



## **“SINGLE EURO CASH AREA” (SECA) FRAMEWORK**

Abstract	The objective of this “Single Euro Cash Area” (SECA) Framework is to develop a common set of rules and best practices for the distribution and recycling of wholesale and retail euro cash in the Eurozone.
Document Reference	Cash 021/05
Issue	Version 2.01 Approved
Original Date of Issue	8 March 2006
Reason for Issue	Approved by the EPC Plenary 8 March 2006
Reviewed by	Cash Working Group
Produced by	Cash Working Group Secretariat
Authorised by	EPC Plenary 8 March 2006
Circulation	Publicly available as of 10 March 2009

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## 0.2 References

### 0.2.1 Eurosystem references:

- 1<sup>st</sup> March 2002: Common Eurosystem fee policy for cash transactions of professional clients at NCB counters, differentiating between free-of-charge services and charge-incurring services
- March 2002: Common Eurosystem approach to opening hours rules and debiting and crediting rules for cash services at NCB counters
- 18 April 2002: Common Eurosystem terms of reference for the use of cash-recycling machines by credit institutions and other area institutions engaged in the sorting and distribution of banknotes<sup>1</sup>.
- December 2004: Recycling of euro banknotes: Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers<sup>2</sup>.
- December 2004: High-level principles as regards NCBs' core functions in the distribution and recycling of cash

### 0.2.2 EPC references:

- Doc EPC-0090/02 (January 2003): Cash WG Findings and Recommendations
- Doc EPC-0363/03 (December 2003): Resolution on National Central Banks' core functions as regards cash
- Doc EPC-0374/03 (December 2003): Resolution on Facilitating cross-border cash transportation in the Eurozone
- Doc EPC-0453/04 (June 2004): Resolution on a European set of banking best practices for cash handling

### 0.2.3 EU Law references:

- Regulation 1338/2001/EC on the protection of the euro against counterfeiting<sup>3</sup> (28 June 2001)
- Regulation 2560/2001/EC on cross-border payments in euro<sup>4</sup> (19 December 2001)
- Draft directive on Payment services in the Internal Market<sup>5</sup>
- Draft directive on Services in the Internal Market ("Bolkestein Directive")<sup>6</sup>

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<sup>1</sup> Cf. <http://www.ecb.int/pub/pdf/other/cashrecyclingtermsen.pdf>. The main elements of these terms of reference are the criteria for authentication of genuine banknotes and the requirements for sorting of unfit notes.

<sup>2</sup> Cf. <http://www.ecb.int/pub/pdf/other/recyclingeurobanknotes2005en.pdf>

<sup>3</sup> Cf. [http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l\\_181/l\\_18120010704en00060010.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_181/l_18120010704en00060010.pdf)

<sup>4</sup> Cf. [http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l\\_344/l\\_34420011228en00130016.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_344/l_34420011228en00130016.pdf)

<sup>5</sup> Cf. [http://europa.eu.int/comm/internal\\_market/payments/framework/index\\_en.htm](http://europa.eu.int/comm/internal_market/payments/framework/index_en.htm)

<sup>6</sup> Cf. [http://europa.eu.int/comm/internal\\_market/services/services-dir/index\\_en.htm](http://europa.eu.int/comm/internal_market/services/services-dir/index_en.htm)

### 0.3 Change History

Issue number	Dated	Reason for revision
Version 0.1	13/05/2005	Early version of a working document for initial discussion at 18 May Cash WG meeting
Version 0.1 bis	06/06/2005	Incorporation of small changes agreed at the 18 May Cash WG meeting
Version 0.2	12/08/2005	Upgrade of version 0.1
Version 0.3	15/09/2005	Revision of version 0.2 on the basis of comments received from Cash WG members + Upgrade of chapters 5 and 6.
Version 0.4	20/10/2005	Upgrade of version 0.3, following the joint meeting with the ESCB Banknote Committee on 27 September
Version 0.5	27/10/2005	Revision of version 0.4, following the Cash WG meeting of 26 October
Version 0.6	14/11/2005	Revision of version 0.5 on the basis of comments received by WG members, in preparation for submission to the December Plenary (after review by the Coordination Committee on 24 November).
Version 1.0	15/12/2005	Submission for national consultation
Version 1.1	08/02/2006	Preparation of version 2.0, for discussion at Cash WG meeting of 21 February 2006, and after amendments approved at Cash WG meeting of 26/01/2006
Version 2.0	21/02/2006	Last changes agreed at Cash WG meeting of 21 <sup>st</sup> February; Circulation of final version to EPC Plenary for approval
V2.0 Approved	08/03/06	Approved by EPC Plenary

## EXECUTIVE SUMMARY

As for other payment instruments, the present landscape for the distribution of cash is characterized by the coexistence in the Single Euro Payments Area (SEPA) of multiple national infrastructures, organized at national level and based on different business models. Thus there is currently no Single Euro Cash Area for credit institutions and other professional cash handlers. This is an issue as:

- cash remains the most popular yet amongst the most expensive payment instrument to operate,
- As the cost of cash is being imperfectly externalized to actual users, de facto usage of cash is thus cross-subsidized by other bank revenues, contributing to burdening the pricing of other bank services.

As national legacies differ widely across the Eurozone, with current National Central Bank (NCB) operational rules and conditions still largely reflecting this diversity, the Eurosystem has already initiated a harmonization process. In this context, the objective of the SECA Framework is to define:

- a) taking a “user perspective”, banking industry requirements for core cash services provided by Eurosystem NCBs,
- b) a common set of banking best practices for the distribution and recycling of euro cash in the Eurozone.

This will shape the “Single Euro Cash Area” (SECA) where cash usage will be repositioned through the perception by end users of its attributes in relation to its cost, and where banks will be enabled to exercise their responsibilities with respect to both wholesale and retail cash also taking into account business objectives. The migration from the current to the SECA landscape will however require a reasonable adaptation period, in view of national legacies and the heavy investments that characterise the cash processing industry (depreciation of the cost of cash-handling machines over several years).

