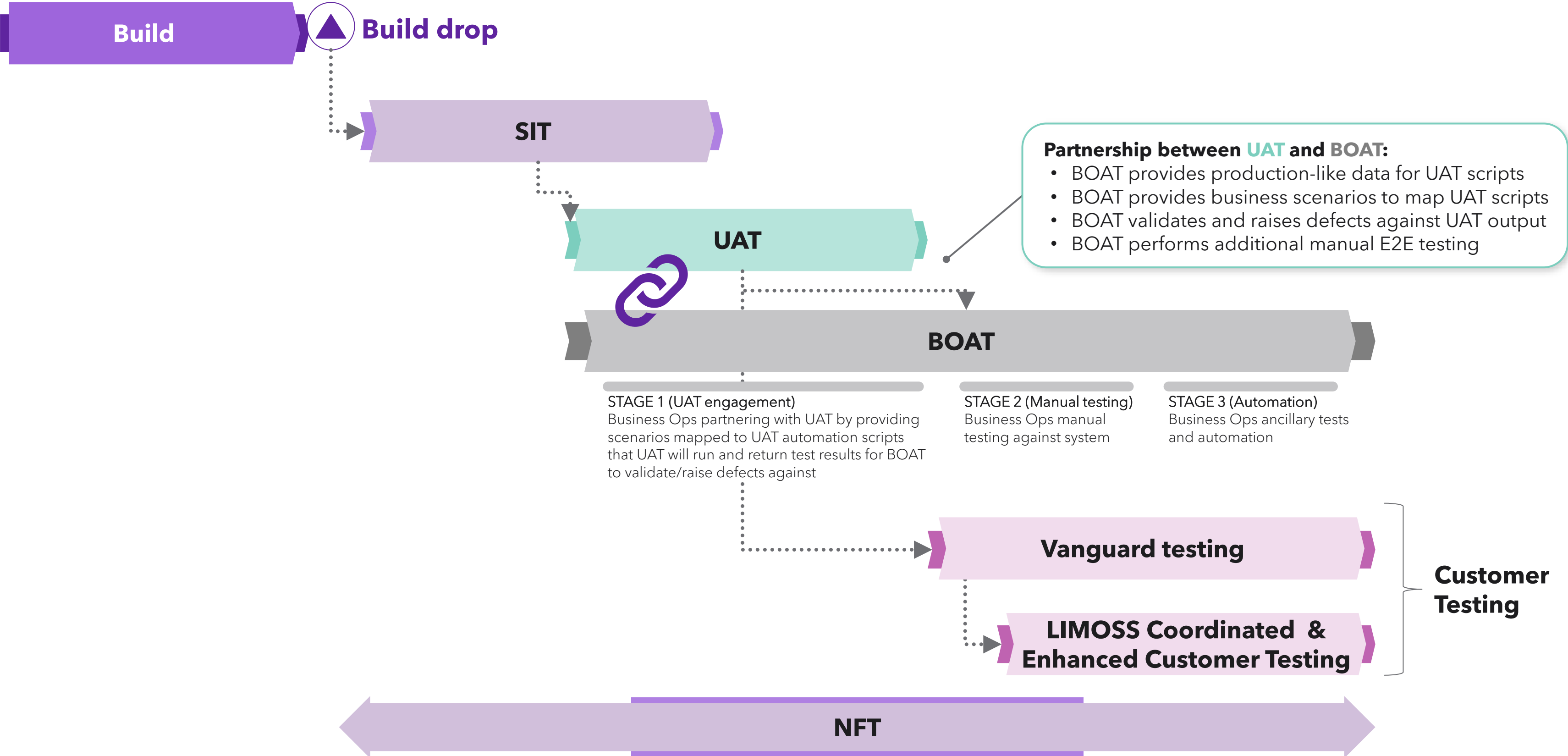


We have 5 layers of testing to ensure a stable, resilient, fit-for-purpose solution

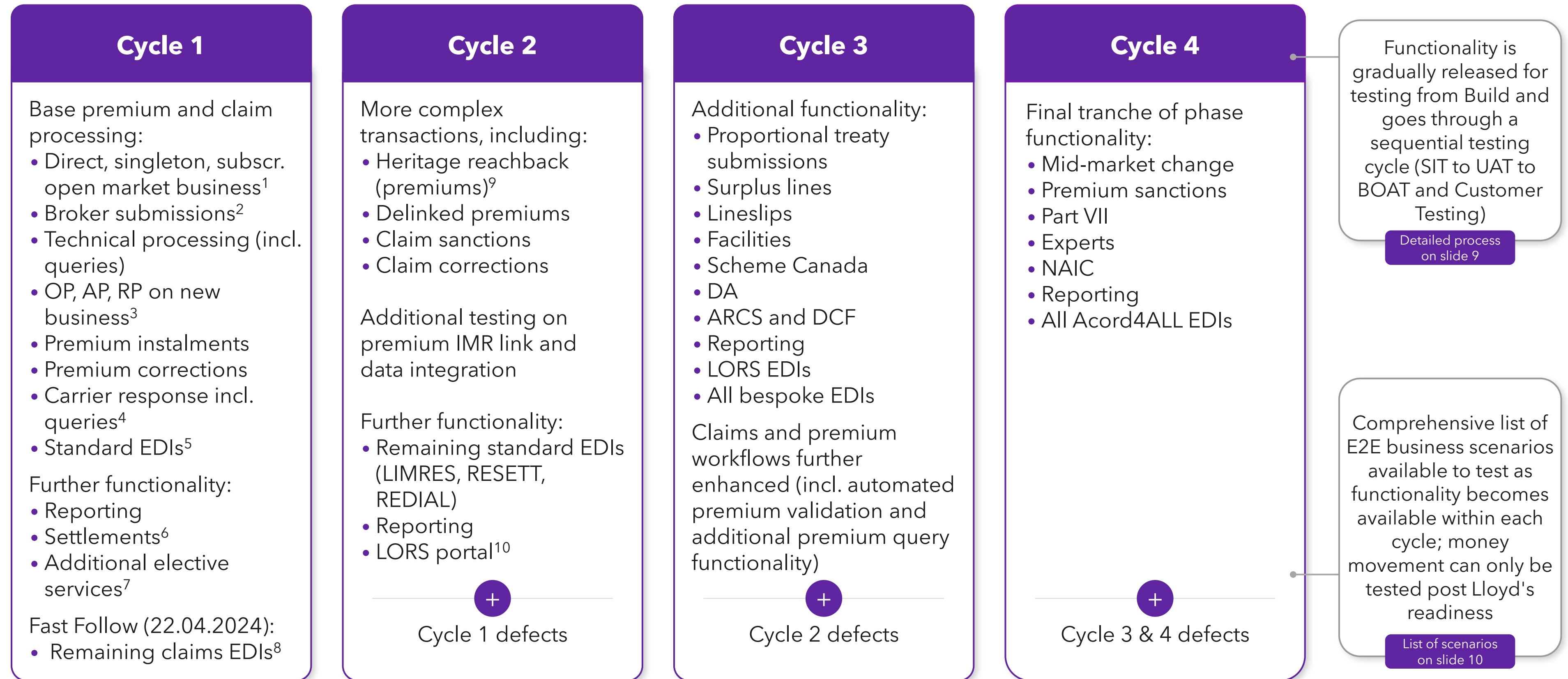


Test layers follow a clear and logical sequence from build release to Customer Testing

A well gated process that works sequentially designed before Customer Testing initiated, reducing customer time and effort

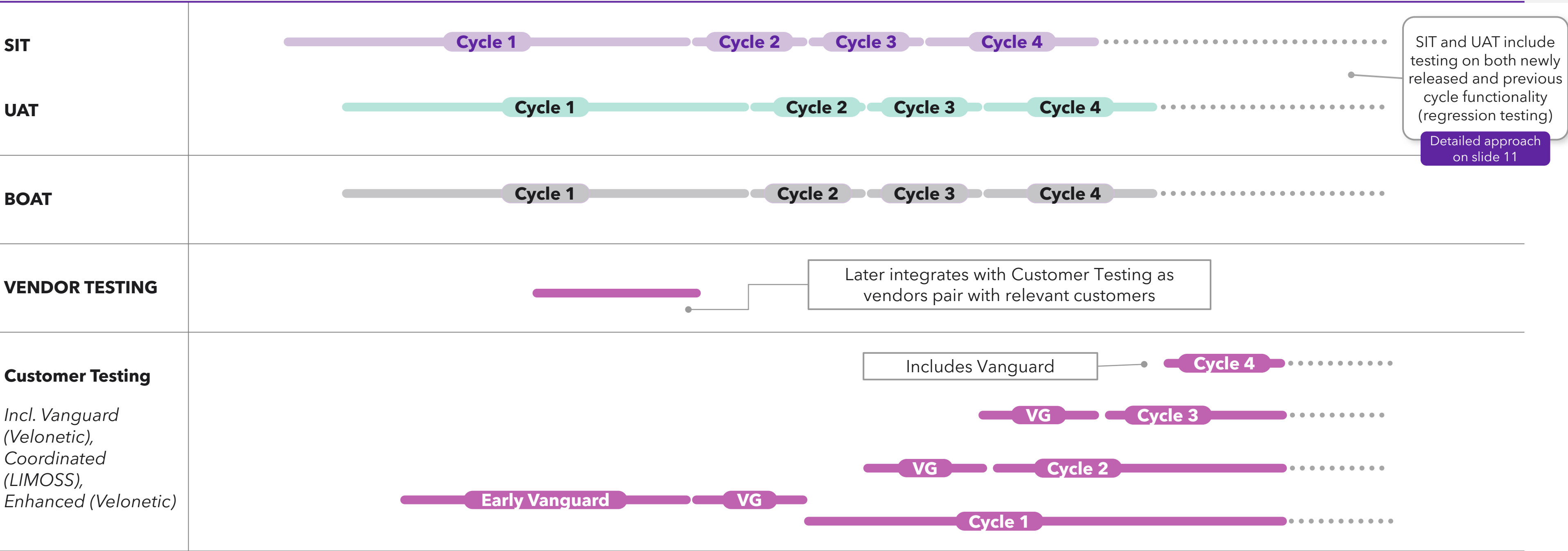


DPS functionality will be tested across 4 test cycles for Customer Testing



1. For all markets. Excludes proportional treaty, facilities and DA (Cycle 3); 2. DRI and A&S for premiums, Portal and LIMCLM for claims; 3. Both cash and non-cash, excluding delinked premiums (Cycle 2); 4. Portal, Writeback and CWT; 5. Excl. LIMRES, RESETT, REDIAL; 6. Including company settlement and singleton funded and non-funded settlement. Lloyd's central settlement excludes ARCS and DCF; 7. Elective services include premium and claim submission on behalf of brokers, Velonetic delegated lead and Velonetic assisted fees; 8. LIMCLM (CLMRC) LIMCLM (CLMILC), LIMCLM (inbound), LIMCLM (CLMLRB), LIMCLM (BLMILB), LIMCLM (CLMLLB); 9. Includes AP and RP transactions for Main Business, DA, lineslips, and Cover; 10. Excluding integration (EDI)

What this looks like in practice | Testing in sequential cycles across various testing layers



▲ Gate 3

Test execution team | DXC | Velonetic | Ops teams | Market participants

Scenarios are mapped to cover core business requirements (>90%) and are extensively tested (>10k test scripts in BOAT)

Testing is run against a comprehensive list of ~150 business scenarios providing full coverage of core functionality

Used across UAT, Vanguard and Customer Testing



Comprehensive list of ~150 business scenarios targeted for testing

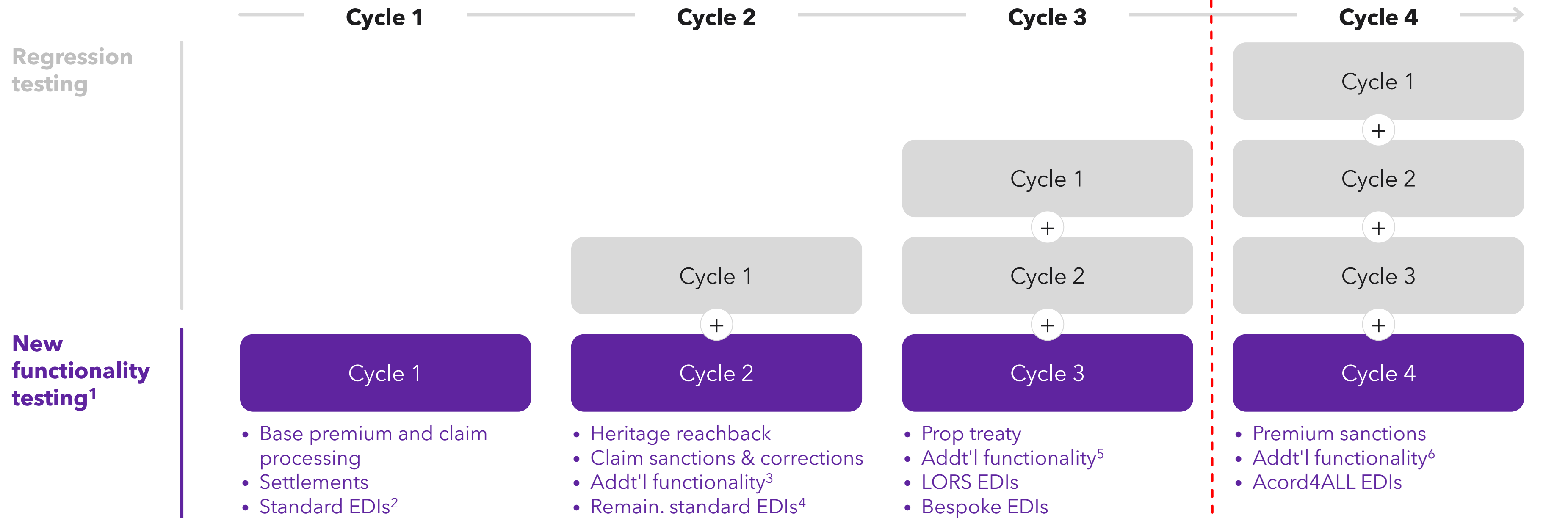
Business category	E2E business scenarios to be tested
Premium submission, query, signing, and settlement	<ul style="list-style-type: none"> Premium submissions [7 scenarios] Premium query [4 scenarios] Premium signing [5 scenarios] Premium rejection [1 scenario] De-linked premium settlement release [2 scenarios]
Claim submission, query, agreement, signing, and settlement	<ul style="list-style-type: none"> Claim first-advice FNOL submission [2 scenarios] Other claims submissions [2 scenarios]¹ Claim settlement submission [3 scenarios] Claim notifications [4 scenarios] Claim query [4 scenarios] Claim agree or deny [7 scenarios] Claim signing and settlement [3 scenarios] Claim recovery and salvage [1 scenario] Claim closure [2 scenarios]
Delegated authority binder submission, query, agreement, signing, and settlement	<ul style="list-style-type: none"> DA binder contract [4 scenarios] DA bordereau [10 scenarios] DA notifications [4 scenarios] DA queries [4 scenarios] Above authority claim processing [1 scenario]
Prop Treaty submission, query, signing, and settlement	<ul style="list-style-type: none"> Prop treaty [9 scenarios]
Scheme Canada	<ul style="list-style-type: none"> Scheme Canada [2 scenarios]
LORS	<ul style="list-style-type: none"> LORS [1 scenario]
Lineslips (facilities) submission, query, signing, and settlement	<ul style="list-style-type: none"> Bulking lineslip [8 scenarios] Lineslip queries [8 scenarios] Non-bulking lineslip [8 scenarios]
Corrections	<ul style="list-style-type: none"> Corrections [4 scenarios]
Settlements	<ul style="list-style-type: none"> Currency conversion service [1 scenario] Settlement fulfilment [2 scenarios] Scheduling [4 scenarios]
Business information	<ul style="list-style-type: none"> Business information - reports [4 scenarios] Account enquiry [4 scenarios]
Other services	<ul style="list-style-type: none"> Mid-market change [4 scenarios] Run-off carrier addition [1 scenario] Stop block [2 scenarios] Party and user management [4 scenarios]
Lloyd's European business	<ul style="list-style-type: none"> Lloyd's European Business [3 scenarios]
Repository services	<ul style="list-style-type: none"> Repository services [4 scenarios]

1. Claim subsequent advice submission and simultaneous premium and claim submission
 Source: DPS Phase 1 root business scenario matrix Master (as of 21st February)



Each test cycle includes testing of both previously built (regression testing) and new functionality

Regression testing approach across SIT and UAT



Defects undergo a continuous cycle of detection, documentation and resolving. Defects unresolved in Cycle X to be retested and closed in the following Cycles

1. All cycles include reporting functionality releases; 2. Excluding LIMRES, RESETT, REDIAL; 3. Delinked premiums, LORS portal; 4. LIMRES, RESETT, REDIAL; 5. Surplus lines, lineslips, facilities, Scheme Canada, DA, ARCS and DCF; 6. Mid-market change, Part VII, experts, NAIC



Across test layers, where defects found, defect management process consisting of 3 sequential steps to swiftly resolve in place

Discover

- V Defects are identified, documented and triaged
- P Defects further analysed by program office to understand root causes and implement actions
- P Defects arising out of development errors are checked for severity

Resolve

- D Defects are investigated and resolved through code amendments
 - Defects are tested in:
 - P SIT environment
 - V UAT environment
 - V Customer Testing environment

Note resolution includes "hot fixing" for critical defects (see following slide)

Document

- V After successful re-testing, defects are closed

Teams responsible:

V Velonetic Assurance

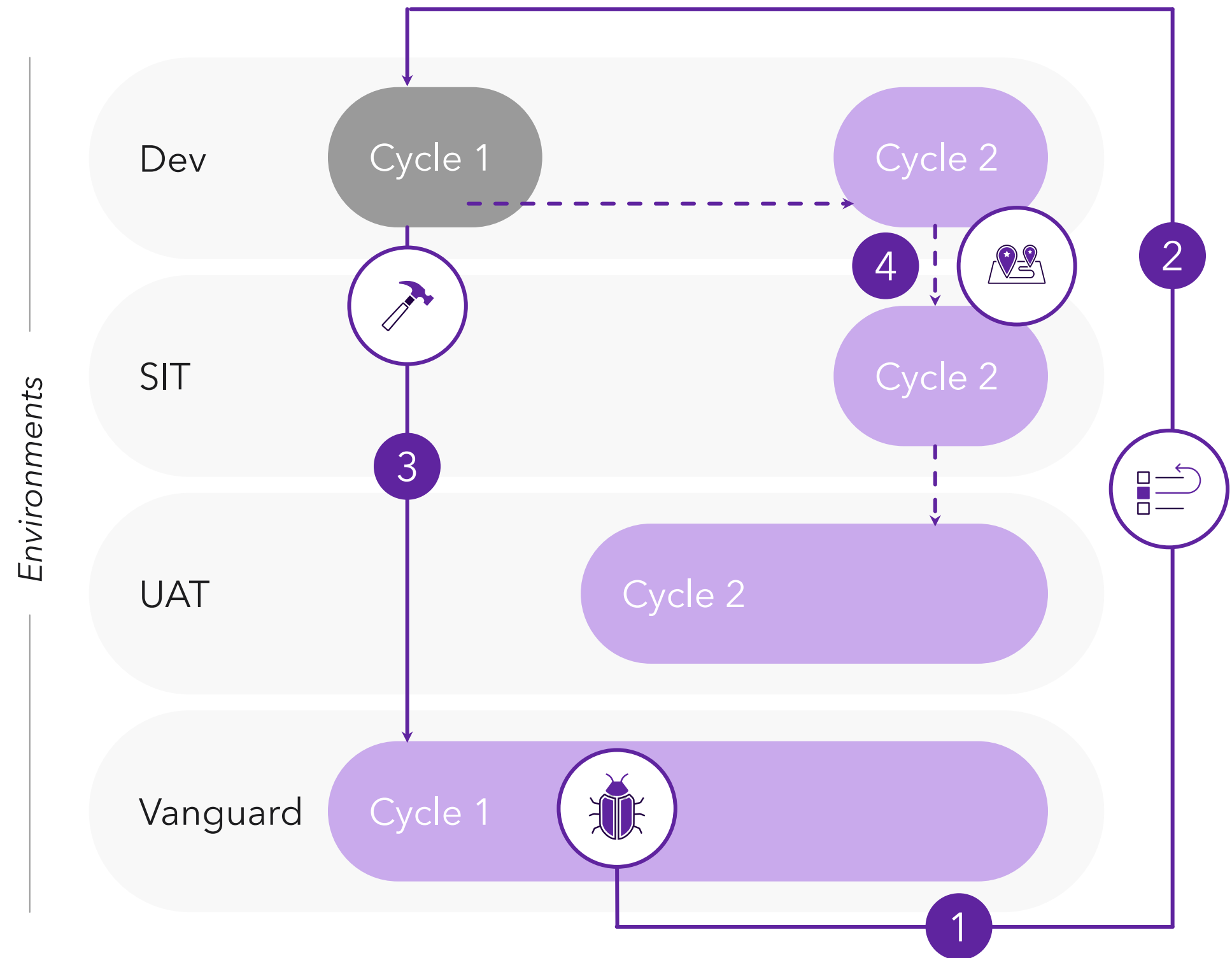
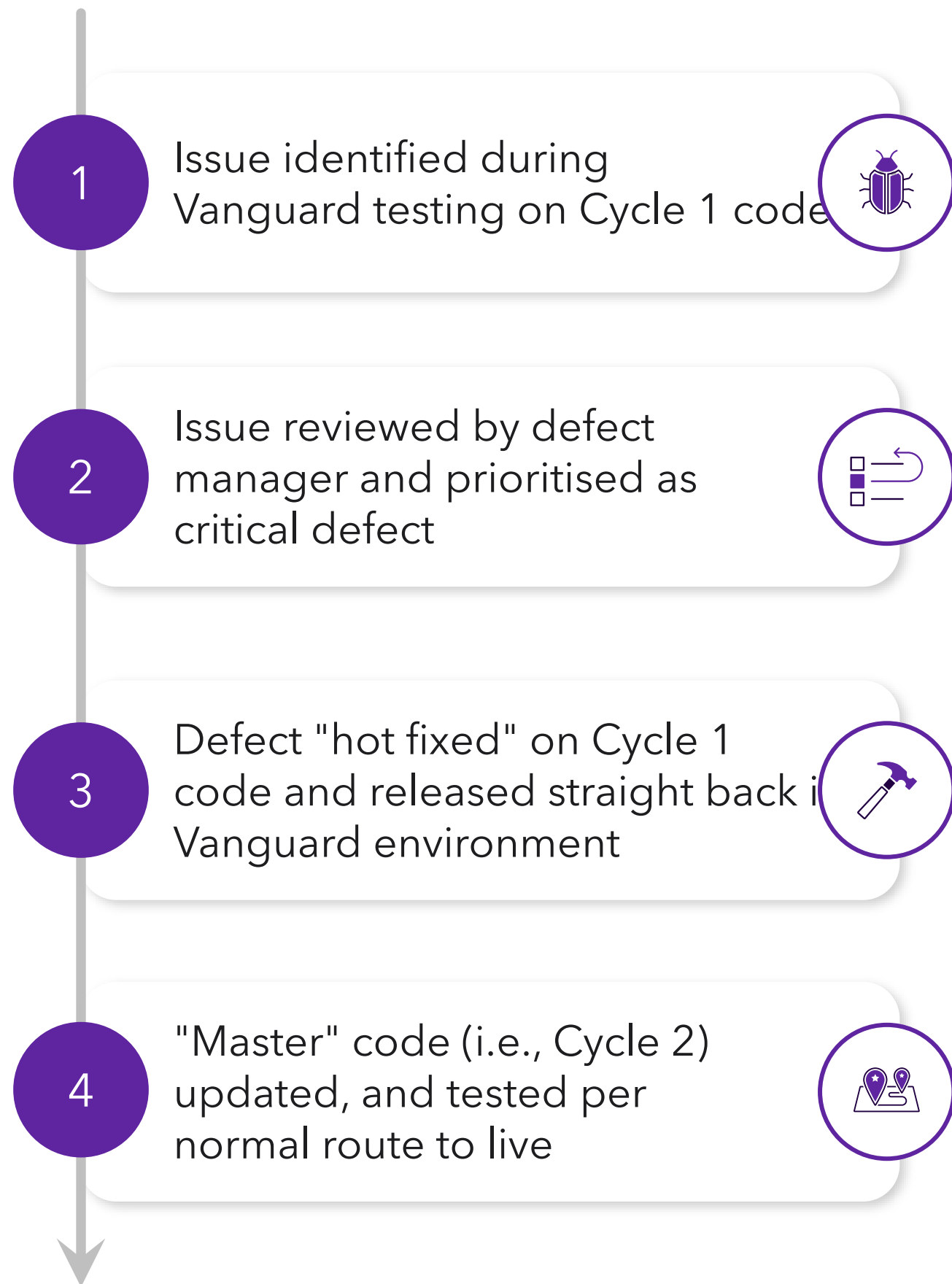
P Program resources

D Development resources

Hot fixing | Critical defects can be resolved through hot fixes

Illustrative process for defect identified in Vanguard testing

Illustrative



Note: Shape represents code in environment; colour represents latest code used

Testing runs through a well defined, rigorous governance process, leading up to final sign-off for Gate 3

Gates 1 & 2 testing governance

SIT, NFT, UAT, BOAT

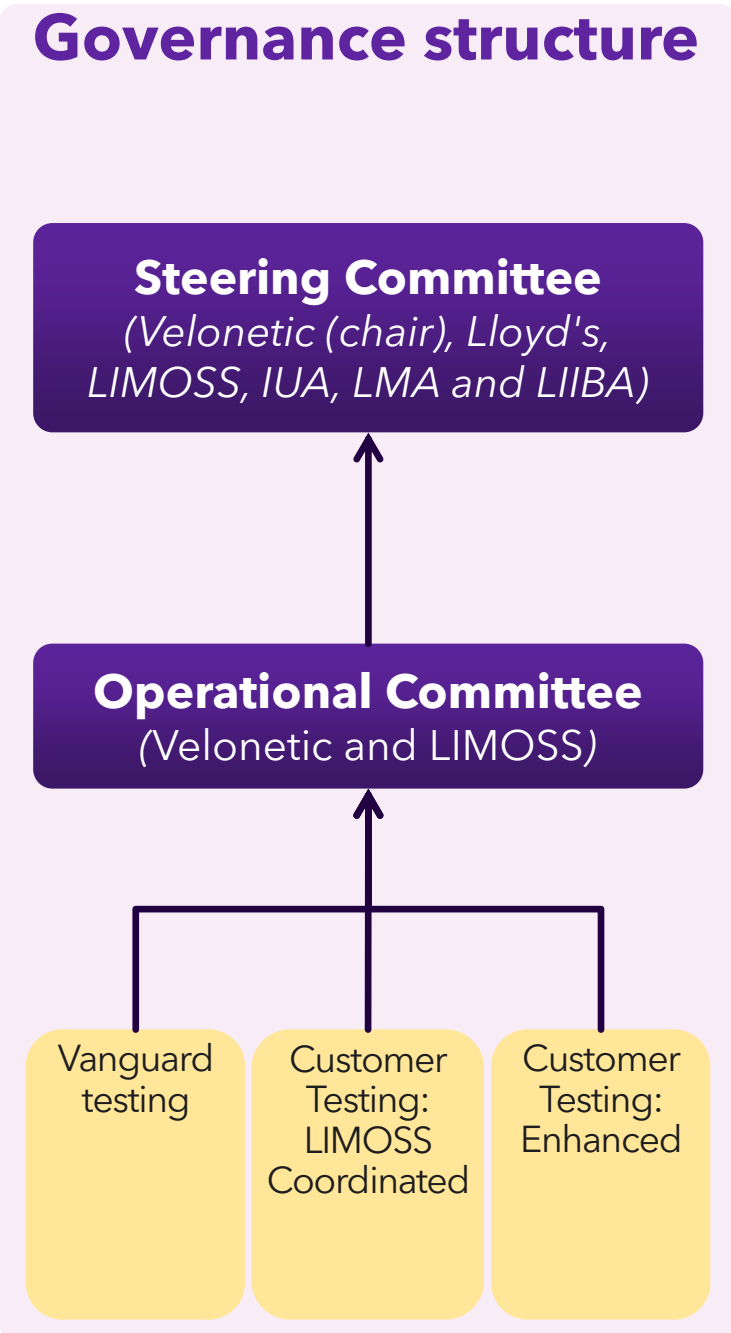
Rigorous governance process run by Velonetic internally, with PWC to audit

