

## Report on Payment and Interbank Settlement Systems | 2006





Banco de Portugal EUROSYSTEM

Report on Payment and Interbank Settlement Systems

2006

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## LIST OF ACRONYMS

| ADC*       | Direct Debit Authorization  |
|------------|---|
| AT*        | Treasury Application  |
| ATM        | Automated Teller Machine  |
| BIC        | Bank Identifier Code  |
| BPNet*     | Banco de Portugal electronic communication system with other entities   |
| CIIC*      | Interbank Cheque Imaging Exchange   |
| CISP*      | Interbank Commission for Payment Systems  |
| COGEPS     | Contact Group on Euro Payment Systems   |
| EBA        | Euro Banking Association  |
| ECB        | European Central Bank   |
| ECBS       | European Committee for Banking Standards  |
| ECSDA      | European Central Securities Depositories Association  |
| EFTPOS     | Electronic Funds Transfer at Point of Sale  |
| EPC        | European Payments Council   |
| ESCB       | European System of Central Banks  |
| EU         | European Union  |
| GDP        | Gross Domestic Product  |
| IBAN       | International Bank Account Number   |
| IDD*       | Direct Debit Instruction  |
| INTERBOLSA | Portuguese Stock Exchange Settlement System   |
| MBNet*     | Multibanco service designed to ensure secure domestic or foreign payment of any purchase through the Internet |
| MULTIBANCO | Portuguese ATM and POS network  |
| NCB        | National Central Bank of a European Union Member State  |
| NIB*       | National Bank Account Number  |
| OITS       | Operations Infrastructure and Technology Standards  |
| PCN/PRCC*  | Banco de Portugal business continuity and disaster recovery plan  |
| PEDD       | Pan-European Direct Debit   |
| PE-ACH     | Pan-European Automated Clearing House   |
| PMB*       | Multibanco electronic purse   |
| RTGS       | Real-Time Gross Settlement System   |
| SDD*       | Direct Debit System   |
| SEPA       | Single Euro Payments Area   |
| SIBOS      | Swift International Financial Forum   |

| SIBS*  | Portuguese Interbank Services Company  |
|--------|--|
| SICOI* | Portuguese Interbank Clearing System   |
| SLOD*  | Portuguese Settlement System for Other Depositors                            |
| SPGT*  | Portuguese Real-Time Gross Settlement System                                 |
| SSP    | Single Shared Platform for TARGET2   |
| STEP2  | EBA Retail Operations Processing System                                      |
| TARGET | Trans-european Automated Real-time Gross settlement Express Transfer- system |
| TEI*   | Interbank Electronic Transfers   |

\* Portuguese acronym

#### INTRODUCTION

This report presents the most important facts and statistical data relating to the interbank payment and settlement system in 2006, both in terms of large-value and retail payments.

It is Banco de Portugal's responsibility, under the terms of Article 14 of its Statutes, to regulate, oversee and foster the smooth running of Portugal's payment systems, specifically as part of its role in the ESCB. Banco de Portugal therefore oversees domestic payment systems in such a way as to ensure systemic stability, efficiency, security and the fit and proper use of payment instruments.

Banco de Portugal is part of the Eurosystem, along with the ECB and the other national central banks which make up the euro zone. It is involved in implementing and disseminating the policies set out in the "Statement on the role of the Eurosystem in the field of payment systems oversight", published by the ECB on 21 June 2000. In this sphere, the Eurosystem also adopted the "Core principles on systemically important payment systems" in January 2001, approved by the Committee on Payment and Settlement Systems (CPSS) of the Governors of the G10 Central Banks<sup>2</sup>. The principles mentioned above are also applicable to retail systems, with the relevant amendments. Banco de Portugal, following Eurosystem policy, uses these principles in its oversight of the interbank clearing system, SICOI.

The year was marked by major developments in two projects that will change the face of the European payments systems, TARGET2 in large-value payments and SEPA in the retail field.

The Eurosystem's TARGET2 is due to be up and running on 19 November 2007. Important phases in its development have been finalised, among them the price scheme for settlement of basic services and for ancillary systems. Other chapters are also ready, among them the contingency plans, many aspects of the legal issues, means of access to the system (direct or indirect) and many of the tests and migration procedures.

The SEPA project also moved ahead during the year. This is a scheme to be implemented by the European banking industry and should be on stream in 2010. The end of the year was marked by approval of Versions 2.2 of the Rulebooks for credit transfers and direct debits.

In May, the European Commission and the ECB published a joint declaration reaffirming their vision of SEPA as an integrated market for payment services with the euro area seen as one and the same for domestic and cross-border transactions (see Annex 1).

The ECB published two other reports, one on overall progress towards SEPA, the other specifically focusing on payment cards within SEPA.

In Portugal, preparatory work on the SEPA project continued. Among the important issues were the guidelines for the national migration plan. Anumber of interbank meetings were also held, one specifically on the SEPA Cards Framework and another on credit transfers and direct debits.

Approval of the Payment Services Directive was, however, not forthcoming, and this hampered progress on a number of issues. The directive was still the subject of protracted debate at the European Council and the Parliament<sup>3</sup>.

<sup>(2)</sup> Banco de Portugal made its policy on payment systems public in the 2000 Annual Report, Section III. It is the first and foremost responsibility of central banks, as set down in the Core Principles.

<sup>(3)</sup> The Directive on Payment Systems was in fact approved by the European Parliament on 24 April 2007. It must be transposed into domestic legislation by 1 November, 2009.

The Portuguese Interbank Commission of Payments Systems (CISP) is mandated to monitor TARGET2 and SEPA and it organised a number of initiatives during the year, focusing on control and advisory services. Its work included the migration plan and the strategy for banking community participation in the two schemes. The aim is to use successful past experiences with co-operative strategies to find solutions in the more demanding circumstances of a broad European scheme, without foregoing the widely recognised qualities of the Portuguese payment systems.

On 27 July the Eurosystem revealed that it was looking into the possibilities for securities settlement through the ECB, with an infrastructure called "TARGET2 – Securities". The underlying logic is the same as for large-value payments: a common platform taking advantage of synergies with other infrastructures such as TARGET2 to provide an efficient, integrated financial settlement system for securities transactions.

The infrastructure will belong to the Eurosystem and it will be brought on stream following on-going dialogue – already in fact under way – with the institutions that are interested (mainly the banks and CSDs). A detailed feasibility study is being prepared and should be finalised in the first quarter of 2007. This will give the ECB Governing Council the essential information for a decision on whether to go ahead or not. In tandem there is a blueprint being worked on, with details of the aims, scope, functional architecture and schedule (estimated at around 6 years).

The European Council and the Commission are following the project with particular attention, given the potential impact on the EU process of financial integration.

In operational terms, SPGT/TARGET was down in volume (by 0.7%) and in value (by 2.8%), though SICOI moved in the opposite direction, with a 3.6% rise in volume and a 2.1% rise in value.

The SPGT completed its tenth year on 30 September. It has proved its worth as a gross real-time settlement system, underpinning the interbank structure for domestic and cross-border settlements in euros. It has been a factor for integration and modernisation in the Portuguese payments systems and played a fundamental part in the single currency start-up in 1999 through its participation in TARGET.

The results achieved by the SPGT are worth highlighting at a time when large-volume payments schemes are splicing into TARGET2, with enhanced harmonisation and increased efficiency expected as a result. The SPGT developed and has remained a system based on co-operation between all those involved, the central bank, the commercial banks and the Interbank Services Company SIBS.



CHAPTER I. Interbank Settlement Systems

The interbank settlement system in Portugal, as in other developed countries, is made up of two complementary sub-systems: one is the gross real-time settlement system, designed to minimise the risks associated with large-value payments (systemic risk<sup>4</sup>), thus allowing the payment systems to run smoothly; and the other is the interbank clearing system, which processes large quantities of low-value operations (with minimal systemic risk) and with lower processing costs. The first of these is carried out through the SPGT (the system for large-value payments) and SLOD (the system for other depositors). Clearing is through netting, using SICOI (the interbank clearing system).

During 2006, the Portuguese settlement system processed 1,576.10 million transactions totalling 5,561,418.9 million euros, corresponding to a 3.6% rise in quantity and a 2.8% fall in value over 2005 (Table I.1). As a result, the average value settled was down considerably, dropping 6.2%, from 3,759.85 euros in 2005 to 3,528.60 euros in 2006 (Table I.3). During the year, an average of 4,678.74 thousand transactions were settled per day, totalling 21,762.2 million euros (Table I.2).

#### Table I.1

#### TRANSACTIONS IN THE INTERBANK SETTLEMENT SYSTEM (Volume in millions and value in millions of EUR)

|                          | 20       | 005         | 20       | 06          | Variatio | n (%) |
|--------------------------|----------|-------------|----------|-------------|----------|-------|
|                          | Volume   | Value       | Volume   | Value       | Volume   | Value |
| Gross Settlement         | 1.40     | 5,402,897.2 | 1.40     | 5,237,587.2 | 0.0      | -3.1  |
| SPGT                     | 1.35     | 5,332,397.5 | 1.34     | 5,182,064.8 | -0.7     | -2.8  |
| Domestic Transactions    | 0.76     | 1,420,339.9 | 0.79     | 1,497,485.9 | 4.0      | 5.4   |
| Cross-border Transations | 0.59     | 3,911,997.6 | 0.55     | 3,684,578.9 | -6.7     | -5.8  |
| SLOD                     | 0.05     | 70,499.7    | 0.06     | 55,522.4    | 17.8     | -21.2 |
| Net Settlement-SICOI     | 1,519.95 | 317,143.7   | 1,574.70 | 323,831.77  | 3.6      | 2.1   |
| CHEQUES                  | 172.35   | 183,832.8   | 154.85   | 176,835.7   | -10.2    | -3.8  |
| BILLS OF EXCHANGE        | 0.50     | 2,388.5     | 0.43     | 2,284.1     | -14.4    | -4.4  |
| TEI                      | 49.52    | 67,069.4    | 54.66    | 73,896.0    | 10.4     | 10.2  |
| DIRECT DEBITS            | 69.09    | 8,359.5     | 71.33    | 9,809.0     | 3.2      | 17.3  |
| ATM (MULTIBANCO)         | 1,228.48 | 55,493.5    | 1,293.42 | 61,006.9    | 5.3      | 9.9   |
| Total                    | 1,521.35 | 5,720,040.9 | 1,576.10 | 5,561,418.9 | 3.6      | -2.8  |

Only 1.40 million transactions went through the gross settlement systems (SPGT and SLOD), to the value of 5,237,587.2 million euros, a 3.1% fall over 2005 (Table I.1).

The SPGT accounted for 0.79 million domestic and 0.55 million cross-border transactions, a 4% rise over 2005 on the domestic side and a 6.7% fall on the cross-border side. In terms of value, the situation was similar, with domestic on the rise (up 5.4%) and cross-border sliding (down 5.8%) (Table I.1). The overall result is a fall, both in volume (around 0.7%) and value (around 2.8%). During the year, the SPGT processed a daily average of 5.25 thousand transactions to the value of 20,321.8 million euros, a 0.1% rise in volume and a 2.1% fall in value over 2005 (Table I.3).

<sup>(4)</sup> Systemic risk is the most important risk of all. It occurs when a debtor defaults and other institutions cannot fulfil their obligations, and default in turn. To prevent systemic risk from spreading to other sectors of the economy, regulators insist on compliance with a series of criteria designed to minimise the risk.

The other part of the large-value system, SLOD, swung considerably between 2005 and 2006. The number of transactions rose 17.8%, but value fell 21.2%. The fall came in the wake of a large drop in Interbank Money Market transactions (down 55%), with processing at 0.06 million operations to a value of 55,522.4 million euros (Table I.1). In terms of daily average, 0.24 thousand transactions were settled, to a value of 217.7 million euros (Table I.2). Average transaction value rose 1.3%, reaching 1.9 million euros (Table I.3).

The interbank clearing system (SICOI) grew in similar fashion to the previous year, with a 3.6% rise in quantity and a 2.1% rise in value. A total of 1,574.70 million transactions were processed, to the value of 323,831.7 million euros (Table I.1). The daily average rose likewise, to stand at 4,673.25 thousand transactions worth 1,222.7 million euros (Table I.2). The average value of each operation, however, fell by 1.4%, going from 208.65 euros in 2005 to 205.65 euros in 2006 (Table I.3).

#### Table I.2

## AVERAGE DAILY VALUES IN THE INTERBANK SETTLEMENT SYSTEM (Volume in thousands and value in millions of EUR)

|                          | 2005        |          | 200      | 06       | Variation (%) |       |
|--------------------------|-------------|----------|----------|----------|---------------|-------|
|                          | Volume      | Value    | Volume   | Value    | Volume        | Value |
| Gross Settlement         | 5.44        | 21,022.9 | 5.49     | 20,539.6 | 0.8           | -2.3  |
| SPGT                     | 5.24        | 20,748.6 | 5.25     | 20,321.8 | 0.1           | -2.1  |
| Domestic Transactions    | 2.95        | 5,526.8  | 3.09     | 5,872.5  | 4.8           | 6.3   |
| Cross-border Transations | 2.30        | 15,221.8 | 2.16     | 14,449.3 | -6.0          | -5.1  |
| SLOD                     | 0.20        | 274.3    | 0.24     | 217.7    | 18.7          | -20.6 |
| Net Settlement-SICOI     | 4,531.58    | 1,198.6  | 4,673.25 | 1,222.76 | 3.1           | 2.0   |
| CHEQUES                  | 689.41      | 735.3    | 621.88   | 710.2    | -9.8          | -3.4  |
| BILLS OF EXCHANGE        | 2.02        | 9.6      | 1.74     | 9.2      | -14.1         | -4.0  |
| TEI                      | 198.10      | 268.3    | 219.54   | 296.8    | 10.8          | 10.6  |
| DIRECT DEBITS            | 276.37      | 33.4     | 286.47   | 39.4     | 3.7           | 17.8  |
| ATM (MULTIBANCO)         | 3,365.69    | 152.0    | 3,543.63 | 167.1    | 5.3           | 9.9   |
| Tota                     | al 4,537.03 | 22,221.6 | 4,678.74 | 21,762.2 | 3.1           | -2.1  |

Note: The gross settlement system (SPGT) was in operation on 257 days in 2005 and 255 days in 2006. Net settlement (SICOI) was in operation for 250 days in 2005 and 249 days in 2006, apart from the Multibanco, which operated 365 days.

A breakdown of SICOI into retail subsystems shows a positive development in electronic payment instruments – the interbank electronic transfer (TEI), direct debits and the Multibanco – in line with previous years (compare Table I.1 and Table I.2). Paper-based payment instruments – cheques and bills of exchange – went down considerably, more in volume than in value, which means that the average value for each operation is on the rise (Table I.3).

| AVERAGE VALUE PER MEANS OF PAYMENT<br>(In EUR) |              |              |               |  |  |  |
|--|--------------|--------------|---------------|--|--|--|
|  | 2005         | 2006         | Variation (%) |  |  |  |
| Gross Settlement                               | 3,860,971.78 | 3,743,807.86 | -3.0          |  |  |  |
| SPGT   | 3,957,930.81 | 3,872,993.12 | -2.1          |  |  |  |
| SLOD   | 1,875,402.51 | 1,900,362.82 | 1.3           |  |  |  |
| Net Settlement-SICOI                           | 208.65       | 205.65       | -1.4          |  |  |  |
| CHEQUES  | 1,066.61     | 1,141.99     | 7.1           |  |  |  |
| BILLS OF EXCHANGE                              | 4,731.45     | 5,286.45     | 11.7          |  |  |  |
| TEI  | 1,354.28     | 1,351.81     | -0.2          |  |  |  |
| DIRECT DEBITS                                  | 120.99       | 137.51       | 13.7          |  |  |  |
| ATM (MULTIBANCO)                               | 45.17        | 47.17        | 4.4           |  |  |  |
| Total  | 3,759.85     | 3,528.60     | -6.2          |  |  |  |

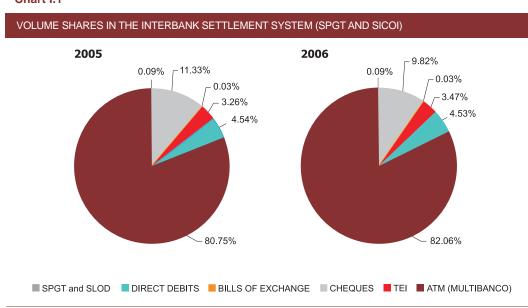
The number of cheques fell by 10.2%, with value falling 3.8% (Table I.1), translating into a 7.1% increase in average value over 2005 (Table I.3). At the retail level, this form of payment, however, continues to be the most representative in terms of value (176.8 billion euros), approximately 54.6% of the total processed through SICOI (Chart I.2).

Bills of exchange accounted for 0.43 million operations, to the value of 2,284.1 million euros (Table I.1), a mere 0.03% of the volume and 0.71% of the value settled through the system (Charts I.1 and I.2). This is the payment instrument with the biggest fall in number of operations (down 14.4%). However, the rise in average value is the biggest, at 11.7%, with the figure moving from 4,731.45 euros in 2005 to 5,286.45 euros a year later (Table I.3).

Interbank electronic transfers (TEI) rose by 10.4% in volume (54.66 million) and 10.2% in value, to approximately 74 billion euros. This was the biggest rise in terms of volume (Table I.1). Average daily figures are of the same order, with a rise of 11% (Table I.2), though average value was down slightly to stand at 1,351.81 euros (Table I.3).

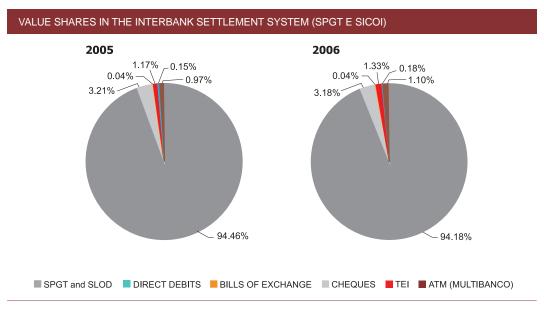
Direct debits came in with the biggest rise in terms of value processed, at around 17.3%. In terms of volume, the rise was 3.2%. The number of transactions carried out stood at 71.33 million, to the value of 9,809 million euros (Table I.1). Average daily figures were also up, with 39.4 million euros processed (Table I.2). As a result, direct debits came in with the biggest rise in terms of average value, which was 137.51 euros, a 13.7% growth over 2005 (Table I.3).

The Multibanco is still the retail instrument most frequently used (Chart I.1), accounting for 82% of SICOI transactions (1,293.4 million operations), representing 18.8% of the value (61.0 billion euros). The average value per transaction is 47.17 euros, an increase of 4.4% over the previous year (Table I.3).



#### Chart I.1

#### Chart I.2



There were more participants in the interbank settlement system this year, though the number of direct participants went down. This has been the trend over recent years, save for 2004 (Table I.4). At year-end, there were six fewer direct participants and two more indirect. There was in fact an overall fall in the three systems, especially in SLOD. In terms of SICOI, there was one less direct participant in the direct debit subsystem, but two new indirect participants.

#### Table I.4

| NUMBER OF PARTICIPANTS IN THE INTERBANK SETTLEMENT SYSTEM |   |   |   |  |  |  |
|---|---|---|---|--|--|--|
| 2005  |   | 2006  |   |  |  |  |
| Direct  | Indirect  | Direct  | Indirect  |  |  |  |
|   |   |   |   |  |  |  |
| 37  | -   | 37  | -   |  |  |  |
| 98  | -   | 93  | -   |  |  |  |
|   |   |   |   |  |  |  |
| 29  | 29  | 29  | 29  |  |  |  |
| 21  | 13  | 21  | 13  |  |  |  |
| 40  | 18  | 40  | 18  |  |  |  |
| 26  | 11  | 25  | 13  |  |  |  |
| 23  | 9   | 23  | 9   |  |  |  |
| 274   | 80  | 268   | 82  |  |  |  |
|   | 2<br>Direct<br>37<br>98<br>29<br>21<br>40<br>26<br>23 | 2005           Direct         Indirect           37         -           98         -           29         29           21         13           40         18           26         11           23         9 | 2005         2           Direct         Indirect         Direct           37         -         37           98         -         93           29         29         29           21         13         21           40         18         40           26         11         25           23         9         23 |  |  |  |

#### Box 1

#### **Retail Payment Instruments in Portugal: Costs and Benefits**

The aim of this study was to fill a gap through an assessment of the costs and benefits of the Portuguese payment system. The study is composed of three parts.

The first part describes the institutional model underlying the Portuguese payment systems (with details on the key points of the recent past), the main infrastructures, a brief summary of the quantitative development of payment instruments and a comparison of some of the main indicators with specific Member States of the European Union.

In this context, the clearest sign of progress is the development of electronic payment instruments in Portugal, along with modernisation overall. The following facts are examples worthy of mention: (i) in 2000, 51% of non-cash transactions were with payment cards, and this had risen to 62% in 2005<sup>5</sup>; (ii) there was a rapid growth in numbers of ATMs and POS terminals, with cheques being used far less; and (iii) between 1996 and 2005, the number of ATMs and POS terminals rose at an annual rate of 11.1% and 13.9%, respectively.