Since the beginning of 2004 a constructive dialogue between the Eurosystem (ESCB Banknote Committee - BANCO) and the European banking industry (EPC Cash Working Group) has taken place about how to achieve a greater harmonisation of Eurosystem NCB operational conditions. Following a high-level discussion on the basis of the EPC resolution on NCB core functions for cash handling, the dialogue between BANCO and the Cash WG has focused on the formulation of the Eurosystem Framework on cash recycling, adopted by the ECB Governing Council in December 2004.

After this mutually beneficial experience, and capitalizing on the cooperation model between the ECB and the EPC, the dialogue should be pursued on the issues highlighted in the SECA Framework. In order to create a level playing field, basic functions performed by NCBs in Europe need to be interchangeable – i.e. sustaining a practical test: it must be possible to handle coins and banknotes issued by a NCB, and access the services it offers, all through the Eurozone, in whatever country, without any practical obstacle, thus creating the same practical effects than a common Eurozone-wide infrastructure for cash (“virtual” infrastructure).

Establishing the level playing (the “Single Euro Cash Area”) requires:

- a) structuring principles to be agreed and implemented: access to NCB cash services across national borders, sufficient network coverage, interchangeability of services as regards lodgings and withdrawals of coins and banknotes, advanced information interface and feedback between NCBs and banks, and stability of services and operational conditions.

- b) the harmonization of a range of NCB operational conditions: minimum and maximum debiting/crediting rules, opening hours, authenticity control policy, cash quality control, penalties for lack of compliance and dispute resolution processes.

Once these principles and harmonized operational conditions have been defined by the Eurosystem in dialogue with banks, the way in which they are implemented in each country or group of countries, i.e. notably the level of outsourcing, can be a decision for each NCB - provided that due remuneration is received by the banking industry for the core functions it will perform in place of an NCB.

In the SECA, banks will continue to acknowledge the crucial importance of, and their obligations, to distribute only genuine and quality cash, an imperative to maintain confidence of the general public. Banks share the understanding that customers should be educated about the societal cost and risks of cash, progress towards enhanced cash processing efficiency should be monitored, a high quality of cash in circulation maintained, and coordinated actions in the fight against counterfeiting and for the protection of the euro sustained. Banks will also implement the reporting scheme agreed with the ECB, and formulate principles as to the remuneration of interbank services in cash handling.

As third parties have a significant role to play in enhancing cash processing efficiency, the SECA Framework identifies a range of best practices that banks should take into account when outsourcing part of their cash processing activities. The SECA Framework also proposes a dialogue with third parties' representatives on issues of common interest, notably: designing common initiatives against euro counterfeiting, reaching a common understanding on standardisation issues, and identifying ways on how to contain or reduce the societal cost of cash.

Finally, a range of Eurozone-wide standards will be required to achieve SECA. Priorities have already been approved by the EPC Plenary in June 2004. Some standards have already been delivered (e.g. common definition of fit/unfit euro banknotes), but others are outstanding e.g. standards for cash degradation systems, coins and banknotes packaging, security requirements for euro cash transportation and testing procedure/criteria for cash handling machines. What matters in this respect is *interchangeability*. For each area where a standard requirement has been identified, the Framework describes - from a banking industry perspective and at a high-level - the standard to be delivered and lists the relevant standardisation activities.

## **1 PREAMBLE:**

### **1.1 Purpose and objectives**

As for other payment instruments, the current landscape for the distribution of cash is characterized by the coexistence in the Single Euro Payments Area (SEPA) of multiple national infrastructures, organized at national level and based on different business models. As a result, there is currently no Single Euro Cash Area for credit institutions and other professional cash handlers.

This is an issue because cash remains the most popular payment instruments for small amounts yet amongst the most expensive payment instruments to operate from a societal point of view: there are today an estimated 360 billion cash transactions in the EU every year (to be compared with some 70 billion non-cash transactions), whilst the total cost per year for EU economies can be reliably estimated between 0.4 and 0.6% GDP, i.e. at no less than EUR 50 billion. With this background, achieving a “Single Euro Cash Area” will be essential for reducing the costs of handling cash in the Eurozone.

Conscious of this challenge, the Eurosystem is in the midst of a wide-ranging harmonisation process: national legacies indeed widely differ across the Eurozone as regards cash handling, with current NCB operational rules and conditions still largely reflecting this diversity. Essential steps taken by the Eurosystem in this direction include:

- March 2002: Common Eurosystem fee policy for cash transactions of professional clients at NCB counters, differentiating between free-of-charge services and charge-incurring services
- March 2002: Common Eurosystem approach to opening hours rules and debiting and crediting rules for cash services at NCB counters
- April 2002: Common Eurosystem terms of reference for the use of cash-recycling machines by credit institutions and other area institutions engaged in the sorting and distribution of banknotes<sup>7</sup>.
- December 2004: Recycling of euro banknotes: Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers<sup>8</sup>.
- December 2004: High-level principles as regards NCBs’ core functions in the distribution and recycling of cash

This harmonisation process is however still under way, and it is therefore essential that the European banking industry - as user of Eurosystem NCB cash services - expresses its vision and requirements, whilst also defining the way it could contribute to these developments.

With this background, the objective of this Framework is to define, taking a user perspective, banking industry requirements for core cash services provided by Eurosystem National Central Banks (NCBs) as well as to define a common set of banking best practices for the distribution and recycling of euro cash in the Eurozone, shaping what is to become the Single Euro Cash Area (SECA).

It is acknowledged that the ECB Governing Council is fully sovereign as regards the harmonisation of Eurosystem NCBs’ operational conditions. But the European banking industry, in keeping with the co-operation model established with the Eurosystem, is keen, as a user of NCB services, to be consulted in their design: it has e.g. done so since several years as regards the management of the TARGET system and development of TARGET2, and it is prepared to do so also in the area of cash services.