Sign-off by Velonetic post review of all technical and organisation testing reports in April 2024

Gate readiness reviewed by PSB and TPG, before final approval by Velonetic CEO and sign-off by the Board

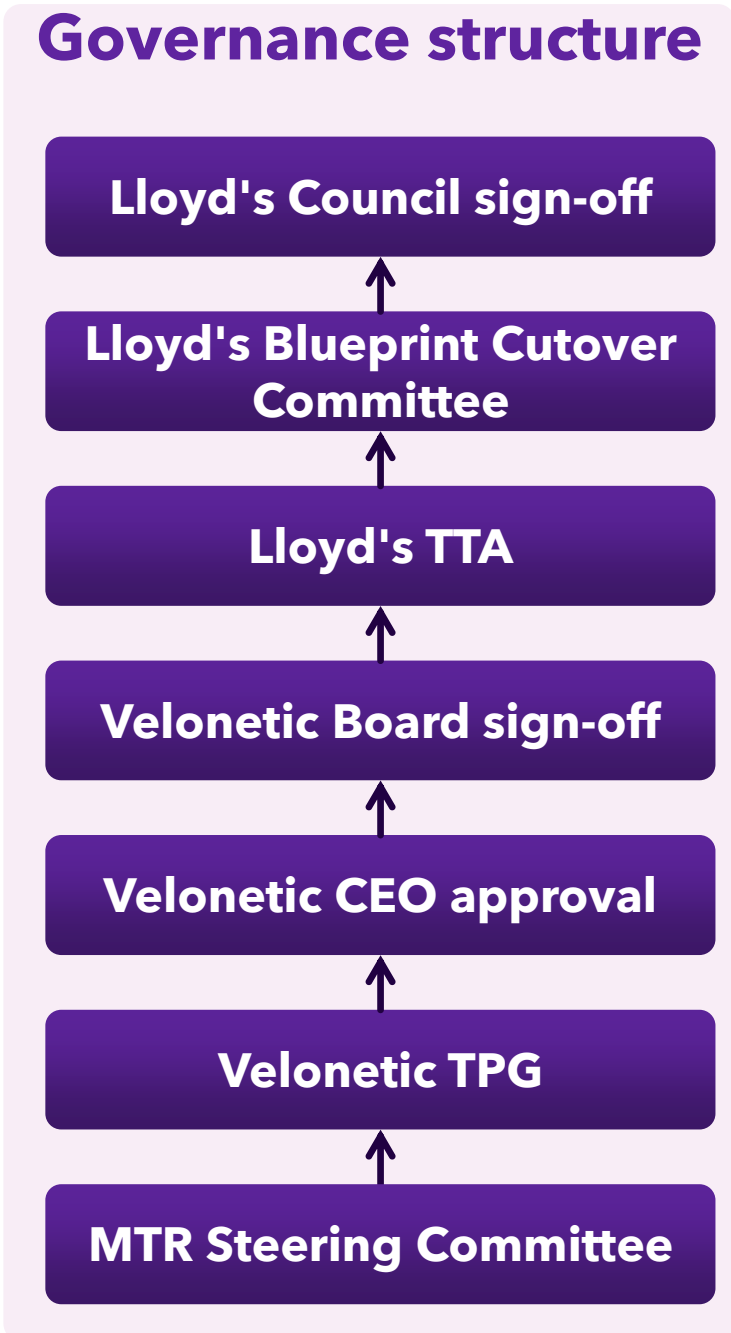
Gate 3 testing governance

Customer Testing



	Market readiness testing Operational Committee	Market readiness testing Steering Committee
Participants	Velonetic and LIMOSS	Velonetic (chair), Lloyd's, LIMOSS, IUA, LMA and LIIBA
Objective	Ensure appropriate coverage, execution and share findings of market testing activities across Vanguard and Customer Testing	Review test completion reports and provide final sign-off on cutover
Cadence	Fortnightly 60'	Monthly 60'

All Testing Outcomes





Deep dive into testing by layer

SIT carried out to ensure seamless integration in build



For high-level status update, see slides 25-27
For testing deep-dive, see slides 38-40

- How is testing done**
- At the end of each sprint and PI, DXC SIT team tests integration between the components work as expected
 - Previously tested functionality also undergoes regression testing, to provide confidence that new code doesn't introduce any issues on previous code

- Input**
- All integration points built in the new release (e.g., API calls/messages, IPOS/ICOS interactions)

- Target output**
- All functionality integrates as expected
 - Regression on previous integration points work as expected

- End artefact**
- SIT testing completion report

- Data**
- Test data (in the same format as production data)

- Environment**
- Dedicated AWS environment for SIT



- What does it demonstrate**
- All components seamlessly integrate within DPS as well as to relevant components outside of DPS and deliver functionality specified

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event

NFT carried out to validate non-functional requirements



For high-level status update, see slides 32-33
For further detail, see slides 48-50 in appendix

- How is testing done**
- 9 Critical non-functional categories and volumetrics are defined
 - Load as defined in the volumetrics is simulated, and performance of the code is assessed

- Input**
- New release successfully tested in SIT
 - All user stories built in the new release; targets and volumetrics defined
 - Performance & NFT test plans & scope

- Target Output**
- Test scope executed as planned, with targets across 9 non-functional categories met - *availability (e.g., outages), back-up & recoverability (e.g., failover & recovery), supportability (e.g., logging), system management & maintenance (e.g., licensing), security (e.g., data security), data management (e.g., data access), performance (e.g., scalability) and accessibility (e.g., user web browser)*
 - No critical defect outstanding

- End artefact**
- NFT testing completion report

- Data**
- Tool-generated test data mimicking volume and format of production data

- Environment**
- Dedicated AWS environment for NFT



- What does it demonstrate**
- DPS meets targets across all non-functional categories
 - Velonetic tests and ensures ability for disaster recovery and rollback contingencies

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UAT carried out to validate user requirements



For high-level status update, see slides 28-31
For testing deep-dive, see slides 41-46

How is testing done

- Master list of business operations scenarios (i.e., use cases), carriers and brokers is developed
- Scenarios enabled in the release are identified, and tested by Velonetic assurance team to validate functionality
- Testing conducted at the end of every PI later retested at the end of every sequence¹, moving forward testing will be carried out incrementally with every build drop (fortnightly)

Input

- New release successfully tested in SIT, and entry criteria met
- Defect list from previous runs requiring re-test

Target Output

- Scenarios are successfully run - correct inputs accepted, required processing carried out, and correct outputs reports produced
- All outstanding defects recorded for the next sequence

Ops/back-end related UAT testing detailed later

End artefact

- UAT report (status across all business scenarios and list of open defects)

Data

- Processing data provided by the business operations team to mirror production transactions

Environment

- Dedicated AWS environment for UAT



What does it demonstrate

- DPS meets end-user requirements (of carriers, brokers and operations) and is fit-for-purpose

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1. PI = Programme Increment (a collection of functionalities); Sequence is collection of PIs

BOAT to be run to validate back-end functionality

- How is testing done**
- 2 types of BOAT:
 - Velonetic operations testing (including all services provided to customers and Lloyd's)
 - Ops resilience & disaster recovery
 - Partnership between UAT and BOAT:
 - BOAT provides production-like data for UAT scripts
 - BOAT provides business scenarios to map UAT scripts
 - BOAT validates and raises defects against UAT output (for automations UAT runs on behalf of BOAT)
 - BOAT performs additional manual E2E testing

Input • UAT report (status across all business scenarios and list of open defects)

Target Output • Scenarios complete as expected from an operations perspective

End artefact • BOAT output report: DXC, Velonetic & Lloyd's op readiness review and attestations

- Data**
- Velonetic operations UAT testing: Processing data provided by the business operations team to mirror production transactions
 - Other operations testing: test data

Environment • BOAT to be carried out in the Customer Testing environment



- What does it demonstrate**
- DPS is fit-for-purpose from an operations perspective, i.e., required back-office processing can be carried out on DPS by Velonetic and Lloyd's operations teams
 - Required helpdesk is set up to operate within DPS

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event

Early testing with the market enabled via the Vanguard program



For high-level status update, see slides 34-35

- How is testing done**
 - 32 participants providing broad market coverage conduct early tests on **connectivity** (*ability to connect to the environment*), **functionality** (*ability to execute incremental business processes*) and **e2e business scenarios** (*ability to test end-to-end business processes*), with dedicated Velonetic support for test planning, onboarding etc.
 - Vanguard testing provides additional opportunity for vendors to test EDI format, connectivity and business scenarios (*additional details on next page*)

- Input**
 - UAT report (status across all business scenarios and list of open defects)

- Target Output**
 - Scenarios complete as expected from a broker/carrier perspective (*e.g., Submit Query, Premium Submission, Claim Settlement, etc.*)

- End artefact**
 - Vanguard test completion report

- Data**
 - Production-like data generated by customers and Vanguard team

- Environment**
 - Separate environment provisioned for all Customer Testing



- What does it demonstrate**
 - DPS is fit-for-purpose and provides expected services to carriers and brokers, ahead of testing by wider market

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event

Vendor testing enables vendor interface testing before integration with CT



For further detail, see slides 51-60 in appendix

- How is testing done** 2 stages of vendor testing:
- Stage 1 (Interface testing) provides vendors with an opportunity to test EDI structure and format as well as connectivity
 - Stage 2 (Scenario testing, as part of Customer Testing) enables vendors to test business scenarios in partnership with a Customer Testing participant (via Vanguard, LIMOSS Coordinated or Enhanced Customer Testing)

- Input**
- Stage 1: Published EDI specs
 - Stage 2: UAT report (status across all business scenarios and list of open defects)

- Target Output**
- Stage 1: Vendors can connect to and transact required messaging on the platform
 - Stage 2: Scenarios complete as expected from a broker/carrier perspective

- End artefact**
- Vendor testing summary report

- Data**
- Production-like data generated by customers

- Environment**
- Separate environment provisioned for all Customer Testing



- What does it demonstrate**
- Vendors can successfully connect to DPS and EDI messages (Stage 1) as well as test business scenarios, covering services expected by carriers and brokers (Stage 2)

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event

LIMOSS

Coordinated testing enables E2E process testing across wider market

- How is testing done** • Coordinated E2E process testing enabled for the wider market to get an early understanding of DPS and provide assurance ahead of cutover
- Provides selected market participants an opportunity to test comprehensive set of E2E scenarios across core business functionalities (covering >90% of core business requirements)
 - Covers both front-end (customer) and back-end functionality
 - Planning, test scoping and coordinating provided by LIMOSS
 - Assurance results subsequently feed into overall program gate assurance process

- Input** • UAT report (status across all business scenarios and list of open defects)

- Target Output** • Scenarios complete as expected from a broker/carrier perspective

- End artefact** • Published Coordinated testing completion report (LIMOSS)

- Data** • Production-like data generated by customers

- Environment** • Separate environment provisioned for all Customer Testing



- What does it demonstrate** • DPS is fit-for-purpose and provides expected services to carriers and brokers
- 90% of business scenarios covered via testing

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event

Enhanced Customer Testing is tailored to individual customer needs

How is testing done Additional testing opportunity available to market participants to complete exception testing:

- Opportunity for participants to test specific scenarios targeted to individual customer needs (e.g., specialty risk), beyond the 150+ E2E business scenarios offered in LIMOSS Coordinated testing
- Offered at an additional cost to the customer

Input • UAT report (status across all business scenarios and list of open defects)

Target Output • Scenarios complete as expected from a broker/carrier perspective

End artefact • Customer Testing summary report

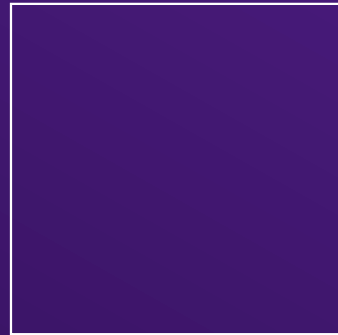
Data • Production-like data generated by customers

Environment • Separate environment provisioned for all Customer Testing



What does it demonstrate • Customers can connect to the testing environment and can successfully execute the individually required scenarios across business operations

Note: All data across all testing stages follow the data policy: no personally identifiable information (no email addresses or phone numbers, no company accurate information (no company names, addresses, company codes), no Policy, Premium, Claim or Notification which refers to any actual production item, person or event



High-level status update across the test phases

Status update | SIT summary

84% defects tagged as critical | **97% critical defects resolved**

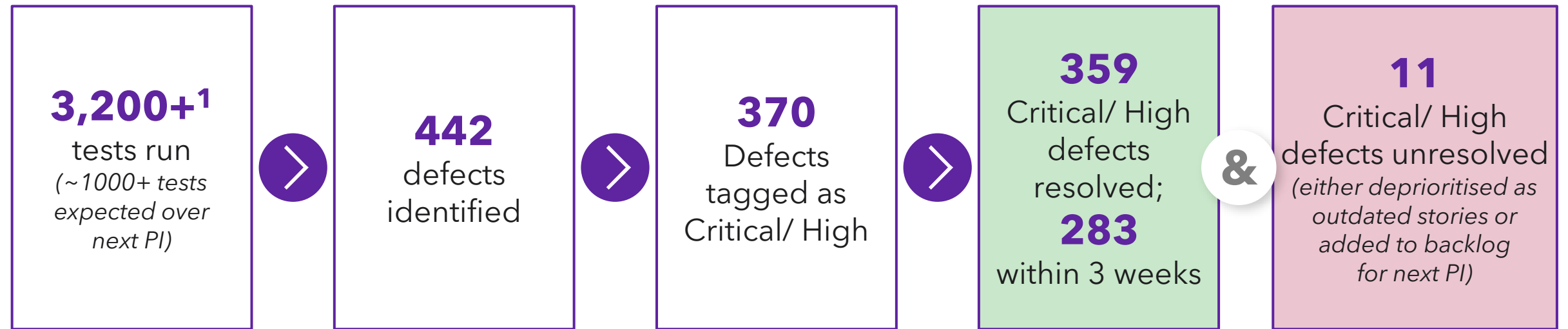
Key outstanding issues:

- **IPOS** (work package section, regression tech portal link, sanction status, workflow latency)
- **ICOS** (sanctions status, ASG notifications, settlement status, queries search, username details)
- **IROS** (SV response)
- **Parties** (home page, repeated email address validation, onboarding page)
- **Other** (notification reversed event, dependency on datum sanctions, settlement event error)

Note: Point in date update. Some of outstanding issues will have since been resolved at time of publication

For PI 11 deep dive, see slide 27
For previous testing stages deep dives, see slides 38-40

Key metrics from tests run in Cycle 1 (PI 7/8, Global PI 8 Fast Follow, PI 9, PI 10, PI 11)



Analysis of SIT defects by criticality and aging

Details on next page	Critical/High pri. defects		Medium/Low pri. defects		Total
	Resolved	Unresolved	Resolved	Unresolved	
<3 weeks	283	5	34	1	323
3-6 weeks	17		11	2	30
6-12 weeks	4	2	6	1	13
>12 weeks	55	4	14	3	76
Total	359	11	65	7	442

1. Tests in the final cycle (including regression tests) for the PI considered
Note: Defects as of 9th Feb 2024 analyzed; Defects with status "Done", "Resolved" considered "Resolved"; Critical and high priority defects also include defects tagged as blocker, major; Medium and low priority defects also include defects tagged as minor
Source: SIT test completion reports for PI 7/8, Global PI 8 Fast follow, PI 9, PI 10, PI 11

Outstanding defects in SIT

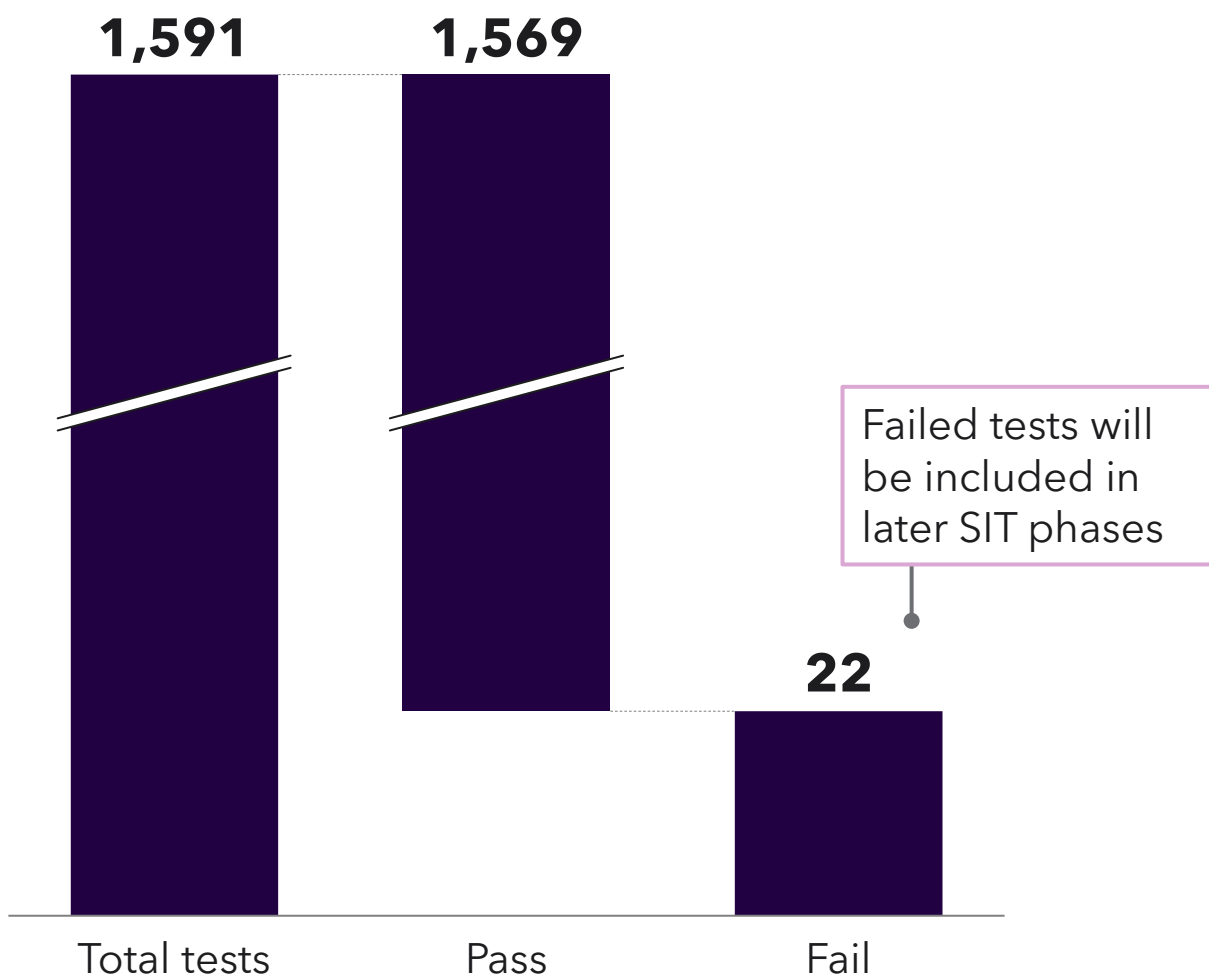
ID	Created date	Priority	Summary
LMT-61249	07/07/2023	Critical	ICOS - SIT - No Sanctions Status appeared on Settlement for ASG underwriter
LMT-64958	04/08/2023	Critical	SIT- ICOS- LM- Claims Sanction status is left blank without any update for London Market
LMT-89496	05/02/2024	Critical	SIT Regression (TST101) - Parties PI 24.1.2 (12.2) - Unable to load the HOME page in TST101 environment.
LMT-81136	04/12/2023	Critical	SIT-Settlement_get An exception occurred while invoking the handler method to handle the event"groupReadyToSettle"in the UAT101
LMT-90139	09/02/2024	Critical	SIT Regression_ICOS_ASG_Notifications were not triggering
LMT-90168	09/02/2024	Critical	SIT- IROS- Getting response from SV for REHR microservice
LMT-70651	14/09/2023	High	SIT Regression_ICOS_Sanction Status when upload a Document includes restricted Data
LMT-82618	13/12/2023	High	Party: Repeated email Address didn't validate - Vanguard
LMT-89193	01/02/2024	High	SIT Regression_ICOS_FE_Global_ Settlement Status Stopped till Underwriter approved
LMT-75887	27/10/2023	High	SIT Regression - PI 11.2 Parties FE: "400 Bad Request" error occurred and 'Consortium data' onboarding page is NOT displaying
LMT-87088	20/01/2024	High	SIT- IPOS_Premiums(TechPortal) - Unable to view the Work package section
LMT-49757	15/03/2023	Medium	SIT - Notification - premium: Reversed event throws exceptions as toBeCancelledID could not be found
LMT-65537	09/08/2023	Medium	Dependency on Datum Sanctions for Integration Testing
LMT-82927	15/12/2023	Medium	SIT_ICOS Queries Search Cross Domain Getting 200 Success Code for Premium Search in Source Application
LMT-86010	13/01/2024	Medium	SIT_IPOS_Regression-TechPortal-Enquiry Link should not be displayed when the user is already in Enquiry screen
LMT-87882	24/01/2024	Medium	SIT Regression_ICOS_FE_Global_Can't retrieve the username details within the message line for a query
LMT-85734	11/01/2024	Medium	SIT_IPOS_Regression-TA sanction status is "Submitted" when Bypassdatum is set to False
LMT-70563	14/09/2023	Low	SIT- IPOS_Workflow - Regression Test - Observed latency issues while navigating in between WF tabs(Unallocated/Allocated/My work/Search tab)

Note: Defects as of 9th Feb 2024 analyzed; Defects with status "Done", "Resolved" considered "Resolved"; Critical and high priority defects also include defects tagged as blocker, major; Medium and low priority defects also include defects tagged as minor

SIT PI 11 | 1.6K+ SIT tests executed, navigating through mixed test results in London Market and Global regression and SIT testing

Regression testing

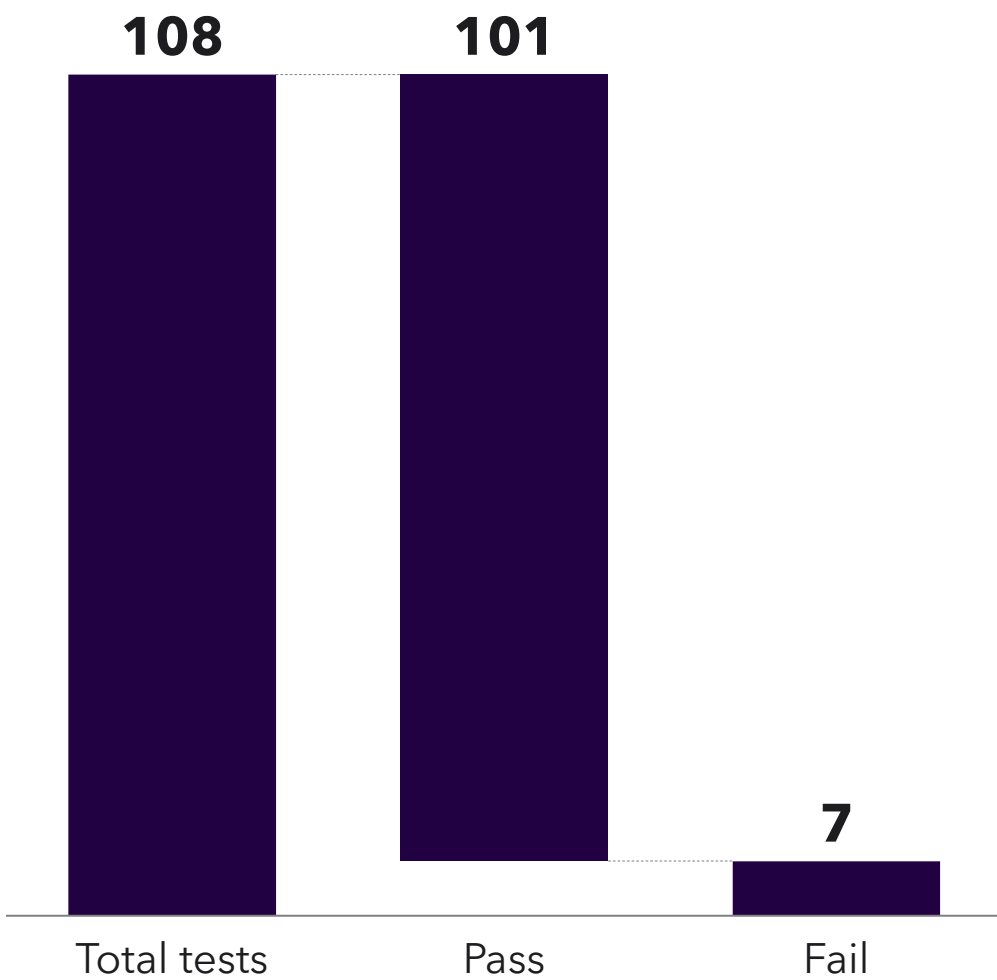
Validating existing features developed <PI 11, mainly on IPOS premium (39% of all tests) and parties (21%)