Progress in information and communication technologies made it possible to introduce new payment systems and increase the choices for consumer and retailer regarding the payment of goods and services. Electronic payment instruments provide benefits in terms of security, ease of use, convenience and savings in travel, waiting and processing. This leads to considerable gains in welfare for the community, above all for the consumer/user (lower cost and less time taken over access to payment services) and for banks (fewer physical and human resources required). The investment made by the banks in modernising payment systems was based on the potential gains in replacing paper-based (so-called traditional) services with electronic, in principle more efficient. This investment has focused above all on technologies of information and communication and the main result has been reorganisation in banks and the introduction of new distribution channels.

The second part of the study is an "Analysis of the Costs and Benefits of Payment Systems" and includes a summary of the main findings of similar studies by other central banks, along with a description of the methodology used for calculations, a presentation of the total costs and benefits, by nature and unit, a short analysis of the quality of information provided by the participants and some notes on where to go from here in future studies.

(5) See Chart I.3 for developments in the use of payment instruments.

The study is based on the ABC method (Activity Based Costing) and bearing in mind the underlying assumptions<sup>6</sup>, total costs for the banks in payment systems were estimated at 1,138.7 million euros in 2005<sup>7</sup>, representing 0.77% of GDP for the year<sup>8</sup> and 16.0% of the banks' total costs. Profits came in at 722.0 million euros (0.49% of GDP), giving a coverage rate of 63.4%<sup>9</sup>. Making payment instruments available, therefore, is at the expense of cross-subsidisation with other banking products.

Expenditure on personnel directly related to payment instruments was estimated at 482.2 million euros, representing 18.7% of total personnel costs and 42.3% of the total cost of making payment instruments available. The second most significant cost item is specialist and third-party services, which come in at 283.5 million euros, corresponding to 24.9% of total costs for payment systems and 25.1% of total costs borne by the banks under this item. Costs relating to rentals and amortisation were estimated at 129.2 million euros (11.3% of total costs with payment systems and 23.6% of total costs for rentals and amortisation), while commission charges stood at 44.6 million euros (3.9% of total costs for payment systems and 37.9% of total costs with commissions).

A detailed analysis of total costs per payment instrument shows that the costs of issuing and processing cards, along with acquiring costs, account for 50.5% of total costs (23.4% for credit cards and 27.1% for debit cards). Cash and cheques together account for 45.9% of total costs (17.2% for cash and 28.7% for cheques). The remaining payment instruments represent only 3.5% of total cost (1.2% for direct debits and 2.3% for credit transfers).

In terms of unit costs, the figures were: 1.85 euros for each deposit or withdrawal of cash at the branch counter; 1.45 euros for each cheque presented; 2.44 euros for each credit card transaction and 0.23 euros for each debit card transaction; 0.28 euros for each credit transfer and 0.09 euros for each direct debit instruction. These findings compare with those detailed in studies in Norway and Sweden (Table I.5), even though there are differences in methodology and in the period under review.

Income broke down as follows: 74.5% of total income derives from payment cards and acquiring operations (39.7% for credit cards and 34.8% for debit cards); 17.9% for cheques; 3.3% for credit transfer; 3.1% for direct debits; and 1.2% for cash.

| UNIT COSTS<br>(In EUR)  |                         |                       |                       |
|-------------------------|-------------------------|-----------------------|-----------------------|
|                         | Portugal <sup>(a)</sup> | Norway <sup>(b)</sup> | Sweden <sup>(c)</sup> |
| Cash withdrawal/Deposit |                         |                       |                       |
| At branch counter       | 1.85                    | 1.88                  | 1.21                  |
| At ATM                  | 0.35                    | 1.07                  | 0.51                  |
| Cheques presented       | 1.45                    | 2.82                  | 2.18                  |
| Credit Transfers        |                         |                       |                       |
| At branch counter       | 0.74                    | 1.63                  | 0.73                  |
| Internet                | 0.07                    | 1.00                  | 0.13                  |

#### Table I.5

Sources: Norway (Gresvick and Owre, 2002) and Sweden (Guibourg e Segendorf, 2004).

Notes: (a) Data relating to 2005; (b) Data relating to 2001; (c) Data relating to 2002.

(7) If the payment systems costs borne by Banco de Portugal were included, but Ministry of Finance costs from issuing coins were excluded, this cost would be 1,168.5 million euros, i.e. 0.79% of GDP.

(8) Compared with 0.38% of GDP in Norway, even bearing in mind differences in methodology. It should also be noted that there are practically no more cheques in Norway, whereas they represent 0.22% of GDP in Portugal.

(9) Compared with 70% in Norway (Gresvik and Owre, 2003) and 69% in Sweden (Guibourg and Segendorf, 2004).

<sup>(6)</sup> These relate to exclusion of costs and income from interbank payments (interbank fee) and to exclusion of income from interest and similar revenue.

So credit cards, acquiring and direct debits are the only payment instruments where income directly generated by their use covers the costs of making them available. Coverage rate is: 107.5% for credit cards; 81.5% for debit cards; 4.3% for cash; 39.4% for cheques<sup>10</sup>; 92.7% for credit transfer and 159.5% for direct debits.

On the basis of these figures, an exercise was carried out to estimate the real and potential gains associated with electronic payment instruments over paper-based. This can be found in the "Economic Analysis of Welfare" in the third part of the study. This part also includes the main conclusions from studies on the costs and benefits of payment instruments and the findings from surveys of consumers, small retailers and large retail outlets relating to the payment instruments used at point of sale. Also analysed is user awareness of the costs involved in using these instruments.

The data from the consumer and small retailer surveys in 2005 confirm the importance of cash, followed by debit cards and credit cards, and the fact that cheques are rarely used at point of sale<sup>11</sup>. However, for amounts above 100 euros, the cheque is the instrument most frequently used. These findings are in line with studies in other countries (the United States, Belgium and the Netherlands), where consumer surveys suggest that the use of electronic payment instruments (payment cards) is directly related to age, income and level of schooling. The findings from the surveys of consumers and small retailers also show that only a relatively small number of users have a detailed knowledge of the costs involved in using any one payment instrument. This could well mean that more efficient instruments are not widely known or used.

As for estimates of the benefits for consumers and banks, the study concludes that, for 2005:

- Cash withdrawal at an ATM rather than a branch counter leads to a saving for consumers of around 11.2 million hours in processing time and for the banks a cut in costs of around 46%;
- For cash deposits at an ATM, the gains are estimated at 443 thousand hours in processing time for users and 4.3 million euros in cost savings for the banks;
- In the case of credit transfers at an ATM, the gains are estimated at 491 thousand hours in processing time and 5.1 million euros in transaction costs;
- There were also gains for consumers by checking account balance and entries at an ATM, coming in at around 1.5 million hours;

Using the OECD figures for gross average income, the benefits for the consumer add up to a total saving of 13.6 million hours in processing time, equivalent to around 86 million euros.

Consumers also gain by using payment cards - the float, points, air miles and others - estimated at 0.10 euros for each debit card transaction and 0.23 euros for each credit card transaction.

The average annual fee for a credit card is 19.5 euros, compared with the 23 euro average for VISA and 24 euros for MasterCard in Europe.

Social gains derive from the replacement of a higher cost instrument by one with a lower cost. With this in mind, the study focused on an estimate of the gains from replacing cheques (which have a net unit cost of 0.88 euros) by credit transfers and direct debit (net unit income of 0.02 euros and net unit cost of 0.05 euros). Replacing one-third of cheques (2005 figures) by credit transfers (1/6) and direct debits (1/6) led to a significant improvement in the coverage rate, from 63.4% to 66.5%.<sup>12</sup>

The study also showed that the use of cash for purchases under 8 euros reveals a very efficient use of a payment instrument, but if cash were replaced by debit card for higher values, this would lead to gains in time and a cut in the total costs. Purchases of newspapers, magazines, bread and milk and a coffee are all on average under 8 euros and correspond to 75% of expenditure at point of sale.

<sup>(10)</sup> If an estimate for float was included, the degree of coverage would be 53.1%. With Decree-Law 18/2007 of 22 January, the amount from available float fell. If the present regime had been in force in 2005, and given the same volume, the degree of coverage would have been 47.7%

<sup>(11)</sup> Given developments in other European countries, it could well be that debit cards take an increasing share in payment, with cash falling.

As almost 96% of such outlays are in cash, there is a situation close to good practice in the use of a payment instrument. On the other hand, for outlays above 8 euros, cash accounts for around 65% of purchases, a long way from good practice. If 10 million withdrawals in cash were replaced by 80 million payments with a debit card, the coverage rate would rise from 63.4% to 64.7%.

As a last point, the organisational model for this study involved two levels, with a managerial group and a specialist group. They were both made up of representatives of Banco de Portugal, the other institutions in CISP (the Portuguese Banking Association, five banks, to wit, the BES, Banco BPI, Banco Santander Totta, BCP, CGD, and the interbank services company SIBS) and Unicre. Banco de Portugal also set up a permanent team to ensure continuity in the work and articulation between all the participants. In addition, the study was able to benefit from the central bank's statistical production and analysis facilities and the collaboration of some of the country's main retail outlets, which provided essential information on the use of payment instruments in their stores, along with related costs.

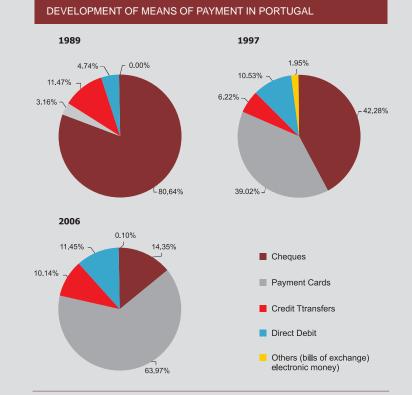


Chart I.3

## Box 2

Important events in 2006

| JANUARY   | On the 24th, information on the strategy for TARGET2 was sent to the banks which are in the SPGT. This strategy is two-fold: (i) phase $1 - $ with the majority of banks joining on an indirect basis through Banco de Portugal, with the existing system (SPGT/SIBS) still in service; (ii) phase $2 - $ with direct connection to the single shared platform for both the institutions and ancillary systems, with the SPGT and back-up infrastructure taken out of service. The banks were also asked about their choice of connection to TARGET2 (direct, indirect or other).   |
|-----------|---|
| FEBRUARY  | On the 17th, the ECB published its fourth progress report on SEPA, defining the final objectives. The report calls for the development of solutions in the payments field to respond to the needs of different consumer segments, in a way that was future-looking, easy to implement and cost effective. The ECB Governing Council reiterated its support for the 2008 and 2010 deadlines and highlighted the need for good project management and an efficient communications strategy.   |
| MAY       | On the 4th, a joint European Commission/ECB declaration on SEPA was published.<br>The institutions both share the same view of SEPA itself and the process leading<br>to it, and are working together to ensure success (see Annex 1).<br>On the 5th, the working group GTI-T2 met and continued with tasks related to<br>TARGET2.<br>On the 16th, there was a meeting at Banco de Portugal on "SEPACards Framework",<br>with the ECB participating, along with the banks on the working group GTI/Bank<br>Cards, SIBS and Unicre.<br>On the 26th there was the first simulation of the year (in simplified form) to assess<br>under real circumstances the Business Continuity and Disaster Recovery Plan.<br>For a complete day, the SPGT functioned from the central bank's alternative<br>centre. |
| JUNE      | On the 2nd, the GTI-T2 met to finalise the proposal for migration to TARGET2 (phase2) to be submitted to the CISP.  |
| JULY      | On the 3rd, daily financial settlements involving MIBEL/OMIP (the Iberian market<br>for term energy contracts) came on stream at Banco de Portugal<br>On the 7th, the SPGT functioned in realistic conditions from the Bank's alternative<br>centre. It thus complied with the mandatory PCN/PRCC test, in accordance with<br>the Eurosystem rules for TARGET.<br>On the 19th, SIBS presented its Payment Digitalisation Plan (ProDigi). The aims<br>of this plan are to increase the use of automatic payment instruments and reduce<br>the use of cash and cheques (Annex 3).<br>On the 21th, the ECB published its "Communication on TARGET2".<br>Banco de Portugal and SIBS started tests on the AT version for TARGET2   |
| SEPTEMBER | On the 22th, approval was given for a cooperative solution for banks to have a direct connection to TARGET2.<br>On the 27th, the EPC approved an interchange fee of 0.093 euros for direct debits through SEPA. The commission was entitled Multilateral Balancing Payment.<br>The 30th marked the tenth year of SPGT operations. It has been a fundamental interbank infrastructure not only for processing domestic and cross-border settlements but also as a factor for integration and modernisation in payment  |

|          | systems in the country. It was an essential pillar in the start-up of the single currency in 1999, through its connection to TARGET.   |
|----------|--|
| OCTOBER  | On the 10th, ECOFIN held a debate on SEPA (see Annex 2).<br>On the 23th, the half-yearly SPGT contingency test took place under real<br>circumstances, as part of the Bank's business continuity plan (PCN). The SPGT<br>operated for a full day from Banco de Portugal's alternative centre.  |
| NOVEMBER | On the 20th, the ECB published the third progress report on TARGET2.<br>During the month it also published "The Single Euro Payments Area (SEPA):<br>an integrated retail payments market", in the form of a brochure explaining the<br>scheme. This would then be translated into the official languages of the euro zone<br>countries, in a format to be decided by the central bank involved.<br>On the 20th, the ECB published "The Eurosystem's view of a SEPA for Cards",<br>following approval by the Governing Council.<br>On the 29th, Banco de Portugal hosted a meeting on migration to SEPA, focusing<br>on credit transfers and direct debits.  |
| DECEMBER | On the 7th, agreement at CISP was reached on the main guidelines of the migration<br>plan to SEPA (Plano Nacional de Migração para a SEPA). The basis for this was a<br>draft version put forward by the GTI/Cross-border Payments group, in conjunction<br>with GTI/Credit Transfers, GTI/Direct Debits and GTI/Bank Cards.<br>On the 11th, wide-ranging tests were started involving all domestic banks, relating<br>to changes in the SPGT/AT for the first phase of connection to TARGET2.<br>There was a plenary meeting of the EPC on the 18th, and approval was given<br>to versions 2.2 of the "Rulebooks" on credit transfers and direct debits within<br>SEPA. These should come on stream on 1 January 2008. Following publication,<br>adaptations were made to the Portuguese handbooks covering transfers (TEI)<br>and direct debits (SDD).<br>On the same day, the EPC approved the "SEPA Data Model" and the "SEPA<br>Implementation Guidelines", both in versions 2.2.<br>On the 21st, a protocol was signed between the Ministry of Finance (General<br>Directorate of Taxation), SIBS and the Portuguese Banking Association on the<br>means of payment to be used in tax credits and refunds ("Protocolo entre o<br>Estado, a Sociedade Interbancária de Serviços e a Associação Portuguesa de<br>Bancos, relativo aos meios de pagamento usados nos reembolsos e restituições<br>de impostos"). The aim is to use electronic means for all these transfers, with<br>automatic validation of the taxpayer's bank identification number (the NIB/NIF).<br>The use of cheques by the Treasury will be phased out. |



CHAPTER II. Gross Settlement Systems

The SPGT came on stream on 30 September 1996 and became one of the 16 national cross-border payment systems that made up TARGET, which started on 4 January 1999. The main aim of this cross-border system is to make a common operational platform available to ensure an efficient processing system for monetary policy and allow for cross-border payments in euros (for customers and interbank transfers) between the countries that make up the European Union.

All domestic payments with a unit value above a specific amount (large-value payments) have to go through the SPGT. This provides a solid guarantee for curbing systemic risk in the Portuguese payment system.

During the year the level of service remained stable in terms of technical infrastructure in spite of one incident on 9 January. There was a block in the central information system at *Banco de Portugal* lasting around 5 hours, leading to the longest break in service since the start of TARGET. The problem occurred between 7 a.m. and midday, at which time normal service was restored and all payments were processed by the end of the day. The incident therefore had minimal repercussions. Service availability was affected during by these 5 hours, and another hour in September. As a result, availability was lower than in previous years, coming in at 99.81%, below the TARGET average of 99.87%.

Work took place on *Banco de Portugal* I.T. platform at two levels during the year: the normal upgrading/updating and fine-tuning of software, and the work of preparation for migration to SWIFTNet Phase2. Migration should take place with the minimum of interruption to normal SPGT service and preparation for TARGET2.

Regular contingency tests were carried out, within the context of incident management, both domestic and cross-border. Domestically, there were three simulations activating *Banco de Portugal* Business Continuity Plan with SPGT operating from its alternative centre. These took place on 26 May (partial), 7 July and between 23 and 27 October. During March and October, SPGT participants tested their own procedures, using alternative channels for transfer orders via SWIFT and fax to check the capacity of NCBs to keep crucial payments flowing (above all those relating to EBA/Euro1 and CLS).

Sweden withdrew from TARGET on 31 December 2006 and various tests were carried out involving the ECB/NCBs in order to make sure no problem affected the smooth running of the system in such unusual circumstances.

The Eurosystem carried out stress-testing exercises in May, designed to cover any possible systemic risk crises and improve NCB response time.

Among other changes to operations, there was the new monetary policy eligible assets framework, approved by the Eurosystem. This came into force in January 2007 and meant revision of specific documentation 1/99 (MOI) and 116/96 (MCI).

From 3 July, the SPGT included the daily financial settlement of MIBEL (the Iberian electricity and long-term energy-contracting market).

In the context of domestic migration to TARGET2, *Banco de Portugal* sent out a circular to all SPGT participants in mid-January. This focused on the two-pronged migration strategy and on the fact that a number of institutions had to let the central bank know if they were opting for direct or indirect connection to TARGET2 in February 2008 (the second window, the date slated for Portugal to join the new system).

Along with the circular, a revised version of SPGT/SIBS messages in the Handbook was sent out, and a timetable for the first phase (development, tests and implementation). During the year, *Banco de Portugal* and SIBS produced a new version of the treasury application/AT, which was tested in the early stages by *Banco de Portugal*. It was available for all participants in the last quarter of the year for them to test the version and dovetail it with their own internal AT applications.

In 2005 the TARGET2 interbank working group (GTI-T2) had been set up, one of their aims being to analyse co-operative solutions for the second phase of migration to TARGET2 (the one involving

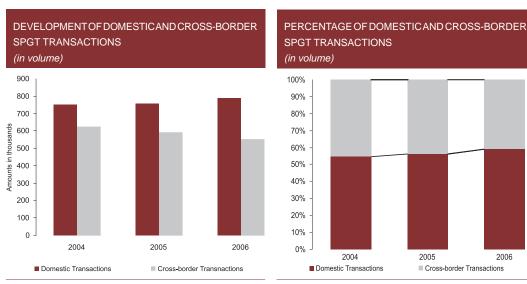
Portugal), from both the functional and the technological angle. A proposal was put forward to CISP and approved at their 22 September meeting. The proposal was for a 12-month period after the February 2008 window, during which a solution would be available for participants who wanted to choose the option of a direct connection to the Single Shared Platform. During this period, the SPGT would be phased out as the Portuguese system patched into TARGET2. The timetable and implementation details are in the hands of SIBS, as the provider, while the working group agreed to set up an interbanking meeting to disseminate information on the proposal in the first quarter of 2007.

#### II.1. SPGT

The Portuguese real-time gross settlement system dipped slightly, as it had done in 2005. The fall was 0.7% in volume and 2.8% in value, with 1.34 million transactions to the value of 5,182,065 million euros (Table I.1).

Domestic transactions moved up, keeping to the trend, with the number of settlements per participant through the SPGT/SIBS channel up approximately 12% in volume and 10% in value.

After 6 years of overall rise (1999-2004) there was a small correction in both volume and value, due to the cross-border side of the system. Here, value fell overall while the pattern of volume varied: operations through TARGET/Interlinking rose but those through Interlinking fell considerably. Interbank transactions were not the prime cause, in fact they rose by almost 1.5%. It was customer transactions that fell – 35% in volume and 28% in value. This situation results from changes in business, along with the increasing use of alternative systems in many customer operations, such as Euro1 and Step2 of the EBA.



#### Chart II.1

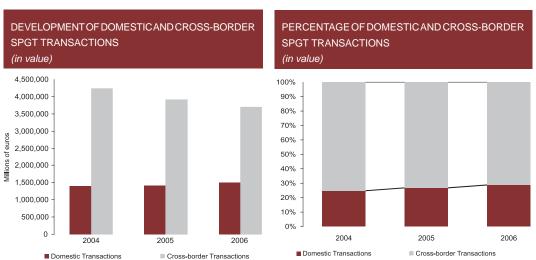
Chart II.2

There had been a slight increase in the share of domestic transactions in 2004, both in volume and value, moving towards the 2002 situation. There was a rise of around 15.5% in domestic traffic with 750,917 transactions processed, accompanied by a 2% fall in cross-border operations, with 623,054 processed. This variation can be fundamentally explained by transactions received through the Interbolsa real-time settlement system (SLRT). This had been connected to the SPGT in November 2003, with 2004 seeing a rise of around 100,000 individual transactions settled through the system. With this increase, no impact was felt from the closing of financial settlement in the derivatives market in March 2004, as this migrated to Clearnet Paris (Charts II.1, II.2, II.3 and II.4).