<sup>7</sup> Cf. <http://www.ecb.int/pub/pdf/other/cashrecyclingtermsen.pdf>. The main elements of these terms of reference are the criteria for authentication of genuine banknotes and the requirements for sorting of unfit notes.

<sup>8</sup> Cf. <http://www.ecb.int/pub/pdf/other/recyclingeurobanknotes2005en.pdf>

## 1.2 Cash in the context of building SEPA: the strategic imperative

Through the SEPA project, the European banking industry has publicly committed to making available to end-customers, from 1. January 2008 onwards, 3 core pan-European payment instruments which should be attractive enough to substitute by 2010 a critical mass of current, national payment instruments:

- a pan-European credit transfer,
- a pan-European direct debit,
- pan-European payments and cash withdrawals with cards.

It is expected that these non-cash instruments will by 2010 enable an internal market of over 500 million end-customers, initiating and receiving some 100 to 150 billion non-cash payment transactions per year. The objective of the regulators (European Central Bank, European Commission), as catalysts for this project, is to bring down the cost of payments by creating new economies of scale, thus spurring economic development. Actually pressure on costs will not only be triggered by economies of scale, but also by active competition between 3 widely available, widely accepted core payment instruments.

How effective competition between the 3 pan-European payments instruments can be will depend to a significant part on how much banks (and other payment service providers) are able and allowed to evidence through direct pricing their costs in producing the related payment services. Today, the direct costing of payment services is often marred by other parameters, such as an interdiction of charging in certain countries for paper-based instruments, or an interdiction of remunerating current accounts. As the cost of cash is being imperfectly externalized to actual users, de facto usage of cash is therefore cross-subsidized by other bank revenues. This contributes to burdening the pricing of other bank services.

Prior to the introduction of the physical euro, every country had its own, distinct organization (a set of laws, regulations, practices, infrastructures) for distributing and recycling cash, from the issuing National Central Bank down to ATMs and retailers, and back. Apart from a handful of often limited exceptions, such national organizations have in effect changed very little compared to end 2001. The physical euro, deemed to become ultimately the single currency for SEPA, merely substituted the national currencies, yet most national (i.e. local) particularities regarding distribution and recycling remained as they were prior to 2002. The direct consequences are that:

- the single currency for SEPA is distributed to banks throughout SEPA at very different costs,
- as banks are often not allowed to pass on these costs to the actual users, the cost of cash is in effect passed on i.a. through the costing of the other payment instruments, thus making them – comparatively – even less attractive than cash. This means that the cost of current, national payment instruments is a function not only of their relative acceptance, but also of the distinct cost of cash is that specific country.

This by all means unsatisfactory situation at national level, if permitted to prevail any further within SEPA, will lead to dramatic consequences for the future of payment services, for 3 main reasons:

- 1- The sheer cost of cash to society as a whole. This cost has been estimated at around EUR 50 billion p.a. (even if this figure – established by the Cash WG Findings and Recommendations in 2003 – is disputed from time to time, no alternative has been suggested up to now). With the

current organizations and cultures, incentives are scarce that would create the actual conditions for key stakeholders to reduce this cost.

- 2- The cost of cash to banks. The September 2005 McKinsey study: “European Payment Profit Pool Analysis: Casting Light in Murky Waters” concludes (on the basis of an evaluation of 9 countries only) that cash costs banks EUR 21 billion p.a., but there are significant differences between countries. In other words in some countries the cost of non-cash payment instruments is far more burdened with the imperfect pass through of the cost of cash than in other countries.
- 3- Fair competition between payment instruments. SEPA customers must be able to choose the payment instrument(s) with which they make and receive payments on the basis of their respective merits and prices. Unless there is an effective harmonization of the conditions for distributing and recycling cash throughout SEPA, this comparison will be gravely distorted, not only between non-cash payment instruments, but also between countries. The very objective of SEPA – to create an internal market for payment services – will have been missed.

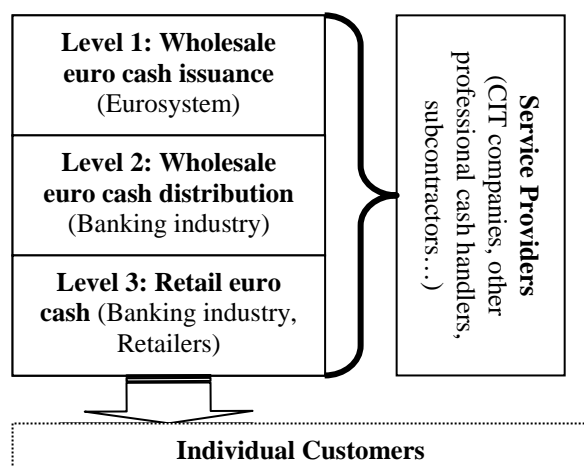
It is not too late yet for decisive action, along the following principles:

- Wholesale cash should be made available to SEPA banks by the Eurosystem at –nearly – the same cost throughout the Eurozone.
- SEPA banks should be able to recycle cash at Eurosystem outlets at –nearly – the same cost throughout the Eurozone.
- SEPA banks should be able to source and recycle cash from any outlet of the Eurosystem, regardless of their country of registration and operation.
- Legal and regulatory barriers that (directly or indirectly) pre-empt direct pricing of cash services to users must be removed.

The overriding objective with the SEPA Cash Framework is to see these principles effectively implemented by 2008, in time for the deployment of the pan-European payment instruments.

### 1.3 Expectations from market participants

The cash distribution organisation can be described as follows, using 3 levels:



### *1.3.1 Individual customers' perspective*

The introduction of euro banknotes and coins in January 2002 has been a resounding success in achieving its primary aim: it has brought to citizens the capability to use their everyday familiar currency and compare the prices of the goods and services they purchase throughout the countries of the Eurozone. From the point of view of retailers and particularly those who do business with customers from many countries, the common European currency has also greatly simplified cash payments. Strictly from a customer perspective, the single cash payment area is already a reality.

