TARGET Services incidents in 2020 and ECB response

ECB OMG meeting

8 December 2021

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TARGET Services incidents in 2020

- 16 March: TARGET2 Outage of 2 hours
- 25-26 May: T2S Creation of negative positions/balances
- 11 August: TARGET2 Outage of 6 hours
- 23 October: TARGET2 Outage of 10 hours
- 13 November: TARGET2 No EUR liquidity transfers to T2S before night time settlement

ECB announces independent review of payments system outage

16 November 2020

- Independent review to be launched on payments IT infrastructure
- TARGET2 incident on 23 October 2020 caused outage lasting almost 10 hours
- Findings of the review to be published by the second quarter of 2021

The European Central Bank (ECB) will launch an independent review of an incident that affected its real-time gross settlement system TARGET2 on 23 October 2020, causing an outage for almost 10 hours. An initial investigation determined that a software defect in a network device was the specific technical cause of the incident. The independent review will also take into account other incidents that affected TARGET Services during 2020, including those affecting directly and indirectly TARGET2 Securities (T2S), the securities settlement platform operated by the Eurosystem.

The independent review will allow the Eurosystem to draw lessons from the incidents and address them. It will look into the robustness of the business continuity model, the adequacy of the regular recovery tests, the efficiency of the change management procedures and the communication protocols.

The main findings of the review will be shared with market participants and made public by the second quarter of 2021.
Scope of the external review and findings

Deloitte launched its review on 21 December 2020

<table>
<thead>
<tr>
<th>Workstream I</th>
<th>Change &amp; release management</th>
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</thead>
<tbody>
<tr>
<td>Workstream II</td>
<td>Business continuity management</td>
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<tr>
<td>Workstream III</td>
<td>Fail-over and recovery tests</td>
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<tr>
<td>Workstream IV</td>
<td>Communication protocols</td>
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<tr>
<td>Workstream V</td>
<td>Governance</td>
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<tr>
<td>Workstream VI</td>
<td>Data centre &amp; IT operations</td>
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</tbody>
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Final report discussed at the GovC of 28 July 2021

Deloitte identified **40 individual findings** that led them to conclude that, even though none of them was rated with severity ‘very high’, they solely or in total are likely symptoms of larger critical overarching organisational, control and/or governance issues. **Deloitte advised that their recommendations are addressed urgently.**
Deloitte’s overarching issues and recommendations

Overarching issues

1. Deficiencies concerning the planning and implementation of changes
2. Communication during the incident resolution
3. Continuous improvement process or a formal process to incorporate lessons learned
4. Adequacy, consistency and clarity of the documentation of processes, policies and procedures
5. Shortcomings concerning an overarching internal control system
6. Governance of the TARGET Services

High-level Recommendations

1. Implement risk assessments within relevant processes, especially in change management and deciding criticality of processes and IT elements, in particular business impact analyses.

2. Improve relevant processes, inter alia communications with external stakeholders and continuous improvement / lessons learned.

3. Improve documentation by inter alia introducing umbrella documents for complex processes, implementing a CMDB spanning all TARGET Services’ IT elements and requiring more stringent documentation of roles and responsibilities.

4. Enhance organisational and governance structures, including implementing a common 2nd LoD, responsible for implementing and running a comprehensive risk management and overarching internal control system spanning all platforms and services with appropriate staff, in terms of both quality and quantity.
## Follow up to GovC discussion

### 28 July 2021
- **Publication** via Press Release of Deloitte’s report and Eurosystem’s response accepting recommendations and indicating how and by when to address them. This allowed open and transparent communication so that trust in TARGET Services is re-gained.

### By end Q4 2021
- The Eurosystem has prepared a **comprehensive action plan** to address all recommendations by Deloitte, the Eurosystem oversight function and the Internal Audit Committee, as there are overlaps and interlinkages.
- **Involvement of all relevant stakeholders**, including CSG, AMI-Pay, AMI-SeCo.
- Eurosystem will also prepare a **publication related to the action plan** to communicate to the market participants.

### As of 2022
- **Monitoring of the implementation of the action plan** until completion by the Governing Council (reporting every 6 months).
- **Regular reporting** to all relevant stakeholders.
Background slides
Deloitte’s main findings

Deloitte identified 40 individual findings that led them to the conclusion that, even though none of them was rated with severity ‘very high’, they solely or in total are likely symptoms of larger critical overarching organisational, control and/or governance issues.

Heat map (based on ECB’s risk tolerance policy matrix)

Number of findings per Work stream (WS)

<table>
<thead>
<tr>
<th>Work stream</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
<th>Total per WS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work stream I.</td>
<td>3</td>
<td>5</td>
<td>2</td>
<td>10</td>
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<tr>
<td>Work stream II.</td>
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<td>1</td>
<td>0</td>
<td>3</td>
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<tr>
<td>Work stream III.</td>
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<td>2</td>
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<td>5</td>
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<tr>
<td>Work stream IV.</td>
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<td>4</td>
<td>2</td>
<td>8</td>
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<tr>
<td>Work stream V.</td>
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<td>4</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Work stream VI.</td>
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<td>1</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>17</strong></td>
<td><strong>6</strong></td>
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