In 2005, the share of domestic transactions rose again, to stand at around 56% of volume and 27% of value. Cross-border transactions were down 5.3% in volume and 7.6% in value.

In 2006, domestic share rose again, and stood at around 59% in volume and 29% in value, partly on the back of a sharper rise in absolute figures, with volume up 4% and value 5.4%. Cross-border transactions fell 6.8% in volume and 5.8% in value.

Chart II.4



## Chart II.3

Domestic transactions can be described as those which result in a payment order and/or a receipt that only has an impact on the settlement accounts of the SPGT and/or the SLOD participant. During the year under review, most of these stemmed from ancillary systems - 63.5% in volume and 49.3% in value. The figures correspond fundamentally to settlement of balances in the clearing system, transactions processed through Banco de Portugal market system, transactions with securities and large-value direct debits<sup>12</sup>.

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#### Table II.1

| SPGT - DOMESTIC TRANSACTIONS IN 2006<br>(Volume in units and value in millions of EUR) |                                       |           |         |                              |         |                      |  |  |  |
|--|---------------------------------------|-----------|---------|------------------------------|---------|----------------------|--|--|--|
|  | Transactions through ancillary system |           |         | Transactions through<br>SPGT |         | Domestic<br>sactions |  |  |  |
|  | Volume                                | Value     | Volume  | Value                        | Volume  | Value                |  |  |  |
| January  | 43,890                                | 66,447.0  | 23,304  | 64,477.3                     | 67,194  | 130,924.3            |  |  |  |
| February   | 41,711                                | 52,515.6  | 20,194  | 54,024.3                     | 61,905  | 106,539.9            |  |  |  |
| March  | 45,054                                | 61,197.5  | 24,645  | 64,248.9                     | 69,699  | 125,446.4            |  |  |  |
| April  | 36,516                                | 50,094.9  | 20,348  | 46,382.0                     | 56,864  | 96,476.9             |  |  |  |
| Мау  | 46,953                                | 65,249.8  | 25,436  | 61,271.9                     | 72,389  | 126,521.7            |  |  |  |
| June   | 42,769                                | 67,738.6  | 24,057  | 69,654.8                     | 66,826  | 137,393.4            |  |  |  |
| July   | 39,587                                | 66,105.0  | 23,806  | 58,725.1                     | 63,393  | 124,830.1            |  |  |  |
| August   | 38,474                                | 67,143.3  | 22,883  | 60,210.9                     | 61,357  | 127,354.2            |  |  |  |
| September  | 38,733                                | 72,107.7  | 23,085  | 68,857.8                     | 61,818  | 140,965.5            |  |  |  |
| October  | 44,360                                | 55,096.1  | 25,397  | 65,447.1                     | 69,757  | 120,543.2            |  |  |  |
| November   | 41,871                                | 58,185.4  | 25,870  | 62,221.2                     | 67,741  | 120,406.6            |  |  |  |
| December   | 40,446                                | 56,381.7  | 28,253  | 83,701.9                     | 68,699  | 140,083.6            |  |  |  |
| Total  | 500,364                               | 738,262.6 | 287,278 | 759,223.2                    | 787,642 | 1,497,485.8          |  |  |  |
| Daily average  | 1,962                                 | 2,895.1   | 1,127   | 2,977.3                      | 3,089   | 5,872.5              |  |  |  |
| Memorandum:  |                                       |           |         |                              |         |                      |  |  |  |
| Total (2005)   | 501,661                               | 732,232.5 | 255,723 | 688,167.7                    | 757,384 | 1,420,400.2          |  |  |  |
| Daily average (2005)   | 1,952                                 | 2,849.0   | 995     | 2,678.0                      | 2,947   | 5,527.0              |  |  |  |

Domestic transactions through the SPGT include interbank transfers to and from customers, and to and from the Treasury. There were 287,278 transactions to the value of 759,223.2 million euros during the year (Table II.1).

Included here are around 281.9 thousand large-value cheques totalling 110,783 million euros (Table II.2). This corresponds to a daily figure of 1,127 cheques to the value of 443.1 million euros. The rise over a year earlier is approximately 2.2%, even though the number of cheques overall has fallen considerably.

January saw the biggest number of large-value cheques and December the biggest value. Among the 281.9 thousand operations, around 2.69 thousand relate to cheques returned for some reason (around 1%).

| LARGE-VALUE CHEQ                               | UES IN 2006 |              |        |                    |         |           |  |  |  |  |
|--|-------------|--------------|--------|--------------------|---------|-----------|--|--|--|--|
| (Volume in units and value in millions of EUR) |             |              |        |                    |         |           |  |  |  |  |
|  | Presented   | for clearing | Returi | ned <sup>(1)</sup> | То      | tal       |  |  |  |  |
|  | Volume      | Value        | Volume | Value              | Volume  | Value     |  |  |  |  |
| January  | 24,830      | 9,592.8      | 258    | 88.9               | 25,088  | 9,681.7   |  |  |  |  |
| February                                       | 21,042      | 8,251.9      | 202    | 54.6               | 21,244  | 8,306.5   |  |  |  |  |
| March  | 23,964      | 8,668.3      | 248    | 62.5               | 24,212  | 8,735.7   |  |  |  |  |
| April  | 19,816      | 7,968.4      | 215    | 67.4               | 20,031  | 8,032.5   |  |  |  |  |
| Мау  | 24,102      | 8,835.4      | 246    | 64.1               | 24,348  | 8,903.7   |  |  |  |  |
| June   | 23,920      | 9,710.1      | 223    | 68.3               | 24,143  | 9,763.4   |  |  |  |  |
| July   | 24,289      | 9,952.6      | 231    | 53.3               | 24,520  | 10,002.8  |  |  |  |  |
| August   | 22,991      | 8,810.8      | 237    | 50.2               | 23,228  | 8,866.9   |  |  |  |  |
| September                                      | 22,524      | 8,781.4      | 200    | 56.1               | 22,724  | 8,847.0   |  |  |  |  |
| October  | 24,001      | 9,399.6      | 253    | 71.1               | 24,254  | 9,470.7   |  |  |  |  |
| November                                       | 23,487      | 9,671.2      | 187    | 53.2               | 23,674  | 9,724.4   |  |  |  |  |
| December                                       | 24,202      | 10,320.8     | 189    | 127.1              | 24,391  | 10,447.9  |  |  |  |  |
| Total  | 279,168     | 109,963.3    | 2,689  | 819.9              | 281,857 | 110,783.2 |  |  |  |  |
| Daily average                                  | 1,117       | 439.9        | 11     | 3.3                | 1,127   | 443.      |  |  |  |  |
| Memorandum:                                    |             |              |        |                    |         |           |  |  |  |  |
| Total (2005)                                   | 272,960     | 113,109.2    | 2,764  | 773.3              | 275,724 | 113,882.  |  |  |  |  |
| Daily average (2005)                           | 1,096       | 454.3        | 11     | 3.1                | 1,107   | 457.4     |  |  |  |  |

#### Table II.2

(1) Includes cheques returned and them re-submitted.

Large-value direct debits are also included in domestic transactions, although they correspond to a far smaller share. This instrument was processed only from October 2003 and has seen sustained growth since then. In 2006, there were 2,909 transactions (25% up on a year earlier) to the value of de 740,226.3 thousand euros (19.6% up on a year earlier) (Table II.3).

#### Table II.3

|            |                      | Prese  | ented     |
|------------|----------------------|--------|-----------|
|            |                      | Volume | Value     |
| nuary      |                      | 223    | 59,160.6  |
| ebruary    |                      | 194    | 46,764.5  |
| arch       |                      | 232    | 65,150.6  |
| pril       |                      | 217    | 52,859.3  |
| lay        |                      | 239    | 60,296.4  |
| ine        |                      | 228    | 57,975.6  |
| lly        |                      | 256    | 62,204.1  |
| ugust      |                      | 273    | 70,461.7  |
| eptember   |                      | 240    | 59,334.8  |
| ctober     |                      | 265    | 65,303.6  |
| ovember    |                      | 275    | 71,029.3  |
| ecember    |                      | 267    | 69,658.8  |
|            | Total                | 2,909  | 740,226.3 |
|            | Daily average        | 11.6   | 2,960.9   |
| emorandum: |                      |        |           |
|            | Total (2005)         | 2,288  | 618,706.9 |
|            | Daily average (2005) | 9.2    | 2,484.8   |

Cross-border transactions are those which are ordered by or in favour of an SPGT participant and tied to a payment/receipt in euros in the settlement account at the NCB of a European Union country. The SPGT sent 219,477 transactions to TARGET and received 330,804 payments, a 20.6% fall in those sent and a 5.5% rise in those received. Those sent came to 1,839,624.4 million euros (down 6.1%) and those received came to 1,844,954.4 million euros (down 5.6%) (Table II.4).

### Table II.4

## SPGT CROSS-BORDER TRANSACTIONS IN 2006 (Volume in units and Value in millions of EUR)

|                      | Transactions send to<br>TARGET |             |         | received from<br>RGET | Total cross-border<br>Transactions |             |  |
|----------------------|--------------------------------|-------------|---------|-----------------------|------------------------------------|-------------|--|
| _                    | Volume                         | Value       | Volume  | Value                 | Volume                             | Value       |  |
| January              | 19,249                         | 191,266.3   | 26,423  | 188,595.8             | 45,672                             | 379,862.1   |  |
| February             | 17,136                         | 137,860.1   | 24,229  | 137,014.4             | 41,365                             | 274,874.5   |  |
| March                | 20,457                         | 145,803.9   | 29,121  | 145,851.6             | 49,578                             | 291,655.5   |  |
| April                | 16,193                         | 124,546.8   | 24,516  | 124,763.6             | 40,709                             | 249,310.4   |  |
| Мау                  | 20,242                         | 113,714.2   | 29,316  | 115,000.5             | 49,558                             | 228,714.7   |  |
| June                 | 18,512                         | 169,588.0   | 28,782  | 167,979.5             | 47,294                             | 337,567.5   |  |
| July                 | 17,854                         | 167,608.2   | 28,949  | 169,515.9             | 46,803                             | 337,124.1   |  |
| August               | 17,277                         | 131,075.9   | 26,306  | 132,173.8             | 43,583                             | 263,255.7   |  |
| September            | 17,377                         | 135,934.7   | 26,837  | 140,275.6             | 44,214                             | 276,210.3   |  |
| October              | 19,087                         | 187,578.5   | 29,745  | 186,909.7             | 48,832                             | 374,488.2   |  |
| November             | 18,649                         | 185,186.3   | 29,088  | 184,947.3             | 47,737                             | 370,133.6   |  |
| December             | 17,444                         | 149,461.5   | 27,492  | 151,920.7             | 44,936                             | 301,382.2   |  |
| Total                | 219,477                        | 1,839,624.4 | 330,804 | 1,844,954.4           | 550,281                            | 3,684,578.8 |  |
| Daily average        | 861                            | 7,214.2     | 1,297   | 7,235.1               | 2,158                              | 14,449.3    |  |
| Memorandum:          |                                |             |         |                       |                                    |             |  |
| Total (2005)         | 276,250                        | 1,958,111.8 | 313,635 | 1,953,885.6           | 589,885                            | 3,911,997.4 |  |
| Daily average (2005) | 1,075                          | 7,619.0     | 1,220   | 7,603.0               | 2,295                              | 15,222.0    |  |

In the cross-border transactions sent by the SPGT to TARGET (Table II.5) interbank transactions accounted for 50.4% in volume and 98.2% in value. The remainder was made up of transfers between NCBs. Customer transactions were down considerably in both volume (34.9%) and value (27.9%). Payments by customers came in at 49.6% in volume and 1.6% in value, with the remainder involving transfers between NCBs.

#### Table II.5

| CROSS-BORDER TRANSACTIONS SENT BY SPGT TO TARGET<br>(Volume in units and value in millions of EUR) |                  |             |         |             |        |       |  |  |  |
|--|------------------|-------------|---------|-------------|--------|-------|--|--|--|
|  | 2005 2006 Variat |             |         |             |        |       |  |  |  |
|  | Volume           | Value       | Volume  | Value       | Volume | Value |  |  |  |
| Interbank  | 108,996          | 1,913,304.3 | 110,600 | 1,807,254.9 | -1.5   | -5.5  |  |  |  |
| Customers  | 167,125          | 40,669.4    | 108,740 | 29,317.4    | -34.9  | -27.9 |  |  |  |
| Inter-NCBs   | 129              | 4,138.3     | 137     | 3,052.3     | 6.2    | -26.2 |  |  |  |
| Total  | 276,250          | 1,958,112.0 | 219,477 | 1,839,624.6 | -20.6  | -6.1  |  |  |  |
| Daily average  | 1,075            | 7,619.1     | 861     | 7,214.2     | -19.9  | -5.3  |  |  |  |

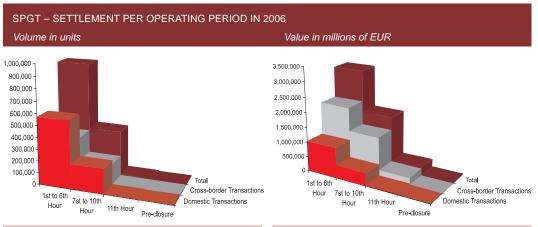
#### Table II.6

## CROSS-BORDER TRANSACTIONS RECEIVED FROM TARGET IN SPGT (Volume in units and value in millions of EUR)

|               | 20      | 05          | 20      | 006         | Variation (%) |       |
|---------------|---------|-------------|---------|-------------|---------------|-------|
|               | Volume  | Value       | Volume  | Value       | Volume        | Value |
| Interbank     | 102,805 | 1,907,746.8 | 105,919 | 1,800,578.6 | 3.0           | -5.6  |
| Customers     | 210,550 | 45,239.8    | 224,622 | 43,551.3    | 6.7           | -3.7  |
| Inter-NCBs    | 280     | 899.2       | 263     | 824.5       | -6.1          | -8.3  |
| Total         | 313,635 | 1,953,885.8 | 330,804 | 1,844,954.4 | 5.5           | -5.6  |
| Daily average | 1,220   | 7,602.7     | 1,297   | 7,235.1     | 6.3           | -4.8  |

The numbers of cross-border payments received at the SPGT from TARGET are fundamentally the same as for those sent, though there are more customer transactions involved. Nearly 97.6% correspond to interbank transactions (value) with 32.0% in volume (Table II.6). Customer payments accounted for 67.9% of volume but only 2.4% of value. The remainder is made up of transfers between NCBs. There was a 6.7% rise in the number of customer transactions received at the SPGT from TARGET.





SPGT pricing is segmented according to the settlement period. The purpose of this policy is to minimise systemic risk, since it penalises late settlement operations. Participants are thus encouraged to settle their operations as early as possible, preventing the accumulation of payments in the pre-closure period (Table II.7 and Chart II.5). During 2006, 70.4% in volume and 60.8% in value were processed during the first six hours (from 6 a.m. to midday). By the end of the 10th hour of operations, the SPGT had settled 99.2% of payments (in volume) and 94.9% (in value).

#### Table II.7

#### SPGT – SETTLEMENT PER OPERATING PERIOD IN 2006 (%)

|                    |       | Domestic<br>Volume Value |       | Cross- | Cross-border<br>Volume Value |       | Total |  |
|--------------------|-------|--------------------------|-------|--------|------------------------------|-------|-------|--|
|                    |       |                          |       | Volume |                              |       | Value |  |
| Normal period (1)  |       |                          |       |        |                              |       |       |  |
| 1st to 6th Hour    |       | 72.48                    | 69.04 | 67.31  | 57.49                        | 70.35 | 60.83 |  |
| 7th to 10th Hour   |       | 26.74                    | 28.61 | 31.79  | 36.24                        | 28.82 | 34.03 |  |
| Interbank period   |       |                          |       |        |                              |       |       |  |
| 11th Hour          |       | 0.75                     | 2.32  | 0.90   | 6.25                         | 0.81  | 5.12  |  |
| Pre-closure period |       | 0.03                     | 0.02  | 0.00   | 0.02                         | 0.02  | 0.02  |  |
|                    | Total | 100                      | 100   | 100    | 100                          | 100   | 100   |  |

(1) Interbank and customer transfers

# II.2. SLOD

The Settlement System for Other Depositors (SLOD) was created to maintain access facilities to Banco de Portugal accounts by institutions not eligible for the SPGT. The SLOD therefore encompasses those depositors that use Banco de Portugal but are not within the SPGT purview since they do not fulfil the minimum requirements, which are of necessity more demanding and more selective. This year, as last, there was a rise in volume (up 17.8%), but a considerable fall in value (down 21.2%) (Table I.1). This led to a rise in average unit value from 1,875,402 euros in 2005 to 1,900,362.82 euros a year later, a rise of around 1.3% (Table I.4). This development is also reflected in average daily figures, where there was a rise in volume but a fall in value. At the end of the year, there were 93 participants, compared to 98 at end-2005 (Table I.3).

#### **II.3. TARGET**

During the year, the focus was on specifications of the Eurosystem's TARGET2 project. Among the points analysed were harmonised pricing, legal issues, conditions for participation, dates for migration and specific country-related matters related to change-over. All the documentation is essential as a framework for the strategic decisions on a system due to come on stream on 19 November 2007 (the first migration window).

As in previous years, the Eurosystem used SIBOS (9 to 13 October) to disseminate information on TARGET2, focusing on the most important issues – timetable, test phases, migration procedure and a range of details on using the system.

Internally, the Eurosystem has been working on different aspects of the project, among which:

- "TARGET2 Risk Management Framework", focusing on risk analysis and aspects of security;

- "TARGET2 Legal Framework", to be finalised in 2007, aiming to provide the legal framework for the system, to replace the existing TARGET guideline and annexes;

- All issues relating to internal (Eurosystem) and external tests and preparation for the migration windows already agreed.

A considerable amount of work was done in collaboration with European banks (especially TARGET working groups) and associations such as ECSDA and EBA. There were meetings and other forms of interaction between all these entities and the Eurosystem.

During the year, TARGET was closed on New Year's Day, Good Friday, Easter Monday, 1 May (Labour day), Christmas Day and 26 December, as well as Saturdays and Sundays, as defined in its calendar.

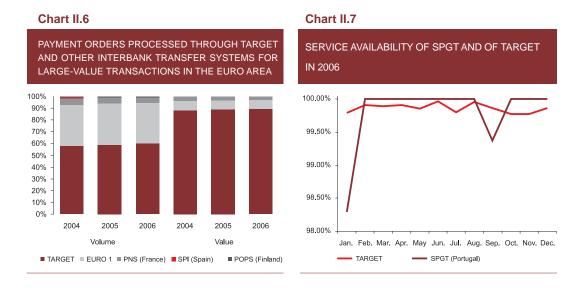
TARGET remains the top system for large-value payments in euros. During the year, it processed around 89.4% in value and 60.2% in volume (Table II.8 and Chart II.6). The figures show a small rise in share (9.2% in volume and 9.1% in value), while EURO 1 grew 2.8% in volume and 12.3% in value. The PNS (Paris Net Settlement) fell by 3.2% in volume and 5% in value, while POPS (Pankkien Online Pikasiirrot ja Sekit-järjestelmä) fell by 1.5% in volume, though value rose by 1.1%. The Spanish service (SPI) has had no business since it was closed on 15 December 2004.

| INTERBANK FUNDS IN THE EURO AREA<br>(Volume in thousands and value in billions of EUR) |           |         |           |         |           |         |  |  |  |  |
|--|-----------|---------|-----------|---------|-----------|---------|--|--|--|--|
|  | 20        | 04      | 200       | 05      | 200       | 6       |  |  |  |  |
|  | Volume    | Value   | Volume    | Value   | Volume    | Value   |  |  |  |  |
| TARGET   | 69,213.5  | 443,993 | 76,150.6  | 488,901 | 83,180.0  | 533,541 |  |  |  |  |
| Domestic   | 52,368.1  | 297,856 | 58,467.5  | 324,089 | 64,162.2  | 348,765 |  |  |  |  |
| ross-border  | 16,845.4  | 146,137 | 17,683.1  | 164,812 | 19,017.8  | 184,777 |  |  |  |  |
| EURO 1   | 41,724.0  | 44,125  | 46,413.0  | 42,939  | 47,726.7  | 48,241  |  |  |  |  |
| PNS (France)   | 7,006.9   | 17,470  | 6,835.7   | 15,648  | 6,613.9   | 14,862  |  |  |  |  |
| SPI (Spain)  | 1,058.3   | 218     | 0.0       | 0       | 0.0       | 0       |  |  |  |  |
| POPS (Finland)   | 563.8     | 460     | 595.3     | 454     | 586.5     | 459     |  |  |  |  |
| Total  | 119,566.5 | 506,266 | 129,994.6 | 547,942 | 138,107.1 | 597,104 |  |  |  |  |
| Daily average  | 461.6     | 1,955   | 505.8     | 2,132   | 541.6     | 2,342   |  |  |  |  |

#### Table II.8

PAYMENT ORDERS PROCESSED BY TARGET AND OTHER TRANSFER SYSTEMS FOR LARGE-VALUE INTERBANK FUNDS IN THE EURO AREA

TARGET saw an average daily figure of 326,196 payments during the year, with value on 2,092 billion euros. These figures are an increase of around 10.1% in volume and 10% in value over the previous year. As with Portugal since 2002, TARGET processes (in value terms) more domestic than cross-border payments. In 2006, cross-border payments accounted for 22.9% in volume and 34.6% in value of total TARGET traffic.