Nevertheless, the SECA is not only about the existence of euro banknotes and coins for making payments, it is also about the genuineness, availability and quality of cash in circulation: with this regard, the level of protection and of fitness of euro banknotes and coins should be homogeneous and there should not be shortage of banknote or coin denominations across the Eurozone.

For individual customers, using cash should be easy and secure. They should be able to withdraw cash easily 24/7, to deposit cash almost<sup>9</sup> as easily as they withdraw it, and shall be confident that cash withdrawn at the counter or at an ATM will not be counterfeit. A consistent customer experience should also be guaranteed across the Eurozone (use of ATM devices).

### *1.3.2 Retailers' perspective*

As for retailers (SMEs located in border areas and corporate retailers active in several countries), they may expect from SECA an enhanced competition between their cash service providers, thanks to the possibility to be serviced by a bank or a CIT company on a cross-border level within the Eurozone rather than being limited to their country of location. If such competition was effective, it would allow a decrease in prices, especially in border areas in case the price difference between the 2 border countries is significant. Also, as the removal of barriers within the Eurozone would mean the possibility for professional cash handlers to reap economies of scale, CIT companies would be able to present a better value proposition (in terms of price/quality).

### *1.3.3 Professional cash handlers' perspective*

Professional cash handlers are third parties in the cash processing chain, as they undertake activities outsourced by the banking industry. Banks indeed remain the sole intermediary of central banks in the cash distribution chain, whilst both banks and central banks often resort to outsourcing in order to increase the efficiency of their operations. With this regard, and given the heavy investments required for undertaking cash handling activities, outsourcers have become a reality in the market and their requirements/expectations shall be taken into consideration as well.

Professional cash handlers must be allowed the possibility to have cross-border business activities within the Eurozone in order to be able to reap economies of scale at the level of the SECA, enhance the efficiency of their operations and provide a better service to their customers. However, for this to become a reality, changes to the existing legal framework will be needed, as very little harmonisation efforts have been undertaken so far and cash services remain regulated by national laws that significantly differ from one country to the other (cf. e.g. security requirements, employer's liability

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<sup>9</sup> The time/geographic coverage may be less extended than for withdrawals (ATMs), given the special machinery required and possible regulatory constraints.

insurance, etc. for cash transportation). A harmonisation of NCB operational conditions would also be essential to allow PCHs to conduct cross-border deposits and withdrawals at NCB branches, with a prior harmonisation of procedures, standards, control and audit criteria for cash centers.

Also, professional cash handlers would benefit from a Eurozone-wide market for cash handling machine manufacturers (with common testing procedures across the Eurozone<sup>10</sup>), as such integrated market would enhance competition between manufacturers, allow economies of scale and scope, and decrease prices.

#### 1.3.4 *Banks' perspective*

The banking industry vision for Cash in SEPA is expressed in the Cash Working Group *Findings and Recommendations* (pp.16-19), unanimously approved by the EPC Plenary in January 2003. The vision statement still stands. In particular, it shall be restated that *“the euro will not be the single currency as long as there are significant differences in the treatment of wholesale cash within national borders, nor as long as the provision or sourcing of cross-border wholesale and retail cash services is not possible under the same conditions than the provision or sourcing of equivalent domestic services”*. Meeting this objective requires a harmonisation of Eurosystem NCB operational conditions, the development of common standards at Eurozone level and the removal of legal barriers preventing an effective cross-border cash service provision/sourcing<sup>11</sup>.

In addition, maximum society and economic efficiency can only be achieved when payment instruments can freely compete against each other for customer acceptance on the basis of their own merits (i.e. convenience, price, security...). Cash should therefore be treated as any other payment instrument: at every step the pricing of related services must reflect their costs to the provider(s), whilst not forgetting from a fair cost-sharing perspective the society dimension of cash (in terms both of minimum access to payment capability and ultimate back-up instrument). This objective can only be met if legal restrictions to the free pricing of cash transactions by banks are removed.

For the same reasons as professional cash handlers, banks would also benefit from a Eurozone-wide market for cash handling machine manufacturers, as it is expected it would bring down the costs of cash handling/recycling machines and thus facilitate the business case of more efficient cash processing solutions (e.g. cash recycling at branch level).

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<sup>10</sup> This has already been enacted by the Eurosystem Framework for the detection of counterfeits and fitness sorting of euro banknotes by credit institutions and professional cash handlers (December 2004)

<sup>11</sup> Cf. Cash WG Recommendation # 9, approved by the EPC Plenary in January 2003: *“The Eurosystem will harmonize its operating conditions for cash (i.e. notes and coins). This will include restating the core responsibility of National Central Banks in the distribution of cash (still allowing them to offer value added services as they deem suitable). As a matter of priority, the Eurosystem will, in cooperation with the banking industry, identify and remove the barriers that currently prevent the provision of cash services cross-border.”*

## 2 DEFINITION OF THE TARGET MODEL

Cash remains the most popular yet amongst the most expensive payment instruments to operate, as illustrated by the societal costs it involves. If the EU is to become the most competitive economy in the world by 2010 (Lisbon Agenda), initiatives shall thus be taken to reduce the costs of cash processing. It is proposed to address this challenge from 2 angles: harmonising NCB operational conditions (thereby developing, as an output, a virtual cash infrastructure at Eurozone level), and enhancing the processing efficiency in the cash chain through targeted actions. A number of inhibitors will however have to be overcome before the target can be reached.