Aggregated view from PI 11.1 to PI 11.6

System integration testing

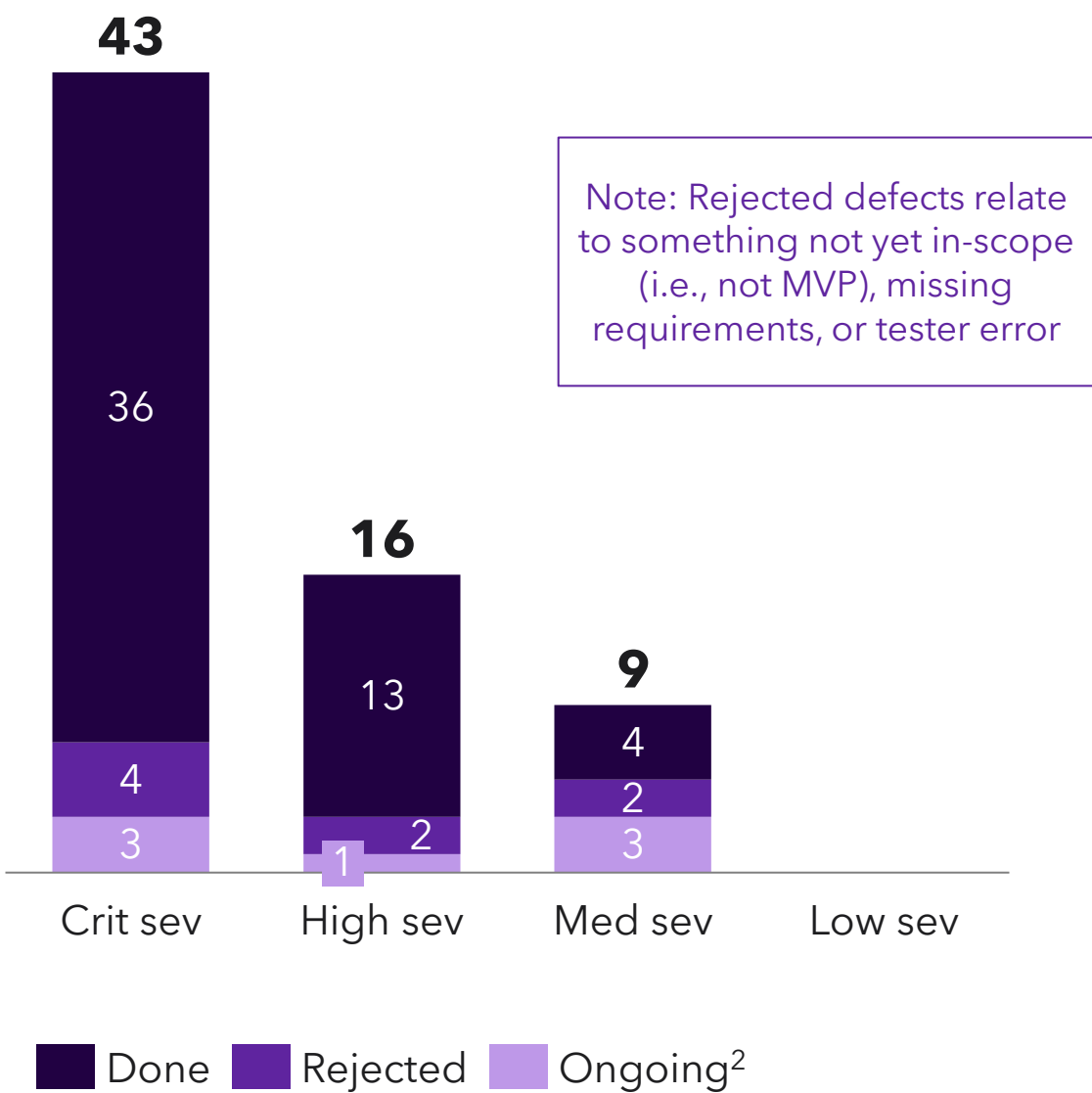
Focused on new London Market functionality, mainly validating the new features for IROS



As of 9th February

Defects created¹

68 defects affecting PI 11 created, majority of them (46) were considered critical. 53 defects 'done' (88% excl. rejected defects). 8 defects rejected



Note: Rejected defects relate to something not yet in-scope (i.e., not MVP), missing requirements, or tester error

Status update | UAT summary

64% defects tagged as critical

91% critical defects resolved

Key outstanding issues:

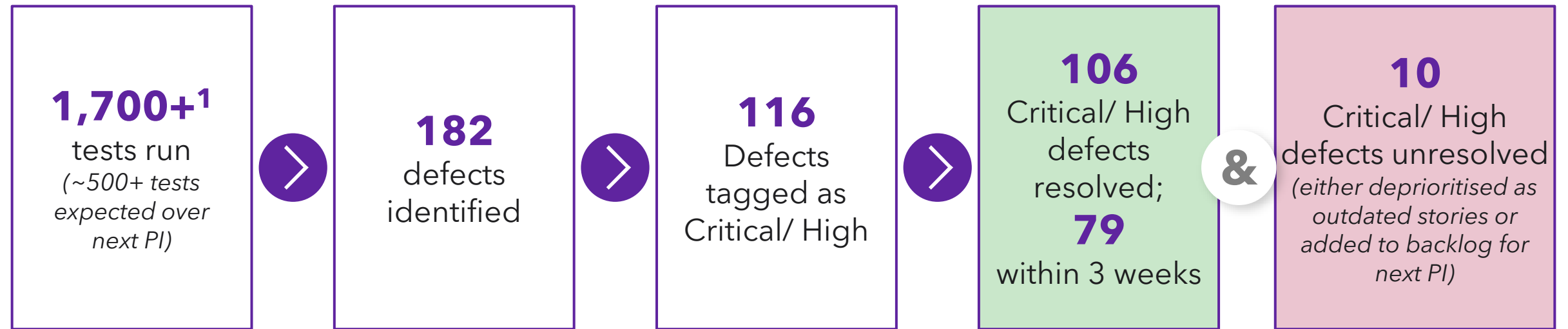
- **IPOS** (default order for records, filter clearing, role based access)
- **ICOS** (settlement agreement payment method drop downs, settlement transaction payments)
- **Parties** (onboarding IPOS/ICOS LM technician, LM user log in error, notification emails, external bank account approval)
- **Other** (month clearing in presentation date fields)

Note: Point in date update. Some of outstanding issues will have since been resolved at time of publication



For PI 10 deep dive, see slide 31
For previous testing stages deep dives, see slides 41-46

Key metrics from tests run in Cycle 1 (Global UAT Cycle 1-4, Global Fast Follow, PI 9 and PI 10)



Analysis of UAT defects by criticality and aging

Details on next page	Critical/High pri. defects		Medium/Low pri. defects		Total
	Resolved	Unresolved	Resolved	Unresolved	
<3 weeks	79	8	17	4	108
3-6 weeks	9		10		19
6-12 weeks	7		3	1	11
>12 weeks	11	2	20	11	44
Total	106	10	50	16	182

1. As of 8th February. Does not include unexecuted tests (failed, blocked, WIP, unexecuted, deferred or cancelled tests, as per test completion reports)

Note: Defects as of 8th February analyzed; Defects with status "Done", "Resolved" considered "Resolved"; Critical and high priority defects also include defects tagged as blocker, major; Medium and low priority defects also include defects tagged as minor

Source : UAT test completion reports for Global, Fast-follow, PI 9 and PI 10

Outstanding defects in UAT (I/II)

ID	Created date	Priority	Summary
LMT-89347	02/02/2024	Critical	UAT Party: Internal Server Error received when logged in using newly approved LM user
LMT-89039	31/01/2024	Critical	UAT Party: Notification emails not received when approving a new Party Person
LMT-88822	30/01/2024	Critical	IPOS workflow PI 11 UAT : The records in My work tab is not default to due date (ascending) oldest on top
LMT-88584	29/01/2024	Critical	IPOS workflow PI 11 UAT : The filters "slip type", "Processing required" and "channel" do not work when clear all filters is clicked and filter is applied again
LMT-72320	29/09/2023	Critical	Workflow UAT : User is unable to clear the Month component in the presentation date from and to fields
LMT-89940	07/02/2024	High	Party Onboarding- IPOS/ICOS LM Technician
LMT-89587	05/02/2024	High	UAT Party: External Bank Account Reference can't be approved for the Party Organisation
LMT-89060	31/01/2024	High	IPOS Workflow PI 11 UAT : Role based access is not working for lgteam.leader01
LMT-88176	25/01/2024	High	ICOS UAT GLOBAL PI11: Settlement agreement - Payment method dropdowns are not selectable
LMT-61261	07/07/2023	High	ICOS UAT : Settlement transactions are failing with status as "Payment failed"

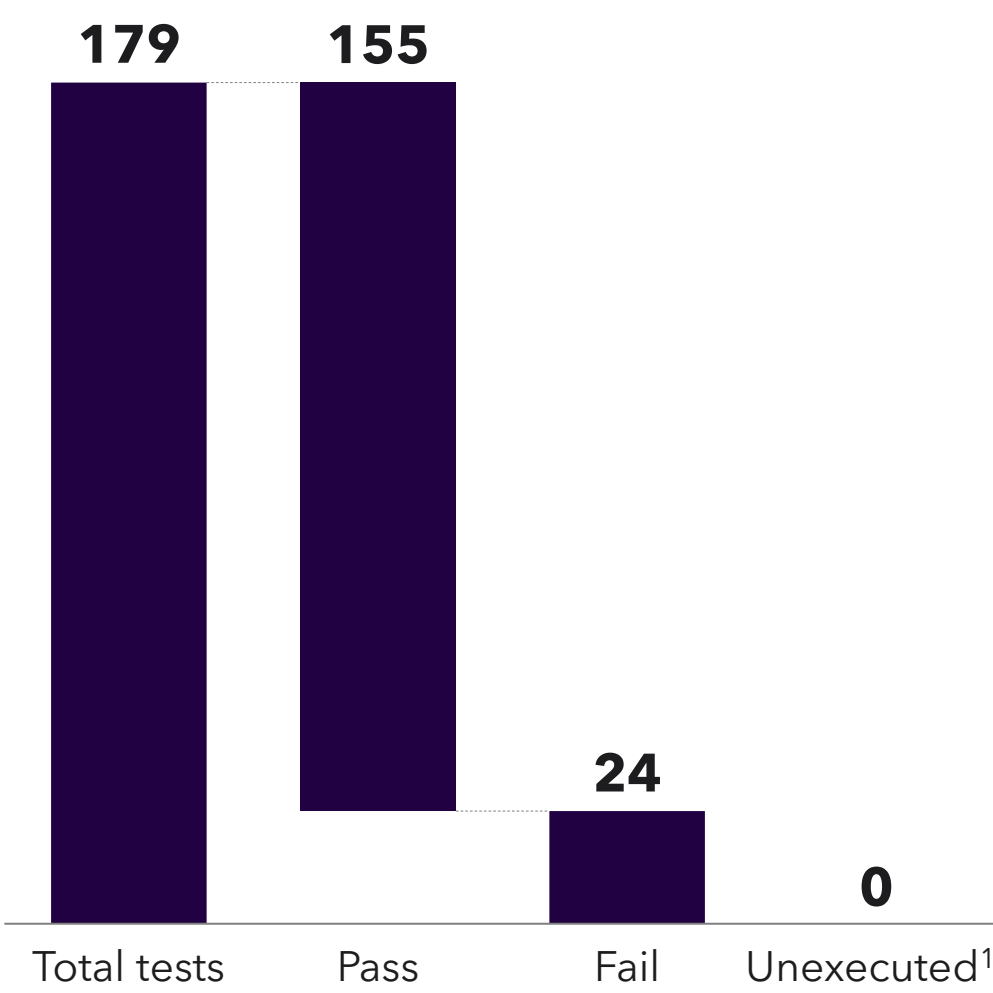
Outstanding defects in UAT (II/II)

ID	Created date	Priority	Summary
LMT-88526	29/01/2024	Medium	IPOS workflow PI 11 UAT : In the search tab the date search fields are displayed as mandatory
LMT-88287	26/01/2024	Medium	IPOS workflow PI 11 UAT : The correction type filter is not functional
LMT-88274	26/01/2024	Medium	IPOS workflow PI 11 UAT : Click to perform icon does not work for Logistics user
LMT-83754	21/12/2023	Medium	Party: Telephone Number Validation is inconsistent for Org & Person on-boarding
LMT-72107	26/09/2023	Medium	IPOS UAT GLOBAL : User is unable to override the default value populated on the FA settlement amount field from TA
LMT-72106	26/09/2023	Medium	IPOS UAT GLOBAL : Error message displayed during FA creation when settlement amount is a Negative value
LMT-71752	25/09/2023	Medium	Workflow UAT : POST/api/v1/channelSubmission end point accepts UMR up to max 20 chars whereas in the FE user is restricted to a search using only max 17 chars
LMT-53023	14/04/2023	Medium	Notifications IPOS : When the user has read a notification from the bell icon, the bell count of unread notifications still remains the same
LMT-50989	23/03/2023	Medium	Notifications IPOS: The Notification bell count does not match with the number of unread notification messages
LMT-45214	09/02/2023	Medium	IPOS UAT : During FA creation, in TA selection screen, Sorting of columns "Contract ref,contract name, transaction ref", not working as expected
LMT-44712	07/02/2023	Medium	IPOS UAT: Unable to perform sort using Base/Tax amount column in tax table , financial details screen-TA creation
LMT-41358	17/01/2023	Medium	ICOS UAT - Edit Claim - Open status - The field "The date that the claim was first advised to the broker" accepts future dates
LMT-88573	29/01/2024	Low	IPOS workflow PI 11 UAT : In the search tab when user enters a future date in the "from date" field , incorrect error message is displayed
LMT-76405	31/10/2023	Low	Party: Add additional Contact, Address, Party Role are greyed out
LMT-72262	28/09/2023	Low	Workflow UAT : User is unable to edit the "day" and "year" components of the date fields in the search tab when the fields are accessed using tab option
LMT-45256	10/02/2023	Low	IPOS UAT : User is unable to view most recent records in premiums dashboard since timestamp is not returned in date created or date updated fields

UAT PI 10 | Balancing successes and ongoing challenges in Party, IPOS, and Mix & Match testing. Missing functionality in the SIT/UAT env. main cause for deferred tests

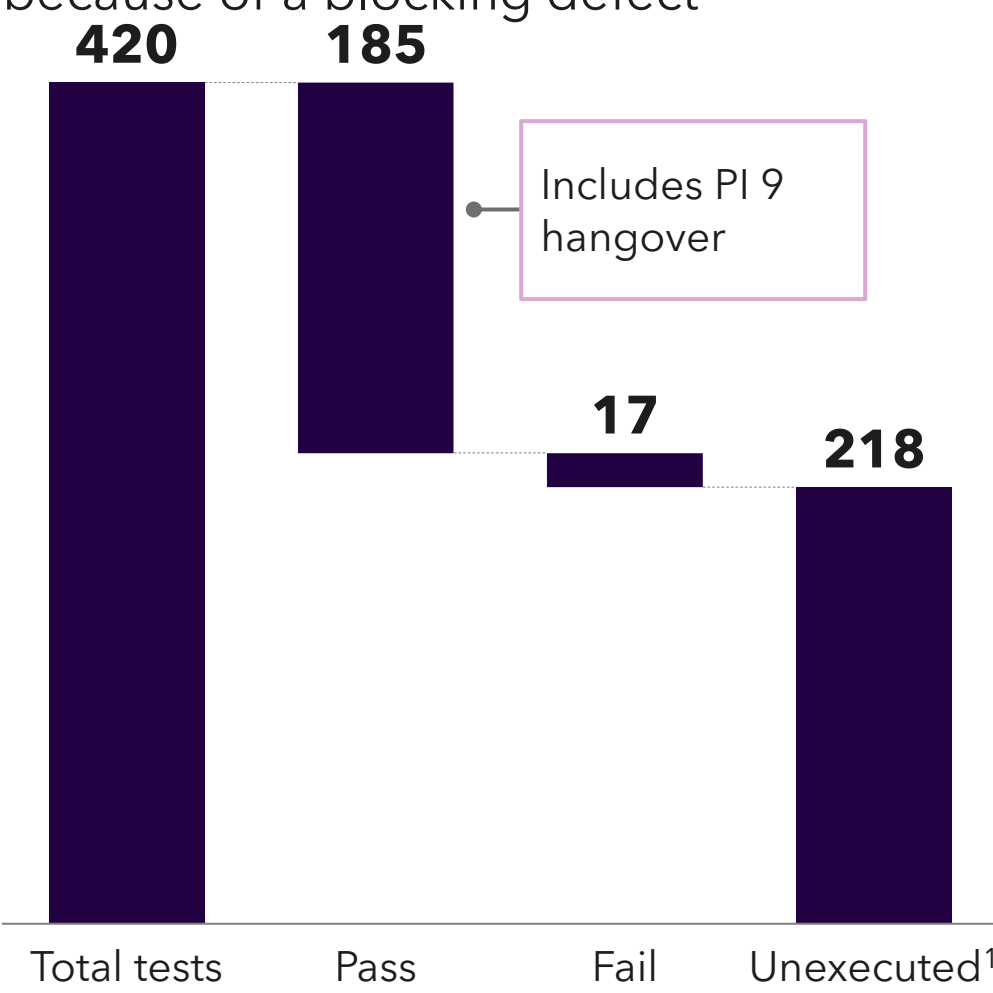
Regression testing

The ICOS (73 tests) and IPOS (106) automated UAT regression packs were run successfully (on Global functionality)



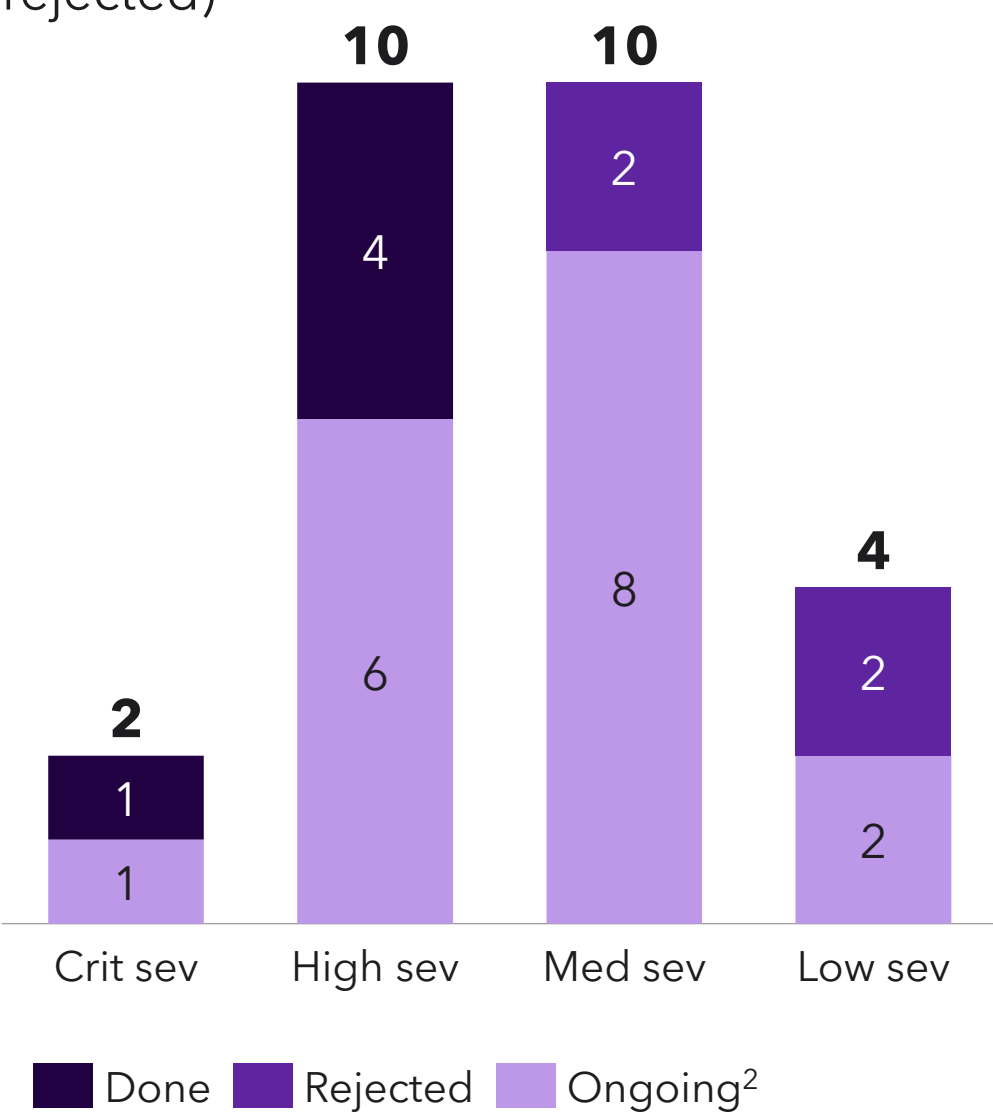
User acceptance testing

London Market integration tests blocked due to portal's unavailability in SIT/UAT env. Majority of other tests unexecuted because of a blocking defect



Defects created/retested

26 defects created/retested with differing severity. In total 4 defects rejected. 5 defects 'done' (23% excl. rejected)





For Global Seq 2 outcomes, see slide 33
For further detail, see slides 48-50 in appendix

Status update | NFT Summary

To be shared when available

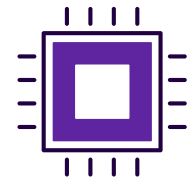


NFT - Global Seq 2 | Overall positive performance outcomes with areas for targeted improvement, especially in optimizing response times for key functionalities



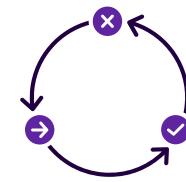
Enhanced performance metrics

The ICOS application underwent performance testing in the NFT Environment, showing an improvement in the 95th Percentile Response Time compared to previous tests



Efficient resource utilization

CPU and Memory Utilization for EKS and KeyCloak remained below 39% and 70%, respectively, indicating efficient resource usage during the test



Managing high transaction volume

A significant volume of ICOS transactions were processed, including claims creation and agreement, though issues with Sanctions and Settlement functionalities were identified due to a specific defect (LMT-68575)



Need for optimizing response time

Response times for critical operations like claim creation showed some actions taking longer than desired, with a particular focus on the high response times affecting user experience

Status update | Vanguard summary

86% defects tagged as critical | **42% critical defects resolved**

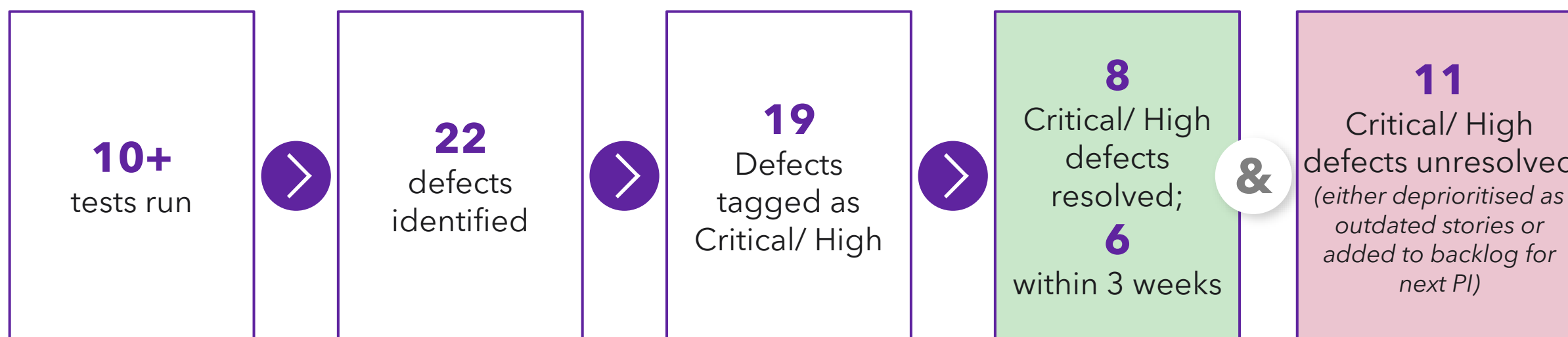
Key outstanding issues:

- **IPOS** (TA data field validation, TA tab control, attaching documents to TA)
- **ICOS** (create claim button, dashboard error message, claim error message)
- **Global** (multiple instances of inability to view messages or direct messages to Vitesse, assistance required for claims movement)
- **London market** (error when IPOS tries to bypass sanction check)

Note: Point in date update. Some of outstanding issues will have since been resolved at time of publication

Cycle 1 (Global Sequence 2) testing performed in June 2023; continuous testing ongoing since (currently PI 12)

Key metrics from tests run in Cycle 1 (Global Sequence 2)



Analysis of Vanguard defects by criticality and aging

Details on next page	Critical/High pri. defects		Medium/Low pri. defects		Total
	Resolved	Unresolved	Resolved	Unresolved	
<3 weeks	6	3	1	-	10
3-6 weeks	2	5	-	-	7
6-12 weeks	-	3	-	2	5
>12 weeks	-	-	-	-	-
Total	8	11	1	2	22

Note: Defects as of 8th Feb 2024 analyzed; Defects with status "Done", "Resolved" considered "Resolved"; the Updated date is assumed as resolved date; Critical and high priority defects also include defects tagged as blocker, major; Medium and low priority defects also include defects tagged as minor
 Source : Vanguard sequence 2 cycle 1 and cycle 2 reports

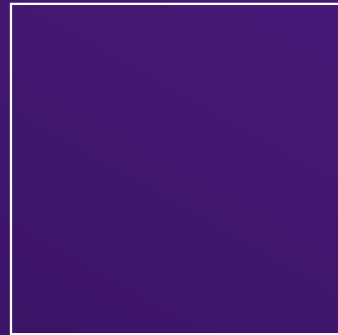
Outstanding defects in Vanguard

ID	Created date	Priority	Summary
LMT-88975	31/01/2024	Critical	Vanguard - ICOS Claim - Unable to see Create Claim button.
LMT-88939	31/01/2024	Critical	Vanguard - ICOS Claim - Error Message displayed when user clicked on the Dashboard
LMT-88932	31/01/2024	Critical	London Market - 500 error displayed in the logs when IPOS is trying to Bypass the Sanction Check.
LMT-86613	17/01/2024	Critical	Vanguard - IPOS - Broker is not able to attach a document to the TA
LMT-85636	10/01/2024	Critical	Vanguard Global Cyc2 - Test 2.1 WTW sent APM TA - AXA XL Unable to see it in their system
LMT-85633	10/01/2024	Critical	Vanguard Global Cyc2 - Test 2.1 WTW sent FEE TA - AXA XL Unable to see it in their system
LMT-85299	08/01/2024	Critical	Vanguard Cycle 2 - Swiss Re unable to see the TA message delivered from DXC
LMT-84026	27/12/2023	Critical	Vanguard - ICOS Claim - Error Message
LMT-83645	20/12/2023	Critical	Vanguard Global Cyc2 - Test 1.5 WTW sent Profit Commission TA - AXA XL Unable to see it in their system
LMT-83643	20/12/2023	Critical	Vanguard Global Cyc2 - Test 1.2 FA sent by WTW - error pointing at Vitesse
LMT-85818	11/01/2024	High	Vanguard Cycle 2 - Assistance required to execute a Claims Movement using the Test Harness
LMT-82648	13/12/2023	Medium	Vanguard - IPOS TA - Date Field Validation
LMT-82653	13/12/2023	Low	Vanguard - IPOS TA - Tab Control