TARGET saw an average daily figure of 326,196 payments during the year, with value on 2,092 billion euros. These figures are an increase of around 10.1% in volume and 10% in value over the previous year. As with Portugal since 2002, TARGET processes (in value terms) more domestic than cross-border payments.

As with the SPGT, the participants in TARGET put in most of their payments at the start of the day, contributing in a big way to the smooth running of the system and a cut in logjams, especially regarding end-of-day liquidity pressures.

As for availability, TARGET has improved performance over the years: from 99.71% in 2000, to 99.75% in 2001, 99.77% in 2002, 99.79% in 2003, 99.81% in 2004, 99.83% in 2005 and 99.87% in 2006. The SPGT, especially in the TARGET/Interlinking segment, fell slightly during the year, to stand at an average availability of 99.81%.



#### Chart II.8

# CROSS-BORDER PAYMENTS SENT BY EACH NATIONAL RTGS SYSTEM LINKED TO TARGET (Volume in thousands and value in billions of *FLIR*)

| (Volume in thousands and value in billions of EUR) |          |         |          |         |          |        |  |  |  |
|--|----------|---------|----------|---------|----------|--------|--|--|--|
|  | 200      | 5       | 200      | 6       | Variatio | on (%) |  |  |  |
|  | Volume   | Value   | Volume   | Value   | Volume   | Value  |  |  |  |
| Austria - ARTIS                                    | 543.6    | 3,445   | 546.6    | 3,690   | 0.6      | 7.1    |  |  |  |
| Belgium - ELLIPS                                   | 939.6    | 13,583  | 917.8    | 15,939  | -2.3     | 17.3   |  |  |  |
| Germany - RTGSplus                                 | 5,021.3  | 41,295  | 5,147.5  | 46,751  | 2.5      | 13.2   |  |  |  |
| Denmark - KRONOS                                   | 97.9     | 3,744   | 108.0    | 3,100   | 10.3     | -17.2  |  |  |  |
| Spain - SLBE                                       | 862.2    | 5,841   | 1,031.9  | 6,885   | 19.7     | 17.9   |  |  |  |
| ECB - EPM  | 39.6     | 3,803   | 39.7     | 5,049   | 0.3      | 32.8   |  |  |  |
| Finland - BOF                                      | 147.8    | 1,757   | 159.4    | 2,044   | 7.8      | 16.3   |  |  |  |
| France - TBF                                       | 2,150.6  | 24,156  | 2,456.0  | 27,197  | 14.2     | 12.6   |  |  |  |
| United Kingdom - CHAPS Euro                        | 3,598.4  | 28,872  | 4,116.6  | 32,229  | 14.4     | 11.6   |  |  |  |
| Greece - HERMES euro                               | 315.5    | 2,458   | 323.5    | 2,488   | 2.5      | 1.2    |  |  |  |
| Ireland - IRIS                                     | 425.5    | 2,828   | 485.8    | 3,117   | 14.2     | 10.2   |  |  |  |
| Italy - BI-REL <sup>(1)</sup>                      | 1,973.1  | 10,350  | 2,078.6  | 12,058  | 5.3      | 16.5   |  |  |  |
| Luxemburg - LIPS-GROSS                             | 407.4    | 3,902   | 473.2    | 4,491   | 16.2     | 15.1   |  |  |  |
| Ntherlands - TOP                                   | 793.9    | 14,790  | 854.8    | 16,089  | 7.7      | 8.8    |  |  |  |
| Portugal - SPGT                                    | 276.3    | 1,958   | 219.5    | 1,840   | -20.6    | -6.0   |  |  |  |
| Sweden - Euro RIX                                  | 90.3     | 2,031   | 58.8     | 1,810   | -34.9    | -10.9  |  |  |  |
| Total  | 17,683.0 | 164,813 | 19,017.7 | 184,777 | 7.5      | 12.1   |  |  |  |

(1) Includes SORBNET Euro (Poland) and EP RTGS (Slovenia)

There are 16 real-time gross settlement systems directly linked to TARGET, including the ECB's own Payment Mechanism (EPM) (Table II.9). On 20 November, Estonia joined through the Italian system (BI-REL).

The German system (RTGSplus) is the biggest in terms of cross-border transactions, accounting for 27.07% of total volume and 25.3% of value.

The other important systems are the Italian (BI-REL) with 10.9% of cross-border traffic (in volume terms), the French (TBF) with 12.9%, and the U.K. (CHAPS Euro) with 21.7%.

The Portuguese system processed 219.5 thousand cross-border payments, totalling 1,840 billion euros, out of a TARGET total of 19,017.7 thousand, to the value of 184,777 billion euros. This is a fall of nearly 20.6% in volume and 6% in value for cross-border payments. It was the system that lost most in volume terms, coming in 12th in volume and 15th in value.

The German SLBE saw the biggest growth in payments (27.07%).

Cross-border payments through TARGET can be broken down (like the Portuguese SPGT) into interbank payments, transfers on behalf of customers and payments between NCBs (Table II.10).

| CROSS-BORDER PAY<br>(Volume in thousands a |        |           |        |           |          |        |
|--|--------|-----------|--------|-----------|----------|--------|
|  | 20     | 005       | 20     | 006       | Variatio | on (%) |
|  | Volume | Value     | Volume | Value     | Volume   | Value  |
| Interbank                                  | 8,490  | 156,580.2 | 9,015  | 175,618.3 | 6.2      | 12.2   |
| Customers                                  | 9,180  | 8,145.0   | 9,987  | 9,096.1   | 8.8      | 11.7   |
| Inter-NCBs                                 | 12     | 86.7      | 15     | 62.2      | 25.0     | -28.3  |
| Total                                      | 17,682 | 164,811.9 | 19,017 | 184,776.6 | 7.6      | 12.1   |
| Daily average                              | 69     | 641.3     | 75     | 724.6     | 8.7      | 13.0   |

Interbank cross-border payments through TARGET account for 95% in terms of value and 47.4% in terms of volume. The remaining volume figures break down into customer payments (52.5%) and inter-NCBs (0.1%). Average interbank payments for customers were 19.5 million euros and the average value of payments on behalf of customers was 0.9 million euros.

In seven of the sixteen systems making up TARGET (CHAPS, RTGSplus, HERMES, IRIS, BI-REL, SLBE and TBF) cross-border operations for customers now account for over 50% of operations, though the figure for value is much lower (Table II.11) in spite of the expansion of EBA systems. The traditional system of "correspondent banks" is now on the wane: apart from being short on efficiency, it is expensive for banks both in terms of maintenance and management.

# CROSS-BORDER PAYMENTS THROUGH TARGET BY TYPE OF TRANSACTION AND BY RTGS (Volume in units and value in billions of euros)

|           |                | 200       | 06       | Proportio | on (%) |                     |                | 200       | 6        | Proporti | on (%) |
|-----------|----------------|-----------|----------|-----------|--------|---------------------|----------------|-----------|----------|----------|--------|
| System    |                | Volume    | Value    | Volume    | Value  | System              |                | Volume    | Value    | Volume   | Value  |
| Artis     |                |           |          |           |        | CHAPS               |                |           |          |          |        |
| (Austria) | Clients        | 78,058    | 211.5    | 14.28     | 5.73   | (United<br>Kingdom) | Clientes       | 2,540,272 | 2,140.8  | 61.71    | 6.6    |
|           | Interbank      | 468,357   | 3,477.8  | 85.68     | 94.24  | 5,                  | Interbank      | 1,576,346 | 30,088.4 | 38.29    | 93.3   |
|           | Inter-NCBs     | 196       | 1.0      | 0.04      | 0.03   |                     | Inter-NCBs     | 13        | 0.0      | 0.00     | 0.0    |
|           |                | 546,611   | 3,690.3  |           |        |                     |                | 4,116,631 | 32,229.2 |          |        |
| ELLIPS    |                |           |          |           |        | HERMES              |                |           |          |          |        |
| (Belgium) | Clients        | 441,026   | 607.8    | 48.05     | 3.81   | (Greece)            | Clients        | 195,522   | 15.5     | 60.43    | 0.6    |
|           | Interbank      | 470,166   | 15,314.3 | 51.23     | 96.08  |                     | Interbank      | 127,800   | 2,469.4  | 39.50    | 99.20  |
|           | Inter-NCBs     | 6,631     | 16.5     | 0.72      | 0.10   |                     | Inter-NCBs     | 205       | 3.0      | 0.06     | 0.12   |
|           |                | 917,823   | 15,938.6 |           |        |                     |                | 323,527   | 2,487.9  |          |        |
| RTGSplus  |                |           |          |           |        | IRIS                |                |           |          |          |        |
| (Germany) | Clients        | 2,591,387 | 2,121.6  | 50.34     | 4.54   | (Ireland)           | Clients        | 311,966   | 252.7    | 64.22    | 8.1    |
|           | Interbank      | 2,554,960 | 44,620.3 | 49.63     | 95.44  |                     | Interbank      | 173,667   | 2,864.0  | 35.75    | 91.88  |
|           | Inter-NCBs     | 1,183     | 8.9      | 0.02      | 0.02   |                     | Inter-NCBs     | 171       | 0.4      | 0.04     | 0.0    |
|           |                | 5,147,530 | 46,750.8 |           |        |                     |                | 485,804   | 3,117.1  |          |        |
| KRONOS    |                |           |          |           |        | BI-REL              |                |           |          |          |        |
| (Denmark) | Clients        | 10,631    | 16.5     | 9.84      | 0.53   | (Italy)             | Clients        | 1,182,458 | 272.7    | 56.89    | 2.20   |
|           | Interbank      | 97,387    | 3,083.7  | 90.16     | 99.47  |                     | Interbank      | 894,400   | 11,778.0 | 43.03    | 97.6   |
|           | Inter-NCBs     | 0         | 0.0      | 0.00      | 0.00   |                     | Inter-NCBs     | 1,727     | 7.0      | 0.08     | 0.0    |
|           |                | 108,018   | 3,100.2  |           |        |                     |                | 2,078,585 | 12,057.7 |          |        |
| SLBE      |                |           |          |           |        | LIPS-Gross          |                |           |          |          |        |
| (Spain)   | Clients        | 587,203   | 243.5    | 56.91     | 3.54   | (Luxemburg)         | Clients        | 229,601   | 167.0    | 48.52    | 3.72   |
|           | Interbank      | 441,151   | 6,632.2  | 42.75     | 96.33  |                     | Interbank      | 243,601   | 4,324.1  | 51.48    | 96.28  |
|           | Inter-NCBs     | 3,502     | 9.1      | 0.34      | 0.13   |                     | Inter-NCBs     | 0         | 0.0      | 0.00     | 0.00   |
|           |                | 1,031,856 | 6,884.8  |           |        |                     |                | 473,202   | 4,491.1  |          |        |
| EPM       |                |           |          |           |        | TOP                 |                |           |          |          |        |
| (ECB)     | Clients        | 6,337     | 0.1      | 15.96     | 0.00   | (Netherlands)       | Clients        | 216,892   | 1,187.7  | 25.37    | 7.38   |
|           | Interbancárias | 33,229    | 5,043.5  | 83.67     | 99.88  |                     | Interbancárias | 637,765   | 14,896.7 | 74.61    | 92.59  |
|           | Inter-NCBs     | 149       | 5.8      | 0.38      | 0.11   |                     | Inter-NCBs     | 180       | 4.2      | 0.02     | 0.03   |
|           |                | 39,715    | 5,049.4  |           |        |                     |                | 854,837   | 16,088.6 |          |        |
| BOF       |                |           |          |           |        | SPGT                |                |           |          |          |        |
| (Finland) | Clients        | 24,119    | 94.0     | 15.13     | 4.60   | (Portugal)          | Clients        | 108,740   | 29.3     | 49.55    | 1.59   |
|           | Interbank      | 135,179   | 1,949.9  | 84.79     | 95.40  |                     | Interbank      | 110,600   | 1,807.3  | 50.39    | 98.24  |
|           | Inter-NCBs     | 121       | 0.1      | 0.08      | 0.00   |                     | Inter-NCBs     | 137       | 3.1      | 0.06     | 0.1    |
|           |                | 159,419   | 2,044.0  |           |        |                     |                | 219,477   | 1,839.7  |          |        |
| TBF       |                |           |          |           |        | RIX                 |                |           |          |          |        |
| (France)  | Clients        | 1,440,444 | 1,644.4  | 58.65     | 6.05   | (Sweden)            | Clients        | 22,719    | 90.9     | 38.65    | 5.02   |
|           | Interbank      | 1,014,612 | 25,549.5 | 41.31     | 93.94  |                     | Interbank      | 36,059    | 1,719.1  | 61.35    | 94.98  |
|           | Inter-NCBs     | 916       | 3.2      | 0.04      | 0.01   |                     | Inter-NCBs     | 0         | 0.0      | 0.00     | 0.00   |
|           |                | 2,455,972 | 27,197.1 |           |        |                     |                | 58,778    | 1,810.0  |          |        |

TARGET is growing steadily in terms of cross-border payments for customers. In the system overall, this was a bigger share than in the Portuguese system, accounting for 52.5% as against 49.6%.



CHAPTER III. The Interbank Clearing System (SICOI)

## III.1. SICOI

During the year, the clearing system grew, as it had in the previous year. Growth was 3.6% in volume and 2.1% in value, with 1,574.70 million transactions processed to the value of 323,831.7 million euros (Table III.1). The daily average also moved in the same direction, rising to 4,673.25 thousand transactions to the value of 1,222.7 million euros (Table I.2).

A breakdown of SICOI into retail subsystems shows that electronic payment instruments recorded good growth, following the trend of recent years. Interbank electronic transfers were up around 10.4%, direct debits close to 3.2% and the Multibanco 5.3%.

Paper-based payment instruments were down considerably, both in volume (-10.2% for cheques and -14.4% for bills of exchange), and in value (-3.8% for cheques and -4.4% for bills of exchange). The average value for each operation with bills of exchange rose as a result of a bigger fall in volume than in value.

#### Table III.1

# TRANSACTIONS IN THE INTERBANK CLEARING SYSTEM (SICOI) (Volume in millions and value in millions of EUR)

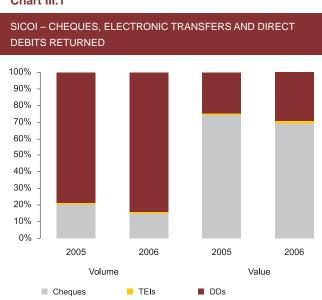
|                   | 2005     |           | 20       | 06        | Variation (%) |       |  |
|-------------------|----------|-----------|----------|-----------|---------------|-------|--|
|                   | Volume   | Value     | Volume   | Value     | Volume        | Value |  |
| Clearing          | 1,519.95 | 317,143.7 | 1,574.70 | 323,831.7 | 3.6           | 2.1   |  |
| CHEQUES           | 172.35   | 183,832.8 | 154.85   | 176,835.7 | -10.2         | -3.8  |  |
| Truncated         | 168.66   | 102,716.4 | 151.25   | 97,134.9  | -10.3         | -5.4  |  |
| Not Truncated     | 3.69     | 81,116.4  | 3.60     | 79,700.9  | -2.5          | -1.7  |  |
| OTHERS            | 1,347.60 | 133,310.9 | 1,419.85 | 146,996.0 | 5.4           | 10.3  |  |
| BILLS OF EXCHANGE | 0.51     | 2,388.5   | 0.43     | 2,284.1   | -14.4         | -4.4  |  |
| TEI               | 49.52    | 67,069.4  | 54.66    | 73,896.0  | 10.4          | 10.2  |  |
| DIRECT DEBITS     | 69.09    | 8,359.5   | 71.33    | 9,809.0   | 3.2           | 17.3  |  |
| ATM (MULTIBANCO)  | 1,228.48 | 55,493.5  | 1,293.42 | 61,006.9  | 5.3           | 9.9   |  |
| <br>Daily average | 4.532    | 1,198.6   | 4.673    | 1,222.7   | 3.1           | 2.0   |  |

The number of documents returned to SICOI rose during the year, though it still stands at only 0.4% of the total number going through the system. One of the reasons for the increase was the growing number of direct debits (17.1%) and interbank electronic transfers (29%) returned. Paper-based instruments also fell, down by around 19.5% for cheques and 14.4% for bills of exchange.

| DOCUMENTS IN SICOI - PRESENTED AND RETURNED<br>(Volume in millions and value in millions of EUR) |          |           |               |           |         |       |  |  |
|--|----------|-----------|---------------|-----------|---------|-------|--|--|
|  | 20       | 06        | Variation (%) |           |         |       |  |  |
|  | Volume   | Value     | Volume        | Value     | Volume  | Value |  |  |
| SICOI  |          |           |               |           |         |       |  |  |
| Presented  | 1,519.95 | 317,143.7 | 1,574.70      | 323,831.7 | 3.6     | 2.1   |  |  |
| Returned   | 5.63     | 3,884.8   | 6.17          | 3,933.9   | 9.7     | 1.3   |  |  |
| CHEQUES  |          |           |               |           |         |       |  |  |
| Presented  | 172.35   | 183,832.8 | 154.85        | 176,835.7 | -10.2   | -3.8  |  |  |
| Returned   | 1.16     | 2,897.5   | 0.93          | 2,738.8   | -19.5   | -5.5  |  |  |
| BILLS OF EXCHANGE  |          |           |               |           |         |       |  |  |
| Presented  | 0.50     | 2,388.5   | 0.43          | 2,284.1   | -14.4   | -4.4  |  |  |
| TEI  |          |           |               |           |         |       |  |  |
| Presented  | 49.52    | 67,069.4  | 54.66         | 73,896.0  | 10.4    | 10.2  |  |  |
| Returned   | 0.04     | 35.6      | 0.06          | 42.7      | (1)29.0 | 20.2  |  |  |
| DIRECT DEBITS  |          |           |               |           |         |       |  |  |
| Presented  | 69.09    | 8,359.5   | 71.33         | 9,809.0   | 3.2     | 17.3  |  |  |
| Returned   | 4.43     | 951.7     | 5.19          | 1,152.4   | 17.1    | 21.1  |  |  |
| ATM (MULTIBANCO)   |          |           |               |           |         |       |  |  |
| Presented  | 1,228.48 | 55,493.5  | 1,293.42      | 61,006.9  | 5.3     | 9.9   |  |  |

(1) One of the factors that contributed to the increase of credit transfers returned was a technical problem at one of the banks in July (see also Table III.15).

Chart III.1 shows that cheques still represent the biggest amounts returned through SICOI, even though numbers are down. Around 2,738.8 million euros were returned, equivalent to 70% of the total. In terms of numbers of items returned, direct debits came top of the list (5.19 million operations), with an increase from 79% of total returned items in 2005 to around 84% a year later.



#### Chart III.1

## **III.2. CHEQUES**

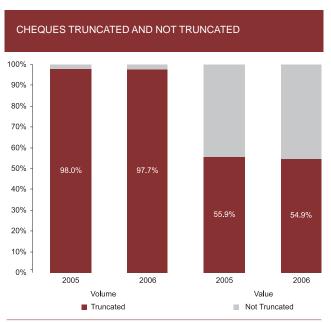
During the year, 154.85 million cheques were processed, to a value of 176,835.7 million euros. This was a 10.2% fall in volume and a 3.8% fall in value over the previous year. Cheques, however, are still the major instrument in terms of value, accounting for around 54.6% of the amounts settled through SICOI.

With the interbank cheque imaging process (CIIC) now fully operative, around 97.7% of cheques (151.25 million) are truncated at the drawer's bank. Cheque imaging is only mandatory in specific circumstances, but banks can access all the images, whatever the value of the cheque, and this optimises the risk management.

#### Table III.3

| CHEQUES TRUNCA<br>(Volume in millions ar |        |           |        |           |          |        |
|--|--------|-----------|--------|-----------|----------|--------|
|  | 20     | 005       | 20     | 06        | Variatio | on (%) |
|  | Volume | Value     | Volume | Value     | Volume   | Value  |
| CHEQUES                                  | 172.35 | 183,832.8 | 154.85 | 176,835.7 | -10.2    | -3.8   |
| Truncated                                | 168.66 | 102,716.4 | 151.25 | 97,134.9  | -10.3    | -5.4   |
| Not Truncated                            | 3.69   | 81,116.4  | 3.60   | 79,700.9  | -2.5     | -1.7   |
| Daily average                            | 0.69   | 735.3     | 0.62   | 710.2     | -9.8     | -3.4   |

Chart III.2 shows that truncated cheques only represent 54.9% of value, even though they account for 97.7% of the volume. Non-truncated cheques account for only 2.3% in volume terms, but a considerable share of the value (45.1%). This is related to the fact that it is mandatory for the drawer's bank to send images of cheques over a specific amount agreed by the banking system.