### 2.1 Scope

<i>Currency and denominations</i>	This Framework covers euro (EUR) banknotes and coins of all denominations.
<i>Geographical reach</i>	The focus is on the Eurozone. However, the Framework could have side-effects for non-euro countries as well (cf. e.g. standardisation aspects); the latter countries have thus been invited to participate in the discussions at banking industry level.
<i>Practices</i>	The Framework focuses on developing common rules for wholesale cash services, but also sets a number of best practices in the area of retail cash (distribution of cash by banks to their customers, cf. section # 4). Both the provision and the sourcing of cash services, cash distribution and cash recycling practices, are addressed under the present Framework
<i>Implementation</i>	In some areas, decisions by the ECB Governing Council will be needed. In others, recommendations will be enforced by self-regulation, through EPC Plenary decision(s). Implementation of decisions will be monitored through National Cash Plans, to be reviewed by the EPC Cash WG, in dialogue with the Eurosystem.

### 2.2 Model to be realised

#### 2.2.1 Cooperation model between banks and central banks

The introduction of the euro has changed the configuration of the dialogue between banks and central banks. On the retail side, issues e.g. related to the quality of cash in circulation or to the protection of the euro against counterfeiting are now indeed common to all countries and require an appropriate dialogue interface at the Eurozone level, as well as joint actions. From this perspective, the Eurosystem needs a reliable partner on the European banking industry side – a role attributed to the EPC Cash Working Group by the EPC Plenary (cf. Recommendations approved in January 2003).

There has been since the beginning of the year 2004 a constructive dialogue between the Eurosystem (ESCB Banknote Committee - BANCO) and the European banking industry (EPC Cash Working Group) about ways to achieve a greater harmonisation of Eurosystem NCB operational conditions. Following an initial high-level discussion about the EPC resolution on NCB core functions as regards

cash, the dialogue between BANCO and the Cash WG has been mainly focused on the preparation of the Eurosystem Framework on cash recycling, adopted by the ECB Governing Council in December 2004. After this fruitful experience, and capitalizing on the cooperation model built between the ECB and the EPC in the cash handling area, it is believed that the dialogue should continue on the issues identified in section # 3 of the present Framework.

### *2.2.2 A “virtual” Eurozone-wide cash infrastructure*

The basic functions performed by NCBs in Europe need to be interchangeable – i.e. sustaining a practical test: it must be possible to handle coins and banknotes issued by a NCB, and access the services it offers, all through the Eurozone, in whatever country, without any practical obstacle (such e.g. as packaging), thus creating the same practical effects than a common Eurozone-wide infrastructure for cash (“virtual” infrastructure). It would not be acceptable either that, as far as these functions are concerned, some national banking industries must comply with direct or indirect obligations that are more stringent.

### *2.2.3 Processing efficiency in the cash chain*

Given the costs involved at each step of the chain (transport, sorting, storage...), the shorter the cash processing chain the more efficient the process. The objective should thus be to reduce whenever possible the number of participants in the processing and distribution chain. For instance, the promotion of direct contracts between merchants and CIT Companies, when appropriate, would allow cash to be delivered directly to cash centres. National banking communities are encouraged to review the cash processing chain model in use in their market, to measure its efficiency and propose ways to increase the latter.

In most cases, the existing cash handling process runs through merchant, credit institution, CIT Company and NCB, with thus 4 participants in the process chain. For instance: in the first step, the merchant processes the cash for paying in at the credit institution; there, the cash is again processed for delivery to the CIT Company; the CIT Company gathers the cash paid in at a bank, processes it and pays the money in at the NCB; the NCB processes this money once again and undertakes the final check for counterfeit money on all payments received. It is obvious in such a case that shortening the cash processing chain would allow greater efficiency.

## **2.3 Implementation options**

Once NCB core functions have been defined by the Eurosystem in dialogue with banks, the way in which they are implemented in each country or group of countries, i.e. notably the level of outsourcing, is the decision of each market<sup>12</sup> - provided that full remuneration is received by the banking industry for the core functions it will perform instead of NCBs.

With this regard, the optimal organisation of the cash processing chain may differ from one region to the other depending on local factors, as the efficiency of one model compared to another largely depends on the context (past investments, central bank organisation, cash-in-transit market, geographical distances...) of each country. A progressive convergence is expected over years, but it is acknowledged that this process will require time, given the investments involved.

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<sup>12</sup> Cf. principle # 2 (Decentralisation) of the EPC Resolution on “National Central Banks’ core functions as regards cash”

Different models currently exist in the market and will thus have to be taken into consideration by national banking communities when implementing this framework. In reality, there is not always a strict distinction between 2 models, rather, some forms of combinations are possible. However we may distinguish between 4 “generic” models, e.g. (acknowledging that this is by no means intended to be an exhaustive list):

- “Outsourcing model”: scheme where the banks have taken responsibility (and costs, in Sweden and the UK) for most wholesale cash functions, e.g. fitness sorting; storage; distribution. This model is not deemed to be compatible with the requirements expressed in the present framework.
- “Notes Held To Order” (NHTO) model: scheme where banks are authorised by the NCB to hold wholesale cash off-balance sheet; fitness sort notes off-balance sheet; deposit ‘out-sort’ and unfit notes to the NCB for same-day settlement; withdraw new notes and store off-balance sheet pending issue to the public (examples: Ireland, the Netherlands). The implementation of such a scheme may be a way to compensate banks for the costs incurred in the case of a reduction of NCB network coverage.
- “Centralised model”: the NCB continues to carry out pivotal roles in the cash distribution chain at national level, acting - through its branch network - as the primary cash warehouse, distribution point, and processor (examples: Germany, France)
- “Joint-Venture model”: scheme where a ‘joint venture’ company has been established, involving the NCB and the banks as key financial shareholders, that deals with all aspects of wholesale cash activity on a ‘lowest operational cost’ basis; the JV directs and manages the injection of new cash, the destruction of unfit, fitness-sorting, storage and cash distribution; it does not run its own CIT fleet (example: Austria).

In the same way, banks will have full flexibility on the way they organise their internal cash processes and on the extent they outsource the latter to professional cash handlers.

