



ECB
DG-MIP/MIS
EAT Team

EAT execution status

TIPS Contact Group
9th Meeting on 28 August 2018

Eurosystem Acceptance Testing for TIPS

- EAT stage is to provide the MIB with an independent assessment on the quality of the TIPS service and its compliance with URD and UDFS, before the start of the Pilot testing phase.
- The ECB EAT team is in charge of preparing and conducting the functional tests on TIPS for the EAT on behalf of the Eurosystem.
- EAT execution for TIPS divided in three phases following the development cycles:

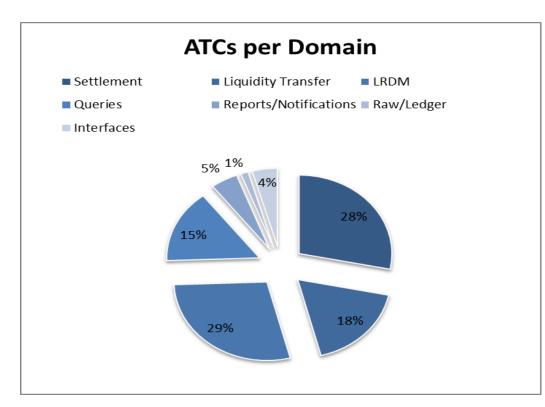


 EAT is executed in the EAC TIPS dedicated environment connected to the ECB testing infrastructure via NSP (only for testing purposes).

EAT3 scope

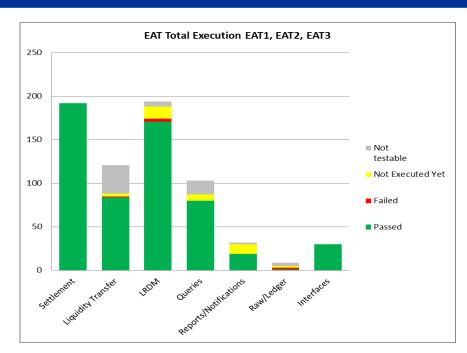
- EAT3 covered
 - the regression tests (EAT1+EAT2) with the full software platform
 - non-core functionalities (e.g. reports and the general ledger file)
 - TIPS GUI
- The cumulative views on Requirements and Atomic Test Cases are shown below:

| Domain | #URD | #ATCs | %total ATCs | |
|-----------------------|------|-------|----------------|--|
| | | | | |
| Settlement | 73 | 192 | 28.19% | |
| Liquidity Transfer | 16 | 121 | 17.77% | |
| LRDM | 27 | 194 | 28.49% | |
| Queries | 8 | 103 | 15.12% | |
| Reports/Notifications | 19 | 32 | 4.70% | |
| Raw/Ledger | 8 | 9 | 1.32% | |
| Interfaces | 30 | 30 | 4.41% | |
| Total | 181 | 681 | | |



EAT cumulative testing execution status

| Domain | #ATCs testable | Passed | % | Failed | % | Not Executed Yet | % |
|-----------------------|-------------------|--------|------|--------|-----|------------------------|-----|
| | | | | | | | |
| Settlement | 192 | 192 | 100% | 0 | 0% | 0 | 0% |
| Liquidity Transfer | 88 | 84 | 95% | 1 | 1% | 3 | 3% |
| LRDM | 188 | 171 | 91% | 3 | 2% | 14 | 7% |
| Queries | 87 | 80 | 92% | 0 | 0% | 7 | 8% |
| Reports/Notifications | 30 | 19 | 63% | 0 | 0% | 11 | 37% |
| Raw/Ledger | 5 | 1 | 20% | 2 | 40% | 2 | 40% |
| Interfaces | 30 | 30 | 100% | 0 | 0% | 0 | 0% |
| Total | 620 | 577 | 93% | 6 | 1% | 37 | 6% |



93% of the testable test cases were passed

6 Test cases are failed

37 Test cases (6%) are still to be executed:

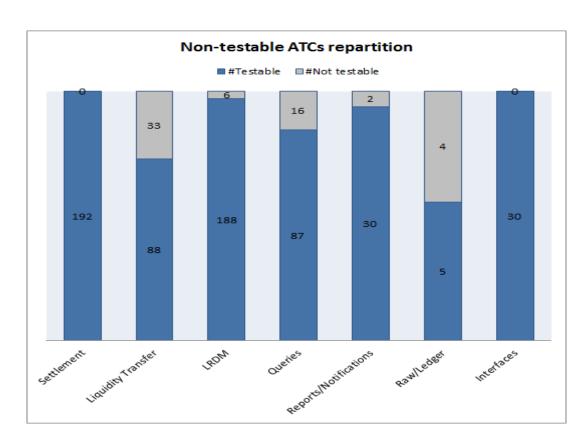
- 3 test cases in the Liquidity Transfer domain
- 14 in the LRDM domain
- 7 in the Query domain
- 13 in the Raw data/General Ledger/Report and Notitification

The most of non executed test cases are related to the TIPS GUI: the initial setup of CRDM and of the reference data needed to access to the TIPS GUI, required more time than expected.

A clarification note will be issued by the Service Provider.