#### Chart III.2

Table III.4 shows cheques returned broken down into categories. The following conclusions can be drawn from this: (i) the overall figure fell by 19.5% year-on-year; (ii) the reason "lack of provision or insufficient funds" is down 22.8%, but it is still the main reason, representing 76.5% of the total for the year (down 3.3 percentage points on a year earlier; (iii) the second biggest reason for returning a

cheque is still "cheque revoked for good reason - loss", accounting for 72,791 returned (10.2% of the total); (iv) for the drawee's bank, the biggest increase in reason is "lack of stamp/submitting reference" (27.3%); (v) for the drawer's bank, the biggest increase is in "misdirection of account", which rose from 12 to 452 cheques returned.

#### Table III.4

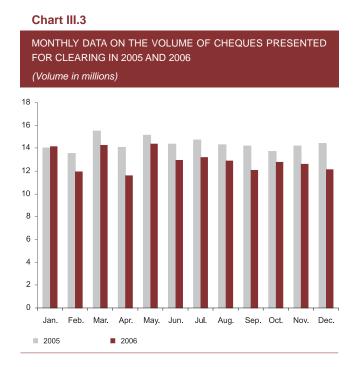
| BREAKDOWN OF REASONS FOR CHEQUES BEING RE                | ETURNED   |         |               |
|--|-----------|---------|---------------|
| (Volume in units)  |           |         |               |
|  | Vol       | ume     |               |
| Reason for return  | 2005      | 2006    | Variation (%) |
| Return by Drawee   |           |         |               |
| Lack of main requirement                                 | 4,501     | 3,426   | -23.9         |
| Cashing irregularities                                   | 2,166     | 2,473   | 14.2          |
| Irregular endorsement                                    | 3,960     | 3,473   | -12.3         |
| Cheque revoked for good reason - theft                   | 11,056    | 5,210   | -52.9         |
| Cheque revoked for good reason - theft with violence     | 7,659     | 6,609   | -13.7         |
| Cheque revoked for good reason - loss                    | 78,794    | 72,791  | -7.6          |
| Cheque revoked for good reason - embezzlement            | 769       | 759     | -1.3          |
| Cheque revoked for good reason - accidental disability   | 325       | 385     | -18.5         |
| Cheque revoked for good reason - causes beyond control   | 40,822    | 37,691  | -7.7          |
| Cheque revoked - submitted after time limit              | 1,381     | 1,733   | 25.5          |
| Cheque presented after time limit                        | 12,959    | 14,377  | 10.9          |
| Account blocked  | 11,461    | 9,621   | -16.1         |
| Account suspended  | 290       | 265     | -8.6          |
| Account closed   | 6,618     | 4,691   | -29.1         |
| Lack of provision or insufficient funds                  | 924,863   | 713,575 | -22.8         |
| Misdirection of account                                  | 543       | 384     | -29.3         |
| Non-existent account number                              | 503       | 526     | 4.6           |
| Non-existent cheque number                               | 4,492     | 2,942   | -34.5         |
| Data error   | 2,543     | 2,709   | 6.5           |
| Incorrect amount   | 4,482     | 5,272   | 17.6          |
| Non delivery of cheque                                   | 3,912     | 4,212   | 7.7           |
| Duplicate register                                       | 1,417     | 717     | -49.4         |
| Lack of stamp/submitting reference                       | 7,265     | 9,246   | 27.3          |
| Altered cheque   | 172       | 217     | 26.2          |
| Return at the request of the collecting bank             | 16,802    | 17,813  | 6.0           |
| Not cleared because of changes to printed data on cheque | 312       | 272     | -12.8         |
| Return by Payee  |           |         |               |
| Invalid return reason                                    | 7,373     | 10,218  | 38.6          |
| Misdirection of account                                  | 12        | 452     | 3,666.7       |
| Duplicated register - drawee institution                 | 667       | 32      | -95.2         |
| Cheque returned after the time limit                     | 731       | 1,069   | 46.2          |
| Total  | 1,158,850 | 933,160 | -19.5         |
|  |           |         |               |

Seen from a monthly point of view (Table III.5), there was a fall in the average number of cheques presented and returned, the first moving from 14.36 million (to the value of 15,319.4 million euros) in 2005 to 12.90 million (to the value of 14,736.3 million euros) a year later; the second from 0.10 million to 0.08 million over the same period. Overall, the relationship between cheques returned and cheques presented fell from 0.7% to 0.6%. The monthly peaks for cheques presented were, in ascending order, January (14.13 million), March (14.26 million) and May (14.40 million). April saw the lowest number (11.59 million).

# MONTHLY DATA ON CHEQUES PRESENTED AND RETURNED THROUGH THE CLEARING SYSTEM IN 2006 (Volume in millions and value in millions of EUR)

| Month                | Pres   | ented     | Returned |         |
|----------------------|--------|-----------|----------|---------|
| Wonth                | Volume | Value     | Volume   | Value   |
| January              | 14.13  | 15,725.8  | 0.08     | 233.8   |
| February             | 11.93  | 13,543.1  | 0.07     | 193.3   |
| March                | 14.26  | 15,759.4  | 0.09     | 253.9   |
| April                | 11.59  | 12,827.7  | 0.07     | 210.7   |
| May                  | 14.40  | 15,981.3  | 0.09     | 266.9   |
| June                 | 12.92  | 14,709.6  | 0.08     | 233.9   |
| July                 | 13.21  | 15,145.0  | 0.08     | 234.0   |
| August               | 12.86  | 15,052.3  | 0.07     | 223.6   |
| September            | 12.06  | 14,275.6  | 0.07     | 215.4   |
| October              | 12.78  | 15,016.1  | 0.08     | 233.2   |
| November             | 12.58  | 14,749.0  | 0.08     | 230.4   |
| December             | 12.13  | 14,050.8  | 0.07     | 209.7   |
| Total                | 154.85 | 176,835.7 | 0.93     | 2,738.8 |
| Monthly average      | 12.90  | 14,736.3  | 0.08     | 228.2   |
| Memorandum:          |        |           |          |         |
| Total 2005           | 172.35 | 183,832.8 | 1.16     | 2,897.5 |
| Monthly average 2005 | 14.36  | 15,319.4  | 0.10     | 241.5   |

There was a fall in cheques presented for clearing every month during the year except for January, which saw a slight rise. There were big falls in April, September and December (Chart III.3).



The rate of cheques returned (including large-value cheques) was between approximately 0.6% in volume and 1.24% in value. In terms of value brackets, 10 to 15 thousand euros and 15 to 20 thousand euros are those with most returned cheques, at 2.14% and 2.08% in volume and 2.15% to 2.07% in value (Table III.6 and Chart III.4).

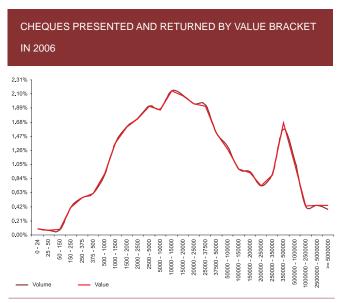
# CHEQUES PRESENTED AND RETURNED BY VALUE BRACKET IN 2006 (Volume in thousands and value in millions of EUR)

|            |           | Prese      | nted      | Returned |         |  |  |
|------------|-----------|------------|-----------|----------|---------|--|--|
| Brac       | kets      | Volume     | Value     | Volume   | Value   |  |  |
| 0          | 24        | 8,172.04   | 134.1     | 7.68     | 0.1     |  |  |
| 25         | 50        | 13,813.12  | 496.8     | 9.82     | 0.3     |  |  |
| 50         | 150       | 36,490.40  | 3,344.4   | 29.60    | 2.8     |  |  |
| 150        | 250       | 21,616.88  | 4,209.3   | 87.85    | 17.2    |  |  |
| 250        | 375       | 16,953.26  | 5,160.2   | 93.83    | 28.5    |  |  |
| 375        | 500       | 10,794.02  | 4,643.9   | 66.72    | 28.8    |  |  |
| 500        | 1,000     | 20,220.83  | 13,820.2  | 181.34   | 126.1   |  |  |
| 1,000      | 1,500     | 7,941.47   | 9,443.7   | 109.33   | 129.9   |  |  |
| 1,500      | 2,000     | 4,041.11   | 6,867.6   | 65.22    | 110.4   |  |  |
| 2,000      | 2,500     | 2,651.79   | 5,811.9   | 46.02    | 100.5   |  |  |
| 2,500      | 5,000     | 5,543.19   | 18,932.3  | 106.75   | 362.5   |  |  |
| 5,000      | 10,000    | 3,339.25   | 22,404.2  | 62.70    | 416.4   |  |  |
| 10,000     | 15,000    | 1,229.96   | 14,475.6  | 26.37    | 310.7   |  |  |
| 15,000     | 20,000    | 589.77     | 9,948.8   | 12.28    | 205.8   |  |  |
| 20,000     | 25,000    | 371.90     | 8,107.9   | 7.27     | 158.2   |  |  |
| 25,000     | 37,500    | 497.53     | 14,820.3  | 9.64     | 283.5   |  |  |
| 37,500     | 50,000    | 208.66     | 8,941.5   | 3.17     | 135.3   |  |  |
| 50,000     | 100,000   | 373.02     | 25,273.1  | 4.89     | 321.8   |  |  |
| 100,000    | 150,000   | 124.55     | 14,648.9  | 1.23     | 143.2   |  |  |
| 150,000    | 200,000   | 49.48      | 8,323.7   | 0.47     | 77.2    |  |  |
| 200,000    | 250,000   | 27.56      | 5,993.7   | 0.20     | 44.0    |  |  |
| 250,000    | 350,000   | 28.02      | 8,050.4   | 0.26     | 72.0    |  |  |
| 350,000    | 500,000   | 17.27      | 7,090.5   | 0.27     | 118.2   |  |  |
| 500,000    | 1,000,000 | 18.79      | 12,451.1  | 0.21     | 130.6   |  |  |
| 1,000,000  | 2,500,000 | 8.92       | 12,981.3  | 0.04     | 55.8    |  |  |
| 2,500,000  | 5,000,000 | 2.49       | 8,341.2   | 0.01     | 36.9    |  |  |
| >= 5000000 |           | 2.10       | 32,082.6  | 0.01     | 142.1   |  |  |
|            |           | 155,127.37 | 286,799.2 | 933.16   | 3,558.8 |  |  |

In percentage terms, the lowest volume of cheques returned is found in the brackets at each end (below 1000 euros and above 1 million euros) where rates are below 1%. In the first three brackets in fact (0 to 24 euros, 25 to 50 euros and 50 to 150 euros) the rates are below 0.1%. No substantial conclusions can be drawn from this fact, however, since the banks are legally obliged to accept cheques up to 150 euros.<sup>13</sup> Cheques cannot be returned for "lack of provision or insufficient funds", which by itself applies to 76.5% of all those returned.

<sup>(13)</sup> On 29 September 2005, Law 48/2005 came into force, and banks henceforth had to pay out on cheques below 150 euros, even if there are insufficient funds in the account.





At the end of 2005, the amount on which the banks were obliged to pay out was raised from 62.32 euros to 150 euros but there were still fewer cheques up to 150 euros processed (58.48 million compared with 69.6 million a year earlier). This represents around 37.7% of cheques cleared, compared with 40.3% in 2005). As for the amounts involved, cheques in this bracket totalled 3,975.2 million euros (4,641.5 million euros in 2005), corresponding to only 1.4% (1.6% in 2005). Only 5% of cheques returned were under 150 euros (11.7% in 2005), corresponding to around 0.1% of amounts returned (0.3% in 2005).

#### **III.3. BILLS OF EXCHANGE**

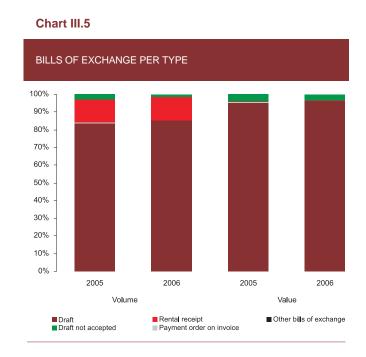
During the year, the clearing system for bills of exchange processed 0.43 million operations to the value of 2,284.1 million euros. This represents only 0.03% in volume terms and 0.71% in value terms for settlement through SICOI. It is the subsystem with the biggest fall in volume (down 14.4% on the previous year) but with one of the biggest increases in average amount per operation (11.7%). This figure rose from 4,731.45 euros in 2005 to 5,286.45 euros a year later. Although the numbers went down, the rate of the fall was slower than in previous years, with 2004 down by 81.1% and 2005 down 41.9%.

The structure by type of operation moved in tandem (Chart III.5), with drafts representing around 83.4% of the bills of exchange (up from 12.2% in 2003, around 58.6% in 2004 and around 84% in 2005). Payment orders on invoice still account for 13.1% in volume and 0.4% in value. Other bills of exchange were well down, and this part of the subsystem is fast becoming residual. Payment orders on invoice were down by around 89.8% in volume and 75.8% in value, coming in at 0.8% in volume terms. Drafts not accepted fell by around 59.6% in volume and 23.5% in value. There were hardly any movements under the heading "other bills".

On 17 September 2003, Banco de Portugal Notice 10/2003 came into force. It stipulated that domiciled receipts should henceforth be settled through the direct debit system. Since then, the collection of bills of exchange has been progressively more limited to drafts and other non-domiciled bills.

| BILLS OF EXCHANGE PER TYPE<br>(Volume in millions and value in millions of EUR) |        |         |        |         |        |        |  |  |  |
|---|--------|---------|--------|---------|--------|--------|--|--|--|
| 2005 2006 Variation (%  |        |         |        |         |        |        |  |  |  |
|   | Volume | Value   | Volume | Value   | Volume | Value  |  |  |  |
| BILLS OF EXCHANGE   | 0.50   | 2,388.5 | 0.43   | 2,284.1 | -14.4  | -4.4   |  |  |  |
| Draft   | 0.42   | 2,277.3 | 0.37   | 2,199.1 | -12.5  | -3.4   |  |  |  |
| Payment order on invoice  | 0.00   | 2.4     | 0.00   | 0.6     | -89.8  | -75.8  |  |  |  |
| Other bills of exchange   | 0.00   | 0.0     | 0.00   | 0.0     | -100.0 | -100.0 |  |  |  |
| Rental receipt  | 0.06   | 10.3    | 0.06   | 9.1     | -11.5  | -11.4  |  |  |  |
| Drafts not accepted   | 0.02   | 98.4    | 0.01   | 75.3    | -59.6  | -23.5  |  |  |  |
| Daily average   | 0.00   | 9.6     | 0.00   | 9.2     | -14.1  | -4.0   |  |  |  |

#### Table III.7



The structural changes in type of bill are reflected in their distribution, though to a lesser extent. (Table III.8). Domestic collection has risen slightly, from 17.16% to 19.1%, though in 2004 it was around 40.9%. Only 82 thousand were processed during the year, a 4.8% fall year on year. Discounts still account for 78.25% in volume and 90% in value, although volume is down 16.6% on 2005. The other items in the subsystem were all down sharply, though their proportion is small in the first place.

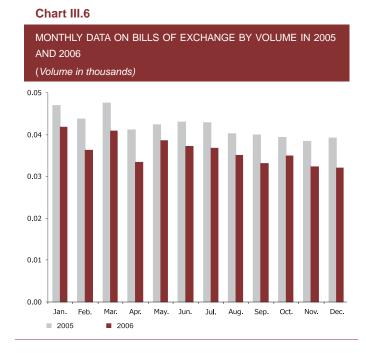
#### Table III.8

| BILLS OF EXCHANGE PER PORTFOLIO TYPE<br>(Volume in millions and value in millions of EUR) |        |         |        |         |               |       |  |  |  |  |
|---|--------|---------|--------|---------|---------------|-------|--|--|--|--|
|   | 20     | 05      | 20     | 06      | Variation (%) |       |  |  |  |  |
|   | Volume | Value   | Volume | Value   | Volume        | Value |  |  |  |  |
| BILLS OF EXCHANGE   | 0.50   | 2,388.5 | 0.43   | 2,284.1 | -14.4         | -4.4  |  |  |  |  |
| Discount  | 0.41   | 2,170.4 | 0.34   | 2,055.3 | -16.6         | -5.3  |  |  |  |  |
| Domestic collection   | 0.09   | 128.1   | 0.08   | 118.9   | -4.8          | -7.2  |  |  |  |  |
| Collection from abroad -<br>- changes can be refused                                      | 0.01   | 35.4    | 0.01   | 38.9    | -11.3         | 9.9   |  |  |  |  |
| Collection from abroad -<br>- changes cannot be<br>refused                                | 0.00   | 54.5    | 0.00   | 70.9    | -12.5         | 30.1  |  |  |  |  |
| Daily average   | 0.00   | 9.6     | 0.00   | 9.2     | -14.1         | -4.0  |  |  |  |  |

Seen from a monthly perspective (Table III.9 and Chart III.6), bills of exchange were significantly down year on year. The average monthly figure was down slightly, from 0.042 million in 2005, to 0.036 million in 2006.

#### MONTHLY DATA ON BILLS OF EXCHANGE of EUR) illions and value in million

| (volume in millions and value in millions of EUR) |        |         |        |         |           |       |  |  |  |
|---|--------|---------|--------|---------|-----------|-------|--|--|--|
| Month   | 2005   |         | 2006   |         | Variation | (%)   |  |  |  |
| Month   | Volume | Value   | Volume | Value   | Volume    | Value |  |  |  |
| January   | 0.047  | 208.2   | 0.042  | 204.3   | -11.3     | -1.9  |  |  |  |
| February  | 0.044  | 201.8   | 0.036  | 184.3   | -17.0     | -8.7  |  |  |  |
| March   | 0.048  | 225.6   | 0.041  | 216.3   | -14.0     | -4.1  |  |  |  |
| April   | 0.041  | 191.6   | 0.033  | 180.9   | -18.9     | -5.6  |  |  |  |
| Мау   | 0.042  | 196.8   | 0.039  | 202.8   | -9.0      | -3.0  |  |  |  |
| June  | 0.043  | 196.3   | 0.037  | 193.1   | -13.7     | -1.6  |  |  |  |
| July  | 0.043  | 197.2   | 0.037  | 195.9   | -14.0     | -0.7  |  |  |  |
| August  | 0.040  | 179.7   | 0.035  | 177.1   | -12.9     | -1.4  |  |  |  |
| September   | 0.040  | 196.3   | 0.033  | 175.8   | -17.1     | -10.5 |  |  |  |
| October   | 0.039  | 207.3   | 0.035  | 199.0   | -11.5     | -4.0  |  |  |  |
| November  | 0.038  | 197.2   | 0.032  | 184.1   | -15.8     | -6.7  |  |  |  |
| December  | 0.039  | 190.3   | 0.032  | 170.5   | -18.5     | -10.4 |  |  |  |
| Total   | 0.505  | 2,388.5 | 0.432  | 2,284.1 | -14.4     | -4.4  |  |  |  |
| Monthly average                                   | 0.042  | 199.0   | 0.036  | 190.3   | -14.4     | -4.4  |  |  |  |



A breakdown by value bracket shows that around 17.4% of bills of exchange are less than 245 euros, though these only represent 0.36% of the amounts involved. The biggest share is in the 5 thousand to 25 thousand euro bracket, with 21.75% in volume and 44.6% in value. The 245 euro bracket has less share, both in volume and in value terms. The fall in the lowest bracket is also due to the switch of domestic receipts to direct debit, which is a system geared to low-value amounts.

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It is also important to note that the lowest brackets (below 2.5 thousand euros) were the biggest fallers in volume and in value, along with the highest brackets (above 50 thousand euros) where no items at all were presented.

## Table III.10

|             |         | 20      | 05       | 20      | 06       | Variatio | on (%) |
|-------------|---------|---------|----------|---------|----------|----------|--------|
| Br          | rackets | Volume  | Value    | Volume  | Value    | Volume   | Value  |
| 0           | 245     | 99,575  | 10.77    | 75,096  | 8.22     | -24.6    | -23.7  |
| 245         | 1,000   | 116,178 | 64.31    | 93,250  | 51.93    | -19.7    | -19.3  |
| 1,000       | 2,500   | 102,783 | 165.17   | 88,680  | 142.69   | -13.7    | -13.6  |
| 2,500       | 5,000   | 67,018  | 234.99   | 60,853  | 214.63   | -9.2     | -8.7   |
| 5,000       | 25,000  | 99,376  | 1,072.77 | 93,955  | 1,017.78 | -5.5     | -5.1   |
| 25,000      | 50,000  | 14,830  | 500.19   | 15,277  | 521.99   | 3.0      | 4.4    |
| 50,000      | 250,000 | 5,037   | 337.18   | 4,949   | 326.82   | -1.7     | -3.1   |
| 250,000     | 500,000 | 5       | 1.51     | 0.00    | 0.00     | -100.0   | -100.0 |
| > = 500,000 |         | 2       | 1.57     | 0.00    | 0.00     | -100.0   | -100.0 |
|             |         | 504,804 | 2,388.5  | 432,060 | 2,284.1  | -14.4    | -4.4   |

#### III.4. INTERBANK ELECTRONIC TRANSFERS (TEIs)

In this subsystem, 54.66 million transactions were processed to a value of 73,896 million euros, a 10.4% increase in volume and a 10.2% increase in value (Table I.1). Transactions returned accounted for around 0.06 million, to the value of 0.04 million euros. This a bigger rise than in the number of items presented, which came in up 29% in volume and 20% in value.

