Target 2 Securities
Opportunities and strategies
The adoption of T2S and its opportunities

The migration waves to T2S were reshuffled to allow a smooth transition

- Target 2 Securities (T2S) is the new **single pan-European platform for cash and securities settlement** in central bank money. T2S ensures resilience, integrity and neutrality of the Eurosystem’s settlement.

- The migration to T2S will be gradual; it started last June 2015, and will end in September 2017. Overall, there will be 5 T2S migration waves.

<table>
<thead>
<tr>
<th>Wave</th>
<th>Countries</th>
<th>Migration Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>Greece, Malta, Romania, Switzerland</td>
<td>22/06/15</td>
</tr>
<tr>
<td>W2</td>
<td>Belgium NBB-SSS, Portugal</td>
<td>31/08/15</td>
</tr>
<tr>
<td>W3</td>
<td>ESES (France - Belgium - Netherland), Luxemburg (VP Lux), Denmark</td>
<td>28/03/16</td>
</tr>
<tr>
<td>W4</td>
<td>Germany, Hungary, Luxemburg (Lux CSD), Austria</td>
<td>12/09/16</td>
</tr>
<tr>
<td>W5</td>
<td>Spain, Finland</td>
<td>06/02/17</td>
</tr>
</tbody>
</table>

~ 16% | Greece, Malta, Romania, Switzerland
~ 5%  | Belgium NBB-SSS, Portugal
~ 20% | ESES (France - Belgium - Netherland), Luxemburg (VP Lux), Denmark
~ 49% | Germany, Hungary, Luxemburg (Lux CSD), Austria
~ 10% | Spain, Finland

* Ex wave 2 joiner markets
** Ex wave 3 joiner markets

*EU*
The adoption of T2S and its opportunities

Intesa Sanpaolo chose to become DCP to further develop its integrated services

- There are 3 strategic options to join T2S:

  1. **DCP** Direct connection
     - Securities DCP
     - DCA
     - Option selected by ISP

     Intesa Sanpaolo selected to directly connect to T2S as a DCP both for cash and for settlement because it is a critical participant for the Italian market in the role of integrated service provider on the whole value chain.

  2. **ICP** Indirect connection through local CSD
     - Securities ICP
     - DCA

     **Securities ICP through regional CSD**
     - Extension of the local CSD services on T2S markets

  3. **ICP** Indirect connection through GC
     - Securities ICP
     - DCA

     **Securities ICP through GC**
     - Use of own DCA

     **GC like Account Operator**

**Legend:**
- **DCP** → Direct Connected Party
- **ICP** → Indirect Connected Party
- **DCA** → Direct Cash Account
- **CSD** → Central Securities Depository
- **ICSD** → International CSD
- **GC** → Global Custodian
The adoption of T2S and its opportunities

*T2S is the operating platform that will support the European harmonization process*

- T2S is a large dimension, high complexity project, with a **high potential**.
- It can bring several benefits, such as:

### S – T2S strengths

- Harmonised and commoditised settlement services in an integrated technical environment;
- Liquidity and collateral **optimisation**;
- **Segregation** of the liquidity for securities and for cash with dedicated accounts (SAC - Securities Account vs DCA – Dedicated Cash Account);
- **Standardisation and optimisation** of domestic and cross-border settlement **processes**;
- **Overall** visibility on the **value chain**.

### O – T2S opportunities

- **Cost cutting in the long term** (cross-border settlement in the Euro zone costs);
- **Middle-term ROI**;
- **Support to harmonisation of corporate actions** management;
- **Renew of service portfolio**: increase of number and quality of services;
- Enhancing of **attractiveness** for new potential Clients;
- **More efficient** new IT architecture with impact on securities and cash processes (more automated);
- **European harmonization process** (tax, processes, etc.);
- **T2 and T2S platforms integration** (consultation started February 2016).
The long path of Wave I
All the main players selected to be directly connected to T2S from the 1st wave

- The communication dead-line for T2S subscription was the 24th of February, 2014.
- All the main players are direct joiners for securities and cash:

<table>
<thead>
<tr>
<th>Securities</th>
<th>CSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABN AMRO Clearing Bank NV</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>BNP Paribas Securities Services</td>
<td>BOGS &amp; MT</td>
</tr>
<tr>
<td>Citibank</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Citibank International Plc Greece (branch)</td>
<td>BOGS</td>
</tr>
<tr>
<td>Clearstream Banking S.A. (CBL)</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Deutsche Bank</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>European Central Counterparty</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Iccrea Banca S.p.A.</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Intesa Sanpaolo</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Istituto Centrale delle Banche Popolari Italiane S.p.A.</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>LCH. Clearnet SA</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Parel</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>Société Générale Securities Services S.p.A.</td>
<td>Monte Titoli</td>
</tr>
<tr>
<td>The Bank of New York Mellon SA/NV</td>
<td>Monte Titoli</td>
</tr>
</tbody>
</table>

**14 Securities DCP (for the 1st wave)**

<table>
<thead>
<tr>
<th>Cash</th>
<th>NCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABN AMRO Clearing Bank NV</td>
<td>De Nederlandsche Bank</td>
</tr>
<tr>
<td>Banca Popolare di Sondrio</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>Banco Popolare Società Cooperativa</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>BNP Paribas Securities Services</td>
<td>Banque de France</td>
</tr>
<tr>
<td>Cassa centrale Raiffeisen dell’Alto Adige S.p.A.</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>Citibank International plc. Greece (branch)</td>
<td>Bank of Greece</td>
</tr>
<tr>
<td>Citibank N.A., Milan Branch</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>Clearstream Banking S.A.</td>
<td>Banque Centrale Luxembourg</td>
</tr>
<tr>
<td>Commerzbank</td>
<td>Deutsche Bundesbank</td>
</tr>
<tr>
<td>Deutsche Bank</td>
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<td>European Central Counterparty</td>
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<td>Istituto Centrale delle Banche Popolari S.p.A.</td>
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<td>Kasbank</td>
<td>De Nederlandsche Bank</td>
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<tr>
<td>LCH.Clearnet SA</td>
<td>Banque de France</td>
</tr>
<tr>
<td>Monte dei Paschi di Siena</td>
<td>Banca d’Italia</td>
</tr>
<tr>
<td>Morgan Stanley Bank</td>
<td>Deutsche Bundesbank</td>
</tr>
<tr>
<td>Société Générale</td>
<td>Banque de France</td>
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<tr>
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<td>Banca d’Italia</td>
</tr>
<tr>
<td>The Bank of New York Mellon (Frankfurt branch)</td>
<td>Deutsche Bundesbank</td>
</tr>
<tr>
<td>Unicredit S.p.A.</td>
<td>Banca d’Italia</td>
</tr>
</tbody>
</table>

**22 Cash DCP**
The long path of Wave I
Continuous involvement of the community in the project led by local Authorities

The Wave 1 Authorities provided technical documents, continuous support and recurring meetings

Local CSD (Monte Titoli)

- **T2S documents** for the local market: declination of ECB key documents, planning and support stuff
- **Weekly calls**
- **Test plan** (Authorization, Community Tests)
- After migration postponement: **de-scoping** of some functionalities of the platform in order to focus on main processes and **workaround** for specific anomalies

National Central Bank (Bank of Italy)

- Scheduling of specific meetings (almost monthly): the **National User Group** (NUG). Definition and monitoring of project milestones and updates
- Request to all participants of **weekly reports** in order to monitor activities progress
The long path of Wave I
The implementation of T2S: a deeply cross-functional project for Intesa Sanpaolo

In the new scenario, operators have to adapt to new T2S requirements, which will generate both a revision of the information system and of the business model, creating new strategic opportunities.

ISP joined T2S as direct participant in order to take advantage of European growth opportunities and to develop a customer retention strategy.

The T2S adaptation as a DCP entailed the creation of a cross-divisional team with resources from Operations, Financial Institutions Global Relationship, Treasury and IT Departments. In total more than 100 resources were involved.