To be refreshed with every cycle

Part 2: Detailed testing results

To be refreshed with every cycle

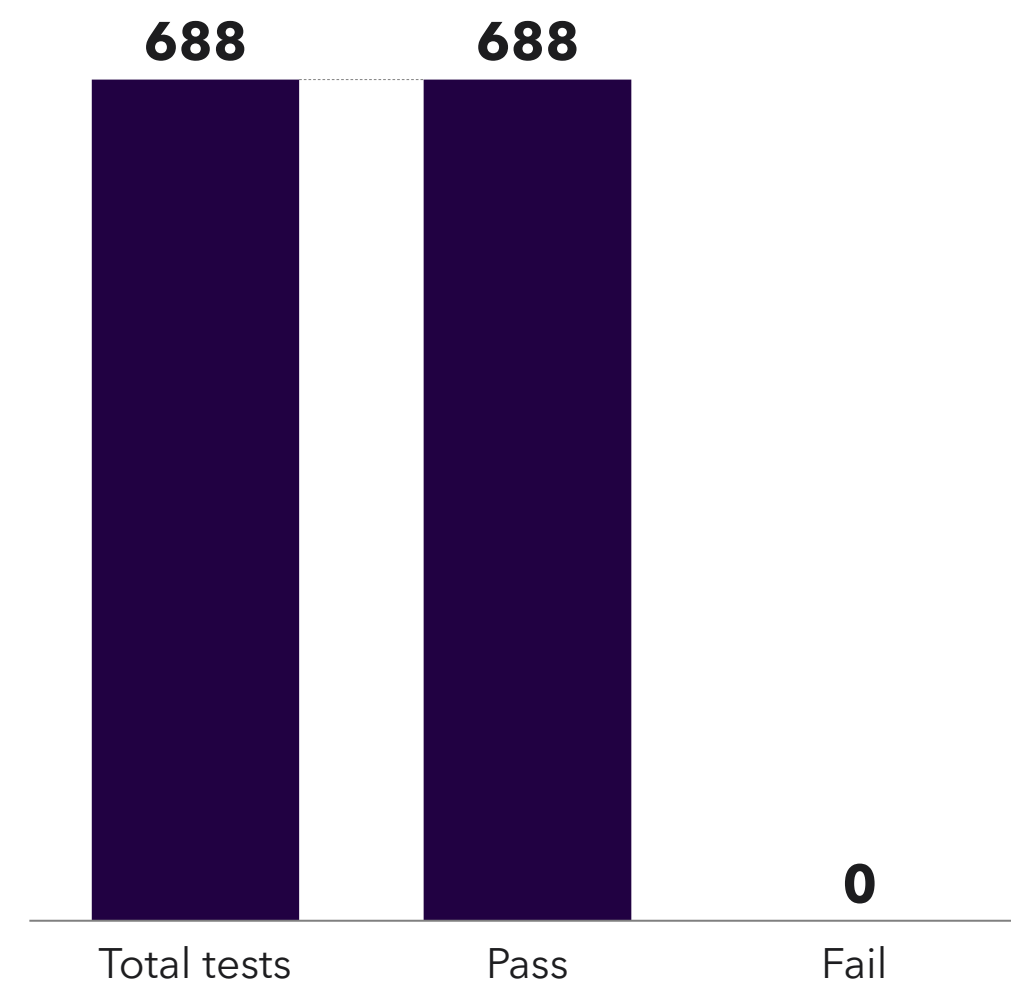


Testing stage status deep-dives

SIT PI 10 | 700 tests executed and passed; Comprehensive success in LON Market and Global SIT and regression testing across key functionalities

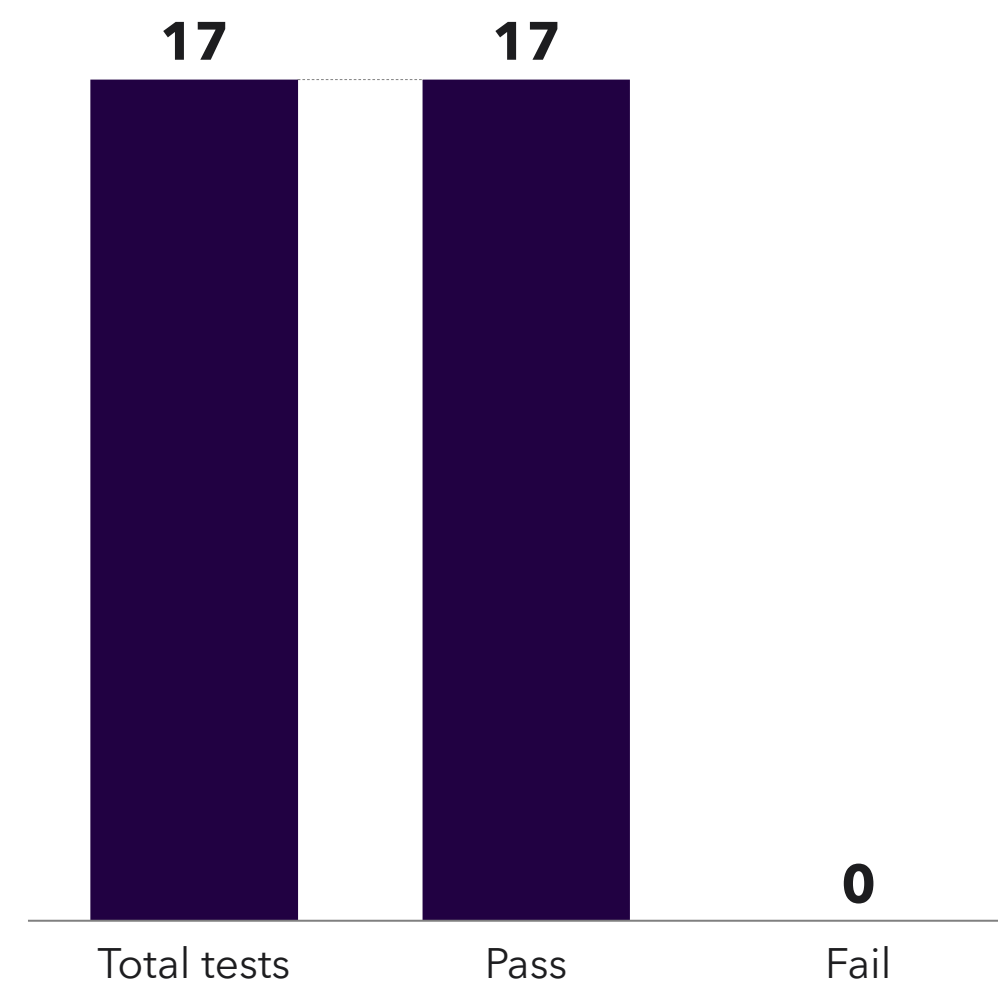
Regression testing

Validating existing features developed <PI 10, mainly on IPOS premium (35% of all tests) and parties (23%)



System integration testing

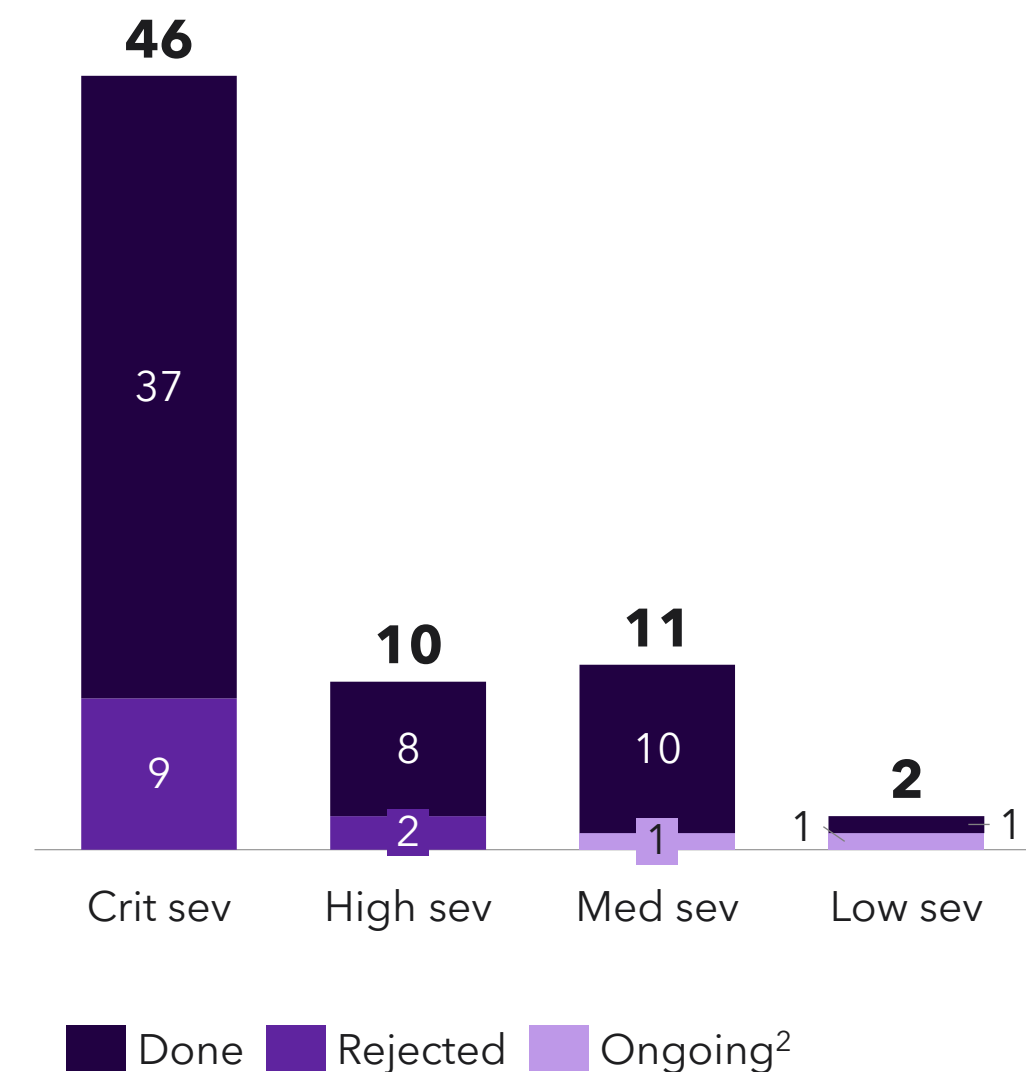
Focused on both London Market (13 tests) and global (4) functionality



As of 9th February

Defects created¹

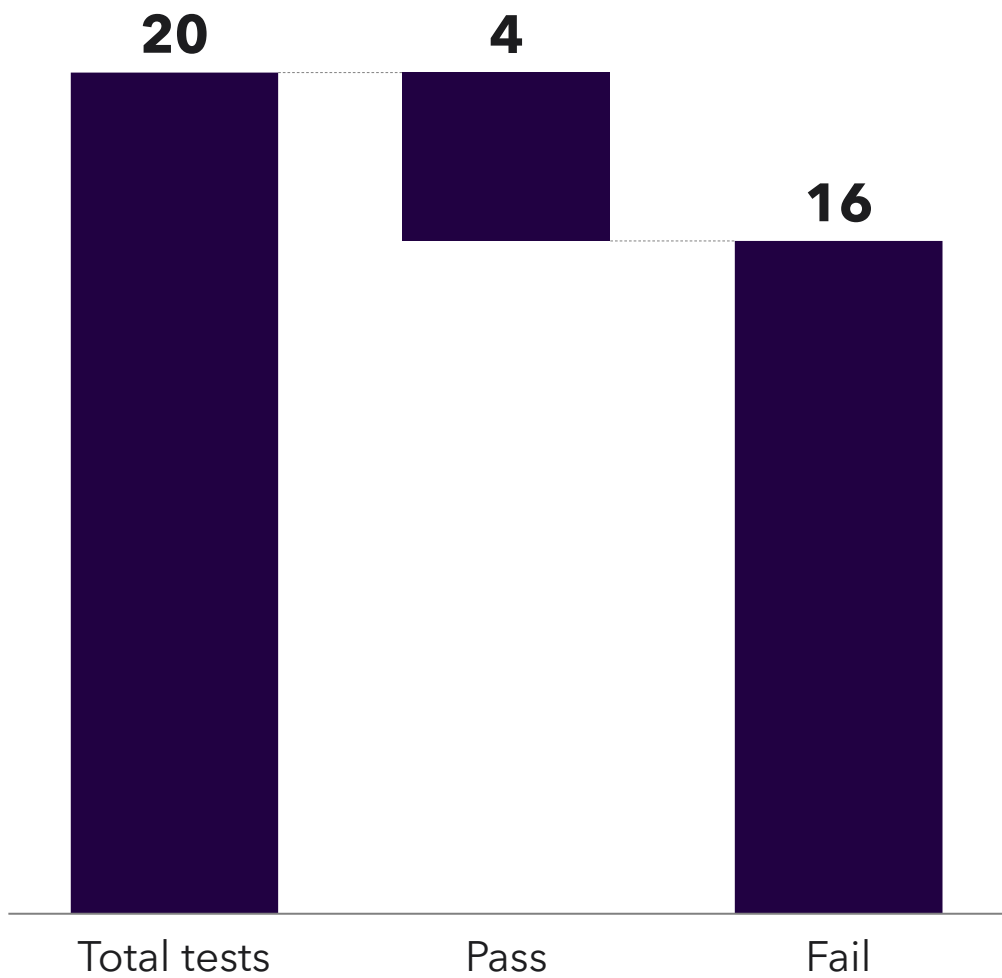
69 defects affecting PI 10 created, majority of them (46) were considered critical. 11 defects rejected and 56 defects 'done' (84% excl. rejected)



SIT PI 9 | Achievements and areas for improvement in London Market and Global Systems

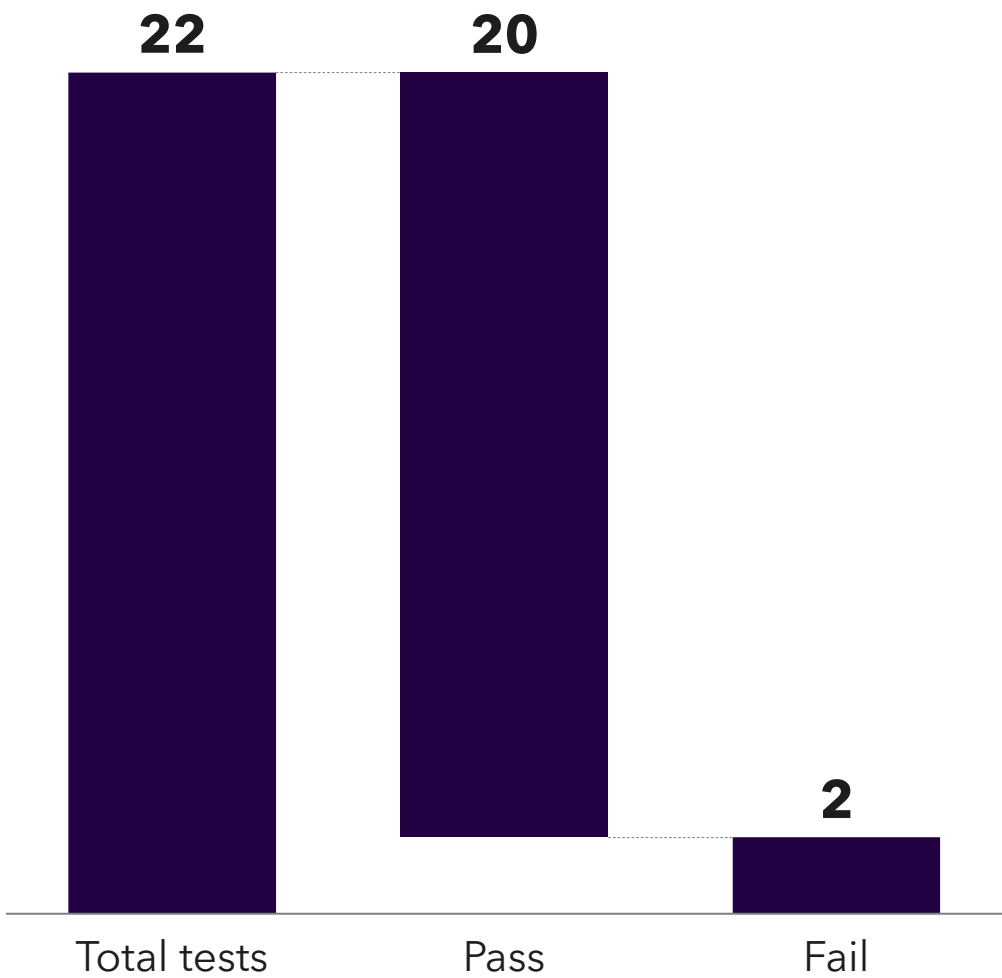
Regression testing

Validating existing features developed <PI 9, i.e., IPOS, IROS and party functionality



System integration testing

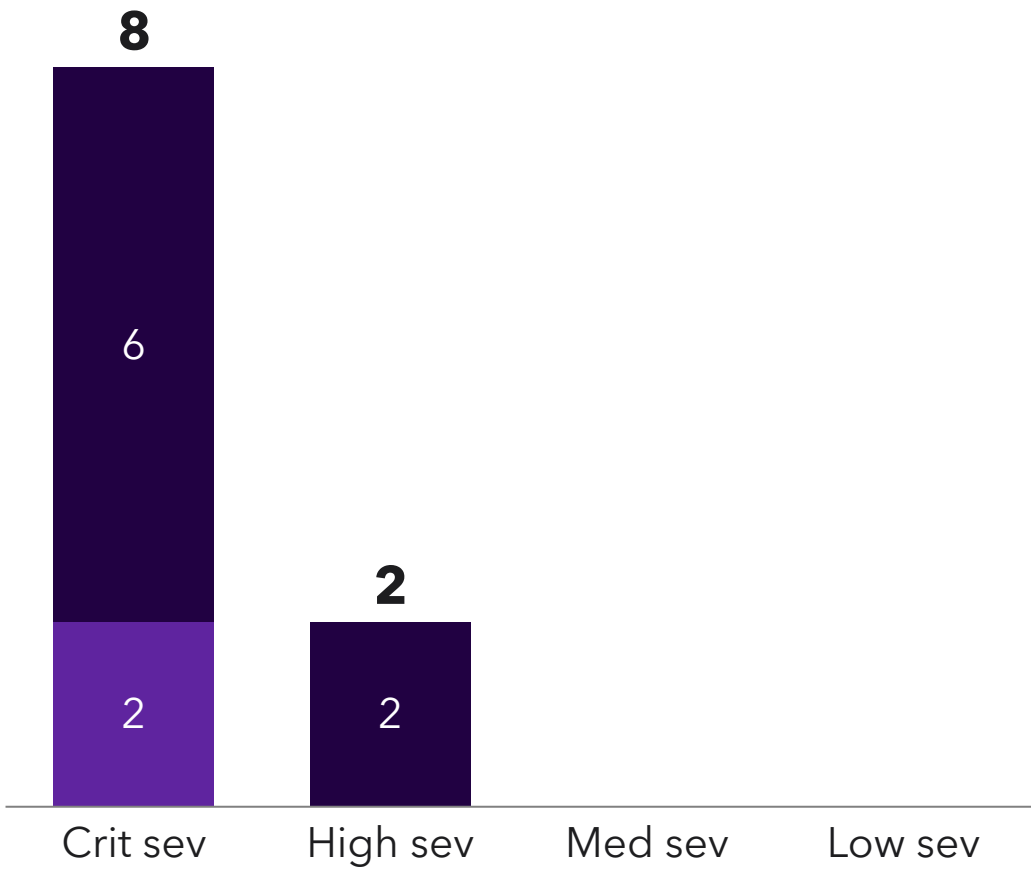
Consists of sanity checks for London Market (8) and P2P/E2E testing (12) for new global market functionality



As of 9th February

Defects created¹

10 defects affecting PI 9 created. Majority of defects (8) considered critical in severity. In total 2 defects rejected, and 8 defects 'done' (80% excl. rejected)

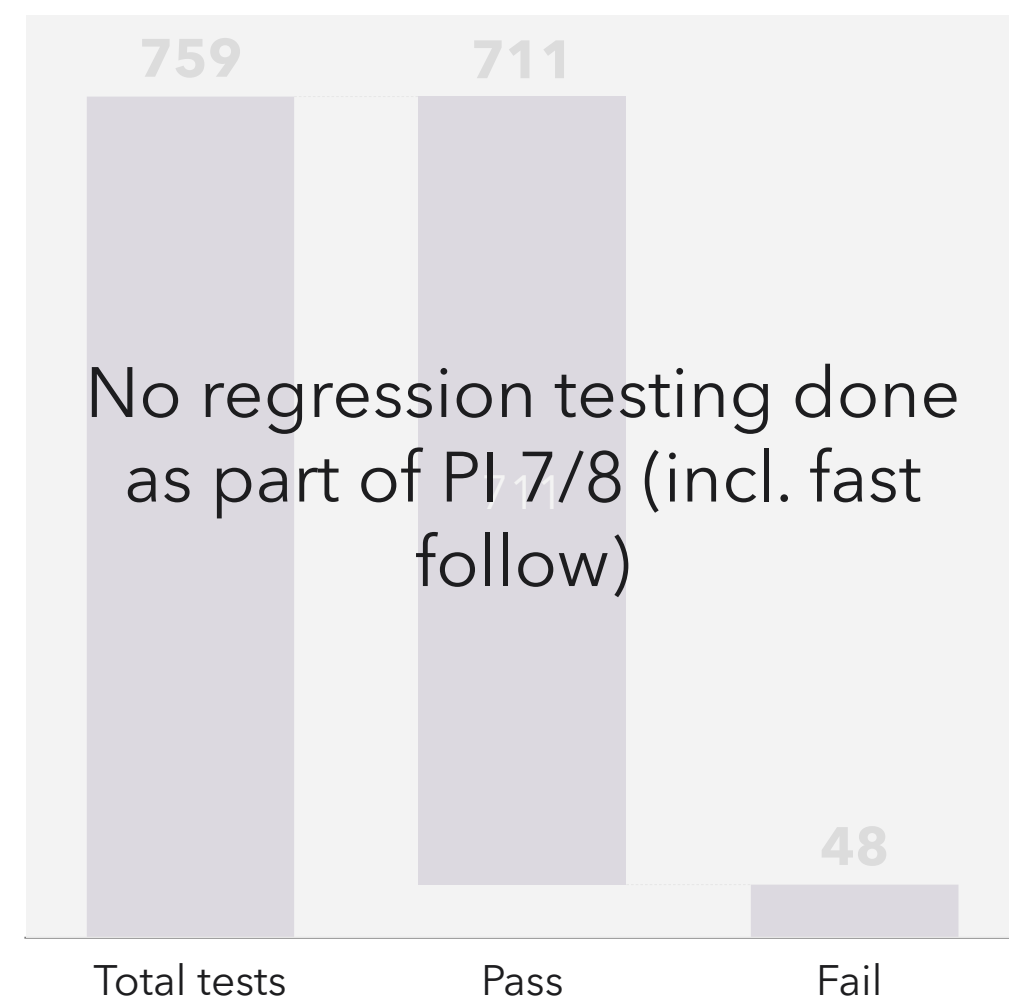


Done Rejected Ongoing²

SIT PI 7/8 | 847 tests executed (includes fast-follow delivery testing), resulting in comprehensive testing success across platform

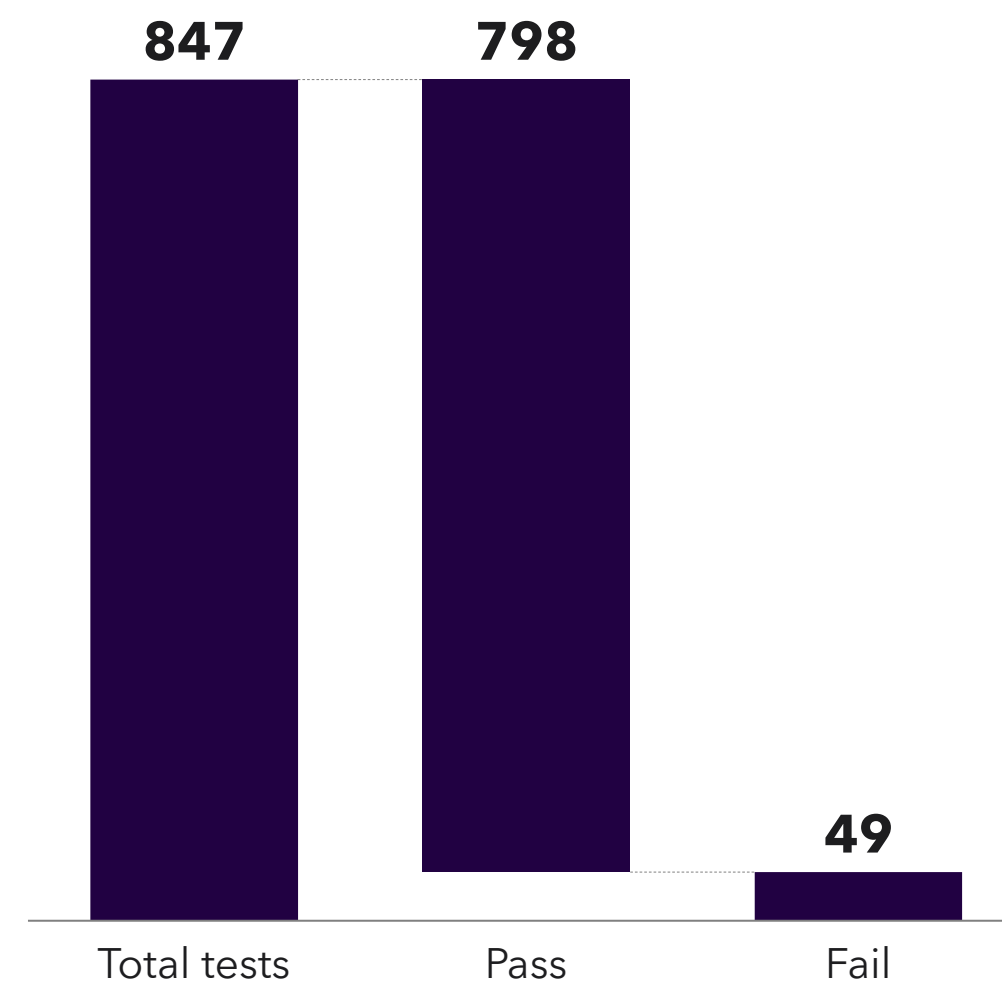
Regression testing

Automated regression testing was not executed



System integration testing

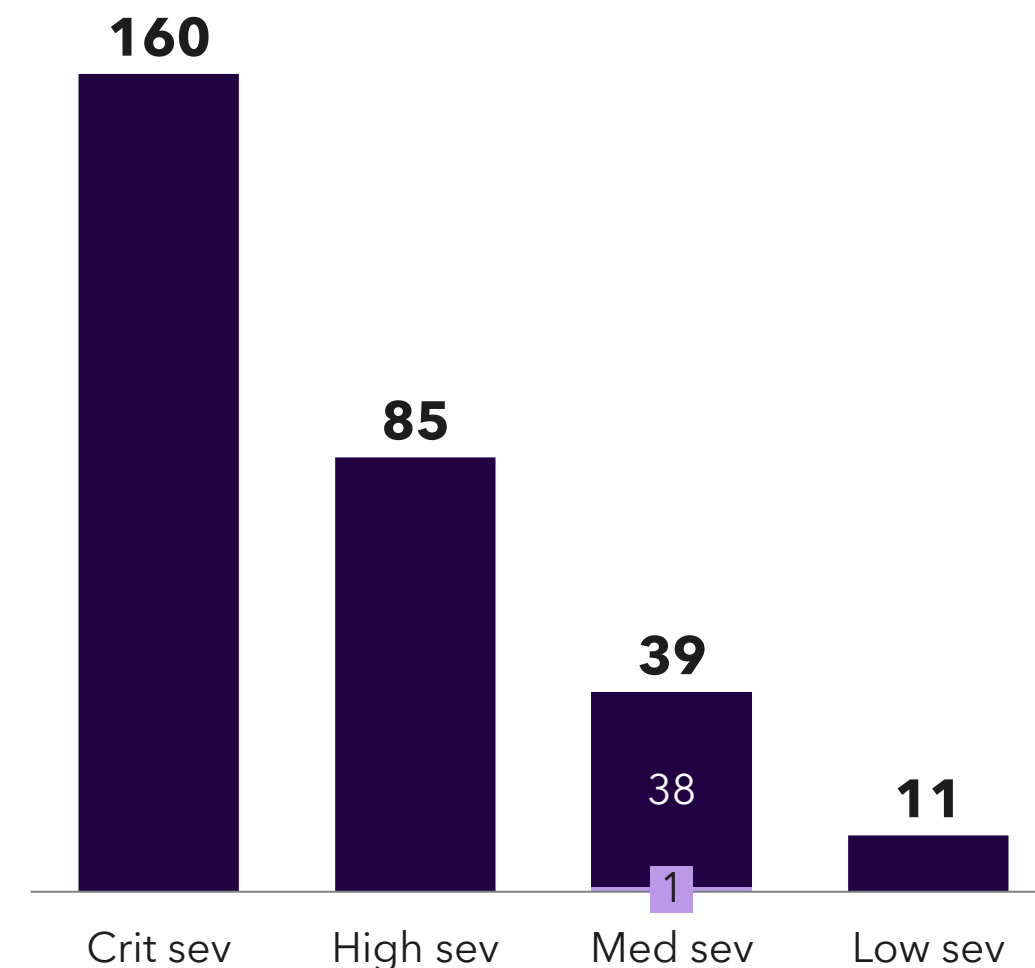
Consists P2P/E2E testing for new global market functionality (includes fast-follow tests executed)