An analysis by value bracket (Table III.11) shows that most electronic transfers cleared are below 5 thousand euros, corresponding to 96% of the total in volume terms and 45% in value. Most transfers returned are also in this bracket (97% in volume and 41% in value).

| Brackets           | Preser    | nted     | Retur  | ned   |
|--------------------|-----------|----------|--------|-------|
| (in euro)          | Volume    | Value    | Volume | Value |
| 0 - 5.000          | 52,617.96 | 33,041.7 | 53.75  | 17.7  |
| 5.000 - 25.000     | 1,568.15  | 16,173.4 | 1.32   | 13.0  |
| 25.000 - 50.000    | 270.41    | 9,377.6  | 0.17   | 5.8   |
| 50.000 - 100.000   | 208.13    | 15,303.3 | 0.09   | 6.3   |
| Total              | 54,664.65 | 73,896.0 | 55.33  | 42.7  |
| Daily average      | 219.54    | 296.8    | 0.22   | 0.2   |
| Memorandum:        |           |          |        |       |
| Total 2005         | 49,524.20 | 67,069.4 | 42.87  | 35.6  |
| Daily average 2005 | 198.10    | 268.3    | 0.17   | 0.1   |

#### Table III.11

(\*) Electronic transfers (TEIs) only account for transfers of under one hundred thousand euros. Values above this are processed through the SPGT, for reasons related to control of systemic risk.

In terms of operational codes (Tables III.12 and III.13), it is important to analyse each closing period separately. In the first, unspecified transfer and salaries are still the most important items, both in terms of volume (71%) and value (76%). These are followed by suppliers and social security payments. In the second period the important items, apart from the unspecified and salaries, are interbank transfers from abroad and domestic transfers.

The transfers processed in the first period are necessarily bigger than the second, both in volume (99.6%) and value (98.1%). This is because the SPGT timetable and the moment when the second period closes imply that this period is limited to transfer orders coming direct from back offices, domestic interbank operations, transfers from abroad and urgent transfers. A supplementary commission is added for the last of these, since more resources have to be allocated to processing and there is an increase in second period operations. The aim is to discourage use of this period for non-interbank or non-urgent operations.

In terms of returns, only 0.10% of first period orders were affected and in the second period, the percentage fell to 0.06% (from 0.13% a year earlier). These figures show clearly the degree of reliability and security that the subsystem has achieved. It should be remembered, however, that total returned items in the two periods rose to 55.33 thousand, to a value of 42.7 million euros.

# ELECTRONIC TRANSFERS BY OPERATIONAL CODE IN 2006 (1ST CLOSURE) (Volume in thousands and value in millions de EUR)

| Operational code                           | Preser    | nted     | Return | Returned |  |  |
|--|-----------|----------|--------|----------|--|--|
| operational code                           | Volume    | Value    | Volume | Value    |  |  |
| Electricity reimbursements                 | 23.42     | 4.4      | 0.04   | 0.0      |  |  |
| Housing rent                               | 136.06    | 123.9    | 0.18   | 0.1      |  |  |
| Salaries                                   | 17,294.72 | 18,570.8 | 4.57   | 3.1      |  |  |
| Suppliers                                  | 2,901.81  | 10,797.0 | 1.85   | 3.6      |  |  |
| Social Security                            | 8,944.20  | 1,793.9  | 14.82  | 2.8      |  |  |
| Pensions                                   | 875.57    | 645.4    | 0.38   | 0.4      |  |  |
| Transfers                                  | 21,531.57 | 36,405.2 | 28.00  | 23.2     |  |  |
| VAT reimbursements                         | 1,190.65  | 1,924.3  | 2.91   | 4.2      |  |  |
| Domestic transfer (manual)                 | 1.57      | 6.2      | 0.03   | 0.0      |  |  |
| Interbank exchange market                  | 0.08      | 0.7      | 0.00   | 0.0      |  |  |
| Commercial transfer from abroad            | 36.88     | 600.5    | 0.55   | 2.5      |  |  |
| Emigrant remittance from abroad            | 0.53      | 8.1      | 0.01   | 0.0      |  |  |
| Low value pension from abroad              | 1,094.74  | 328.1    | 0.93   | 0.2      |  |  |
| Low value commercial transfers from abroad | 334.98    | 1,153.4  | 0.40   | 1.4      |  |  |
| Low value emigrant remittance from abroad  | 97.54     | 156.5    | 0.42   | 0.8      |  |  |
| Transfers of pension from abroad           | 4.36      | 1.1      | 0.15   | 0.0      |  |  |
| Transfers from abroad (manual)             | 0.00      | 0.0      | 0.00   | 0.0      |  |  |
| Total                                      | 54,468.68 | 72,519.6 | 55.21  | 42.2     |  |  |
| Memorandum:<br>Total 2005                  | 49,393.56 | 65,983.6 | 42.70  | 34.6     |  |  |

# ELECTRONIC TRANSFERS BY OPERATIONAL CODE IN 2006 (2ND CLOSURE) (Volume in thousands and value in millions of EUR)

| Operation code                     |            | Pres   | ented   | Retur  | ned   |
|------------------------------------|------------|--------|---------|--------|-------|
| Operation code                     |            | Volume | Value   | Volume | Value |
| Electricity reimbursement          |            | 0.02   | 0.7     | 0.00   | 0.0   |
| Housing rent                       |            | 0.12   | 0.1     | 0.00   | 0.0   |
| Salaries                           |            | 40.17  | 59.9    | 0.00   | 0.0   |
| Suppliers                          |            | 4.49   | 56.0    | 0.00   | 0.0   |
| Social Security                    |            | 0.01   | 0.0     | 0.00   | 0.0   |
| Pensions                           |            | 0.01   | 0.0     | 0.00   | 0.0   |
| Transfers                          |            | 90.79  | 564.5   | 0.03   | 0.2   |
| IVA reimbursements                 |            | 0.00   | 0.0     | 0.00   | 0.0   |
| Interbank exchange market          |            | 8.52   | 97.9    | 0.00   | 0.0   |
| Interbank transfer from abroad     |            | 40.99  | 359.1   | 0.07   | 0.3   |
| Commercial transfer from abroad    |            | 0.41   | 6.4     | 0.00   | 0.1   |
| Emigrant transmittance from abroad |            | 0.01   | 0.3     | 0.00   | 0.0   |
| Domestic interbank transfer        |            | 10.41  | 231.4   | 0.01   | 0.0   |
| Memorandum:                        | Total      | 195.97 | 1,376.4 | 0.11   | 0.5   |
| memorandum:                        | Total 2005 | 130.65 | 1,085.8 | 0.17   | 0.9   |

In terms of service code (Table III.14), a significant part of the entries correspond, logically, to "sending transfers" (around 96.7%). During the year, only 0.13 thousand "transfers of pensions from abroad with standardised account number" were received, to a total of 0.02 million euros. This trend set in during 2004 and the falls were significant, coming in at around 66% in 2005 and 94% in the year under review. This is because the transactions have shifted to "transfers with additional information and NIB or IBAN of beneficiary" (which have gone up by 12% in volume over 2005). The banks are encouraging this shift, since it means more automated handling, with the bank identification number replacing the pensioner's number.

| ELECTRONIC TRANSFERS BY SERVICE CODE<br>(Volume in thousands and value in millions of EUR) |           |          |           |              |
|--|-----------|----------|-----------|--------------|
| Service code   | 200       | 05       | 200       | 6            |
|  | Volume    | Value    | Volume    | Value        |
| Transfers effected   | 48,065.68 | 64,322.9 | 53,035.19 | 70,952.4     |
| Transfers returned   | 41.18     | 31.2     | 52.80     | 37.6         |
| Movement on drawee's account   | 3.45      | 187.4    | 5.10      | 269.7        |
| Transfers to cover drawee's account  | 0.09      | 0.0      | 0.11      | 0.0          |
| Request for confirmation of data (NIB)   | 0.21      | 0.0      | 0.00      | 0.0          |
| Reply to request for account information (NIB)   | 2.78      | 3.5      | 7.27      | 1.8          |
| Information on change of NIB   | 77.56     | 0.0      | 79.43     | 0.0          |
| Transfer with additional information and NIB or IBAN of beneficiary                        | 1,456.46  | 2,746.2  | 1,629.33  | 2,943.5      |
| Return of transfer with additional information and NIB or IBAN of benefeciary              | 1.68      | 4.4      | 2.53      | 5.2          |
| Transfer of pensions from abroad with standardised account number                          | 2.06      | 0.3      | 0.13      | 0.0          |
| Return of transfer of pensions from abroad with<br>standardised account number             | 0.01      | 0.0      | 0.00      | 0.0          |
| Request for return of transfer by drawee's bank  | 11.34     | 19.3     | 15.56     | 23.8         |
| Reply to request for return of transfer by drawee's bank without accounting value          | 6.57      | 10.6     | 10.71     | 15. <i>*</i> |
| Reply to request for return of transfer by drawee's bank without accounting value          | 7.65      | 12.7     | 7.79      | 14.6         |

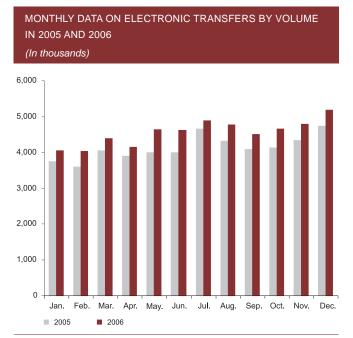
The average monthly figures in Table III.15 come in at around 4,555.39 thousand operations (some 428 thousand more per month than 2005) and 6,158 million euros (up 569 million euros per month on 2005). The biggest volume came in December and the biggest value in November, with minimum volume in February and minimum value in April. The figures were higher every month than a year earlier (Chart III.7).

# MONTHLY DATA ON ELECTRONIC TRANSFERS IN 2006 (Volume in thousands and value in millions of EUR)

| Month                | Presen    | ted      | Returned |       |  |  |
|----------------------|-----------|----------|----------|-------|--|--|
| Month                | Volume    | Value    | Volume   | Value |  |  |
| January              | 4,055.83  | 5,769.4  | 4.04     | 3.3   |  |  |
| February             | 3,035.59  | 5,414.7  | 3.44     | 3.0   |  |  |
| March                | 4,394.17  | 5,856.1  | 3.90     | 3.3   |  |  |
| April                | 4,152.92  | 5,190.1  | 3.52     | 2.2   |  |  |
| Мау                  | 4,636.36  | 6,238.4  | 4.34     | 3.6   |  |  |
| June                 | 4,625.19  | 6,548.4  | 4.26     | 4.5   |  |  |
| July                 | 4,881.70  | 6,467.2  | (1)10.21 | 4.4   |  |  |
| August               | 4,762.78  | 6,238.6  | 5.26     | 4.7   |  |  |
| September            | 4,496.57  | 6,045.1  | 3.73     | 3.9   |  |  |
| October              | 4,660.18  | 6,281.6  | 3.96     | 3.1   |  |  |
| November             | 4,784.07  | 7,137.1  | 4.18     | 3.2   |  |  |
| December             | 5,179.29  | 6,709.3  | 4.48     | 3.5   |  |  |
| Total                | 54,644.65 | 73,896.0 | 55.33    | 42.7  |  |  |
| Monthly average      | 4,555.39  | 6,158.0  | 4.61     | 3.6   |  |  |
| Memorandum:          |           |          |          |       |  |  |
| Total 2005           | 49,524.20 | 67,069.4 | 42.87    | 35.6  |  |  |
| Monthly average 2005 | 4,127.02  | 5,589.1  | 3.57     | 3.0   |  |  |

(1) This volume is exceptional, and resulted from technical problems at one the banks.

## Chart III.7



#### **III.5. MULTIBANCO**

The Multibanco system is a shared network of ATMs and POS terminals that started in September 1985 with 12 ATMs in Lisbon and Oporto.

It is the retail system with most transactions processed. In 2006, it accounted for 82% of all the traffic going through SICOI, with 1,293.4 million transactions, though only 18.8% of value (61 billion euros). It is the payment subsystem with the lowest average value (47.17 euros), and this, more than anything else, justifies its classification as a retail system.

The use of cards is still growing markedly, rising by over 5.3% in volume and 9.9% in value over 2005 (Table III.17). The rate of growth in cards issued rose again by about 7.9%, closer to the rates seen in 2004 and 2003. At the end of 2006, there were around 17.64 million payment cards recognised at the Multibanco terminals (6.92 million credit cards and 10.72 million debit cards). Since the end of 2003, there has been a 65.05% growth in credit cards and a 1.67% growth in debit cards. The debit cards are following a trend that set in during 2003, when there was very slow growth (and even a slide) in numbers of cards. It looks as if saturation point has been reached, since this is a widely available payment instrument which the Portuguese use en masse. The credit card has grown more, up by 28.5% in 2004, 14.2% in 2005 and 13.82% in 2006.

At the end of the year under review, there were 11,440 ATMs and around 158 thousand POS terminals, a 6.7% increase for the first and a 7.7% increase for the second (Table III.16).

| MULTIBANCO CARDS | S AND TERMIN | ALS        |               |               |            |            |            |
|------------------|--------------|------------|---------------|---------------|------------|------------|------------|
|                  | 2000         | 2001       | 2002          | 2003          | 2004       | 2005       | 2006       |
|                  |              | Nur        | nber of cards | s and termina | lls        |            |            |
| Cards issued     | 11,756,240   | 13,250,489 | 14,574,435    | 14,687,682    | 16,188,793 | 16,350,350 | 17,642,048 |
| Debit cards      | 9,168,573    | 10,397,695 | 10,999,436    | 10,544,965    | 10,864,554 | 10,270,090 | 10,721,586 |
| Credit cards     | 2,587,667    | 2,852,794  | 3,574,999     | 4,142,717     | 5,324,239  | 6,080,260  | 6,920,462  |
| Terminals        | 99,155       | 112,057    | 122,623       | 134,977       | 146,586    | 157,860    | 169,857    |
| ATMs             | 7,870        | 8,482      | 8,969         | 9,521         | 10,085     | 10,723     | 11,440     |
| POS              | 91,285       | 103,575    | 113,654       | 125,456       | 136,501    | 147,137    | 158,417    |
|                  |              |            | Annual va     | riation (%)   |            |            |            |
| Cards issued     | -14.6        | 12.7       | 10.0          | 0.8           | 10.2       | 1.0        | 7.9        |
| Debit cards      | -15.3        | 13.4       | 5.8           | -4.1          | 3.0        | -5.5       | 4.4        |
| Credit cards     | -11.9        | 10.2       | 25.3          | 15.9          | 28.5       | 14.2       | 13.8       |
| Terminals        | 12.9         | 13.0       | 9.4           | 10.1          | 8.6        | 7.7        | 7.6        |
| ATMs             | 15.2         | 7.8        | 5.7           | 6.2           | 5.9        | 6.3        | 6.7        |
| POS              | 12.7         | 13.5       | 9.7           | 10.4          | 8.8        | 7.8        | 7.7        |

#### Table III.16

Note: The breakdown of cards into debit and credit cards draws on the classification of the issuing bank. A number of credit cards issued also function as debit cards.

There is a wide range of operations that can be carried out at the Multibanco ATM, not all of them with an impact on the individual's bank account(s) and therefore on the clearing system. Among those with an impact, there are cash withdrawals, payment for services, interbank transfers and low-value payments (motorway tolls, telephone calls and parking charges).

An analysis of transactions involving funds (Chart III.8) shows that purchases take the biggest share (41.26%), followed by withdrawals with cards issued by domestic banks (28.04%). Payments on road tolls come in at around 17.06% of operations. In terms of value, purchases and cash withdrawals at a domestic level came to 22,274.3 million euros and 23,432.5 million euros, respectively, together accounting for 74.9% of the total.

An analysis of the use of the Multibanco (Table III.17), shows that the biggest increase is in low-value payments (agricultural diesel), up 664.1% and the return of transfers (up 205.3%). Telephone calls (another low-value payment) and cash deposits fell most in percentage terms (down 17.2 and 10.3, respectively).

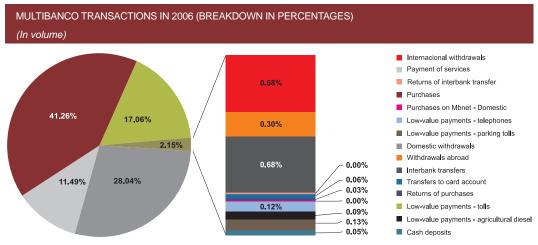
#### Table III.17

| Function                                 | 20       | 05       | 20       | 06       | Variation (%) |       |
|--|----------|----------|----------|----------|---------------|-------|
| i unotion                                | Volume   | Value    | Volume   | Value    | Volume        | Value |
| Domestic withdrawals                     | 346.29   | 20,836.4 | 362.66   | 22,274.3 | 4.7           | 6.9   |
| International withdrawals                | 7.48     | 965.6    | 8.84     | 1,138.4  | 18.2          | 17.9  |
| Withdrawals abroad                       | 3.47     | 343.4    | 3.86     | 388.2    | 11.3          | 13.0  |
| Payment of services                      | 148.39   | 7,864.6  | 148.58   | 9,040.0  | 0.1           | 14.   |
| Interbank transfers                      | 7.76     | 3,007.0  | 8.77     | 3,489.7  | 13.1          | 16.   |
| Returns of interbank transfer            | 0.00     | 0.0      | 0.00     | 0.1      | 205.3         | 444.  |
| Transfers to card account                | 0.85     | 460.9    | 0.80     | 459.8    | -5.0          | -0.   |
| Purchases                                | 496.26   | 21,265.0 | 533.67   | 23,432.5 | 7.5           | 10.   |
| Returns of purchases                     | 0.33     | 30.5     | 0.40     | 37.1     | 20.1          | 21.   |
| Purchases on Mbnet - domestic            | 0.03     | 1.2      | 0.05     | 4.8      | 114.1         | 303.  |
| Low-value payments - tolls               | 213.59   | 552.9    | 220.66   | 583.9    | 3.3           | 5.    |
| Low-value payments - tolls - Telephones  | 1.92     | 2.9      | 1.59     | 2.6      | -17.2         | -10.  |
| Low-value payments - agricultural diesel | 0.16     | 0.0      | 1.19     | 0.0      | 664.1         | n.a   |
| Low-value payments - parking lots        | 1.21     | 4.3      | 1.73     | 5.5      | 42.4          | 28.   |
| Loading cash in electronic purse         | 0.05     | 0.8      | 0.00     | 0.0      | -100.0        | -100. |
| Unloading from electronic purse          | 0.00     | 0.0      | 0.00     | 0.0      | -100.0        | -100. |
| Cash deposits                            | 0.69     | 158.1    | 0.62     | 150.0    | -10.3         | -5.   |
| Total                                    | 1,228.48 | 55,493.5 | 1,293.42 | 61,006.9 | 5.3           | 9.9   |
| Daily average                            | 3.37     | 152.0    | 3.54     | 167.1    | 5.3           | 9.    |

| Function                                 | 20         | 05     | 2006   |        |  |
|--|------------|--------|--------|--------|--|
| , anoton                                 | Volume     | Value  | Volume | Value  |  |
| Domestic withdrawals                     | 28.19      | 37.55  | 28.04  | 36.51  |  |
| International withdrawals                | 0.61       | 1.74   | 0.68   | 1.87   |  |
| Withdrawals abroad                       | 0.28       | 0.62   | 0.30   | 0.64   |  |
| Payment of services                      | 12.08      | 14.17  | 11.49  | 14.82  |  |
| Interbank transfers                      | 0.63       | 5.42   | 0.68   | 5.72   |  |
| Returs of interbank transfers            | 0.00       | 0.00   | 0.00   | 0.00   |  |
| Transfers to card account                | 0.07       | 0.83   | 0.06   | 0.75   |  |
| Purchases                                | 40.40      | 38.32  | 41.26  | 38.41  |  |
| Returs of purchases                      | 0.03       | 0.05   | 0.03   | 0.06   |  |
| Purchases on Mbnet - domestic            | 0.00       | 0.00   | 0.00   | 0.01   |  |
| Low-value payments - tolls               | 17.39      | 1.00   | 17.06  | 0.96   |  |
| Low-value payments - telephones          | 0.16       | 0.01   | 0.12   | 0.00   |  |
| Low-value payments - agricultural diesel | 0.01       | 0.00   | 0.09   | 0.00   |  |
| Low-value payments - parking lots        | 0.10       | 0.01   | 0.13   | 0.01   |  |
| Loading cash in electronic purse         | 0.00       | 0.00   | 0.00   | 0.00   |  |
| Unloading from electronic purse          | 0.00       | 0.00   | 0.00   | 0.00   |  |
| Cash deposits                            | 0.06       | 0.28   | 0.05   | 0.25   |  |
| То                                       | tal 100.00 | 100.00 | 100.00 | 100.00 |  |

(\*) Volume and value are significant in absolute terms but negligible in relative terms.

