



# T2-T2S Connecting to the Eurosystem Single Market Infrastructure Gateway

Update on connectivity testing Prod

# T2-T2S connecting to ESMIG Prod Status Summary





- 1 Connectivity tests next milestones
- 2 Preliminary operations with NSP
- 3 Lesson Learnt
- 4 Validation of U2A for connectivity test and usage of Probe pages
- 5 Validation of A2A connectivity test
- T2 Service Desk support



1 - Connectivity test – next milestones



- CSLD.NCOP1 Network connectivity tests on production will start on 1<sup>st</sup> May 2022 - These are mandatory tests Participants have to perform on the production environment before the start of their pre-migration activities.
- CSLD.NCOP2 Network connectivity tests on production have to be completed within 31<sup>st</sup> July 2022 - Participants have completed the connectivity testing on the production environment and are ready to start the pre-migration activities.







Network Service Provider Selection (allegedly, already done)

TARGET Services Actors registration is mainly supported by the establishment of a contractual relationship between them and the selected NSP. Once done, they are registered in the NSP Website and their representatives (admin) nominated.

- Two different CGU (Closed Group of Users) subscriptions
  - CBs
  - Target Service Actors (excluding CBs)

The NSP shall create and manage CGUs containing the relevant TARGET Services Actors for both the Production environment (PROD) and the Test environment (UTEST and EAC), one CGU for each environment and for each Eurosystem Market Infrastructure (T2, T2S, TIPS, ECMS). The subscription to a CGU, and any subsequent modification to such subscription, are arranged through an electronic workflow on the Internet

Designation of the Authorized approvers

A limited number of people is entitled per institution to submit the NSP tickets for CGU subscription. Each CB needs to approve or reject these tickets.

The ESMIG Portal is the same for all the TARGET services (T2, T2S, ECMS and TIPS)



### 3 - Lessons learnt



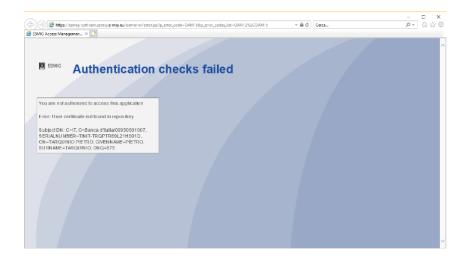
- The previous connectivity testing phase for User Testing has highlighted possible different testing results, yet all valid to determine if the connectivity is successfully in place
- These results depend on the presence of already existing CRDM configurations as well as the status of the backend applications that change over the testing period
- Benefitting from this previous experience, the deployment of the backend modules will be organized to take such needs of clarity into due account
- Back-end modules in Production will tentatively be installed on 23 July 2022, so the results to consider a test successful will need to take into account this information



4 - Validation of U2A for connectivity test



Users that were never configured in PROD will get the error "You are not authorized to access this application" (see screenshot)



For users that were already configured, it is correct that TIPS service (or T2S) is already visible in PROD environment; depending on privileges already assigned to the user they will be able see the page where there is an option to select the applications.

Choose a Service			
☐ <b>♦</b> TIPS			
Choose a Service			
□ <b>♦</b> T2		<b>♦</b> TIPS	
Choose a Service			
□ <b>♦</b> T2	□ <b>¢</b> T2S	□ <b>¢</b> TIPS	











As the U2A applications backend modules (CRDM, CLM, ...) will only become available at a later stage, it is highly recommended for participants to make some tests related to connectivity in advance using the Probe pages. This will ensure all the local settings and NSP configurations are correct so avoiding late detection.

Probe pages can also be useful when troubleshooting access to the U2A applications later.

The connection to the Probe page is successful if the response includes "Status: ACTIVE" or "Status: UP 50"

In case the Probe pages cannot be accessed, after verification with its NSP, the participant should report it to its National Service Desk (NSD). The NSD will then submit the evidence to TARGET Service Desk (TSD) for analysis.

There are 2 types of Probe pages:

- 1. Non Authenticated Probe pages: used to Check external connectivity with 4CB reverse proxies.
- 2. Authenticated Probe pages: to check external connectivity with 4CB reverse proxies and IAM authorization.









### 4 - Validation of U2A and usage of Probe pages for connectivity test

Probe pages are built in order to allow faster detection of possible issue when a participant is receiving an error accessing the T2 Production Application via ESMIG.

Probe pages are not bound to the application, therefore they are used to do a connectivity test before invoking the application and facilitate the evaluation of where the error is.

They are of two types: unauthenticated and authenticated

- The unauthenticated test is used to verify the functionality of the proxies.
- The authenticated test is for testing the IAM so the sequence should be:
  - unauthenticated test -> proxy ok
  - 2. authenticated test -> IAM ok
  - 3. application test -> Appl ok

Probe pages analysis will help in isolating a problem (if any) as they segment the access so that it is possible to verify the different components without having interactions with the following ones.