As of 9th February

Defects created¹

295 defects affecting PI 7/8 created. 160 defects considered critical in severity. In total 0 defects rejected, and 294 defects 'done' (100% excl. rejected)



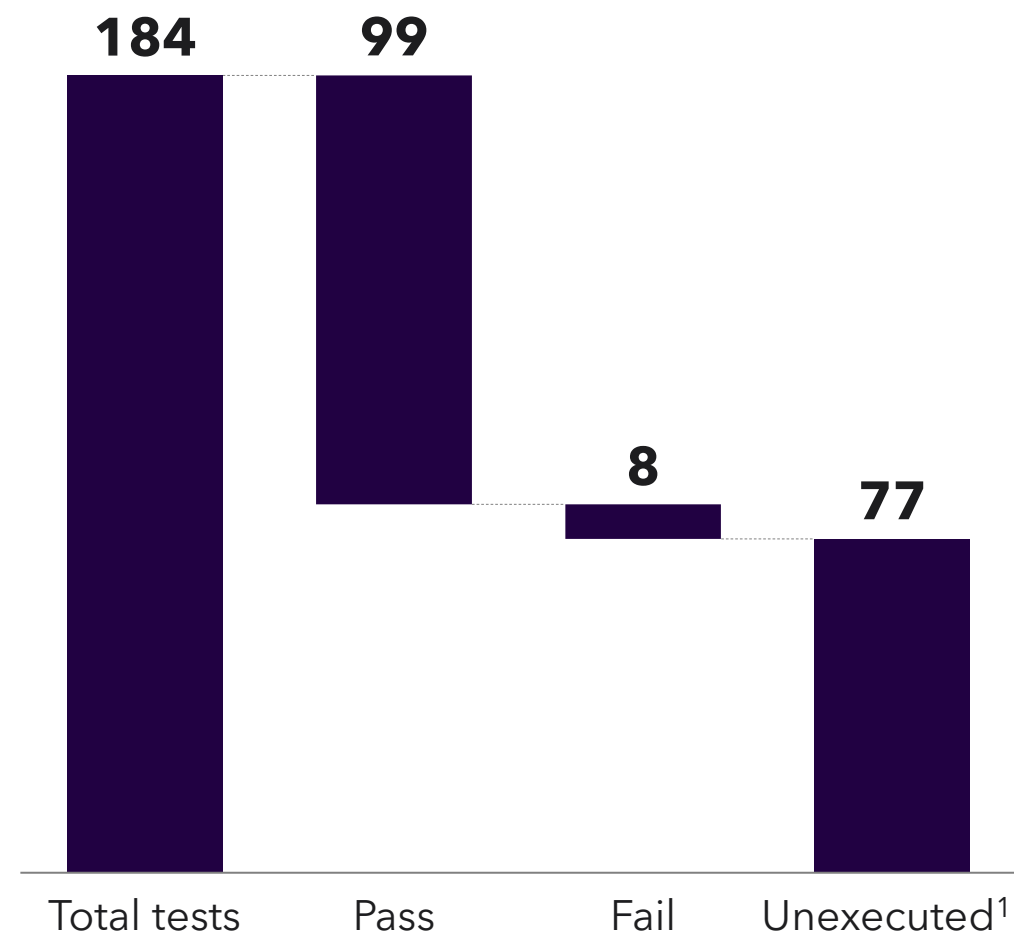
Done Rejected Ongoing²

PI 7/8 SIT tested the aggregated functionality developed across all earlier PIs

UAT PI 9 | Testing truncated and facing challenges: navigating critical defects and enhancing future testing strategies

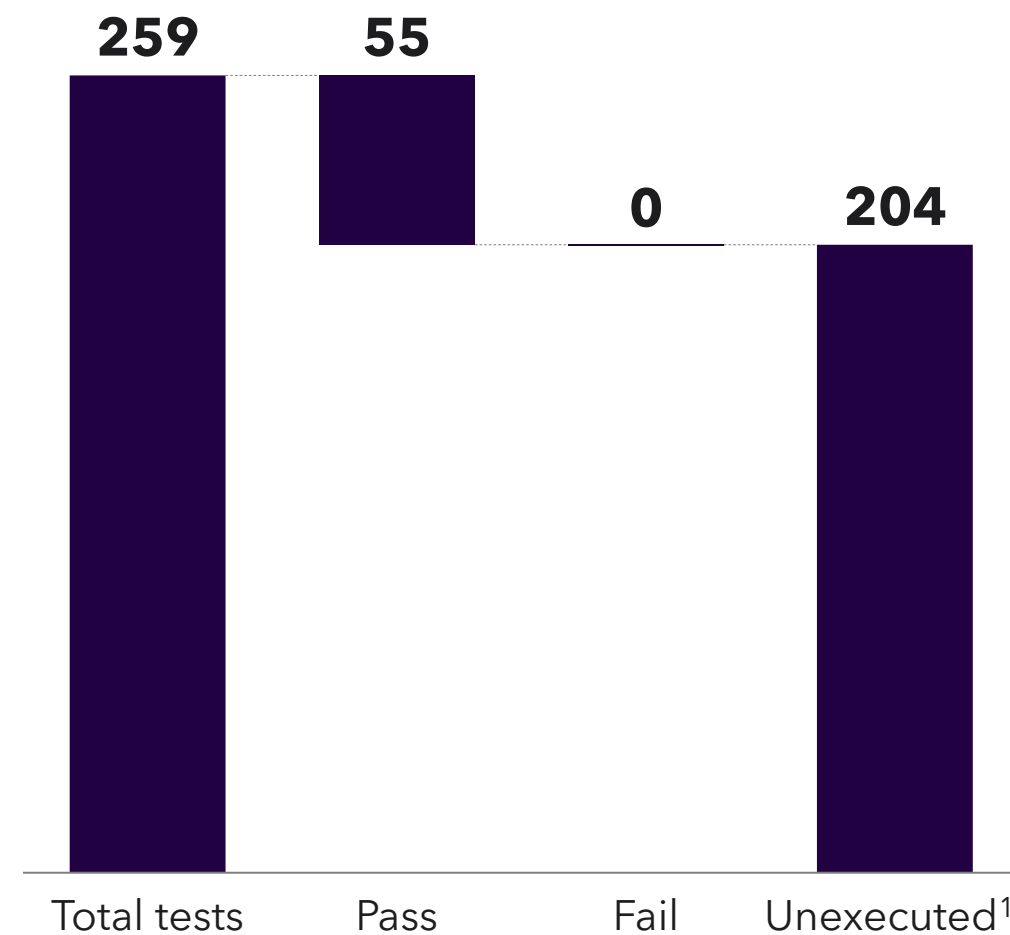
Regression testing

Automated ICOS regression testing unexecuted due to defects/environment issues (76 tests impacted). IPOS ran successfully, 99 of 108 tests passed



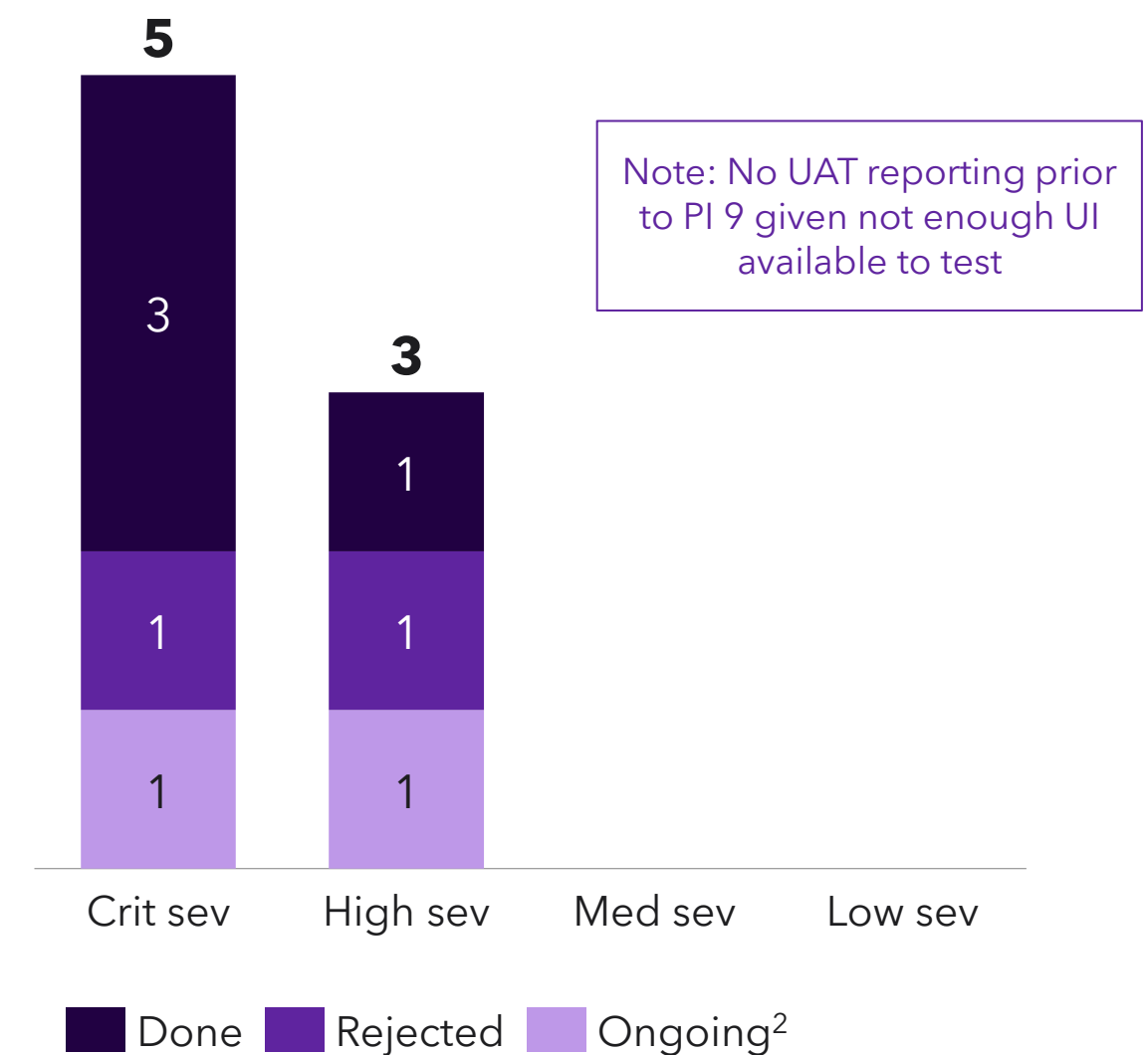
User acceptance testing

Tech Portal unavailability halted 189 IPOS tests, ICOS defects prevented 54, Party functionality limited to 7, Mix & Match mostly successful



Defects created/retested

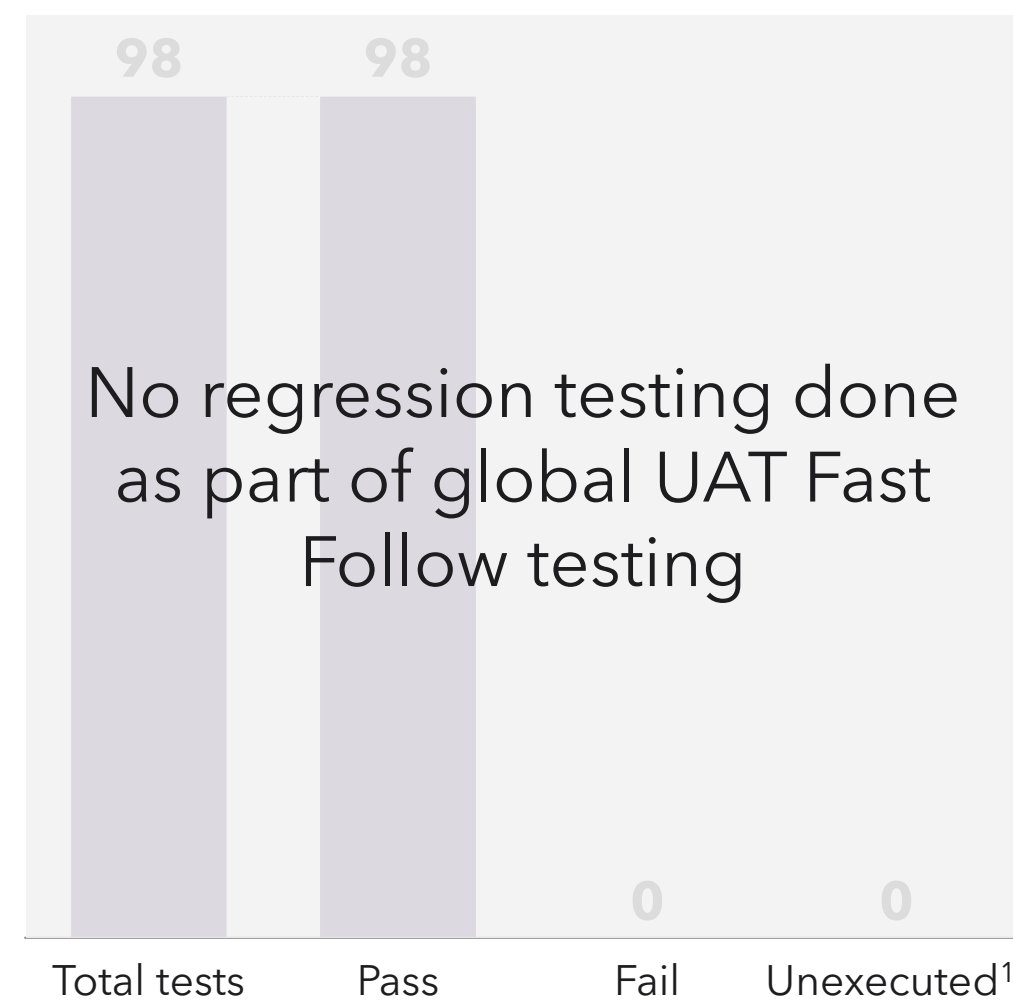
8 defects created/retested with. In total 2 defects rejected. 4 defects 'done' (67% excl. rejected)



Global UAT Fast Follow | Fast follow addressing outstanding defects and functionality with execution cycle, closing 18 outstanding defects

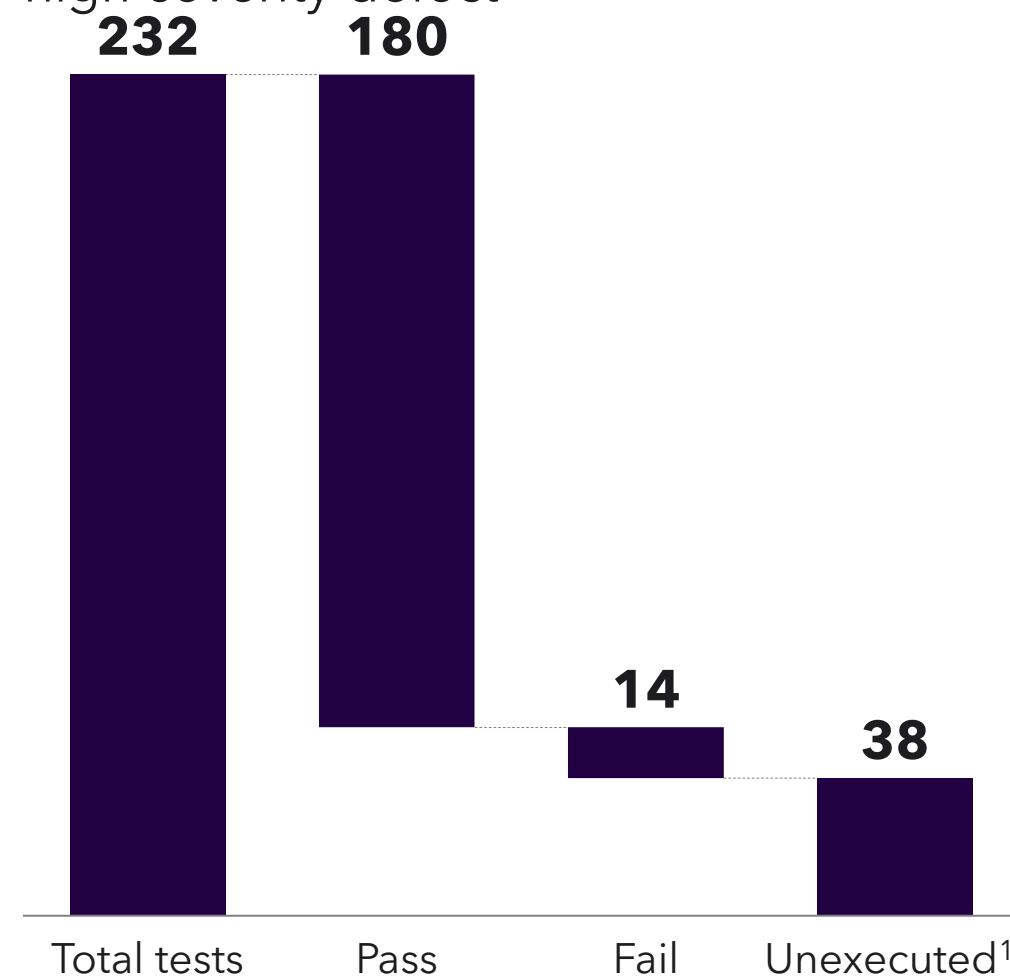
Regression testing

Automated regression testing was not executed



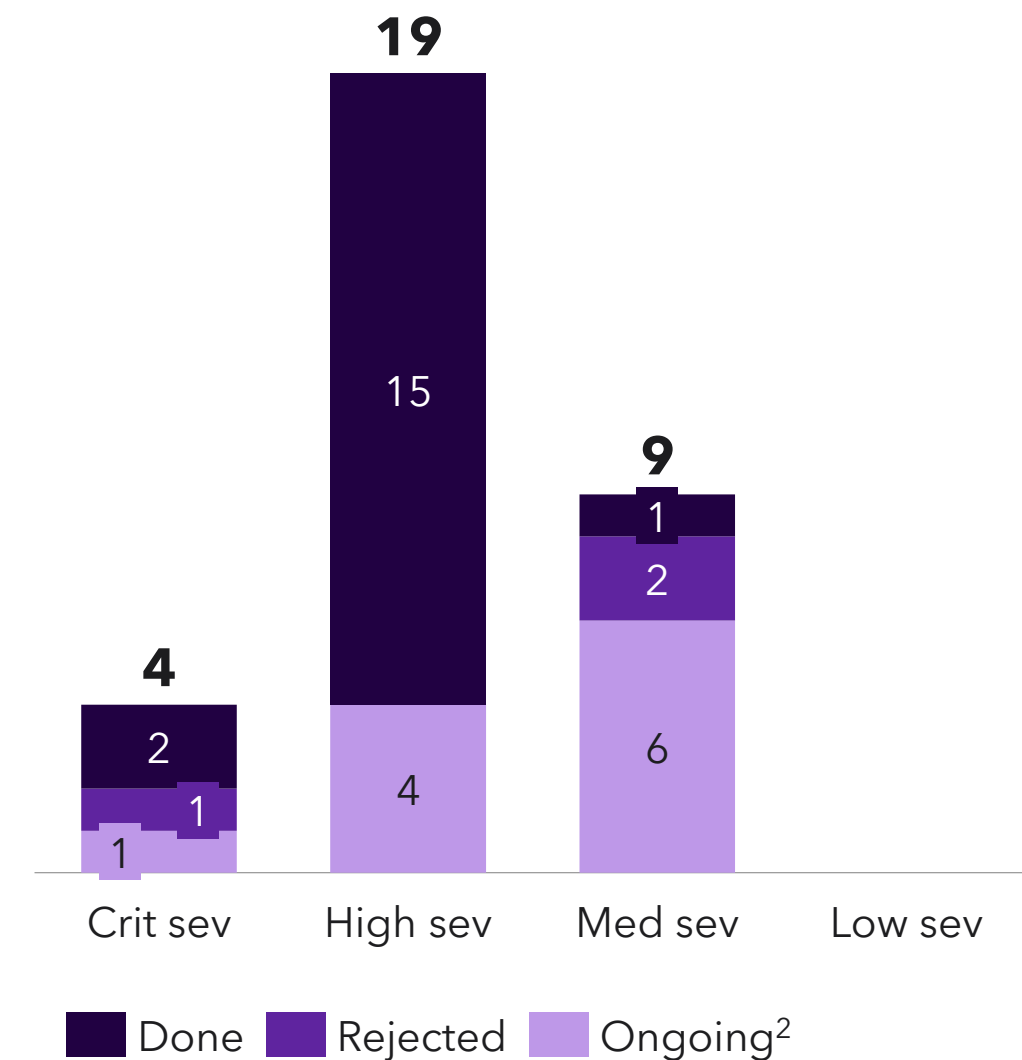
User acceptance testing

ICOS defect blocked testing, leaving 29 tests (22 ICOS + 7 IPOS) unexecuted. 14 tests across both failed due to 4 critical/high-severity defect



Defects created/retested

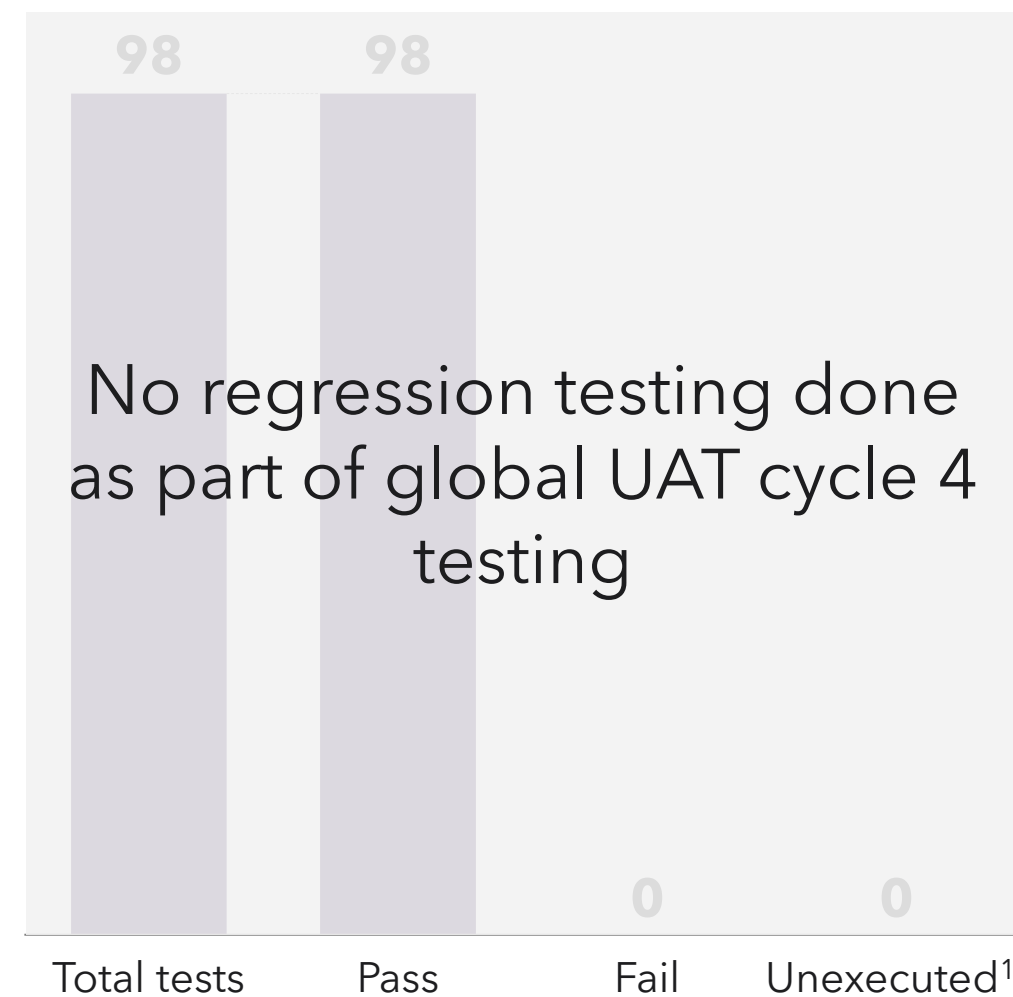
Mix & Match testing revealed defects in ASG/Portal interaction, failing UAT Exit Criteria. Fixes carrier over to PI 9 UAT