# Chart III.8



The Multibanco has an array of add-on services that put it far ahead of systems in other countries. These constitute a significant fraction of ATM operations, and have made the system ever more accepted by the Portuguese.

For example, Multibanco users can pay their taxes and their social security instalments, included in the on-screen menu "Payment of Services" (Table III.19). During the year, 3,172,127 payments were made to the State (up 46.3% year on year) to the value of 2,155.88 million euros. There were 876,299 payments to Social Security (down 6.3% on 2005), to the value of 107.82 million euros.

Other important uses of the system are the loading of mobile phones (83.1 million operations), around 6.4% of total operations.

Tickets for films and shows can also be purchased, and under this item there are 5,018 transactions (a fall of 71.3% over 2005), to the value of 265.74 thousand euros.

#### Table III.19

# BREAKDOWN OF PAYMENT OF SERVICES THROUGH ATM (Volume in units and value in millions of EUR)

| Service                      | 2005        | 5        | 200         | 6        | Variation (%) |       |
|------------------------------|-------------|----------|-------------|----------|---------------|-------|
| Gervice                      | Volume      | Value    | Volume      | Value    | Volume        | Value |
| Utilities                    | 59,079,233  | 5,171.51 | 60,698,184  | 5,695.81 | 2.7           | 10.1  |
| State                        | 3,167,746   | 1,519.97 | 3,172,127   | 2,155.88 | 46.3          | 41.8  |
| Social Security              | 935,201     | 89.63    | 876,299     | 107.82   | -6.3          | 20.3  |
| Legal costs                  | 277,987     | 43.79    | 317,890     | 52.47    | 14.4          | 19.8  |
| Theatre tickets              | 17,482      | 0.98     | 5,018       | 0.27     | -71.3         | -73.0 |
| Loading cash on Mobile Phone | 85,503,258  | 1,011.20 | 83,088,264  | 996.87   | -2.8          | -1.4  |
| Internet                     | 80,339      | 1.18     | 44,985      | 0.63     | -44.0         | -46.4 |
| Others                       | 332,249     | 26.34    | 373,764     | 30.27    | 12.5          | 14.9  |
| Total                        | 148,393,495 | 7,864.60 | 148,576,531 | 9,040.03 | 0.1           | 14.9  |

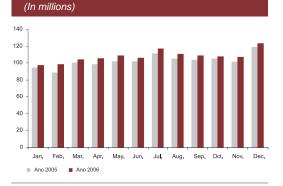
Note: Others include rail tickets, bills of exchange and credit vouchers.

A breakdown into categories over 2005 and 2006 (Table III.20 and Chart III.9) shows an increase in use for every month, confirming the importance of the system for everyday purposes and the increasing reliance on it.

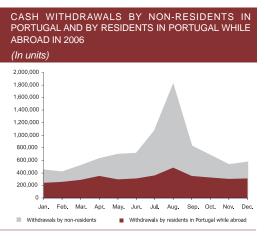
| Month     | 20     | 2005    |        | 2006    |        | Variation (%) |  |
|-----------|--------|---------|--------|---------|--------|---------------|--|
| Month     | Volume | Value   | Volume | Value   | Volume | Value         |  |
| January   | 94.49  | 3,991.3 | 96.94  | 4,499.6 | 2.6    | 12.7          |  |
| February  | 88.39  | 3,776.0 | 98.27  | 4,251.0 | 11.2   | 12.6          |  |
| March     | 99.93  | 4,347.5 | 103.97 | 4,700.1 | 4.0    | 8.1           |  |
| April     | 98.42  | 4,335.2 | 105.27 | 4,872.0 | 7.0    | 12.4          |  |
| Мау       | 101.62 | 4,406.1 | 108.55 | 4,972.1 | 6.8    | 12.8          |  |
| June      | 101.90 | 4,486.6 | 105.75 | 4,875.1 | 3.8    | 8.7           |  |
| July      | 110.83 | 5,051.0 | 117.10 | 5,561.7 | 5.7    | 10.1          |  |
| August    | 104.75 | 5,095.7 | 110.69 | 5,605.1 | 5.7    | 10.0          |  |
| September | 103.32 | 4,811.0 | 108.69 | 5,428.7 | 5.2    | 12.8          |  |
| October   | 104.90 | 4,774.1 | 107.88 | 5,009.3 | 2.8    | 4.9           |  |
| November  | 101.07 | 4,658.2 | 107.02 | 5,100.3 | 5.9    | 9.            |  |
| December  | 118.84 | 5,760.8 | 123.29 | 6,131.9 | 3.7    | 6.4           |  |

#### Chart III.9





#### Chart III.10



A detailed analysis will give us a number of economic and social pointers. For instance, there are far more "International withdrawals" (non-residents using the Multibanco network) than withdrawal by residents in Portugal in other countries. There are clearly more foreign tourists taking holidays in Portugal than there are Portuguese holidaying abroad. There were around 8.84 million "International withdrawals" but only 3.86 million "Withdrawals in other countries" (Table III.17 and Chart III.10).

#### **III.6. DIRECT DEBITS**

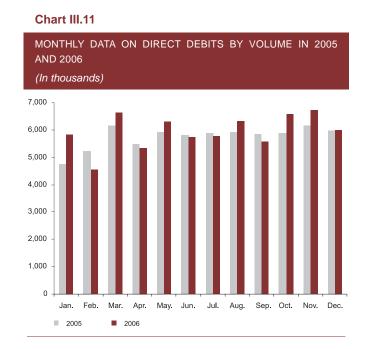
The direct debit subsystem is still the one with biggest growth potential. The banks benefit from it and it is regulated in such a way as to safeguard the rights and clarify the duties of everyone involved. During the year it was the system that grew most in terms of values processed, coming in up around 17.3%. Growth in volume was up 3.2% (Table I.1). The year saw 71.33 million transactions settled to the value of 9.809 million euros. Daily average rose in similar fashion, with an average of 39.4 million euros (Table I.2). As a result, this part of the system grew most in terms of the average daily amount, standing at 137.51, a growth rate of 13.7% (Table I.3).

As can be seen in Table III.21 and Chart III.11, the system expanded over the year, starting with around 5.83 million operations in January, and finishing on 5.99 million in December. The chart shows that some months were considerably higher than a year earlier, with more than 6 million operations. Amounts were bigger in every month, sometimes by as much as 20% or more.

#### Table III.21

# MONTHLY DATA ON DIRECT DEBITS (Volume in thousands and value in thousands of EUR)

| Month           | 20        | 2005        |           | 006         | Variation (%) |       |
|-----------------|-----------|-------------|-----------|-------------|---------------|-------|
| wonth           | Volume    | Value       | Volume    | Value       | Volume        | Value |
| January         | 4,771.35  | 605,018.3   | 5,825.76  | 762,468.6   | 22.1          | 26.0  |
| February        | 5,235.45  | 614,728.9   | 4,542.24  | 627,340.7   | -13.2         | 2.1   |
| March           | 6,163.59  | 722,909.0   | 6,619.93  | 888,779.8   | 7.4           | 22.9  |
| April           | 5,484.11  | 645,142.0   | 5,341.48  | 741,053.3   | -2.6          | 14.9  |
| Мау             | 5,930.98  | 687,703.8   | 6,310.04  | 867,382.0   | 6.4           | 26.1  |
| June            | 5,805.50  | 696,325.3   | 5,750.68  | 799,265.1   | -0.9          | 14.8  |
| July            | 5,887.74  | 691,397.5   | 5,766.27  | 814,434.3   | -2.1          | 17.8  |
| August          | 5,933.80  | 715,440.4   | 6,316.24  | 881,561.3   | 6.4           | 23.2  |
| September       | 5,864.64  | 723,305.9   | 5,569.16  | 788,733.9   | -5.0          | 9.0   |
| October         | 5,878.51  | 724,593.9   | 6,577.41  | 885,089.5   | 11.9          | 22.1  |
| November        | 6,152.82  | 771,258.4   | 6,726.20  | 902,656.1   | 9.3           | 17.0  |
| December        | 5,984.04  | 761,711.3   | 5,985.16  | 850,250.6   | 0.0           | 11.6  |
| Total           | 69,092.54 | 8,359,534.7 | 71,330.57 | 9,809,015.1 | 3.2           | 17.3  |
| Monthly average | 5,757.71  | 696,627.89  | 5,944.21  | 817,417.93  | 3.2           | 17.3  |



# Table III.22 shows that the number of direct debit instructions during the year was 71.3 million (up 3%) to the value of 9,810.4 million euros (up 17%). It is important to note that annual figures were down for "DDs returned by the creditor after settlement", for "cancellation of instructions" and for "return by the creditor". Only "returns after settlement" and "returns before settlement" were up slightly on the previous year.

Among the 71,337.86 thousand instructions sent during the year, around 7.29 thousand were cancelled by the drawee's bank and 5,139.20 thousand rejected by the drawer's bank and therefore not settled. There was a small rise in the number of rejections, up from 6.4% in 2005 to 7.2% a year later.

After financial settlement, debtors revoked 49.31 thousand debits, with 528.86 thousand reversions (credit to the debtor on the order of the creditor), and among these only 0.56 thousand operations were revoked. The level of collection stands at 92%, practically on the same threshold as interbank transactions and therefore around standard levels for the procedure.

# Table III.22

| DIRECT DEBITS BY SERVICE CODE<br>(Volume in thousands and value in thousands of EUR) |           |             |           |             |  |  |
|--|-----------|-------------|-----------|-------------|--|--|
| Operational code   | 20        | 005         | 2006      |             |  |  |
| Operational code   | Volume    | Value       | Volume    | Value       |  |  |
| DD Instructions  | 69,105.74 | 8,363,082.2 | 71,337.86 | 9,810,366.8 |  |  |
| DD returned by the creditor after settlement   | 682.29    | 57,901.1    | 528.86    | 45,754.1    |  |  |
| DD returned by the debtor after settlement   | 41.18     | 12,631.1    | 49.31     | 17,358.1    |  |  |
| DD returned by the debtor/bank before settlement                                     | 4,388.16  | 939,083.7   | 5,139.20  | 1,135,023.1 |  |  |
| Cancellation of DD by creditor before settlement                                     | 13.21     | 3,547.5     | 7.29      | 1,351.7     |  |  |
| Return of DD returned by the creditor  | 1.02      | 163.0       | 0.56      | 88.8        |  |  |

Table III.23 shows that the main operations with direct debits are electricity, non-specified and CLIP (telephone payments). These account for around 75.6% of instructions sent and 78.5% of the amounts. Other operations, such as public terrestrial services, insurance and transfer, come to 14.4% in volume.

Practically all the items saw a rise over 2005, in both volume and value, among them water, telephone, other insurance and telecommunications.

#### Table III.23

# DIRECT DEBITS BY OPERATIONAL CODE (Volume in thousands and value in thousands of EUR)

| Operational code   | 20        | 2005        |           | 2006         |  |
|--|-----------|-------------|-----------|--------------|--|
| operational bode   | Volume    | Value       | Volume    | Value        |  |
| Water  | 1,008.50  | 27,281.7    | 1,249.26  | 32,318.99    |  |
| Gas  | 568.05    | 21,344.2    | 675.06    | 35,145.28    |  |
| Electricity  | 31,999.86 | 2,077,374.2 | 26,976.29 | 2,307,057.30 |  |
| Combined Gas / Electricity                               | 2.34      | 40.8        | 2.91      | 67.31        |  |
| Telephone  | 490.15    | 14,391.7    | 827.23    | 22,705.68    |  |
| House rent   | 27.96     | 7,389.6     | 38.46     | 11,158.92    |  |
| Communication infrastructures (cable, fibre optics etc.) | 1,811.06  | 258,224.8   | 2,024.86  | 269,442.75   |  |
| Life insurance   | 826.27    | 53,108.8    | 834.62    | 53,940.01    |  |
| Other insurance  | 3,639.35  | 266,721.4   | 4,673.85  | 324,126.66   |  |
| Professional fees and dues                               | 572.39    | 26,085.7    | 924.56    | 38,508.45    |  |
| Transfers  | 4,270.09  | 1,038,547.8 | 3,596.70  | 942,188.55   |  |
| Public data communication service                        | 37.08     | 28,381.3    | 43.57     | 35,226.20    |  |
| Collection of receivables                                | 12,779.01 | 3,943,315.6 | 17,275.80 | 4,969,658.76 |  |
| Purchases on credit                                      | 3.19      | 11,182.0    | 9.06      | 21,112.87    |  |
| Sundry services  | 811.73    | 101,338.5   | 1,256.18  | 243,580.27   |  |
| Water and drainage                                       | 730.22    | 15,128.0    | 839.15    | 17,238.85    |  |
| Telecommunications                                       | 219.77    | 25,317.9    | 358.18    | 39,312.61    |  |
| Public call service                                      | 0.03      | 7.4         | 0.00      | 0.00         |  |
| First client - CLIP                                      | 9,230.02  | 421,833.0   | 9,656.12  | 421,853.94   |  |
| Others   | 78.67     | 26,067.9    | 76.04     | 25,723.43    |  |
| Total  | 69,105.74 | 8,363,082.2 | 71,337.86 | 9,810,366.8  |  |

Table III.24 shows that 88.5% of instructions rejected by the debtor's bank (86.1% in value) relate to "no funds or insufficient funds in the account". The second most frequent reason given is "charge to the payee's account not authorised", accounting for around 3.2% in volume and 3.1% in value.

In terms of reasons for rejection, the biggest growth is in "refusal by the bank", "bank does not authorise instructions" and "authorisation expired". The biggest falls are in "non-existent account" and "wrong NIB on debtor account".

| BREAKDOWN OF REASONS FOR STOPPING DIRECT DEBITS (Volume in thousands and value in thousands of EUR) |          |           |          |             |  |
|---|----------|-----------|----------|-------------|--|
| Reason  | 2005     |           | 2006     |             |  |
|   | Volume   | Value     | Volume   | Value       |  |
| Refusal by the bank   | 52.25    | 10,841.7  | 182.80   | 47,556.41   |  |
| Non funds or insufficient funds in the account  | 3,987.91 | 841,913.2 | 4,589.56 | 991,754.30  |  |
| Non-existent account  | 50.80    | 6,425.0   | 24.66    | 4,355.57    |  |
| Cancellation of authorisation by client   | 15.76    | 6,880.0   | 19.21    | 10,374.27   |  |
| Wrong NIB on debtor account   | 30.90    | 4,471.0   | 33.16    | 4,883.48    |  |
| Charge to the payee's account not authorised  | 149.51   | 31,676.3  | 168.40   | 35,855.04   |  |
| Operation refused by client   | 42.22    | 24,393.2  | 50.18    | 29,112.48   |  |
| Bank does not authorise instructions  | 0.58     | 125.9     | 4.82     | 741.29      |  |
| Cancellation of authorisation by bank   | 2.20     | 694.9     | 2.99     | 1,006.57    |  |
| Value above maximum authorised  | 0.39     | 108.8     | 0.39     | 183.58      |  |
| Authorisation expired   | 0.24     | 85.2      | 0.35     | 39.41       |  |
| Cancellation of DD already rejected   | 0.01     | 0.3       | 0.01     | 1.91        |  |
| Suspension  | 96.58    | 24,099.4  | 111.98   | 26,516.91   |  |
| Total   | 4,429.35 | 951,714.8 | 5,188.51 | 1,152,381.2 |  |

An analysis by value brackets shows that 33.9% (22.43 million) are for amounts below 25 euros, corresponding to 318.3 million euros (only 3.7% of the total). Around 91.9% were below 250 euros, so the system can be classified as a real retail operation, with most transactions being low-value.

## Table III.25

| Brackets   |         | 200        | 5           | 2006       |             |  |
|------------|---------|------------|-------------|------------|-------------|--|
|            |         | Volume     | Value       | Volume     | Value       |  |
| 0          | 25      | 24,124,924 | 334,223.6   | 22,430,831 | 318,329.7   |  |
| 25         | 50      | 17,862,404 | 634,442.6   | 17,989,700 | 639,533.    |  |
| 50         | 150     | 14,542,560 | 1,173,609.8 | 16,388,749 | 1,334,730.  |  |
| 150        | 250     | 3,558,425  | 694,600.4   | 4,012,592  | 781,388.    |  |
| 250        | 500     | 3,101,516  | 1,050,249.9 | 3,497,755  | 1,187,368.  |  |
| 500        | 2,500   | 1,304,593  | 1,191,107.2 | 1,613,534  | 1,489,269.  |  |
| 2,500      | 5,000   | 109,138    | 378,456.0   | 132,274    | 456,968.    |  |
| 5,000      | 100,000 | 98,538     | 1,348,086.0 | 123,050    | 1,728,400.2 |  |
| 100,000    | 250,000 | 1,676      | 260,239.4   | 2,108      | 321,830.    |  |
| >= 250,000 |         | 601        | 355,436.2   | 783        | 416,172.0   |  |
|            |         | 64,704,375 | 7,420,451.0 | 66,191,376 | 8,673,992.0 |  |

#### Box 3

#### SEPA - Single Euro Payments Area

OThere were various stages of this project reached during the year, and the aim is still to set up a fully operational single payments area in euros from the end of 2010, assuming that work done will be built on and the plan kept to.

Work centred on the EPC-European Payments Council, with active involvement of the European Commission, the ECB and the NCBs, especially those making up the Europystem.

The following key points, covering a range of areas, occurred during the year.

#### Cards

The Eurosystem held a series of meetings with national banking systems in the eurozone countries along with those involved in international schemes. The aim was to find where everyone stood on the issue of the SEPA and if possible define guidelines relating to its objectives. There was a meeting in Lisbon on 16 May, organised by Banco de Portugal, attended by the ECB and the banks that are working in the GTI/Bank Cards working group, under the auspices of the CISP.

On 20 November, following all the meetings and after approval by the Governing Council, "The Eurosystem's View of a SEPA for Cards" was published. Among other things, the position is set for a pan-European debit card scheme to rival the main American schemes available internationally (Visa and MasterCard).

Some domestic debit card schemes, among them the Multibanco, have been doing research and complementary work on the scheme, within the framework of the Euro Alliance of Payment Schemes (EAPS).

The European Commission, through its General Directorate for Competition, has published a report on the payment card market, after a survey of a number of banks, covering various aspects of the business (profitability, income from acquiring operations, issuing, potential barriers to competition and so on).<sup>14</sup>

The EPC took the decision, following initial moves in 2005, not to create an anti-fraud data base, given the infrastructure that would be needed, the costs and the likely fall in the amount of fraud with migration to EMV standard cards.

#### Credit transfers

There was consensus on the Rulebook for start-up of the SEPA, along with the approval of the SEPA Data Model, which will use XML files, and the SEPA Implementation Guidelines. This means that domestic systems can be adapted so that they are SEPA-compliant.

No great difficulties are foreseen for credit transfers, irrespective of whether the Directive is in force or not, given the cross-border procedures already in place and the standards in use.

#### **Direct debits**

During the year substantial progress was made on the model which will be implemented on SEPA start-up. As with credit transfers, a final version of the Rulebook for start-up was agreed. It will be difficult, however, to put into practice without a harmonised legal framework, given the variety of models existing in the countries involved.

<sup>(14)</sup> This process involved ECOFIN and the European Parliament and was only finalised on 24 April 2007, with approval of the final text for the Directive. It is now urgent for all countries to transpose the text, if possible before the deadline set in the Directive.

There was progress nonetheless on the legal framework for SEPA, within the context of strengthening the internal market. There was no agreement though on the final text for the Payment Services Directive (PSD), given the need for consensus among Member States.<sup>15</sup>

There are divergences in the concept of the model to be used. Some countries have a system based on the management of instructions by creditors, while others use a system based on debtor bank management. The model to be used for SEPA start-up stipulates management by the creditor bank as the basic service, with debtor bank management as an option.

On 27 September, approval was given to the interchange fee, set at 0,093 euros per operation.

There were also changes at the EPC, with the creation of new task forces dedicated to preparation of tests and to connections to the EBA. There were also discussions on the scope of the Scheme Management Entity (SME), which will take over the functions now carried out by the Roll Out Committee (ROC).

In Portugal, the interbank committee for payment systems, in collaboration with the working groups most closely involved, held an interbank meeting to look at migration of direct debits and credit transfers. The groundwork was also laid for new initiatives in 2007, bearing in mind the project timetable. CISP also presented the conclusions of a study on the impact of the SEPA on SICOI. This had been put together by a specially created task force.

Also worth a mention is the national plan for migration to the SEPA, with the main guidelines approved by CISP on 7 December. This document is part of an initiative covering all the countries involved, and follows the EPC deliberations in conjunction with the Eurosystem. It sets out, among other things, the issue regarding information about SEPA, which will become more high-profile as start-up draws near. The ECB took an early initiative by publishing a brochure in November explaining the scheme, called "The Single Euro Payments Area (SEPA): An integrated retail payments market". This was initially available only in English, but was then translated into all the other languages, including Portuguese.

(15) "Report on retail banking sector inquiry", published on 31 January 2007, available on http://ec.europa.eu/comm/competition/sectors/financial\_services/inquiries/sec\_2007\_106.pdf.



CHAPTER IV. Regulation and Control of Means of Payment

There is now a Complaints Book which must be available in all credit institutions for those who use financial services as required by Decree Law 156/2005 of 15 September, in force from 1 January 2006. A copy of all complaints must be sent to Banco de Portugal.