A classic scenario is:

- 1. the user connects to the application and gets an error;
- 2. test the unauthenticated probe and so we can understand if the proxies are ok;
- 3. test the authenticated probe and so we know if the IAM is ok

Participant sends to the T2 Service Desk the results of the 3 tests (access to: application, not authenticated and authenticated) so that relevant people have all the elements to identify where the problem is and intervene in a faster way.



## 4 - Probe pages – SIA url







### **SIA Non Authenticated Probe pages:**

https://t2-tkt.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-crdm.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-dmt.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-dwh.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-clm.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-rtgs.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-bdm.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-econs.u2a.sianet.sia.eu/probe/probeSUrl-sia.html
https://t2-econs.u2a.sianet.sia.eu/probe/probeSUrl-sia.html

### **SIA Authenticated Probe pages**:

https://t2-tkt.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-crdm.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-dmt.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-dwh.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-clm.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-rtgs.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-bdm.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-econs.u2a.sianet.sia.eu/probe/probepageauth.html
https://t2-bill.u2a.sianet.sia.eu/probe/probepageauth.html



# 4 - Probe pages - SWIFT url







### **SWIFT Non Authenticated Probe pages**:

https://t2-tkt.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-crdm.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-dmt.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-dwh.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-clm.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-rtgs.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-bdm.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-bdm.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-econs.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html
https://t2-bill.t2.swiftnet.sipn.swift.com/probe/probeSUrl-swift.html

### **SWIFT Authenticated Probe pages**:

https://t2-tkt.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-crdm.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-dmt.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-dwh.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-clm.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-rtgs.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-bdm.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-econs.t2.swiftnet.sipn.swift.com/probe/probepageauth.html
https://t2-bill.t2.swiftnet.sipn.swift.com/probe/probepageauth.html







# Before deployment of the backend modules (tentatively 23/07/2022) the user could receive:

• For Store and Forward traffic, upon subscription for the Delivery Notification to get the confirmation **from the NSP** that the message was delivered to T2 (for example they could have an NSP GUI showing the following):



• For Real Time traffic, the admi.007 - that will confirm correct reception of the message from the ESMIG. This message is sent after 40 seconds to inform about the triggering of the timeout management process. This is the expected behavior **if no backend module is present** 

In any case the T2 Service Desk can be contacted by the CBs (<u>t2@target-ssp.eu</u>) to get the evidences of messages/files received by the platform with a specific request (**that must include DN used and exact time of the message** together with the confirmation that the ack from the NSP was correctly received).

Any of above outcome can be considered as the A2A connectivity is successful.









5 - Validation of A2A connectivity test – backend modules installed

- After deployment of the backend modules tentatively foreseen 23/07/2022:
- I business validation errors will trigger the relevant business response message (eg. Pacs.002, camt.025 and reda.xxx according to the service/component the message has been sent to)
- I the response message will return the relevant error and status 'RJCT' in the Application Header (below an extract response to a pacs010)
- </AppHdr></IGXMApplicationData><IGXMMessage><Document xmlns="urn:iso:std:iso:20022:tech:xsd:pacs.002.001.10">
  <FIToFIPmtStsRpt><GrpHdr><Msgld>NONREF</Msgld><CreDtTm>2022-XXXX23T15:53:45.969+00:00</CreDtTm></GrpHdr><TxInfAndSts><OrgnIGrpInf><OrgnIMsgld>TEST</OrgnIMsgld><OrgnIMsgld><OrgnIMsgNmId>pacs.010.001.03</OrgnIMsgNmId></OrgnIGrpInf><OrgnIInstrId>TEST1</OrgnIInstrId><OrgnIInstrId>TEST1</OrgnIEndToEndId>TEST1</OrgnIEndToEndId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</OrgnIIInstrId>TEST1</Org

The error will be consistent and can be checked in the UDFS

I Admi.007 are anyway still possible to be received in case of errors.

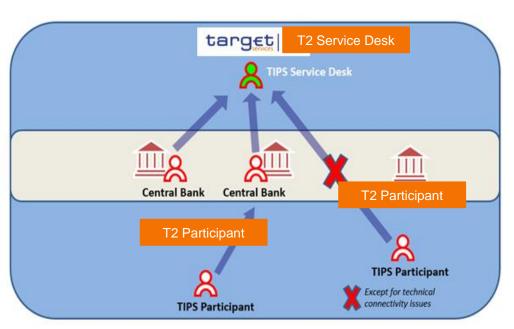


# 6 - Service Desk support



The operations management of T2 is shared among all the T2 Actors and is structured in three levels of responsibility:





- On the topmost level is the T2 Service Desk. The T2 Operator has visibility over the whole platform
- NCBs are the entry point for all support requests coming from the participants
- The T2 Participants can interact directly with the T2 Service Desk only for requests related to pure connectivity matters
- Email addresses:
  - Production <u>t2@target-ssp.eu</u>
  - Test <u>t2-test@target-ssp.eu</u>

