

# 27 February 2025 major incident of the TARGET Services – post-mortem

T2 CONTACT GROUP

22 October 2025



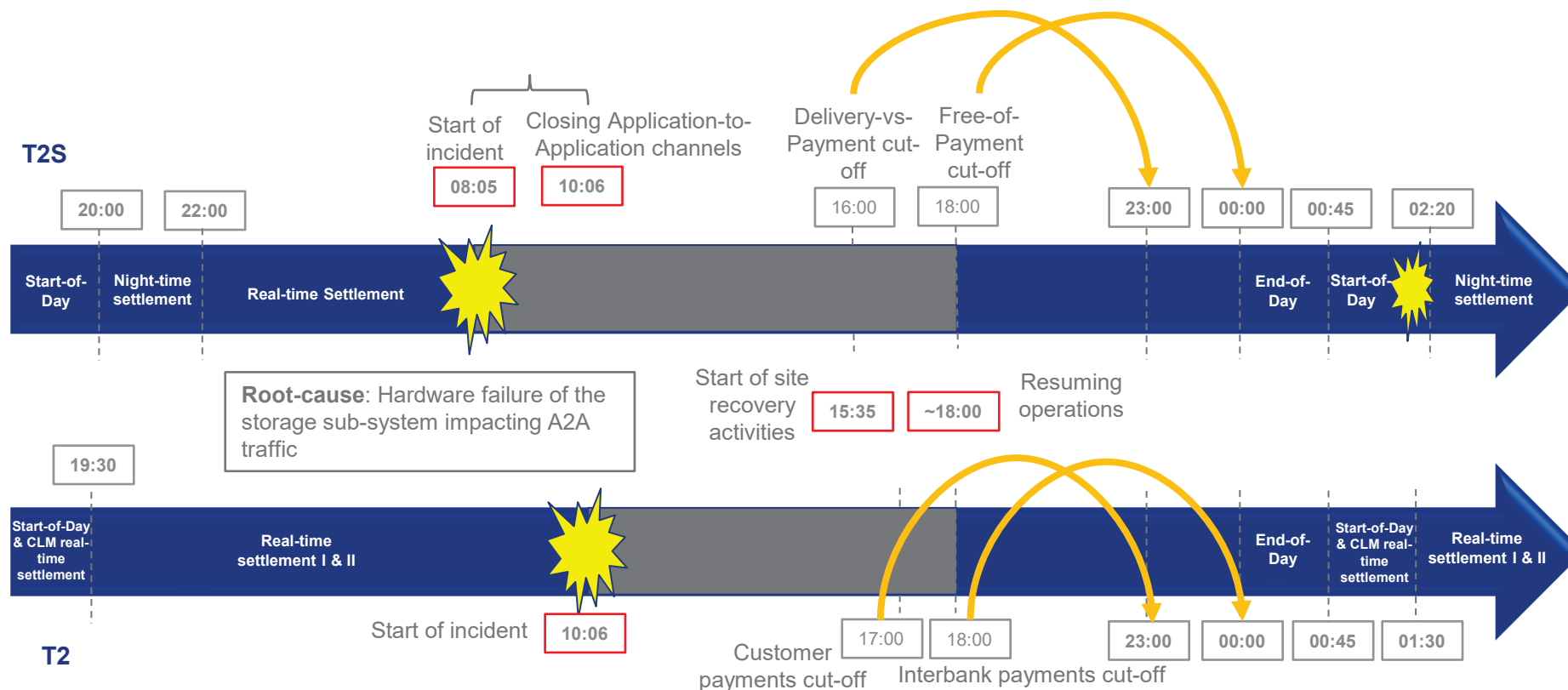
**Yiota Pentaliotou**  
DG-MIP/MIM

# Overview

- 1 Incident chronology
- 2 Root cause of the incident
- 3 Post-mortem

# Incident chronology

ECB-RESTRICTED



## Root cause of the incident

- ❑ A subsequent analysis confirmed that the disruption was caused from the **simultaneous unexpected failure of a critical hardware component and its redundancy mechanism**
- ❑ The hardware vendor has confirmed that **this scenario was unprecedented across all similar vendor-supported installations worldwide**. The vendor committed to providing an update to address the identified vulnerability
- ❑ In the interim, **enhanced monitoring mechanisms have been implemented** to enable the rapid detection and mitigation of any recurrence of similar issues

# Post-mortem

- ❑ The ECB Executive Board mandated the Market Infrastructure Board (MIB) to conduct a comprehensive analysis to **identify essential lessons learned** with the objective of preventing future occurrences
- ❑ The outcome of this analysis, together with a comprehensive action plan that includes **20 actions** covering areas such as **technical monitoring**, **business continuity arrangements**, **decision-making**, and **communication**, are included in the post-mortem report
  - Several **time-critical measures were implemented immediately** following the incident, while the remaining actions are scheduled for completion by the end of this year
- ❑ The **MIB will closely monitor the timely and effective implementation of this action plan**. Regular progress updates will be shared with the relevant market fora
- ❑ The report was **sent to the Governing Council for approval at the end of June** and a redacted version of the report was shared with the Ami-Pay and Ami-Seco in July