Banco de Portugal analyses claims, complaints and reports of bad practice sent to it direct within its remit as regulator and supervisor responsible for the smooth running of the payment system (Article 14 of its Statutes). From 2006, it also became responsible for ensuring proper treatment of complaints coming through the new law, relating to bank cards, cheques, the opening of current accounts, collection procedures, transfers and payment infrastructures.

Within this new framework, there was a growing number of complaints over the year on payment matters (see Table IV.1).

Table IV.1

| NUMBER OF COMPLAINTS |        |
|----------------------|--------|
| Quarter              | Number |
| 1st                  | 294    |
| 2nd                  | 496    |
| 3rd                  | 652    |
| 4th                  | 577    |
| Total                | 2,019  |

This volume of complaints made it necessary to reorganise the department's own procedures and the allocation of resources. There needed to be an acceptable ratio between complaints received and cleared up, within an acceptable response time frame. Figures available at the end of the year showed that this ratio (up to November) was 70%.

A breakdown of the complaints reveals that 485 relate to bank cards, 738 to cheques, 153 to opening an account, 62 to collection procedures, 136 to transfers and 210 to the infrastructures (ATMs and POS terminals).

There were also 235 complaints relating to various issues not connected to payments (for example, the quality of counter service, suggestions for changes in procedure in specific cases and so on).

Banco de Portugal also maintains and circulates information on a data base relating to users of cheques who present a risk (within the terms of the law on cheques without cover). At the end of the year, there were 102,583 names on the list. This was a 14% fall over 2005, bigger than the 11% fall from 2004.

There were 62,162 new names added during the year, a 22% fall from the 2005 figure of 76,078.

Banco de Portugal, took 14,880 names and details off the list, following its own enquiries into the existence of circumstances which justified returning the right to use cheques. There were also 7,300 users whose names were cancelled. There were 8,838 names removed and 6,230 cancellations decided at Head Office, with 6,024 names removed and 1,070 cancellations across the regional network of Banco de Portugal.

Banco de Portugal also provides a personal service with the specific purpose of clarifying restrictions on the use of cheques, but this service is more and more involved in providing general information on payment instruments. There were 37,288 users seen during the year, 16,205 at Head Office and 21,583 across the regional network.

Banco de Portugal is responsible for approving the format of cheques (Instruction no. 26/2003 on the technical norms for cheques). During the year 14 credit institutions sent requests for approval, all of which were analysed.

Work continued during the year, having started in 2005, on checking that clauses in contracts for the use of bank cards were in line with existing regulations (Notice no. 11/2001). This gave rise to Circular No. 2/2006/DPG, of 19.01.2006, defining the minimum standard clauses for the general conditions of use for bank cards. This was in line with the regime on general contract clauses, with consumer credit legislation and with the existing law on abusive contractual obligations. In tandem, a Handbook of Good Practice was put together, summarising the most frequent causes of complaints, claims and reports of bad practice made by the holders of bank cards. This clarified the most frequent sources of dispute with the card issuers and gave recommendations on how to uniform procedures so as to avoid or solve such problems.

Work started in 2005 also continued during the year on analysing the 2006 versions of the community directive that will set up the legal framework for the internal market ("Payment Services Directive"). One of the important issues is the regulatory implication for payment services and instruments. Approval of the directive will make this imperative.



ANNEXES

# Joint statement from the European Commission and the European Central Bank, on SEPA, 4 May 2006<sup>16</sup>

The European Commission (Commission) and the European Central Bank (ECB) share a common vision for the Single Euro Payments Area (SEPA) and the process leading to its realisation. Both institutions are co-operating closely in this process and encourage the European banking industry and the other relevant stakeholders to create the technical conditions for the realisation of the Single Euro Payment Area by the end of 2010.

# Vision

The Commission and the ECB see SEPA as an integrated market for payment services which is subject to effective competition and where there is no distinction between cross-border and national payments within the euro area. This calls for the removal of all technical, legal and commercial barriers between the current national payment markets.

The introduction of the euro as the single currency of the euro area will only be completed when SEPA has become a reality, i.e. when consumers, businesses and governments are able to make cashless payments throughout the euro area from a single payment account anywhere in the euro area using a single set of payment instruments as easily, efficiently and safely as they can make payments today in the domestic context.

By creating open and common standards that overcome technical and commercial barriers and by fostering effective competition, improved payment service levels will benefit the end-users of these services, namely consumers, business and governments, with transparent prices and cost efficient services. SEPA will allow the payments industry to become more efficient, thereby providing significant savings and benefits to the wider European economy and facilitating the attainment of its full potential.

The SEPA process calls for the continuous improvement of payment services, by offering pan-European products that are as easy, efficient and safe as they are today at the national level. It requires to anticipate how modern payment systems will look at the end of the decade and a continuous improvement of service levels. SEPA must be forward-looking, both embracing and enabling the realisation of new technological opportunities. In addition to the core SEPA products that are currently being developed, new opportunities, such as e-invoicing, can provide major benefits.

Standardisation of payment services and processing is critical. It is therefore essential that users, in particular corporations, and other relevant stakeholders are involved in the standard setting process.

#### Milestones

Significant progress towards SEPA has already been achieved by the European Payments Council (EPC) towards the establishment of the schemes, frameworks and the necessary standards underlying SEPA. The Commission and the ECB take the opportunity to stress their support for the objectives set by the EPC for January 2008:

 That EU citizens, enterprises and public administrations should have the possibility to use the SEPA credit transfer and the SEPA direct debit payment instruments defined by the EPC.

- That the technical barriers to cross-border acceptance at the point of sale and cash withdrawals for card payments in euro should be removed. In addition, appropriate technical and contractual provisions and standards should be defined to ensure interoperability.
- That the necessary conditions for infrastructures to become SEPA-scheme compliant are in place. As a minimum, this calls for open and common standards that are available to all EU processing services and infrastructure providers for euro payments, so as to prepare for interoperability and effective competition.

In addition, the Commission and the ECB stress that it is important that all relevant stakeholders, in particular the public sector, contribute to achieving SEPA. By showing political support and by becoming early adopters of the SEPA products the public sector can play a vital role for the success of the SEPA.

The Commission and the ECB also support the schemes and frameworks, as agreed upon by the EPC on 8 March 2006, as the basis for SEPA products to be introduced in 2008. The Commission and the ECB attach great importance to the work of the EPC to further enhance the schemes and frameworks in the future in order to keep meeting user requirements and to ensure that service levels improve continuously. In this perspective, the Commission and the ECB welcome as a start the dialogue between the EPC and end-users as well as their commitment to involve all stakeholders more openly in the future. They also welcome the commitment to work together on cross-industry standards necessary to make the SEPA attractive to all stakeholders.

The delivery of SEPA instruments is only the first step, since the introduction of the instruments as a mere cross-border payment solution would not result in a genuinely integrated market at the level of the Euro area. In particular, a critical mass of national credit transfers, direct debits and card payments should have migrated to SEPA payment instruments by the end of 2010. Further steps will be necessary in order to ensure widespread adoption of new and efficient SEPA instruments. The service level of SEPA instruments will have to be at least as good as existing national instruments, but preferably better. This will allow for a market-driven migration to the SEPA instruments.

The Commission and the ECB support to the greatest possible extent continued self-regulation by the industry, but given the importance and the size of the social and economic benefits of SEPA, the Commission expressly reserves the right to introduce or propose necessary legislation to achieve it.

# Conclusions of ECOFIN on how to make best use of SEPA<sup>17</sup>

The Council discussed the creation in the EU of a single euro payments area (SEPA), and adopted the following conclusions.

"The Council

- SUPPORTS the aim of the Single Euro Payments Area (SEPA): to achieve an integrated market for payment services in euro which is subject to effective competition and where there is no distinction between cross-border and national payments in euro within the EU;
- CONSIDERS that the highest priority must be given to meeting users' needs by the payment services developed under the SEPA, which requires continual involvement at national level of all interested parties;
- EXPRESSES appreciation of the substantial work undertaken by industry to achieve this aim and encourages it to make progress in the areas where work remains to be completed;
- NOTES that the completion of SEPA calls for the removal of all technical, legal and commercial barriers between the current national payment markets;
- NOTES that continued attention is needed to ensure that SEPA-payment services, including their supporting technology and procedures, do not represent a deterioration compared to the national cost and service level in the most efficient Member States and that SEPA products and services are offered in a competitive environment;
- STRESSES the importance of ensuring a level-playing field as regards the application of competition principles to all market participants, including new entrants to the payment services market, and INVITES the Commission to continue without delay, its work on this subject;
- UNDERTAKES to work, together with the European Parliament, towards a swift adoption of the Proposal for a Directive on Payments Services;
- WELCOMES that the Commission intends to come forward with the final report regarding the sector inquiry into competition in the retail banking market (which includes payment cards) before the end of the year;
- In order to facilitate commitment to an early use of SEPA, INVITES Member States to carry out cost and benefit analysis, where necessary, to check that SEPA products are better or at least equivalent to existing products in terms of price and quality, including as regards the security of payments and INVITES the industry to provide information to this end;
- INVITES Finance Ministries of Member States to monitor progress on SEPA at national level, with all interested parties; as well as the Commission and the ECB to continue monitoring the overall development, together with the Financial Services Committee and the Economic and Financial Committee, and report back to the Council if progress is not satisfactory and at the latest in 2008;
- INVITES the Commission to assess the economic and competition impacts of the SEPA taking into account its planned time schedule, and
- INVITES the Commission to continue its work on the next steps regarding the issues raised in its consultative paper on SEPA, including the responses to the public consultation, without delay."

# Payment Digitalisation Plan (ProDigi) Presentation by SIBS on 19 July 2006

Portugal has a payment system based on a totally integrated technological network. This has generated immense economies of scale in a small market, making it possible to slot in a vast array of functions unmatched in the world, with around 30 at the ATM screen and around 10 at the POS terminal.

The high degree of integration in the Portuguese system has also provided considerable openings for entities outside the financial system. They have been able to take advantage of the network to create and rapidly expand services which are innovative at a global level. Among them are the Via Verde, an automatic motorway toll payment system, and the ability to pre-pay a mobile phone account in real time.

The Portuguese payment system is based on state-of-the-art technology and has provided a single, universal ATM/POS available to everyone 24 hours a day, 7 days a week, all year long. Yet there are still entrenched habits based on non-automatic and less efficient means, such as cash and cheques. This situation hinders the societal gains from using electronic payment instruments and it means that Portugal is not where it should be, in the vanguard in Europe.

**The government's technology plan** (plano tecnológico) aims to be a catalyst for Portuguese society, *"part of a new social contract for modernising society and growing the country's economy" and "an agenda for change (...) to galvanise companies, households and institutions so that a combined effort can provide the wherewithal for the country to face the challenges that modernisation brings with it."* In this context, a broadening of the scope for making the payment system more automatic is an ideal opportunity to provide an even better service to underpin the country's modernisation and economic productivity.

The Single Euro Payments Area, in the words of its proponents: "will (...) be forward-looking, both embracing and enabling the realisation of new technological opportunities." It should provide an added stimulus for the Portuguese payment system to enhance its position as one of the best in Europe, with the greatest innovation and efficiency, a continually evolving project.

The ECB, in its fourth progress report on **SEPA**, states: "Cheques and other non-SEPA instruments (...) will thus ultimately disappear when it becomes clear to their users that other means of payment provide better service. By 1 January 2008, it is expected that national banking communities in the euro area will have put in place a strategy for promoting the use of alternative electronic means of payment. (...) Because the use of non-SEPA instruments is so different across countries, it is understood that this process will be monitored at the national level."

The ECB and the European Commission, in a joint communiqué on May 4 of this year, stated that: "both institutions encourage the European banking industry and the other relevant stakeholders to create the technical conditions for the realisation of the Single Euro Payment Area by the end of 2010."

# AIMS AND ACTIONS TO BE TAKEN

The Portuguese financial system is taking up the gauntlet: to head a plan to promote the use of automatic forms of payment, and thus to bring about greater technological efficiency in the economy. We take a stance four-square with the aims of the government's technology plan.

To do this, all the stakeholders in the payment system must join together and stride towards replacing manual means of payment. They must give a major boost to the country's economic productivity and to simplifying the lives of all its citizens. Within three years, Portugal must be among those countries that least use inefficient forms of payment.

The targets are to cut the use of cash by 20% in the next three years and the use of cheques by 50%. This means taking actions already specifically defined by the banking system and it involves an appeal for all the other stakeholders to take concerted action with a specific target in view.

By actions already specifically defined by the banking system is meant the following commitments:

- By the system as a whole:
  - o to ensure the **development of the Portuguese system so that it is SEPA-compatible**, with the same **efficiency** as it reached for transition to the euro;
  - o to ensure efficiency in the supply of payment services;
  - to publicise the plan in such a way as to speed the replacement of less efficient forms of payment.
- By SIBS:
  - o to create a solution that enables rapid and easy electronic payment for low-value transactions, providing an efficient and attractive alternative to the use of cash;
  - o to create a solution involving electronic payments to suppliers, discouraging the use of cheques for this purpose;
  - o to launch a national platform with a safer connection between customer and bank via the internet using a powerful authentication (unbreakable electronic signature);
  - o to provide incentives, starting this year, for the use of debit cards in higher-value transactions, to the detriment of the cheque, and setting out a maximum value for Multibanco payments.

As for mobilising the other stakeholders in the payment system, Banco de Portugal, the State, consumers and retailers are invited to come into the project, within their specific remit, and specifically:

#### • Banco de Portugal:

- o to give public support to the plan;
- to provide regulations that continue to simplify and foster the use of electronic means of payment;
- o to join with the CISP working groups in creating an "Occasional Payment Order" and an "Irrevocable Occasional Payment Order" in the direct debit system so that there is an electronic alternative to a cheque or the deposit of a guarantee required for administrative or judicial purposes.
- The State:
  - o at a political level to ensure that this plan of action dovetails with the technology plan;
  - at an administrative level to discourage the use of cheques for payments to and by its own institutions;
  - o in legislative terms to discourage the use of manual and less efficient forms of payment;
  - o <u>at a co-operative level</u> to search for synergies that give an added impulse to automatic forms of payment in the modernisation of public administration.

#### · Consumers and retailers:

These groups and their associations are essential for the success of this plan, since success, and therefore the expected effect on productivity, depends in the ultimate analysis on preference for electronic forms of payment. These groups are therefore invited to participate in bringing the plan to fruition through whatever ways they see fit, by taking part for example in a Users' Committee to monitor progress and provide advice.

Protocol on the means of payment to be used for tax credits and refunds, signed by the State, the Interbank Services Company (SIBS) and the Portuguese Banking Association

The State (through the General Directorate of Taxation and the General Directorate of Treasury), the Interbank Services Company (SIBS) and the Portuguese Banking Association hereby enter into the following protocol on the means of payment to be used for tax credits and refunds, dated 20 December 2006.

#### Whereas:

- The means of payment at present used by the tax authorities (DGCI) through the Treasury (DGT), for tax refunds or tax credit (hereafter designated "refunds") comprise cheques and interbank electronic transfers (TEIs);
- TEIs account for only 44% of total refunds;
- TEIs are more suitable for processing these payments, given the ease, speed and reliability
  of the operations involved;
- TEI processing costs are substantially lower than cheques for all those using the system;
- The DGCI and the DGT intend to make tax refunds through credit transfer (i.e. TEIs), with cheques used only in exceptional circumstances;
- This will bring more advantages to consumers, since their bank account will be credited in a safe, speedy way, free of any charges;
- The bank account in the name of the taxpayer needed for the tax refund by TEI is in no way different from receiving a cheque, since the latter is always issued in the name of the taxpayer, is crossed and must therefore be deposited;
- Any taxpayer who does not at present have a bank account can be ensured of receiving the refund by opening an account under the terms of the Minimum Banking Services (Decree Law No. 27-C/2000, of 10 March), having due regard to the size and scope of the account, which can be at any of the following banks: CGD, BCP, BES, BPI, BST, CCCAM, MONTEPIO GERAL and FINIBANCO;
- Payment by TEI will be made after confirmation that the account is in the name of the taxpayer in question;
- At a European level, it is considered to be good practice to use electronic means of payment (such as TEIs, direct debits and cards) rather than paper-based (cheques and notes);
- The interbank committee on payment services (CISP) has stipulated as a main guideline for interbank fee that those for electronic payments should be less than for paper-based.

The present protocol, to be governed by the following clauses, is hereby accepted and signed by all parties:

#### Clause 1 – Scope

- 1.1. Existing provisions regulate the service to be provided by credit institutions and by the interbank service company (SIBS) for the tax authorities (DGCI), in terms of validating that the bank identification number (NIB) supplied by the taxpayer conforms to his/her tax number (NIF).
- 1.2. The DGT acts on behalf of the tax authorities (DGCI) both in specialist and financial terms, in the relationship with users of the clearing system for TEI and cheques.

# Clause 2 – Validation

- 2.1. It being necessary to validate the NIB/NIF relationship associated with the tax refund, the DGT should request the information from the bank indicated by the taxpayer (hereafter designated taxpayer's bank) and remit the identification data to the credit institution through the TEI clearing system.
- 2.2. The taxpayer's bank confirms the NIB when the file is validated, in accordance with the information in its data base. It cannot be held responsible for any change that may later occur.
- The taxpayer's bank has two sessions of the TEI clearing system to validate NIB/NIF concordance.
- 2.4. All specific issues related to this service are defined in the TEI Clearing System Operational Handbook, annexed to this protocol.
- 2.5. If there are any changes to the refund procedure, for example from a merger between banks, the new NIB that may be given must be sent without charge to the DGT.

#### **Clause 3 – Responsibilities**

- 3.1. The taxpayer's bank cannot be held responsible for situations where the operation is not carried out or is carried out badly due to error or omission on the customer's part.
- 3.2. The DGCI and the DGT hereby undertake to use the information from validation purely for the purposes defined in this protocol. The banks cannot be held responsible if the information is used for other purposes.
- 3.3. The DGCI and the DGT undertake to move rapidly towards the use of TEI as the prime instrument for tax refunds.
- 3.4. The DGCI accepts that it will, from July 2007, dispense with cheques for tax refunds, and will work with the DGT towards changes in the Law as required.
- 3.5. The banks which offer the minimum banking services (CGD, BCP, BES, BPI, BST, CCCAM, Montepio Geral and Finibanco) guarantee that these services, set down in Decree Law no. 27-C/2000 of 10 March, will in fact be on offer.
- 3.6. In derogation of Clause 3.5., the DGT and/or the DGCI can declare this protocol to be null and void whenever three of the five biggest banks no longer operate in the market.
- 3.7. The Portuguese Banking Association will inform the DGT and/or the DGCI, when so requested, of any changes of which it has had notice in reference to participation of any of its associates in the minimum banking services scheme.

# Clause 4 – Interbank fee

- 4.1. The DGT will pay a 0.05 euro fee to the taxpayer's bank for every validation and respective reply, to be carried out up to the second session of TEI clearing following the sending of a request for validation.
- 4.2. The taxpayer's bank will pay the DGT a 0.50 euro fee for each validation not carried out in the period specified in 4.1.
- 4.3. From July 2007, should it be necessary to issue a cheque for tax refund, the DGT will pay 0.50 euros for each cheque issued, with a special "Type of Document" code, except for those issued as a result of a request for validation not carried out in the period specified in 4.1.

- 4.4. The fee in this protocol will be adjusted annually, with effect from 1 January, in accordance with the average annual change in the consumer price index as set out by the National Statistical Office in October of the previous year.
- 4.5. The sum total of the fees to be paid under the terms of this protocol will be calculated automatically by SIBS for each of the systems and collected through these systems on a monthly basis.

# Clause 5 – SIBS fee

Those involved in the cheques and TEI clearing systems will pay SIBS the fee stipulated in the Operational Handbooks for this protocol, which are annexed.

# Clause 6 – Penalties

- 6.1. The DGT undertakes not to renounce this protocol before 31 December 2007, except if there were to be changes to the Operational Handbook for TEI, relating to the technical and functional specifications of the service governed by this protocol.
- 6.2. In derogation of the provisions of Clause 9.2, should the DGT declare the protocol null and void, with effect before the date stipulated in 6.1, then all the fees set down in 4.1 and 4.3 will be called in immediately as they relate to operations carried out by the DGT during 2007.

#### Clause 7 - Secrecy

The banks and SIBS hereby guarantee the secrecy of all information related to DGT operations that may fall into the hands of their staff.

#### Clause 8 - Change in the protocol and cessation of contractual position

The parties to this protocol hereby commit themselves to look at and agree on any changes to this protocol with a minimum of 90 days' notice.

#### Clause 9 – Date for coming into force

- 9.1. This protocol will come into force on 1 January 2007 and will remain in force for two years, terminating on 31 December 2008, from which date it will be deemed to be renovated automatically for a one-year period at each time, unless one of the parties withdraws, having stated such intention in writing with a minimum of 60 days' notice.
- 9.2. The interbank fee stipulated in Clause 4 will come into force on 1 July 2007.
- 9.3. The SIBS tariff will come into force on the data when production starts on the functions stipulated in this protocol.