Global UAT Cycle 4 | Completing JSP UAT - final push for functionality verification and high-severity defect fixes

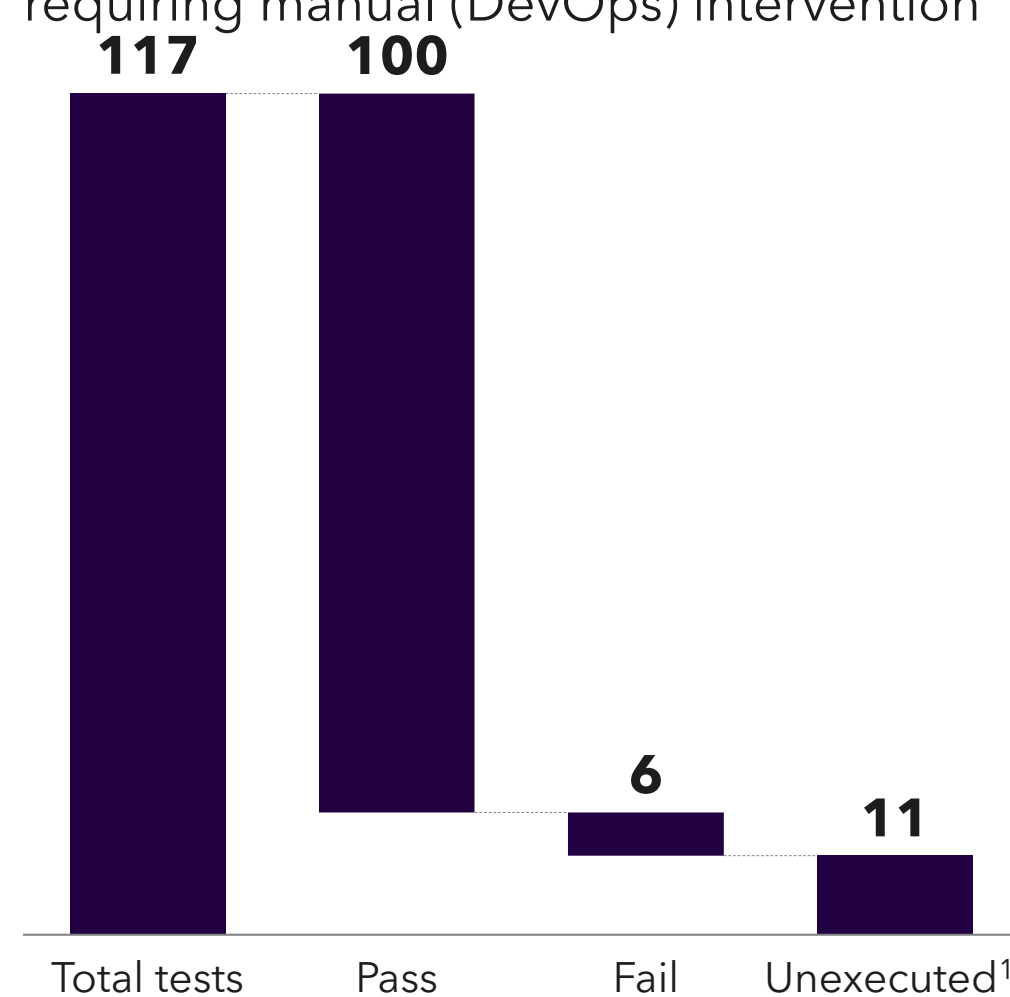
Regression testing

Automated regression testing was not executed



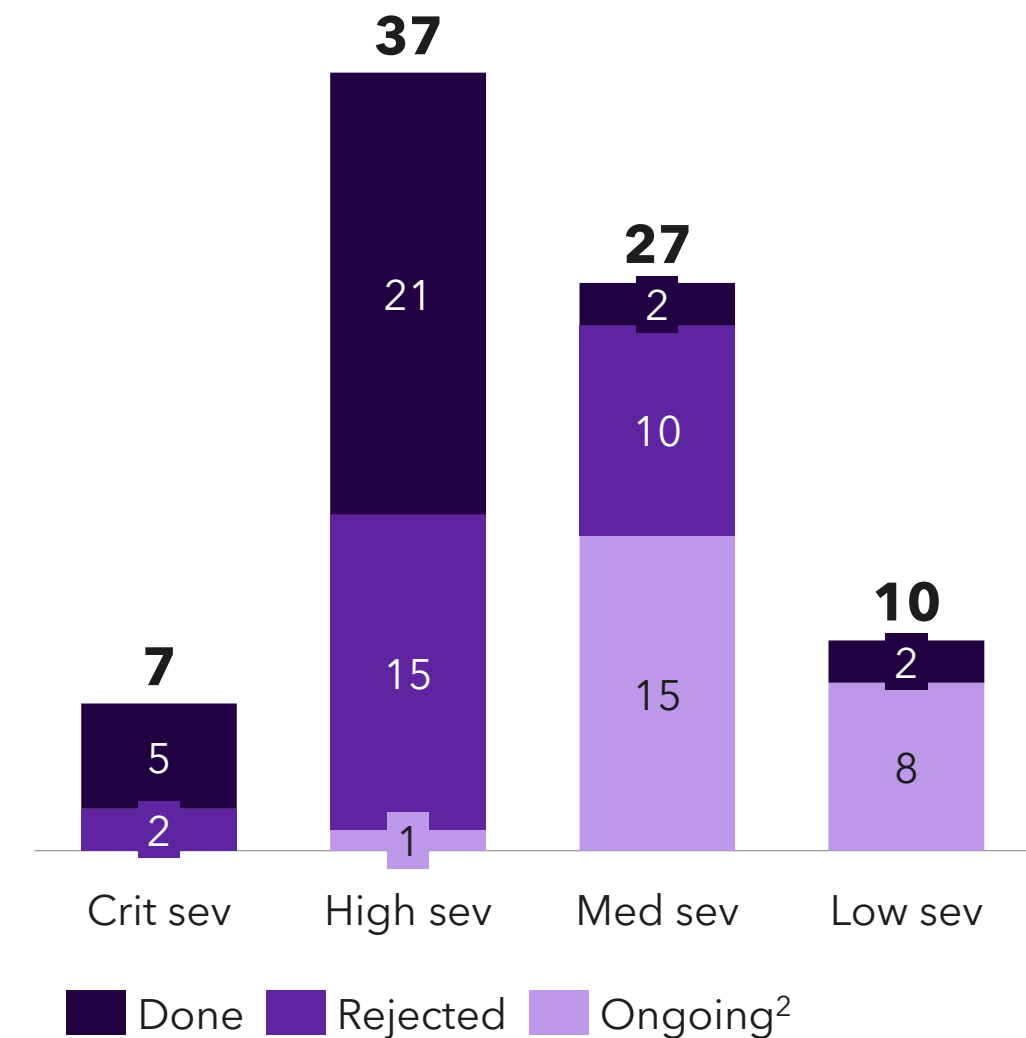
User acceptance testing

7 tests cancelled due to de-scoping, 4 blocked by (sanctions) defect. Party setup remained manual due to technical issues, requiring manual (DevOps) intervention



Defects created/retested

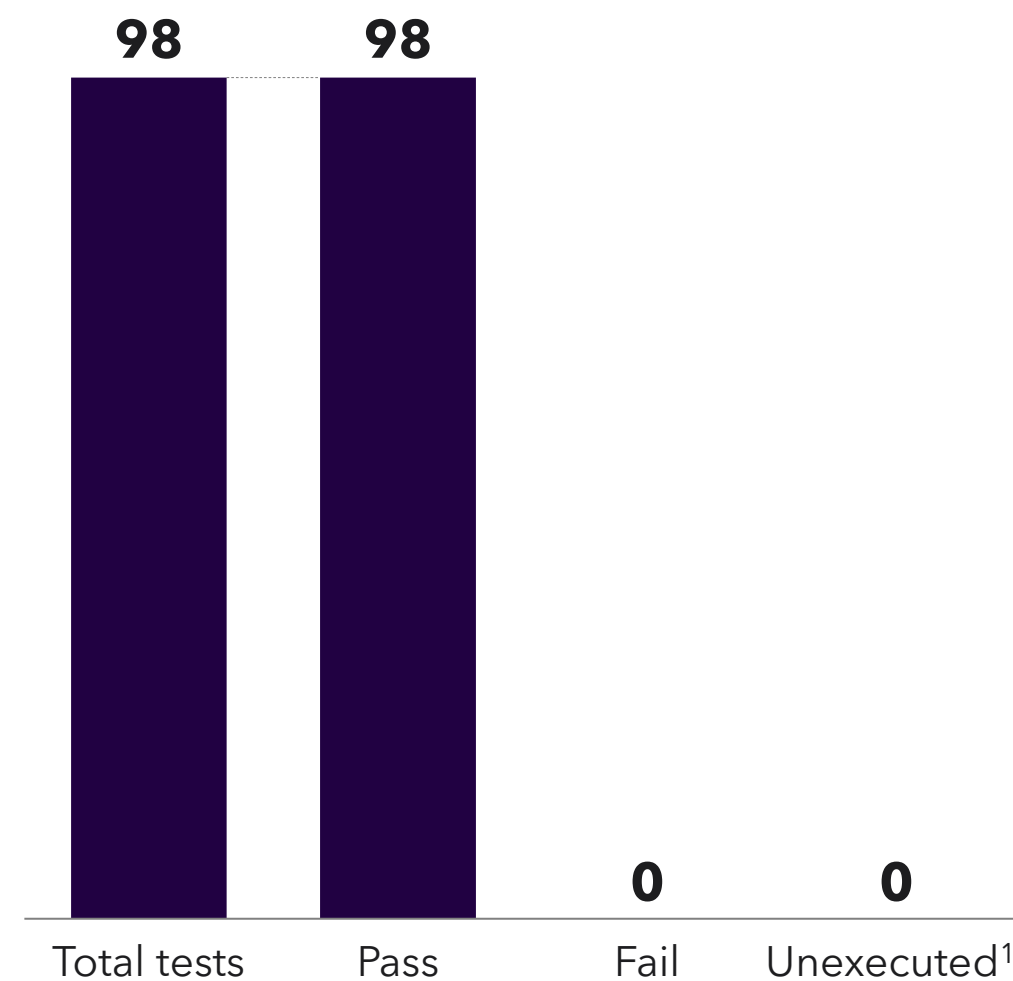
Due to 5 High-Severity unresolved defects during Cycle 3, a fourth cycle was asked for and granted. These we closed during UAT cycle 4



Global UAT Cycle 3 | Finalizing UAT execution - overcoming high-severity defects with extended testing

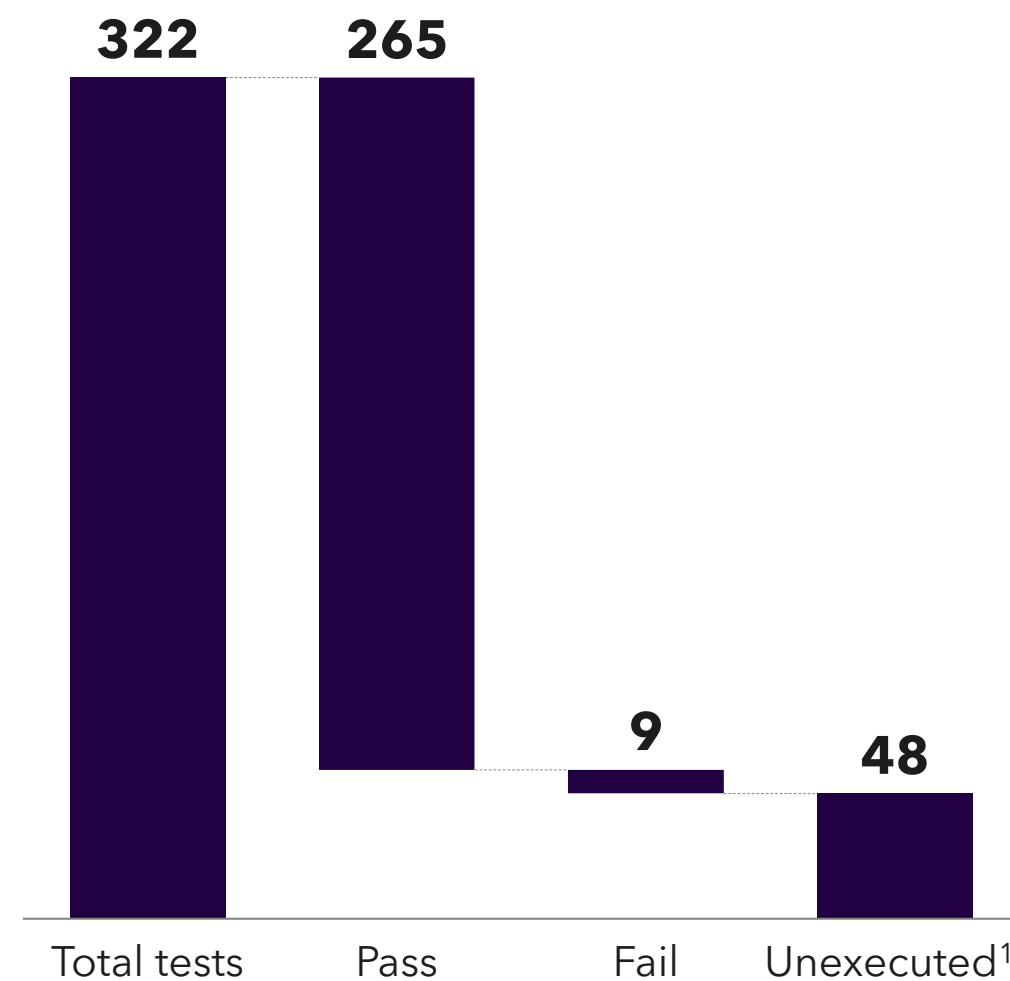
Regression testing

The UAT automated regression pack was done in Cycle 3: 98 IPOS tests



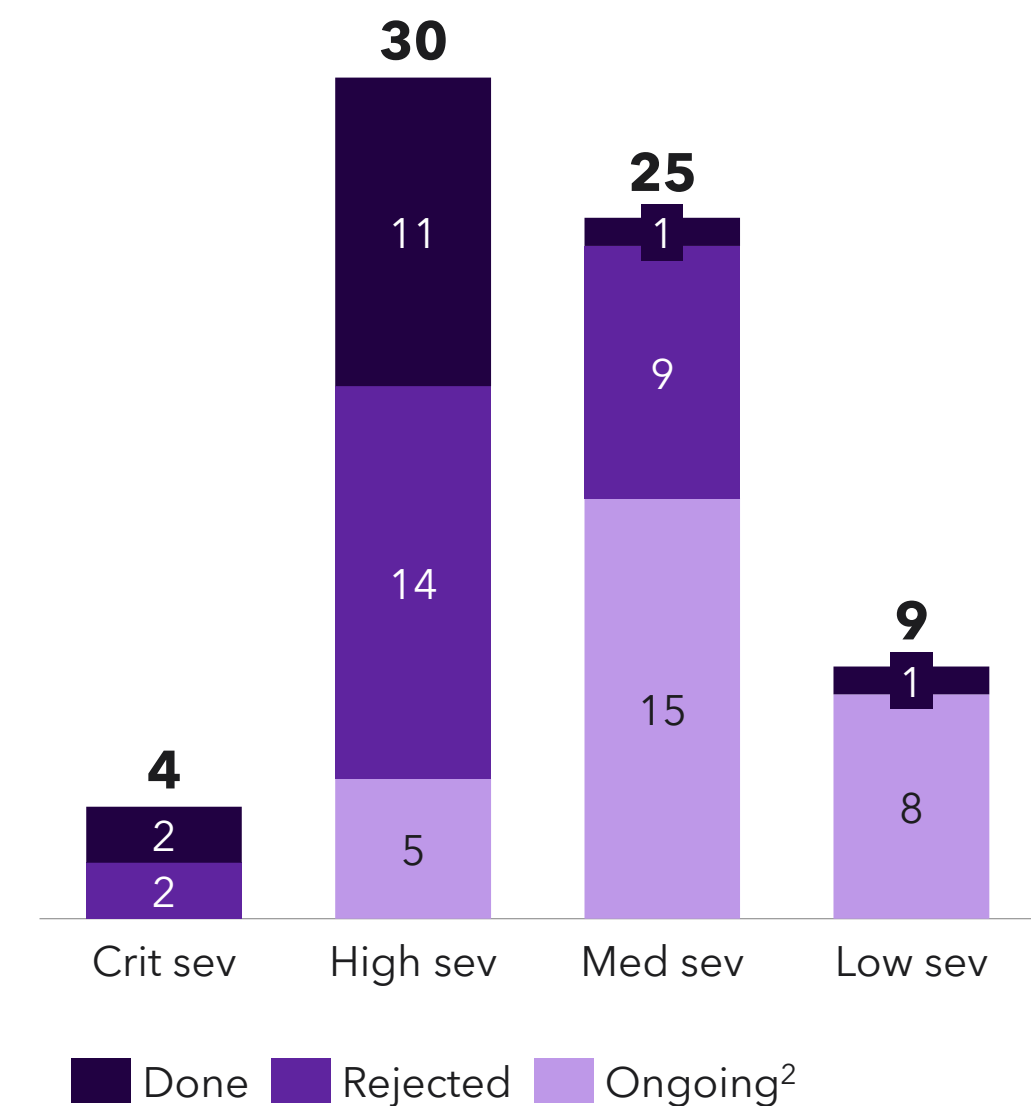
User acceptance testing

IPOS and IROS saw 36 blocked tests, addressed in Cycle 4, and Party setup improvements planned for automation



Defects created/retested

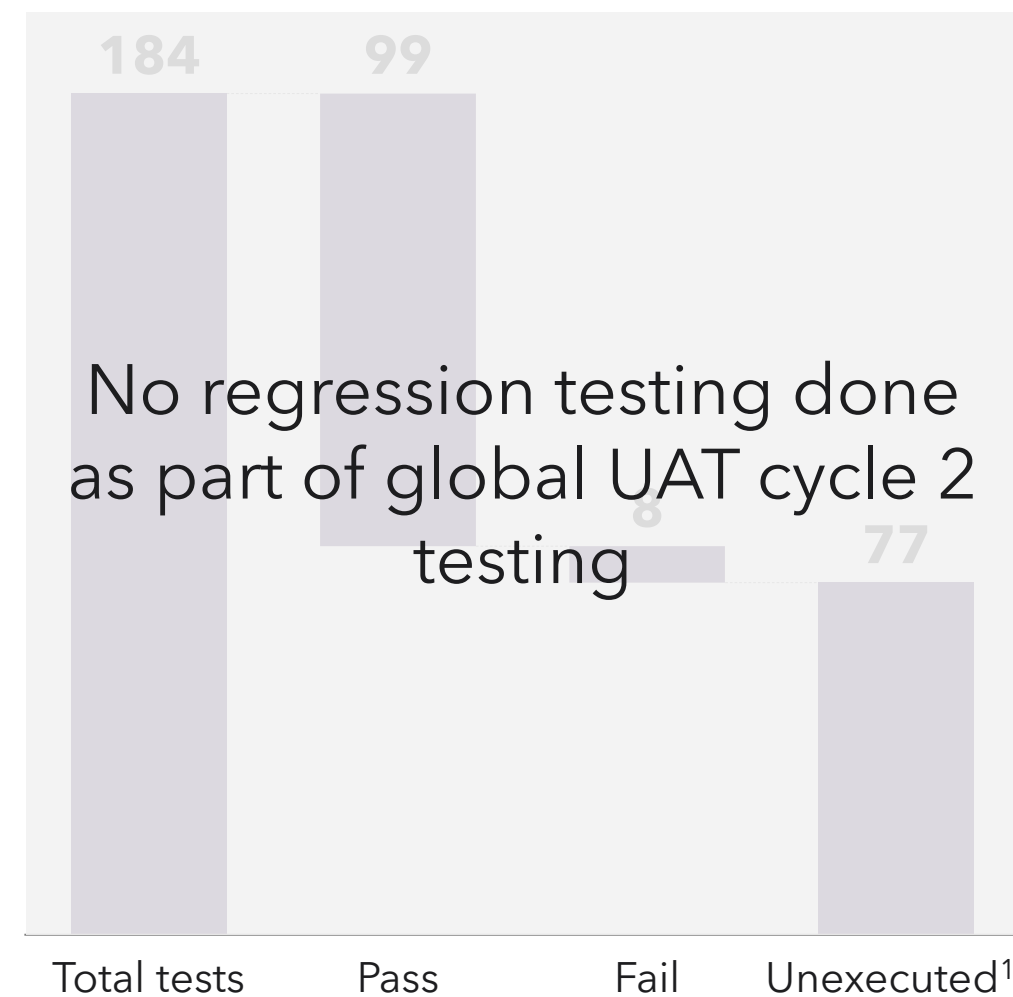
68 defects in total created. 25 defects rejected, leading to 11 new User Stories and five future release candidates



Global UAT Cycle 2 | Expanding UAT scope - addressing additional functionality and defect resolution