## Post-mortem measures (1/7)

| Item reference | Action                                                                                                                                                        | Status                                                                                          |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 1              | Replacement of faulty physical component                                                                                                                      | Completed    |
| 2              | Detailed checklist for vendor's technical support, to be followed in case of the fault reoccurrence to prevent the impacts to manifest                        | Completed    |
| 3              | Vendor to develop and deploy the update to address the occurred vulnerability.                                                                                | Completed    |
| 4              | Enhancement of the existing alarm and the introduction of an automatic call to the relevant team                                                              | Completed    |
| 5              | Assess and discuss the alignment of decision-making practices across T2 and T2S for the site and regional recovery activities with the T2 and T2S governances | Completed  |

## Post-mortem measures (2/7)

| Item reference | Action                                                                                                                        | Status                                                                                          |
|----------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| 6              | Review the Business Continuity Management and the IT Service Continuity Management as a follow up of the incident.            | Completed    |
| 7              | ECONS II to cope with a higher number of active user sessions than currently envisaged.                                       | Completed    |
| 8              | Swift implementation of T2 CR-121.<br><i>This CR relates to making the closing balances of ECONS II available in the DWH.</i> | In progress  |

## Post-mortem measures (3/7)

| Item reference | Action                                                                                                                                                                                                                                                                                                                                                                                  | Status                                                                                            |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 9              | Participants relying on T2S for the provision of collateral for settlement in ECONS II shall have back up plans to cover the scenario where T2S is not available. In addition, the Eurosystem will be investigate further possible sources for liquidity injection to ECONS II accounts and make the necessary adjustments to the list of eligible options described in the TARGET MOP. | In progress    |
| 10             | Operational Readiness Tests involving ECONS II shall cover the scenario where T2S is not available.                                                                                                                                                                                                                                                                                     | In progress    |
| 11             | Participants shall be reminded of the different categories of transactions to be settled under contingency as well as the steps undertaken to process them sequentially when ECONS II is activated. Specific presentations could be prepared and shared with National Stakeholders Groups.                                                                                              | In progress  |



## Post-mortem measures (4/7)

| Item reference | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Status                                                                                                                                                                |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12             | T2 procedures shall be further enhanced to clarify that other critical transactions not clearly covered by the Very Critical /Critical definitions found in the TARGET Manual of Procedures (MOP)/Infoguide can be proposed for settlement in ECONS II during the crisis/settlement managers' conference calls and shall be assessed on a case-by-case basis. Furthermore, the current definition of Very Critical/Critical transactions will be reviewed in view of the experience gathered in this incident. | <b>Completed</b>                                                                   |
| 13             | Collect detailed market feedback on the effectiveness of cut-off delays following a long-lasting outage and prepare with the T2 and T2S governances' general guidance for incident situations to support understanding the effectiveness of cut-off adjustments.                                                                                                                                                                                                                                               | <b>To be started</b> <br>(survey to be launched shortly after ad-hoc AMI-Pay/Seco) |

## Post-mortem measures (5/7)

| Item reference | Action                                                                                                                                                                                                                                                                                                                                                                   | Status                                                                                                                                                                                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 14             | Reflect with the T2 governance upon general guidance as to how longer incidents would typically be handled including extreme scenarios under which the completion of the business day would be executed on ECONS II. The outcome of this work should be shared with National Stakeholder Groups and reflected in the organisation of Operational Readiness Tests (ORTs). | <b>To be started</b> <br>(will be based on the feedback received through the survey for item ref.13)      |
| 15             | Discuss with ESMA and relevant national competent authorities the possibility to put in place a standard procedure for waving penalties after major incidents impacting settlement efficiency.                                                                                                                                                                           | <b>In progress</b> <br>(ECB, as T2S operator, has raised the request to ESMA and is waiting for feedback) |

## Post-mortem measures (6/7)

| Item reference | Action                                                                                                                                                                                                                                                                                                                               | Status                                                                                                                                                                                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16             | Assess whether, in exceptional circumstances, joint T2 and T2S calls of settlement managers or crisis managers could be organised. For instance, when both services are affected by the same incident and decisions have to be taken jointly e.g. for activating an intra/inter-region failover or for activating a system recovery. | In progress                                                                                               |
| 17             | Coordinate a review within the T2S governance of the T2S MOP standard communication templates based on the feedback from the market (e.g. especially with regard to proposing a clearer standard text when the T2S crisis managers decide to skip the daily calculation of penalties).                                               | Completed <br>(general revision + added clarity on what skipping of daily calculation of penalties means) |

## Post-mortem measures (7/7)

| Item reference | Action                                                                                                                                                                                                                       | Status                                                                                                                                                                 |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18             | Coordinate the update with the T2 governance of the T2 crisis management handbook so that the recommendation to stop sending (or to continue sending) is considered in the first T2 crisis manager calls.                    | <b>To be started</b>                                                                |
| 19             | Investigate how participants to T2 and T2S Crisis Communication Groups may be prewarned some minutes ahead of the launch of the call.                                                                                        | <b>Completed</b> <br>(the SMS & email to come 5 minutes in advance of the dial-out) |
| 20             | Elaborate criteria with the T2 and T2S governances which would guide the T2 and T2S crisis managers on the activation of the respective Crisis Communication Groups. These criteria will be shared with market participants. | <b>In progress</b> <br>(finalisation of criteria ongoing on T2 and T2S side)       |