## **2.4 Inhibitors**

A number of inhibitors have to be taken into account on the road towards a genuine Single Euro Cash Area. In particular:

- The current legal framework is unadapted to the new SEPA environment: the cross-border sourcing/provision of cash services (including cash transport) in the Eurozone is for instance still practically impossible for banks and other professional cash handlers, and there are still in many countries legal restrictions to the possibility for banks to charge for cash withdrawals and deposits (at ATMs and/or OTC).
- Founding this argument on national traditions and legacies, some NCBs remain reluctant to abandon their “national arrangements”, which puts at risk an ESCB coordinated approach.

Removing these inhibitors will require coordinated efforts by the ECB and the EPC.

### **3 EUROPEAN BANKING INDUSTRY REQUIREMENTS FOR EUROSISTEM CASH SERVICES**

The Eurosystem National Central Banks' responsibilities, in pursuance of Article 105(2) of the Treaty establishing the European Community, are notably the smooth operation of payment systems (operator, overseer/regulator and facilitator). In the cash area, the exclusive mandate devolved to the Eurosystem for the issuance of banknotes and coins should imply obligations (in a public good sense) for their handling and redistribution.

Hereafter the criticality of the various dimensions of Central Banks' services have been assessed and ranked in function of, on the one side, their structuring or rather operational aspects, on the other by order of priority from a banking industry perspective with a view of establishing a true playing field, as described in Section 1.2 above.

#### **3.1 "Structuring"**

##### *3.1.1 Access to Central Bank cash services across national borders*

The euro is the common currency of Eurozone citizens. It is only appropriate that the banking industry, as the appointed distribution channel of that currency, obtains a non-discriminating and unfettered access to Central Bank cash services (i.e. possibility to open an account at a foreign Eurosystem NCB for accessing the cash services of that particular NCB), irrespective of the location of any given bank and Central Bank within the Eurozone. This is of particular importance to banks located in border areas, which must be able to select on the basis of business rationale alone the Central Bank (or branch thereof) at which they deposit cash, or from which they withdraw it. Furthermore, when banks located in one Eurozone country want to open an account at a NCB of another Eurozone country only to use the cash services of that particular NCB, they should not be subject to reserve requirements. The impact of TARGET2 on these aspects needs to be assessed.

##### *3.1.2 Sufficient network coverage*

Eurosystem NCBs should maintain a network of offices that is large enough to allow operators optimal access to cash (coins and banknotes) in terms of distance, time, security risks and population distribution. The core responsibilities of the NCBs may be entrusted to joint ventures or external service providers, but should remain under the responsibility of the NCB, including its financial liability.

Some Eurosystem NCBs have defined their own policy in this respect, whilst others did not, resulting in a patchwork of contrasted national networks where border effects are still paramount and where no service level is ensured for users of NCB cash services across the Eurozone. A common Eurosystem policy in this area would thus be needed in order to harmonise the criteria used by NCBs (such as population density, cash in circulation, geography, etc.) to assess the effectiveness of their distribution network, including in - yet by no means limited to - border areas (cross-border cash services).

It is acknowledged that the notion of "sufficient network coverage" becomes less of a requirement for those countries where the National Central Bank has authorized an NHTO scheme.

### 3.1.3 Lodgings and withdrawals of coins and notes

Procedures and conditions governing lodgings and withdrawals of notes must be adapted to banks' user requirements and harmonised across the Eurozone, so that interchangeability of services is ensured.

Examples of such procedures and conditions include:

- Value and denominational constraints: e.g. multi-denominational processing, allowing users to lodge unfaced and unoriented banknotes of all denominations, is (or will be) allowed at certain NCBs but not at others
- Packaging standards: in some countries, banknote bundles shall e.g. be comprised of faced and oriented banknotes of one single denomination.
- Frequency of deposits and orders (including incomplete containers): in one country for instance, only one incomplete banknote package is allowed per bank per day and per NCB branch for each banknote denomination.
- Coin lodgments: in at least one Eurozone country, this service is not offered by the NCB to the banks, which is not acceptable
- Time lag from order to implementation: cut-off times for ordering cash (coins and banknotes) to NCBs vary across Eurozone countries. In the case of euro coins, a pre-notification of several days (or months) is even sometimes required.
- Time lag from delivery to account crediting (cf. §3.2.2).
- Possibility to use IBNS technology equipments for depositing/withdrawing banknotes at NCB branches
- Possibility for the banks to choose the quantity of coins/banknotes wanted per denomination when ordering a withdrawal
- Possibility to put together fit and unfit coins/banknotes in a same package

### 3.1.4 Information Interface and feedback between NCBs and banks

Efficient and direct interfaces, using advanced information technologies, must be installed between NCBs and banks in order to ensure a swift exchange of detailed information. This covers cash ordering, accounting as well as differences recorded in the course of the handling process and counterfeiting. In some countries, electronic ordering (web-based, i.e. using TCP/IP) is e.g. not possible, whereas it is widely used in others. In one particular Eurozone country, only accounting records are supported by electronic means and open standards; all other communication is paper-based. In some other countries, telephone or fax orders are possible, but no web-based ordering facility is provided.

In the context of the changeover to TARGET2, it will be investigated whether open standards for both access to and content of information across the Eurozone should be defined (e.g. a TCP/IP and XML based solution, using data modeling to structure data flows), whilst avoiding an over-regulation of interface specifications.

### 3.1.5 Stability of services and operational conditions

Cash handling normally entails significant investments by the banking industry, and market participants thus need stability of NCB services and operations conditions for planning purposes with regard to investment decisions. Investments are usually depreciated over a period of 5 years but, because cash is a mature business, real returns may only be expected over a 7 year period. For all of the parties concerned

(NCBs, banks, CIT companies and customers) there is therefore a need for stability of the services offered, in order to guarantee service efficiency.