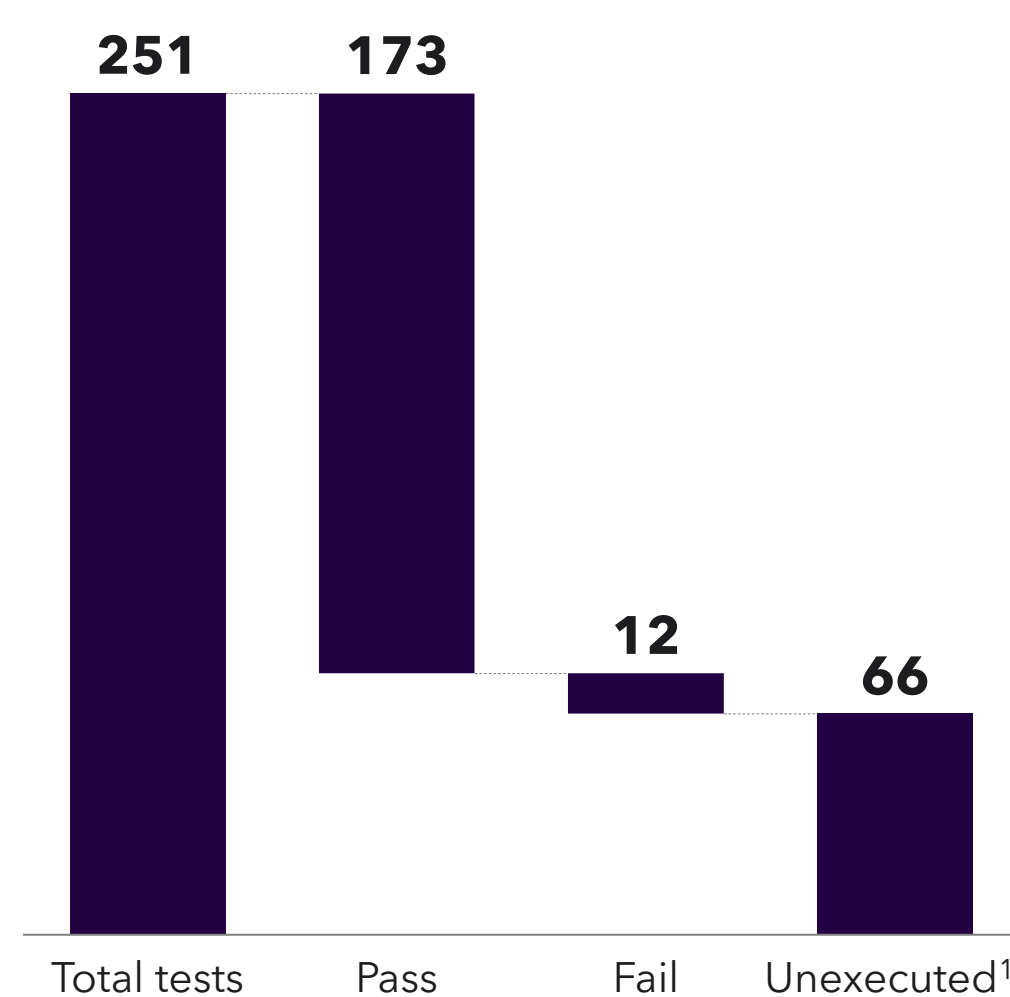
Regression testing

Automated regression testing was not executed



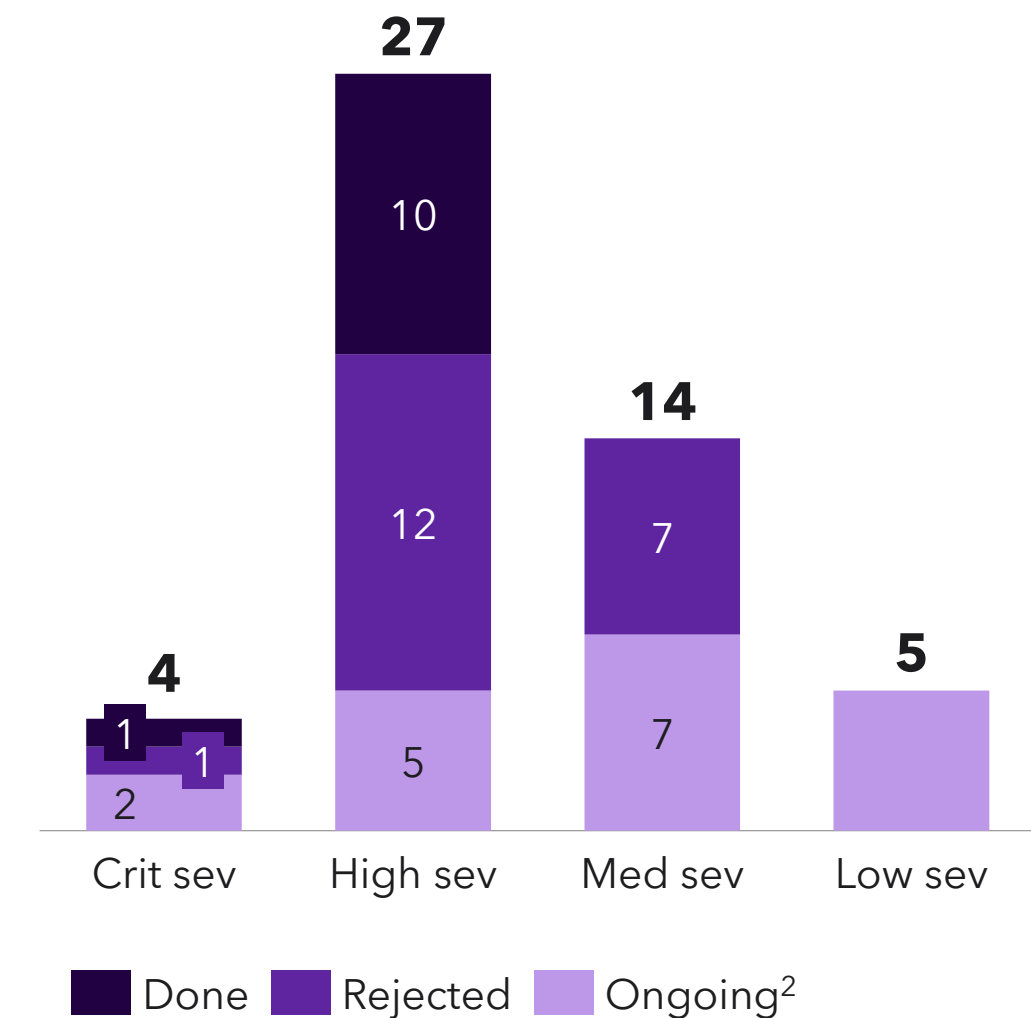
User acceptance testing

44 IPOS tests blocked by Sanctions and Notifications defects. Technical issues delayed IROS testing into Cycle 3



Defects created/retested

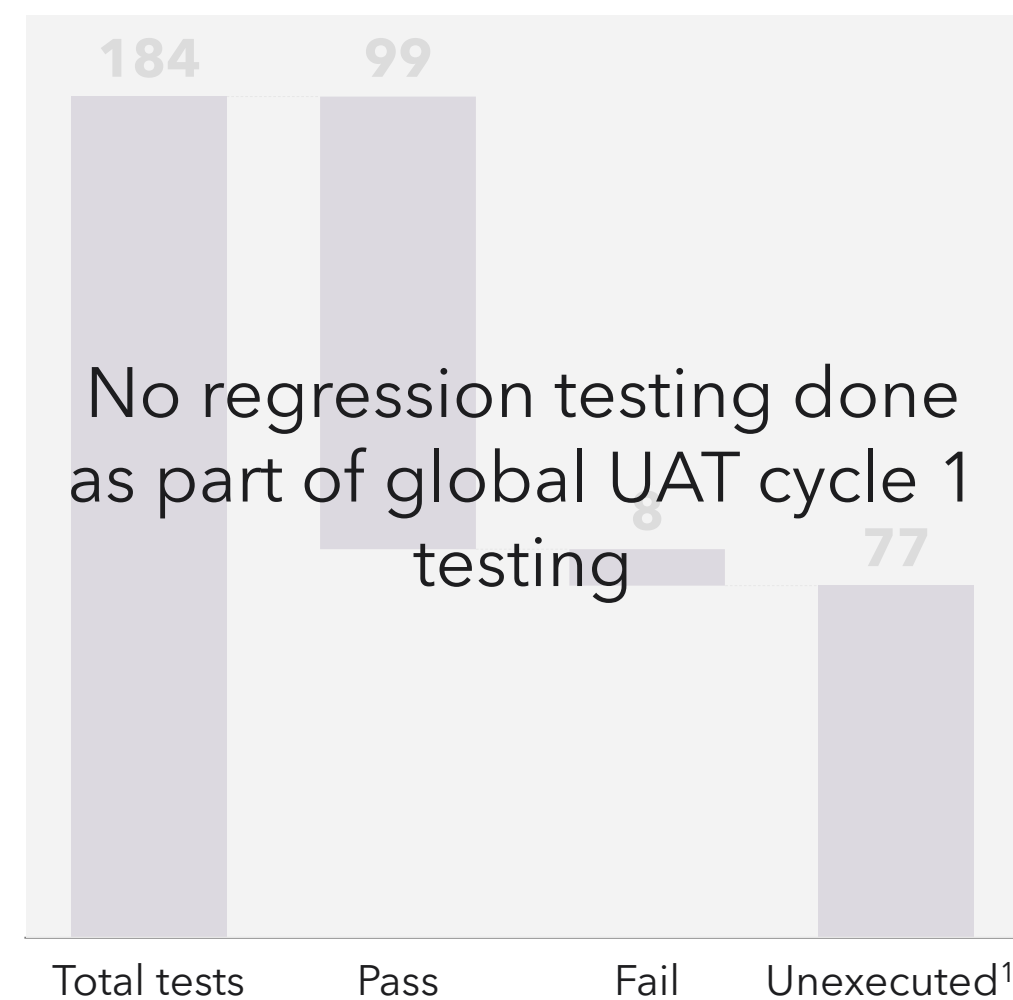
20 defects were rejected as considered requirements gaps: 11 needing new user stories for Cycle 3, 4 possible future US candidates, and five genuinely rejected



Global UAT Cycle 1 | Launching global JSP UAT with IPOS integration creating the foundations for successful user acceptance testing

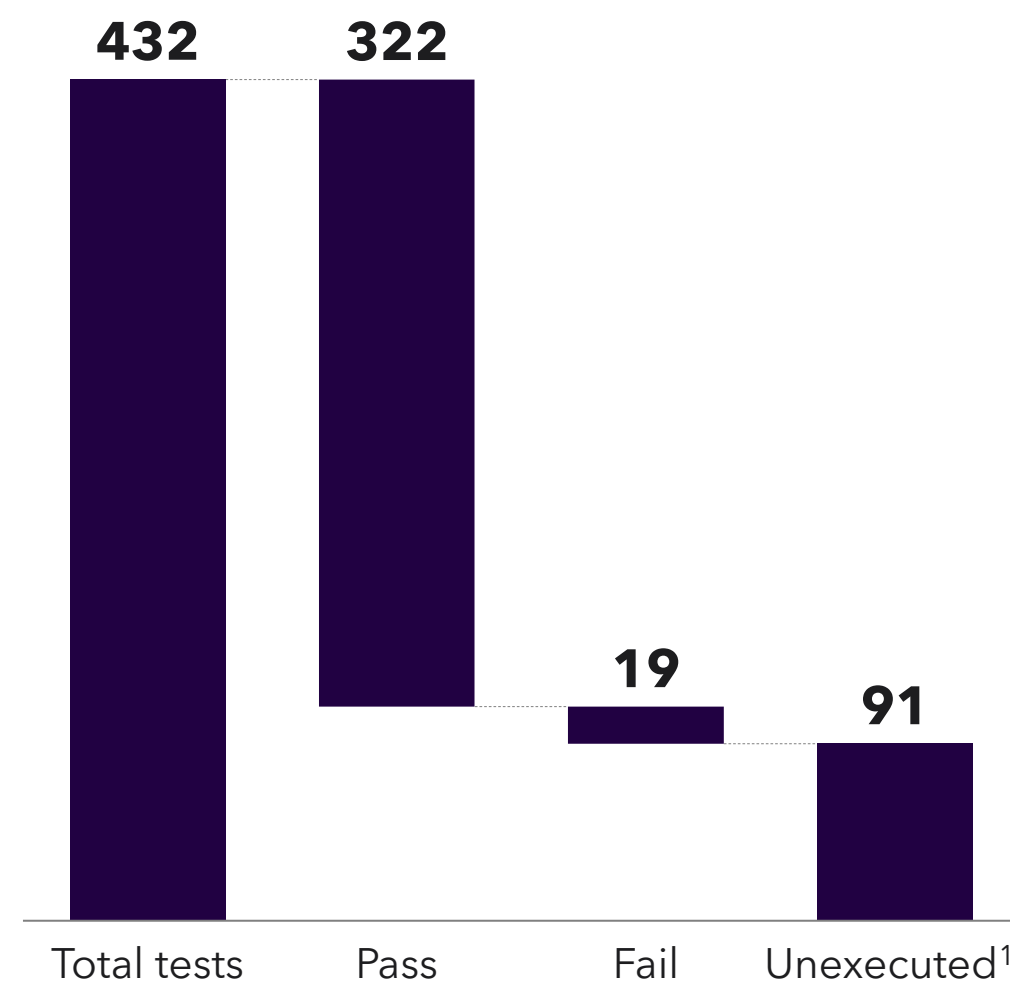
Regression testing

Automated regression testing was not executed



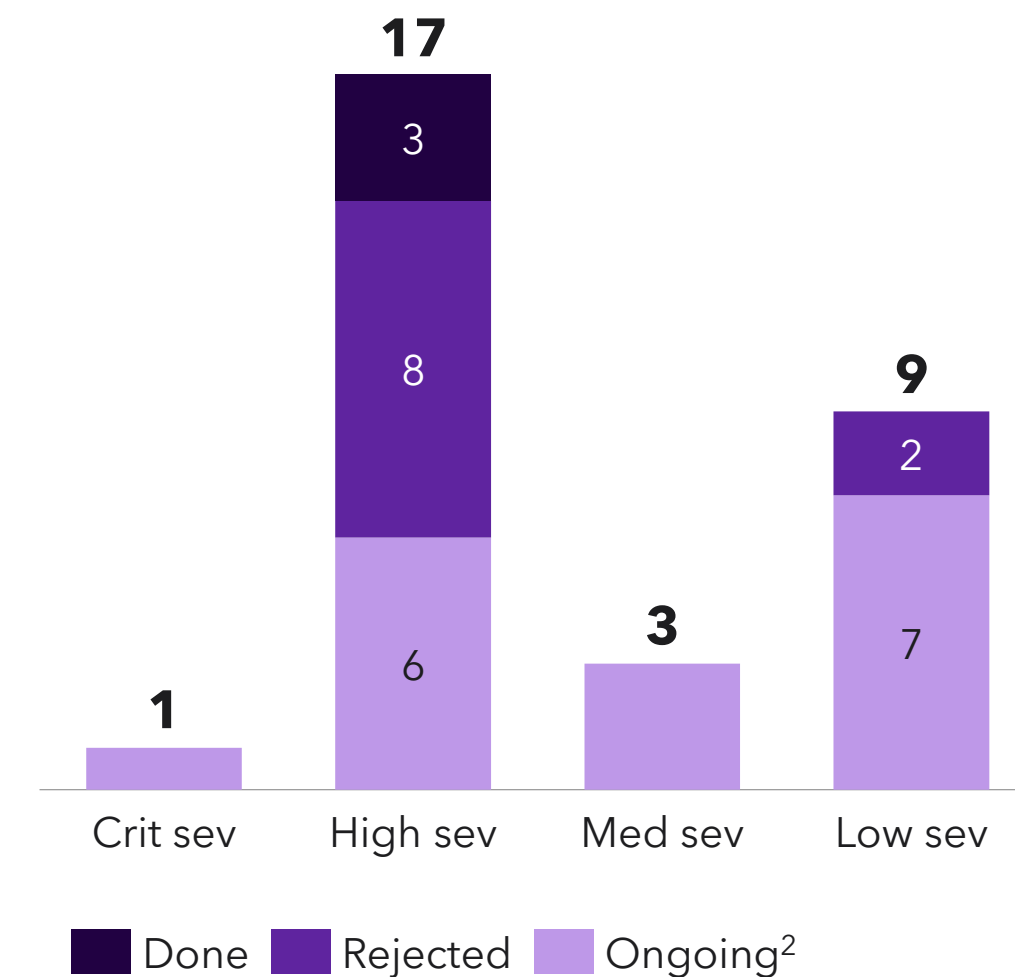
User acceptance testing

Edit feature de-scoping (parties), functionality deployed in later cycles, and unresolved Party defects main reasons for unexecuted tests



Defects created/retested

10 defects rejected due to validation issues and assumptions about business process knowledge



Global (PI 7.8) UAT tested the aggregated functionality developed across all earlier PIs

Appendix









Appendix: Zoom in on NFT

NFT | Various testing types run to ensure platform is robust

Testing types

Description

Environment & tools

<p>Performance Testing Deep-dive on next slide</p>	<p>System performance under workload</p>	<p>NFT  </p>
<p>Security Testing:</p> <ul style="list-style-type: none"> Static App. Security Testing Dynamic App. Security Testing OS Vulnerability Assessment Pen Testing External Pen Testing 	<p>Identification of vulnerabilities in application code</p> <p>Identification of vulnerabilities in application running state</p> <p>Identification of vulnerabilities in operating system</p> <p>Performance under simulated cyber attack</p> <p>Performance under simulated cyber attack on assets visible on internet</p>	<p>Dev </p> <p>NFT </p> <p>All¹</p> <p>NFT & Prod</p> <p>Prod</p>
<p>DR Testing / Chaos Engineering</p>	<p>Ability to sufficiently restore operations after catastrophic event</p>	<p>NFT </p>
<p>RPO / RTO Testing</p>	<p>Ability to sufficiently restore data and systems in required timeframe</p>	<p>NFT </p>
<p>Backup & Recoverability Testing</p>	<p>Ability to successfully back-up and restore data</p>	<p>NFT</p>

Performance Testing | Ensures platform & infrastructure scalable

Performance Test Types

- Load Testing
- Stress Testing
- Endurance Testing
- API Performance Testing for supporting services

Illustrative Approach

- Forecast expected load over next 5 years, incl: users, peak load, peak duration, and transaction volumes
- Loads incorporated into performance test plans:

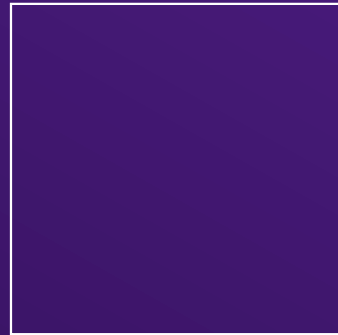
IPOS

Performance Test - Iterations				Test Load					
Test Iteration	Test Type	Test Duration	Test Users	UMR	Original Premiums	Additional and Return Premiums	Corrections	Work Packages	Ramp up Strategy
Iteration 1	Validation Test	15 mins	50	27	129	161	4	79	Ramp up
Iteration 2	Year 1 (50%) Load Test	1 Hours	200	55	259	321	9	157	Ramp up
Iteration 3	Year 1 Load Test	2 hours	500	220	1034	1284	34	630	Ramp up
Iteration 4	Year 2 Load Test	2 hours	500	242	1138	1413	38	693	Ramp up
Iteration 5	Stress test	1 hours	500	439	2068	2569	69	1259	Ramp up
Iteration 6	Endurance test	8 hours	500	549	2585	3211	86	1574	Ramp up

ICOS

Performance Test - Iterations				Test Load				
Test Iteration	Test Type	Test Duration	Test Users	Lloyd's Advice	Company Advice	Lloyd's Settlement	Company Settlement	Ramp up Strategy
Iteration 1	Validation Test	15 mins	50	103	23	94	7	Ramp up
Iteration 2	Year 1 (50%) Load Test	1 Hours	250	207	46	188	15	Ramp up
Iteration 3	Year 1 Load Test	2 hours	500	414	92	376	29	Ramp up
Iteration 4	Year 2 Load Test	2 hours	500	455	101	414	32	Ramp up
Iteration 5	Stress test	1 hours	500	827	183	752	58	Ramp up
Iteration 6	Endurance test	8 hours	500	3310	733	3008	233	Ramp up

- Monitoring tools in place to identify bottlenecks
- Defects logged in Jira for resolution



Appendix: Zoom in on vendor testing

The Vanguard Vendor Programme

Vendor testing is broken into stages:

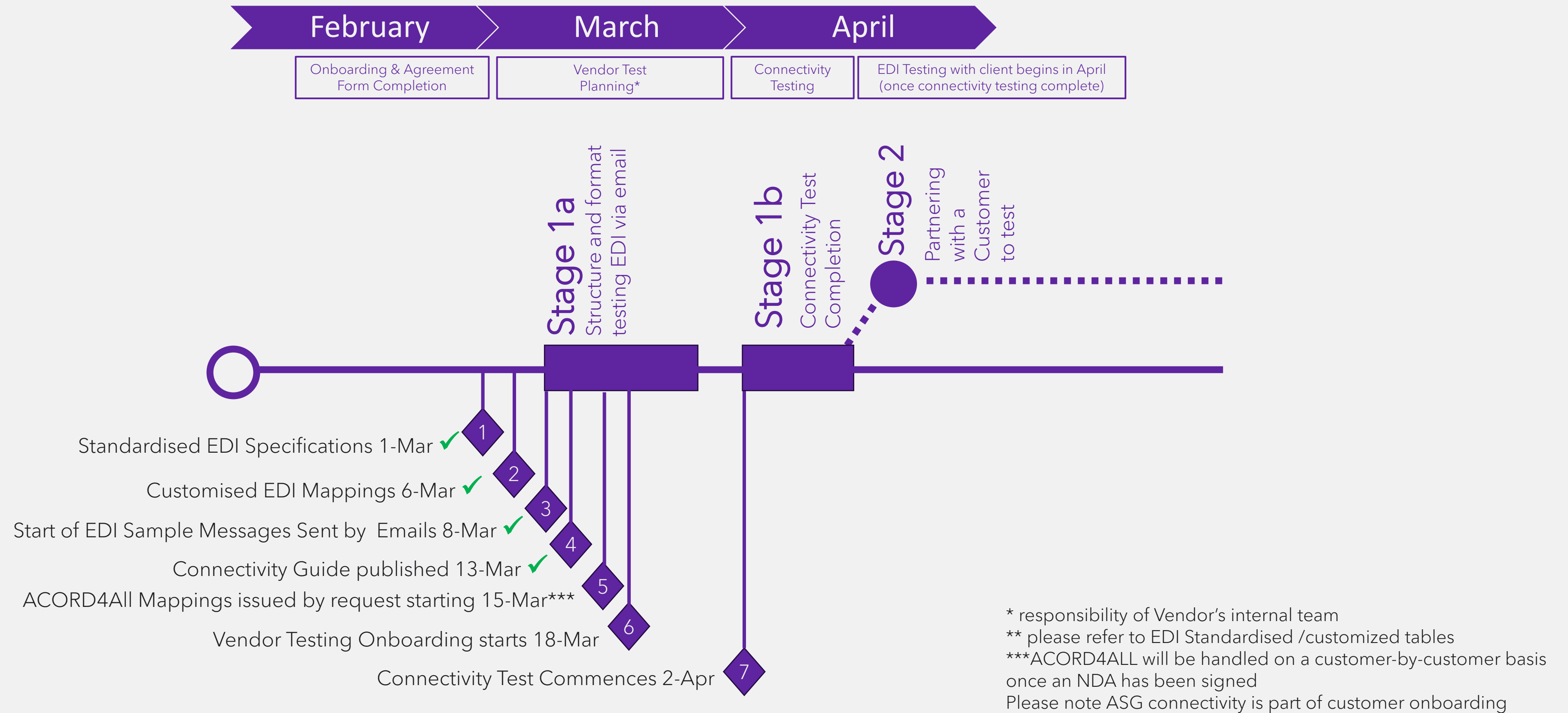
Stage 1: Interface Testing (recommended for all)

- Structure and Format testing for EDI Standardised messages. Test ability to submit, consume and process messages
- Connectivity testing aims to ensure that your system can communicate effectively with the ASG Adept system

Stage 2: Testing scenarios in partnership with a Customer (Optional, not part of Vanguard Vendor Programme)

- Part of the Vanguard/LIMOSS Coordinated Customer or Enhanced Customer Testing. Vendor participation is optional

Timeline for Vendor Testing



Vendor integration testing is embedded in Customer Testing via connectivity testing

Vanguard's initial phase is connectivity testing, encompassing key vendor testing aspects

Outcomes validated via connectivity testing:

- ✓ Customer systems can integrate to and call the platform endpoints
- ✓ Information can be sent and consumed between the two systems

Illustrated test examples

Inputs	Platform behaviour	Outputs
Authenticate call	Pass/fail	Security token
Pick up file from SFTP site	Provide folder structure with test EDI file	Test EDI file

Coverage of vendors serving majority of market via Vanguard's participants

We believe majority of key technology vendors are represented through their customers in Vanguard, including but not limited to

- DXC
- Webcon
- AdvantageGo
- Verisk
- Eurobase
- Trace
- Ebix
- GPM
- Novidea
- Docosoft
- Guidewire

... and additional self-build solutions

- Technical integration across major vendor platform verified via connectivity testing
- Further vendor connectivity testing enabled via ASG gateway (already accessible)
- New workstream for vendors to be established within Vanguard to
 - Enhance vendor visibility into testing
 - Improve vendor coverage for technical integration

Overview and Approach of Vanguard Vendor Testing

STAGE 1 - Recommended for all vendors

Pre-go-live activities recommended to all vendors to ensure readiness. Includes test connectivity and data structure of standardised EDIs.

Within scope of Vanguard Vendor Testing

Will be carried out in two parts: 1a and 1b

1a EDI messages Testing:

- Send a sample EDI - Check Structure is accurate and correct format and can be consumed in the test environment.
- Suitable for vendors using EDI Standardized message.

1b Connectivity Test Data Structure Validation Test

- Suitable for all vendors wanting to test connectivity.
- Can begin once onboarded into ASG.

Actions required from both Velonetic and Vendors to progress through Stage 1 and ready for Stage 2 are detailed in the next four slides

Stage 2 - Options to expand testing scenarios:

Optional for vendors who wish to test extra functionalities **alongside their customers.**

This is outside Vanguard Vendor Testing scope

3 routes depending on vendor requirements: testing scenarios depend chosen route

A Partner with a Vanguard Participant

- Partner with a Vanguard participant customer to perform required E2E tests.
- You will coordinate your test directly with your chosen customer.
- Using Vanguard participant data to check and validate scenarios.

B Partner with LIMOSS Coordinated Customer Testing

- Suitable for vendors without access to a Vanguard participant and open to any vendor wanting to test with their customers.
- Enables vendors to partner with other market participants to test Velonetic and LIMOSS defined E2E processes through scenarios.
- Potential requirement for vendors and their customers to produce test data if unavailable in the testing environment.
- LIMOSS will support with customer coordination for testing.

C Partner with an Enhanced Customer Testing Member

- Chargeable testing of scenarios tailored to vendor requirements in conjunction with your customer.
- You will create all the data needed to perform your tests.
- Velonetic will provide training material where/if possible/available.

Preparation for Stage 1

February

Onboarding & Agreement
Form Completion

Stage 1a

Structure and format
testing EDI via email

Velonetic Actions

1. Send Beta Agreement and Onboarding forms to all vendors. (Complete)
2. Once Beta Agreements and onboarding requirements have been received, we will arrange a drop-in session with vendors to discuss Stage 1 testing. Virtual sessions will be available if required.
3. Onboard vendor into the system (30 days).
4. Liaise with vendor and troubleshoot.

Vendor Actions

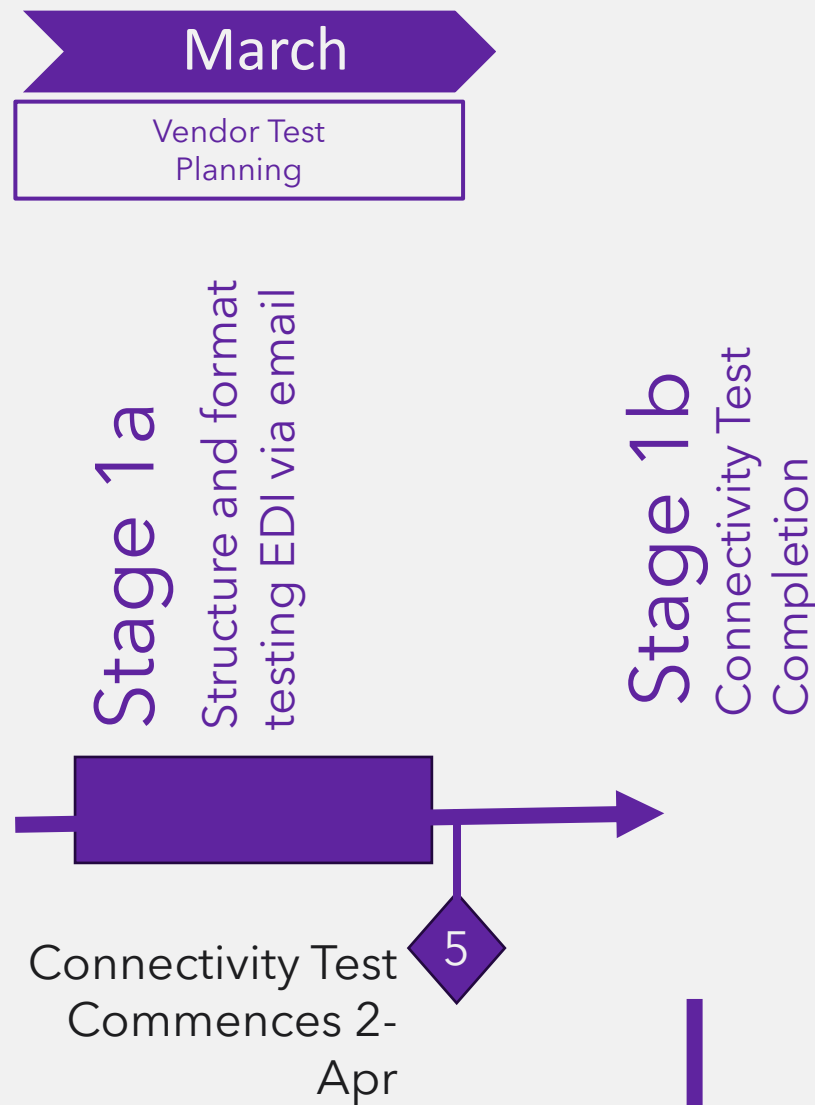
1. Carefully review and understand all documentation provided such as scope, agreements, onboarding forms, specs, etc.
2. Sign the Beta Test Agreement by 01/03/24.
3. Fill the Onboarding forms and send them back by 01/03/24
4. Provide an email address where you want to receive the EDI message (if applicable).

To move to Stage 1a:

- Scope, specs and onboarding requirements read and understood
- Beta Test Agreement signed & returned
- Onboarding forms completed, returned and checked
- Drop-in session/Virtual sessions - Stage 1 testing
- Email Address for EDI receipt provided (if applicable)
- Vendor Onboarded into the system

Stage 1a

EDI Standardise Structure and format testing via email message



Velonetic Actions

- Send required EDIs as per release schedule.
- We will send the messages in 3 batches as per schedule.
- We will liaise with your test team and hold a pre-start meeting to discuss Stage 1b.
- Liaise with vendor on defect management and troubleshooting.

Vendor Actions

- Confirm you have received the EDI message, provide feedback on the file(s) received and sign off Stage 1a.
- Set up your test team.
- Carefully review and understand the *Velonetic-IPOS-ICOS Connection Guide* published on the Velonetic website.
- Set up your environment and prepare for connection.