Main areas affected by T2S:

- Information technology architectures development
- Roll-out of new functionalities, arising from new business requirements
- Adaptation to new message standards (ISO20022)

- Adaptation to T2S new functionalities and services
- Harmonisation of domestic and cross-border settlement processes
- Organisational impacts

- Centralisation of liquidity management in one single pool
- Concentration and optimisation of collateral management
- Improvement of cash forecasting

The adaptation to T2S and the subsequent revision of a plurality of processes and applications implies rationalisation of business offering.

The enhancements require a focused change management process and approach.
The long path of Wave I
Internal adaptation and analysis of risks together with high attention to Clients

- Activities with an internal impact:
  - Project risks analysis, in order to plan and monitor all mitigation actions (e.g. project delays, application defects)
  - Capacity Plan of the UAT dedicated team to monitor tests execution and to highlight possible critical aspects, in order to re-organize the test plan considering available resources and priorities
  - Internal integrated tests within the Group (e.g. Banca IMI)
  - Identification of a crash program in order to highlight the most critical areas for which activate a contingency plan

- Activities with an external impact:
  - Creation of a T2S Client Service task-force and dedicated channels to support Clients
  - Conversion Week-End Manual for Clients, with main impacts of the migration on Clients activities and migration week-end agenda. During the Conversion week-end the T2S task-force sent informative broadcasts to the Clients
  - Functional and Messages T2S Manual for Clients
  - Recurring informative notes regarding main project evolutions or news with an impact on Clients’ activities.
  - Monthly T2S newsletter with a recap of the most important news arising from national and international working groups
  - Tests with the Clients regarding the communication messages (Swift) with ISP
  - New legal arrangements between ISP and Clients and with the local CSD
The long path of Wave I
The cooperation of Wave I banks made possible the postponement of Italian market Go-Live

T2S planning

- The initial planning for the Italian market migration in T2S was on June 22\(^{th}\), 2015 (I\(^{st}\) wave).

Lack of availability of testing environments (of T2S, Monte Titoli, Target 2) and the adaptation problems to the new platform requirements caused **significant delays in the Italian market testing activities**.

The migration to T2S in such conditions of platform instability would have involved a high systemic risk.

**Intesa Sanpaolo**, together with other Wave I banks and the Italian Banking Association, promoted a raising awareness to the Governor of the Bank of Italy and the President of the ECB aimed at postponing the date of Italian market Go-Live in T2S.

**The ECB**, following appropriate evaluation, **approved the request** and postponed the migration date of the Italian market to August 31\(^{st}\), 2015.
The long path of Wave I

The migration was a success: market reached pre-T2S efficiency levels in few weeks

- The outcome of the migration was largely positive, so all the static data set-ups, securities balances and clients instructions was reconciled.
- There were only few anomalies in the activities of the Local CSD: wrong evaluation of securities with coupon and anomalies in cross-border instructions. After the migration week-end the processes and the communication with clients and with T2S worked well.
- Moreover, the settlement rate increased steadily and quickly reached pre-T2S level:

Here below, the main critical aspects arisen during the first weeks post-migration to T2S:

- High number of calls/emails to Client Service team, arising from the Clients, in order to have more explanations (both operational and technical)
- Impact on % settled transactions due to difficulties of few participants
- Problems of auto-collateralization accounting
- T2S delays in the settlement closing cut-off
- Local CSD errors in calculating the value of securities ex dividend
- The complexity of instructing cross-border settlements
- Infrastructural problems for placing and receiving Settlement reports

Precautionary actions taken:

- Set of an additional liquidity buffer
- Additional resources to manage potential issues during first weeks after go-live
After Wave I: lessons learned

T2S is an long lasting project: after the go-live the commitment needs not to be reduced

T2S is a marathon
Long term resources and costs planning with contingency buffers

Skills creation
Intensive and widespread training program

Risks monitoring
Involvement of all internal control functions

Community development
Issues and solutions sharing with your peers