Any major unilateral modification with an impact on investments' amortization and recovery period (e.g. new generation of banknotes, or new policy as regards cash recycling) must be announced well beforehand and follow a proper consultation of market participants. Failing that, banks must be allowed to fully reflect in their pricing propositions the impact of the residual value of passed investments.

Of course banks do acknowledge that this is a fast moving environment – in particular as regards prevention and fighting counterfeiting - so that from time to time decisions may be required that will not conform to the principle formulated in the above paragraph.

### *3.1.6 Issuance of new generations of banknotes*

The Eurosystem is responsible for the definition and issuance of new generations of euro banknotes. As the latter entail non-marginal costs for the banking industry (adjustment of banknote-handling machines, ATMs, etc.), it must be preceded by a proper consultation of market participants and an in-depth impact assessment - in order to limit as much as possible the impact on banks' costs.

## **3.2 Operational conditions: a harmonised Eurosystem Service Level**

The non-harmonisation of core responsibilities as well as, ceteris paribus, mostly unchanged NCB revenues generates imbalances between Member States, and between payment instruments across the Eurozone. The distribution of Eurosystem revenues is indeed based on fixed criteria that are highly independent from the range of services provided by the National Central Banks (Article 32 §2 of the Protocol on the Statutes of the ESCB and the ECB). In the present shifting environment, it is therefore highly necessary, in order to prevent further damaging market distortions, to define a harmonised set of National Central Banks' core responsibilities related to coins and banknotes.

### *3.2.1 Minimum and maximum debiting/crediting rules*

A common Eurosystem policy should be defined as regards the value dating conditions (including cut-off times) for crediting and debiting coin/banknote lodgings and withdrawals. The policy for crediting and debiting the banks' accounts at National Central Banks must in particular take into consideration, as much as possible, the real situation in the field of cash flows: counting coins and banknotes, and crediting or debiting of the banks' accounts at NCBs should happen the same day than the actual cash flow, i.e. than the actual coin/banknote lodging or withdrawal.

Possibilities of advance/deferred crediting and debiting should be considered (e.g. in the case of night deposits), as well as the possibility - upon certain conditions - for banks to store wholesale euro cash at least at cash centre<sup>13</sup> level off balance sheet pending issue to the public.

### *3.2.2 Opening hours of NCBs*

It is acknowledged that the Eurosystem already put in place minimum NCB opening hours, but comparing actual opening hours of Eurosystem NCBs still show wide differences across the Eurozone, hence the need for a harmonized Eurosystem policy in this area. In some countries, NCB branches open

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<sup>13</sup> Both interbank and CIT companies' cash centres

at 07.00 whereas they open at 08.30 in others. In the same manner, cash deposits/withdrawals are only possible until 11.00, 13.30, or 15.00 in some countries, whereas they are possible until 17.00 or 17.30 in others. In one Eurozone country, a particular NCB branch is even open until 22.00. With this regard, banks wish longer opening hours than the minimum already in place in some countries.

Furthermore, NCBs should offer all its “core functions” services to banks during this time window. In some Eurozone countries, lodgings and withdrawals are for instance only possible during the morning.

Last but not least, opening hours must be in line with market needs and should, consequently, be decided in consultation with users and their service providers (banks and CIT companies).

### 3.2.3 Authenticity control policy

The Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004) already provides common rules for authenticity control by banks. However, these obligations must not be discriminatory compared to what is allowed for non-banking institutions, and the Eurosystem policy as regards cash-back practices and the deployment of third-party ATMs should in this respect be reviewed in the light of recent developments<sup>14</sup>.

The sharing of information on euro counterfeiting between banks and central banks remains also to be explored. Some of the conclusions from the Seminar on ‘Fighting Euro Counterfeiting across the Eurozone’ (April 2005) may in this respect be of use:

- *“It is important to continue the dialogue between the authorities and the relevant sectors in the elaboration of the rules to be applied. The case of particular current interest concerns the rules on authentication of the euro banknotes and coins.*
- *Effort should continue by the Community and Member States authorities to achieve a uniform level of protection of the euro throughout the Community. This includes a common approach in the implementation of Regulation 1338/2001, as well as the level of sanctions in the Member States (...)*
- *An appropriate communication system should be established / maintained between the authorities and the credit institutions, so as to achieve rapid information and feed-back regarding counterfeits”.*

Finally, if one considers the current tendency of National Central Banks to dispose of their responsibility as for the control of the authenticity of coins, it shall be reaffirmed that the control of the authenticity of coins by NCBs should also be considered as a core function.

### 3.2.4 Quality control

The Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004) already provides common rules and requirements for manual and automated fitness sorting by banks.

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<sup>14</sup> Cf. results of the EPC Cash WG survey on cash distribution and recycling practices by non-banks (Cash-013/05).

### 3.2.5 Lack of compliance and dispute resolution

Penalties for lack of compliance with NCB rules (e.g. late delivery) shall be harmonized, be proportional to the offense, and not induce an indirect form of tariffing. A dispute resolution mechanism to address possible differences in judgement on compliance levels, as well as proposals for sanction procedures, will be developed by the ECB. NCBs shall in addition be liable in case of system failures.

### 3.2.6 Charging principles

The Eurosystem has already defined in March 2002 the notion of “*free of charge*” services<sup>15</sup>, by opposition to “*charge-incurring*” services. A link could be made in this respect with the notion of NCB ‘core functions’ (to be provided free of charge to the banking industry – e.g. lodgings and withdrawals), but the exact scope of these notions has not been fully spelled out by the ECB and would require clarification: for instance, are the lodgings of unfit coins/banknotes or the change of stained banknotes free of charge services?

Once these principles are clearly set, it is indifferent who performs the core functions of the Eurosystem, provided National Central Banks bear the costs of at least those functions that have been deemed core (even if these functions are entrusted to an external service provider). National Central Banks could furthermore continue offering additional services, albeit expectedly at market conditions.