Non-testable requirements/test cases

| Domain | #ATCs | #Testable | #Not testable | %Not testable | |
|-----------------------|-------|-----------|------------------|------------------|--|
| | | | | | |
| Settlement | 192 | 192 | 0 | 0.00% | |
| Liquidity Transfer | 121 | 88 | 33 | 27.27% | |
| LRDM | 194 | 188 | 6 | 3.09% | |
| Queries | 103 | 87 | 16 | 15.53% | |
| Reports/Notifications | 32 | 30 | 2 | 6.25% | |
| Raw/Ledger | 9 | 5 | 4 | 44.44% | |
| Interfaces | 30 | 30 | 0 | 0.00% | |
| Total | 681 | 620 | 61 | | |

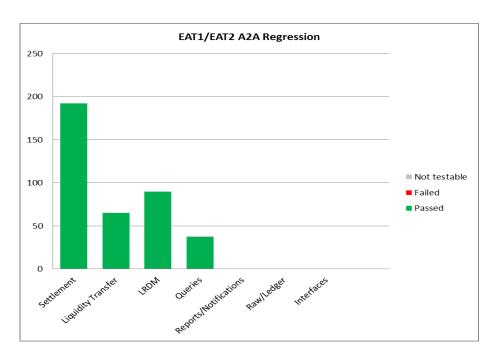


61 test cases have been classified as "not-testable" mainly for two reasons:

- Requirements/test cases that require a RTGS connected to EAT TIPS testing environment EAC. Not testable since no RTGS is connected to EAC.
- Requirements/test cases pertain to the TIPS Operator and therefore could not be executed by the EAT.

EAT3 non regression results

| Domain | #ATCs | #ATCs EAT1/EAT2 Regression A2A | Passed | % | Failed | % | Not testable | % |
|-----------------------|-------|---|--------|---------|--------|-------|-----------------|-------|
| | | | | | | | | |
| Settlement | 192 | 192 | 192 | 100.00% | 0 | 0.00% | 0 | 0.00% |
| Liquidity Transfer | 121 | 65 | 65 | 100.00% | 0 | 0.00% | 0 | 0.00% |
| LRDM | 194 | 90 | 90 | 100.00% | 0 | 0.00% | 0 | 0.00% |
| Queries | 103 | 38 | 37 | 97.37% | 0 | 0.00% | 1 | 2.63% |
| Reports/Notifications | 32 | | | | | | 0 | |
| Raw/Ledger | 9 | | | | | | 0 | |
| Interfaces | 30 | | | | | | 0 | |
| Total | 681 | 385 | 384 | 99.74% | 0 | 0.00% | 1 | 0.26% |



 Overall, 384 A2A non regression test cases were re-executed successfully.

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EAT CRDM

- CRDM delivery was planned to be delivered on 31/07
- The initial EAT approach (ATA) was therefore anticipating only a partial completion by EAT3 milestone

| Domain | #ATCs | Passed | % | Failed | % | Not Executed Yet | % |
|--------|-------|--------|--------|--------|-------|------------------------|-------|
| CRDM | 127 | 124 | 97.64% | 0 | 0.00% | 3 | 2.36% |

- Overall, 98% of the testable requirements/test cases were successfully executed
- Still 3 test cases to run
- There are also 37 not testable requirements/test cases linked to TIPS operators (EAT can not execute these test cases) and generic requirements that are also included in more specific requirements.
- A clarification note will be prepared by Service Provider on the way to correctly configure CRDM data for TIPS

Conclusion

- EAT team has given the green light to the MIB for the start of the Pilot testing:
 - All critical functional test cases for the start of the pilot testing have been executed successfully;
 - No defects with high criticality have been discovered during EAT;
 - A resolution timeline for all discovered defects with medium or low criticality is available;
 - A system test exit meeting took place on 21/8/2018 where the ECB and the 4CB jointly agreed that the test stage has been completed successfully along with the criteria given above.
- A clarification note will be prepared by the TIPS service provider on the way to correctly configure CRDM reference data for TIPS
- EAT team will **finalise** EAT team will finalise the testing of the few remaining CRDM and U2A test cases for TIPS.

Thank you for the attention!

The EAT team can be contacted via the TIPS Project team



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Appendix A - Testing domains

- SETT Settlement domain, (chapter 3 of URD) covering three subdomains: (a) instant payments, (b) recalls and (c) investigation process
- LQMG Liquidity management domain (chapter 4 of URD) all functionalities pertaining to liquidity transfers from and to a RTGS.
- LRDM Local reference data management domain (chapter 5 of URD) all functionalities linked to the creation, update, deletion of static data needed for TIPS.
- QURY Query domain (chapter 7 of URD), covering queries on account balances, CMB limits and payment transaction status.
- REPT Report domain (chapter 6 of URD), all functionalities linked to the generation of statements of account turnover and statement of accounts.
- INTF Interface domain (chapter 8 of URD), general requirements for communication with the TIPS platform in both U2A and A2A modes.
- OTHR Other domain (chapter 9 of URD), other functionalities, namely raw data, general ledger and list of participants.