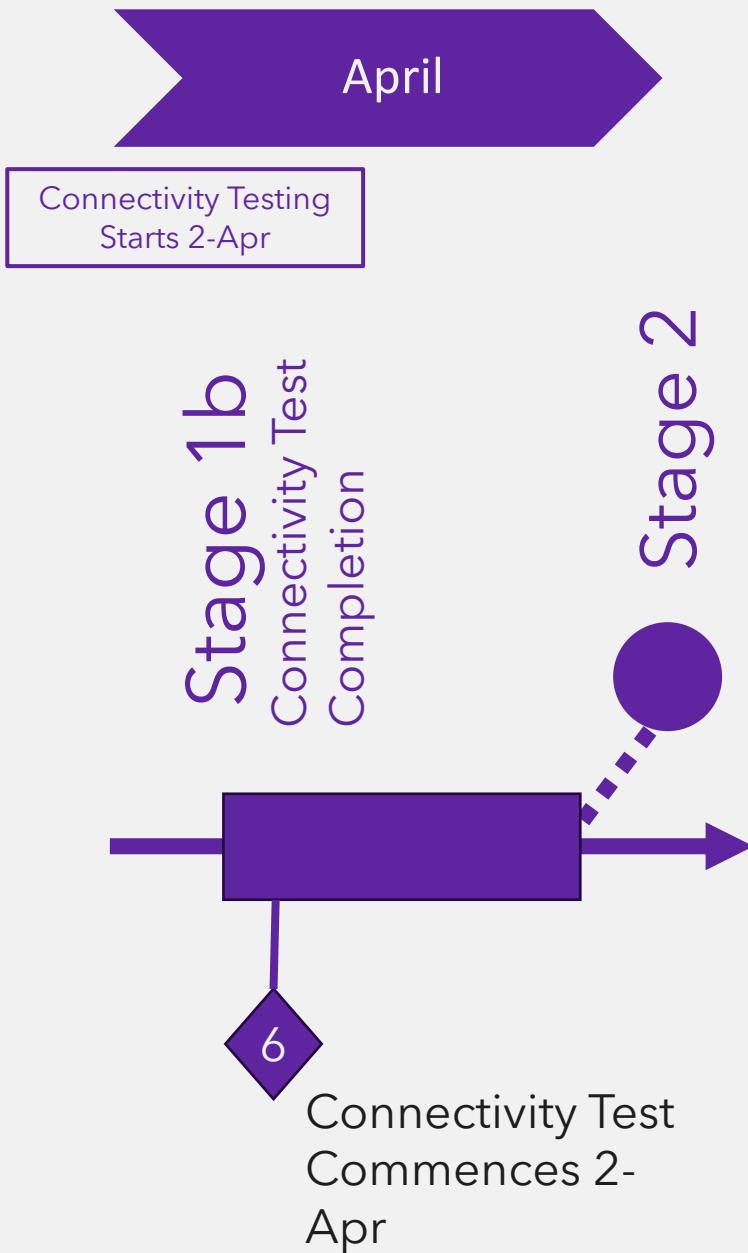
To complete 1a and move on to 1b:

- EDIs sent to vendor as per schedule
- Confirmation that EDIs have been received, feedback provided
- Test team in place
- Environment preparation
- Stage 1b planning meeting held

EDI Sample Messages Sent by Emails

Standard EDI	Sample file available
ILUCSB	08-Mar-24
WSETT	08-Mar-24
DSIGN	08-Mar-24
MCM	08-Mar-24
BSM	08-Mar-24
IPCBSM	08-Mar-24
ILUCSM	08-Mar-24
SCM	08-Mar-24
ILUCST	20-Mar-24
IPCCSM	20-Mar-24
USM	20-Mar-24
IPCDSM	20-Mar-24
LIMCLM (CLMLRC)	28-Mar-24
LIMCLM (CLMILC)	28-Mar-24
LIMRIS (Carrier)	28-Mar-24
LIMRIS (Broker)	28-Mar-24

Stage 1b



Velonetic Actions

- We will onboard you into testing environment.
- We will provide you with credentials to connect to the system.
- Coordinate with vendor’s test team to establish the testing framework, including testing requirements, environment set up and configuration.
- Sign off connectivity test and data structure (if applicable) with the vendor.

Vendor Actions

- Ensure that your network configurations are properly set up to allow communication between your systems and ASG Adept.
- Login into ASG and confirm connection. You’ll be able to see and access your required folder(s).
- Identify the data exchange formats you need to test and test them.
- Verify that the data mapping between you and the system is accurate.
- Provide feedback and sign off Stage 1b.
- Plan your approach to Stage 2 - if required.

To complete stages 1b:

- Network configurations set up to allow comms with ASG
- Onboarding to the test environment complete
- ASG Connection confirmed
- Testing complete and signed off
- Plan your approach to stage 2 - if required

Preparing for Stage 2

Velonetic Actions

- Velonetic’s level of support will depend on the chosen path.
- Provide test root scenarios for guidance.
- Depending on the chosen path, support and liaise with vendor on scenario testing, defect management and troubleshooting.

Vendor Actions

- Choose your preferred path, your activities will depend on this path (please refer to slide 5).
- Clearly define your messages requirements with your testing team. Understand the data you need to produce and what stages you want to test.
- Based on your preferred path, plan to partner with a broker/carrier to test if required.

Before commencing Stage 2 (if intending to progress to Stage 2):

- Plan your approach to Stage 2
- Define message requirements and understand test data needed
- Arrange a customer partner to test with (if required)
- Velonetic level of support will depend on the chosen path.

EDI Testing with client begins in April (once connectivity testing complete)

Stage 2

Partnering with a Customer to test



Vendor participant tracking

As of 13th March 2024, we have communicated with 31 vendors along with 2 customers testing vendor connectivity:

23 Stage 1 Testing Participant Vendors

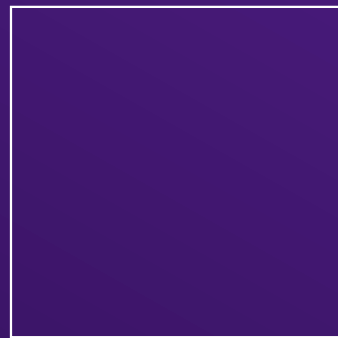
- 21 vendors have confirmed they wish to test with us.
- 2 are Customers testing vendor connectivity.
- 17 have signed the Beta Test Agreement, 5 pending.
- All Vendor participants have received the onboarding forms.
- 15 participants have returned the onboarding forms, 7 are pending.

10 have opted not to test stage 1

- 3 vendors are part of Phase 2 and won't participate in Stage 1.
- 4 are participating through their clients - either part of Vanguard or via Customer Testing.
- 3 are being contacted to review their participation - as they do process other messages.

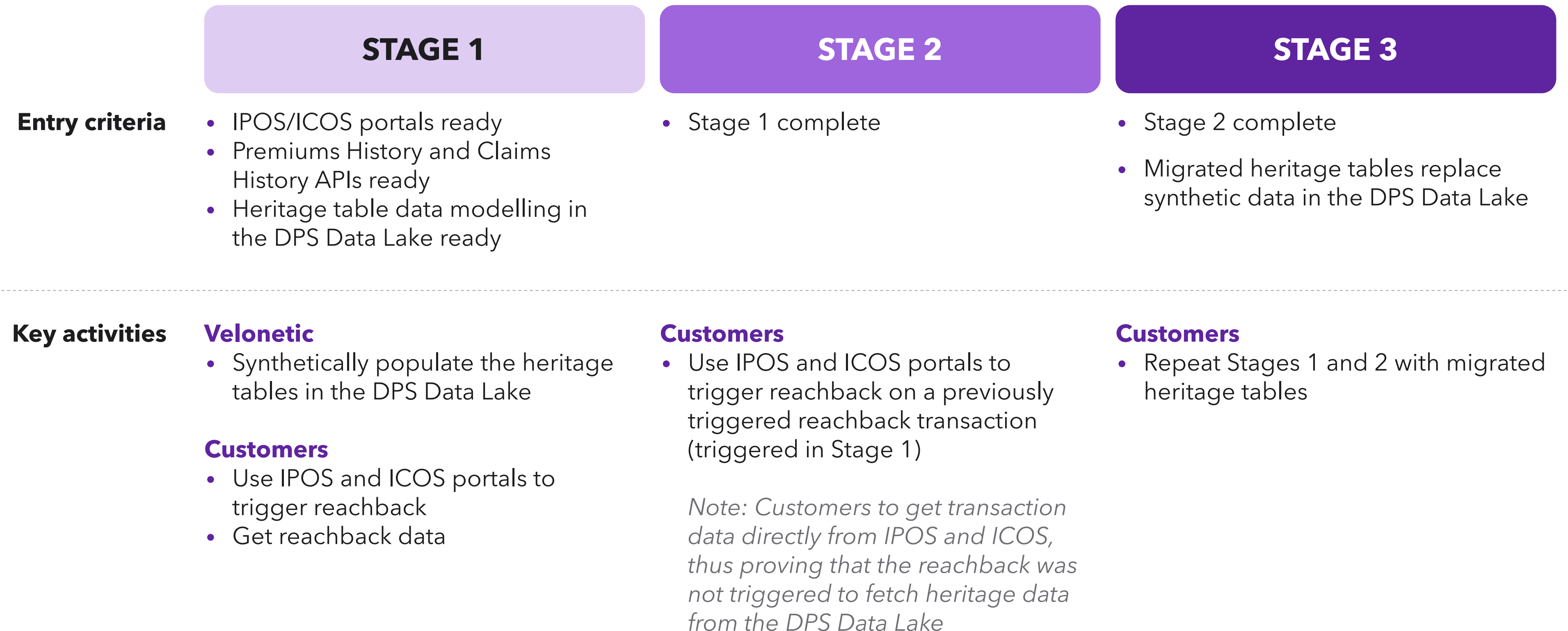
Vendor	Testing Confirmed	Contract Signed	Onboarding Form Complete	Sent to DXC	Sent to ASG	Onboarded to Test Env	Onboarded by ASG	Service Agreement Complete
AdvantageGo	✓	✓	✓					
Artificial.io	not testing	-	-					
Bross	✓	✓	✓					
Capital	not testing	-	-					
Charles Taylor	✓	✓	pending					
Datapro	✓	pending	pending					
Docosoft	✓	✓	✓					
Duck Creek	✓	pending	pending					
DXC/ISB-B	✓	✓	✓					
DXC/ISB-C	✓	✓	✓					
DXC/ISB-R	✓	✓	✓					
Ebix	✓	✓	pending					
Eurobase	✓							
GPMdev	✓	✓	✓					
Guidewire	✓	pending	ü					
MSG	not testing	-	-					
Northdoor	✓	✓	✓					
Novidea	✓	✓	✓					
Ropner	✓	✓	✓					
Trace	not testing	-	-					
Verisk	✓	✓	✓					
WCL	✓	✓	✓					
Websure	✓	✓	✓					
Ecliptic	✓	pending	pending					
SSP (Howden)	✓	pending	pending					
Morning Data	pending	-	-					
PPL	not testing	-	-					
Sunguard	pending	-	-					
TIW Group	pending	-	-					
VIPR	not testing	-	-					
Whitespace SSP	not testing	-	-					
QBE	✓	⊖	pending					
Beazley	✓	✓	✓					

Not started -Stage 1b



Appendix: Reachback testing approach

Example I Reachback functionality is tested and validated across multiple stages





Appendix: Zoom in on EDIs

EDI Status

	EDI	EDI committed	Specs or Mapping in review with ASG	Specs/Mapping pending	Published	Publication Date
1	Standard	31	0	0	31	Published 1 st March
2	Bespoke	22	0	0	22 ¹	Published 6 th March
3	A4A	18	0	18	0	Published 15 th March



- 1 **Standard:** The technical specifications for the **31** EDI Standard messages are accessible to the public on the Velonetic website
- 2 **Bespoke:** Velonetic published all **22** Customised EDI Mappings via the Velonetic website on 6th March¹
- 3 **Acord4ALL:** ACORD4ALL will be handled on a customer-by-customer basis once an NDA has been signed

EDIs testing schedule

EDI STANDARD			EDI BESPOKE			ACORD4ALL
Functionality	EDIs	Available for Customer Testing	Functionality	EDIs	Available for Customer Testing	
Claims	SCM	11/04/2024	Claims	C_SCM_EDl_to_ETS	20/06/2024	ACORD4ALL will be handled on a customer-by-customer basis once an NDA has been signed
Controlled	MCM	11/04/2024	Claims	C_SCM_EDl_to_INT	20/06/2024	
Delinked Signing	IPCBSM	11/04/2024	Claims	C_Brit_Limclm_Edi_to_Sics	20/06/2024	
Delinked Signing	IPCCSM	11/04/2024	Claims	C_LIMCLM_Edi_to_Rif	20/06/2024	
Delinked Signing	IPCDSM	11/04/2024	Claims	C_LIMCLM_EDl_to_SICS	20/06/2024	
Settlement	ILUCSB	11/04/2024	Claims	C_SCM_EDl_to_XML_Native_NoAttr	20/06/2024	
Settlement	WSETT	11/04/2024	Claims	C_SCM_EDl_to_ETS_PAD13	20/06/2024	
Signing	DSIGN	11/04/2024	Controlled	C_UWRCON_EDl_to_ETS	20/06/2024	
Signing	BSM	11/04/2024	Controlled	C_UWRCON_EDl_to_INT	20/06/2024	
Signing	ILUCSM	11/04/2024	Controlled	UCM_EDl_to_XML_Native_Noatt	20/06/2024	
Signing	USM	11/04/2024	Delinked Signing	C_BSM_EDl_to_XML_Native_NoAttr	20/06/2024	
Signing	ILUCST	11/04/2024	LORS	C_LIMORI_EDl_to_ETS	20/06/2024	
Claims	LIMCLM (CLMLRC)	22/04/2024	LORS	C_LIMORI_EDl_to_INT	20/06/2024	
Claims	LIMCLM (CLMILC)	22/04/2024	LORS	C_LORS_EDl_to_RIF	20/06/2024	
Claims	LIMCLM (Inbound)	22/04/2024	LORS	C_LORS_EDl_to_XML_Native_NoAttr	20/06/2024	
Claims	LIMCLM(CLMLRB)	22/04/2024	Signing	c_UWRSGN_EDl_to_ETS_V9	20/06/2024	
Claims	LIMCLM(CLMIILB)	22/04/2024	Signing	C_UWRSGN_EDl_to_INT_V9	20/06/2024	
Claims	LIMCLM(CLMLLB)	22/04/2024	Signing	C_SIGNIN_EDl_to_CSV_DL5001	20/06/2024	
Delinked Settlement	REDIAL	23/05/2024	Signing	C_SIGNIN_EDl_to_RIF	20/06/2024	
Delinked Signing	RESETT	23/05/2024	Signing	USM_EDl_to_XML_Native_NoAttr	20/06/2024	
Error/Confirmation	LIMRES	23/05/2024				
LORS	LIMRIS (Carrier)	20/06/2024				
LORS	LIMRIS (Broker)	20/06/2024				
LORS	LIMRES LORS (Carrier)	20/06/2024				
LORS	LIMRES LORS (Broker)	20/06/2024				
LORS	LIMRID (Incoming)	20/06/2024				
LORS	LIMRIN	20/06/2024				
LORS	LLDUWR (Incoming)	20/06/2024				
LORS	LIMRID (Outgoing)	20/06/2024				
LORS	LIMRIA	20/06/2024				
LORS	LLDUWR (Outgoing)	20/06/2024				

Current Writeback, CWT and DRI specifications status

CWT

- CWT functionality exists today (provides a mechanism for carriers to manage claims in their own workflow system by receiving notifications from Velonetic systems on a frequent basis). It is currently available to test using synthetic data
- User Guide and Data Extract information is available at the Velonetic website (<https://www.velonetic.co.uk/blueprint-two/cwt-wb-dri-information>)
- Available to test as Stage 1 once Vendor has successfully connected to the system

Write Back (WB) & DRI

- WB functionality already exists in ICOS version 1.0. It provides a mechanism for carriers to manage claims by talking directly to ICOS via an API gateway, and also to receive messages about claims throughout the claims lifecycle, including settlement of claims
- Specifications have been published on the Velonetic website (<https://www.velonetic.co.uk/blueprint-two/cwt-wb-dri-information>)
- Write back deep-dives continue to run in parallel with development

Write Back and DRI Specifications

The functional and interface specifications listed below are available for download from our website

Write Back Project Part A - Overall	Download
Write Back Project Part B - Claim Notify	Download
Write Back Project Part C - Retrieve Claim	Download
Write Back Project Part D - DRI Search	Download
Write Back Project Part E - DRI Download	Download
Write Back Project Part F - Claims Response	Download
Write Back Project Part G - DRI Upload for Carriers	Download
Write Back Claim Notify Interface Specification	Download
Write Back Claim Respond Interface Specification	Download
Write Back Retrieve Claim Data Interface Specification	Download



Vendor to EDI mapping (I/II)

EDIs	Vendor																																				
	Advant-age Go	Artificial.io	Bross	Capital	Charles Taylor	Data-pro	Doco-soft	Duck Creek	DXC/ISB-B	DXC/ISB-C	DXC/ISB-R	Ebix	Eurobase	GPMdev	Guidewire	MSG	Northdoor	Novidea	Ropner	Trace	Verisk	WCL (webconn)	Websure	Ecliptic	SSP (Howden)	Morning Data	PPL	Sunguard	TIW Group	VIPR	Whitespace SSP	QBE (+MCM, SCM, USM)	Beazley				
BSM									✓									✓	✓				✓		✓												
DSIGN									✓			✓			✓									✓													
ILUCSB									✓						✓									✓													
ILUCSM									✓			✓			✓									✓													
IPCBSM									✓									✓	✓					✓		✓											
IPCCSM															✓									✓													
IPCDSM															✓									✓													
LIMCLM (CLMILC)														✓	✓									✓		✓											
LIMCLM (CLMLRC)														✓	✓									✓		✓											
LIMCLM (CLMILB)														✓				✓	✓					✓		✓											
LIMCLM (CLMLLB)														✓				✓	✓					✓		✓											
LIMCLM (CLMLRB)														✓				✓	✓					✓		✓											
LIMRES														✓				✓	✓					✓		✓										✓	
LIMRES LORS																																					
LIMRIA																																					
LIMRID																																					
LIMRIN																																					
LIMRIS																																					
LLDUWR																																					

Vendor to EDI mapping (II/II)

EDIs	Vendor																																			
	Advant-age Go	Artificial.io	Bross	Capital	Charles Taylor	Data-pro	Doco-soft	Duck Creek	DXC/ISB-B	DXC/ISB-C	DXC/ISB-R	Ebix	Eurobase	GPMdev	Guidewire	MSG	Northdoor	Novidea	Ropner	Trace	Verisk	WCL (webconn)	Websure	Ecliptic	SSP (Howden)	Morning Data	PPL	Sunguard	TIW Group	VIPR	Whitespace SSP	QBE (+MCM, SCM, USM)	Beazley			
MCM									✓								✓							✓											✓	
REDIAL																								✓												
RESETT																								✓												
SCM									✓						✓		✓							✓												✓
USM															✓		✓							✓												
WSETT									✓			✓			✓									✓												
LIMORI																																				
LIMCLM														✓				✓	✓							✓										
LIMRID																																				
LLDUWR																																				
LIMORIL																																				
LIMRIN																																				
LIMRIS																																				
Writeback							✓								✓							✓	✓													
Portal																																				
CWT - xml																																				
CWT - csv																																				
DRI							✓							✓	✓			✓	✓				✓	✓		✓										



Appendix: Data migration assurance

Heritage data will be migrated from IMR & Mainframe

IMR

Mainframe

Pre-requisites for DPS

- New IMR application built for DPS: Document Repository Services ("DRS")
- FileNet, DB2 and Storage are all upgraded

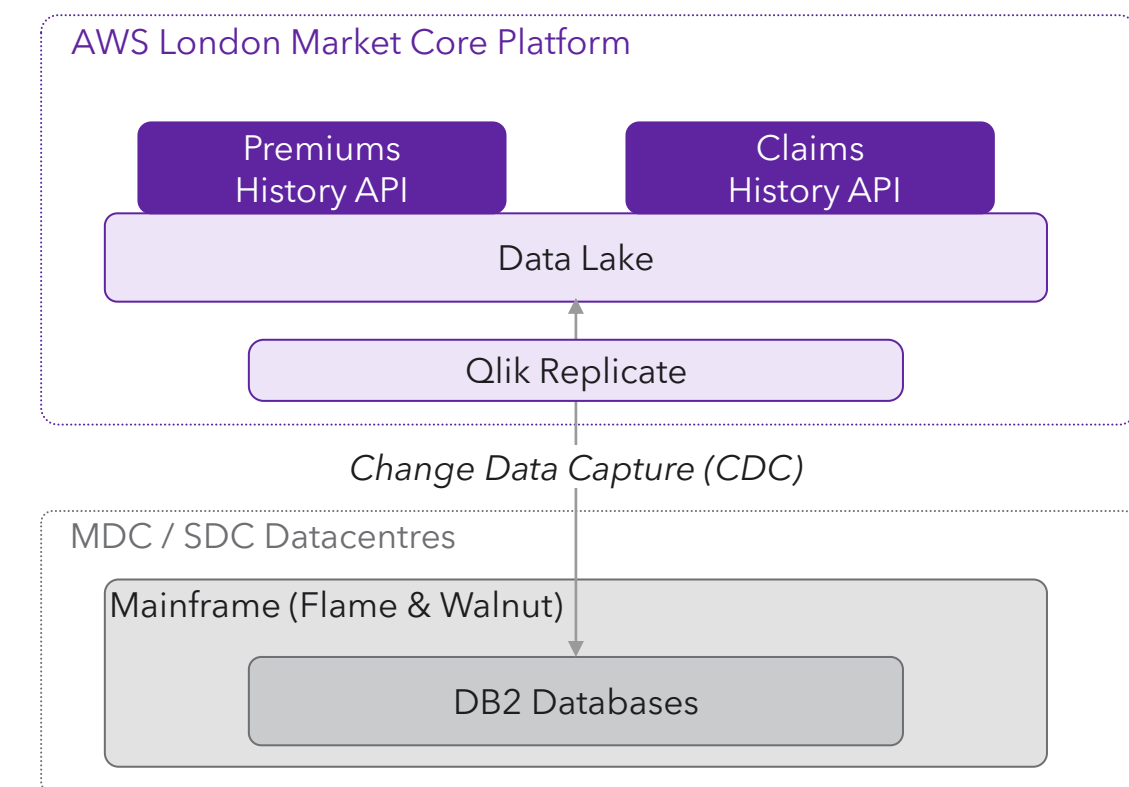
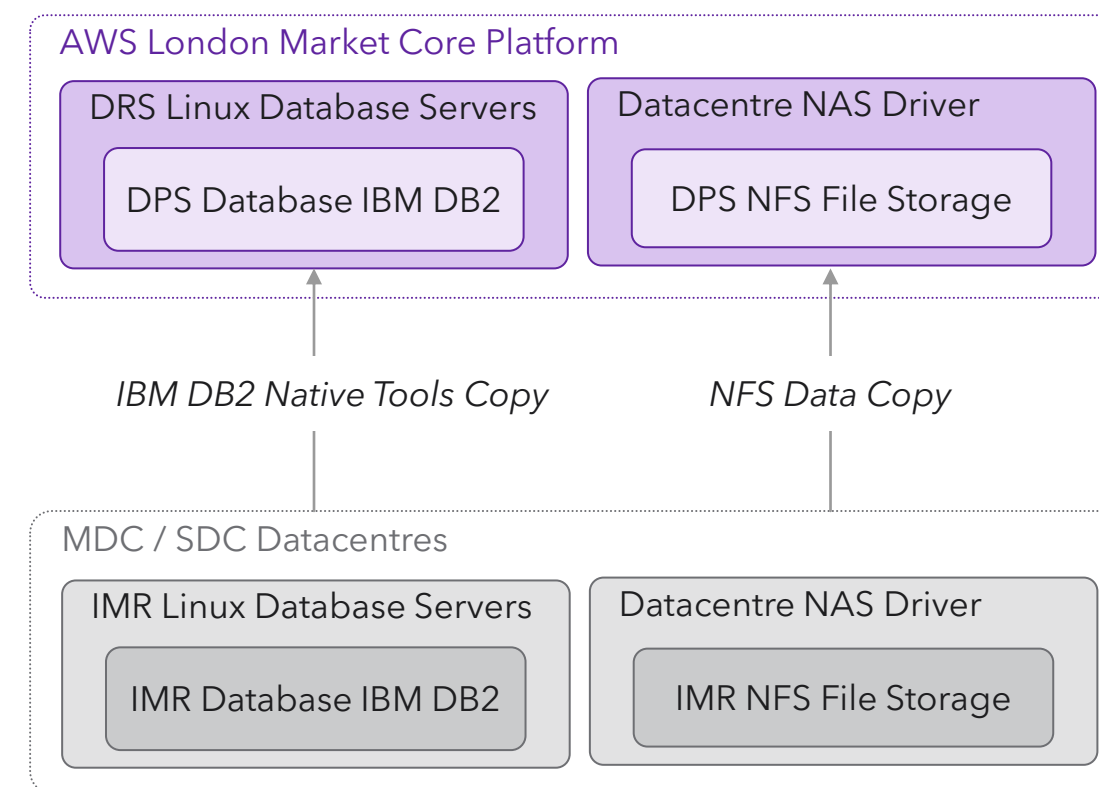
- Data lake ready to receive historical data
- History APIs built and allow DPS services to access transaction history from data lake

Impact on Heritage

- Heritage IMR continues until DPS live
- Infra decommissioned once warranty complete

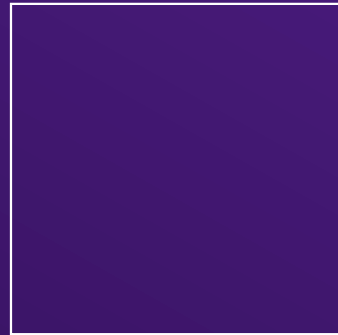
- Heritage services continue until DPS live
- Only Lloyd's Settlement continues after DPS live
- Dependencies on Mainframe must be removed to allow decommissioning

Data transfer process



Execution

- As ~120TB of data to migrate, will begin with 1 initial transfer, followed by incremental updates
- Will minimise work-in-progress using ex BPS Processes + Overtime + a Cut Off Point Prior to Migration
- Migration to commence in April 2024, pending successful testing



Appendix: Constraints on dual run

Why not test during a dual run? 4 key challenges, with negative implications on the customer as well as Velonetic



Data security and integrity

Would require testing DPS with FERN live data posing several security constraints

Synchronising both systems of records consistency for duplication and consistency adds complexity and risk of error

Synchronising the data also means all transactions move at speed of slower system, negating DPS value



Customer Impact

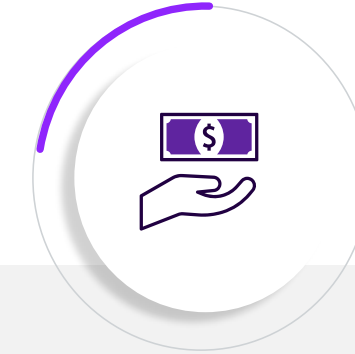
Customers will need to enact substantial changes/upgrades on their side to enable reconciliation of EDIs split between FERN and DPS in a single file

Additional risk to customers given all participants in a risk contract must be on the same system of record



Contractual limitations

Neither FERN nor DPSA currently designed to work in parallel, there are substantial contractual limitations on having a dual run



Cost impact

Operations teams currently resourced and designed to operate on single system of record, dual run likely to increase need for manual reconciliation beyond current capacity

Thank you

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