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<sup>15</sup> The exclusive mandate devolved to NCBs and Treasuries for the issuance of banknotes and coins generates operational costs but also substantial incomes (in the form of ‘seignorage’), which may be used to cover the costs of providing these core functions “free of charge”.

## 4 COMMON UNDERSTANDING OF BANKS' RESPONSIBILITIES

Banks are fully aware of the crucial importance of continuing to distribute only genuine and quality cash, and of their obligations in this respect. The confidence of the general public in the currency is indeed critical to the well-functioning of the economy.

### 4.1 Monitoring progress towards enhanced cash processing efficiency

Resources used in the cash chain are only synonym of costs for banks, since they are often no direct revenues from the provision of cash services. Nevertheless, efficiency<sup>16</sup> is about optimising resources, i.e. minimizing resources used for a given service level.

Resources used by banks in the area of cash processing are composed of means, staff, inventory, and transport costs, and shall be divided between the incoming side (cash deposits, sorting, recycling) and the outgoing side (cash withdrawals by customers at the counter or at ATMs). Whilst it is acknowledged that obtaining a fully "scientific" costing of cash to society is a challenge, rough cost estimates were delivered by the Cash WG in the framework of its *Findings and Recommendations* of January 2003, which e.g. shows that there seems to be room for efficiency improvement on the incoming side (twice more costly than the outgoing side).

However, in the cash area, efficiency is not only about process efficiency (e.g. automation): cash handling is indeed a 'heavy' industry by nature, and another way to optimize resources is to limit the volumes of cash handled. One way to do this is to encourage customers to use alternative means of payment (e.g. cards). Another way can be to limit the float/stocks of cash in the process: this can be done by developing cash recycling and shortening the cash cycle. A number of concrete best practices in this area have been identified by the EPC in its Resolution<sup>17</sup> on a *European set of banking best practices for cash handling* (June 2004), and were subdivided into the following categories: shortening the cash processing chain, developing cash recycling, developing cash management, optimising ATM performance, outsourcing cash processing, optimising teller operations, optimising CIT services and automating coins processing. The implementation of this set of best practices is due to be reviewed in June 2006 and will be upgraded on the basis of recent developments and of the experience accumulated. Here, the opportunity of developing a common method and set of indicators for monitoring progress in the area of enhancing cash processing efficiency (cf. national cash plans) will also be assessed.

### 4.2 Maintaining a high quality of cash in circulation

The fitness of banknotes is part of banks' commercial policies and thus one of the key aspects of the cash service to their customers; it is therefore a parameter that banks cannot afford to set apart: not only would poor quality banknotes generate blockage at ATM-level, but also distributing unfit banknotes would be detrimental to banks' commercial image.

However, for those banknote and coin denominations that are not returning to the banks due to a longer cash cycle, some specific initiatives could be undertaken by European banks in order to increase the level of quality of these denominations in circulation. As the two lowest banknote denominations (€

<sup>16</sup> Here understood as x-efficiency: the effectiveness with which a given set of inputs (means, staff, transport, inventory) is used to produce outputs (cash services). If a bank is producing the best service it can given the resources it employs (depends on the targeted service level), and the best technology available, it is said to be x-efficient.

<sup>17</sup> Doc EPC-0453/04

and €10) are generally subject to higher wear and tear in circulation, it is e.g. recommended that these denominations are regularly dispensed to retailers and the general public to ensure a good quality of banknotes in circulation. Campaigns could also be organized by national banking communities to collect/recycle unused low euro coin denominations (1 and 2 euro cents); if deemed opportune, the phasing out of these coins could also be decided, as already implemented in some euro countries.

### **4.3 Coordinated actions in the fight against counterfeiting and for the protection of the euro**

The fight against cash counterfeiting is a combined task of all participants in the cash cycle. However, the banking industry acknowledges its role in this field, and supports joint actions with other stakeholders.

In line with the conclusions of the joint EPC/ECB Seminar on Fighting Euro Counterfeiting across Europe (Brussels, April 2005), it is notably proposed that banks:

- Continue the dialogue with the competent authorities and favour a common approach in the implementation of Regulation 1338/2001/EC
- Take internal measures related to planning, information, training, auditing and organisation, so as to optimise the protection of the euro.
- Identify best practices in the area of the protection of the euro and integrate them into the EPC set of banking best practices (to be reviewed by the EPC Cash WG in 2006)

### **4.4 Principles for remuneration of interbank services**

As stated in Section 1.2, one of the key underlying principles for establishing sound conditions to construct a healthy SEPA environment for all payment instruments is the capability for banks to price the services they are providing, also to each other, in keeping with free market principles.

### **4.5 Reporting requirements**

Following Eurosystem's concerns regarding the lack of reliable statistics as regards retail and wholesale cash handling, the European banking industry has expressed readiness to contribute to data collection for cash recycling activities provided that the statistical requirements and subsequent administrative burden remain limited, and at any rate proportional to the intended benefits.

Section 2.7 of the Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions ("CIs") and other professional cash handlers ("PCHs"), CIs and PCHs, has defined in general terms the data to be regularly provided by the latter to NCBs. This general requirement has subsequently been transposed by a Joint Task Force - composed of representatives from the Eurosystem, the EPC and the ESTA - into a detailed reporting table<sup>18</sup>. The resulting reporting scheme will enter into force at the end of 2006.

The number and value of ATM withdrawals, as well as the number of ATMs, are already reported to the Eurosystem and resulting statistics are already part of the ECB Blue Book.

For practical reasons, as acknowledged by the above-mentioned Joint Task Force, no detailed data regarding over-the-counter (OTC) transactions will need to be collected from banks.

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<sup>18</sup> ECB Reference: BN BAI/SRR/05/129.

#### **4.6 Debate on the societal cost of cash**

Banks should take an active part in the debate on the societal cost of cash, but this debate should involve *all stakeholders* (not only banks), including Central Banks, national Governments, retailers and consumers - as has already been initiated in some countries (e.g. Belgium<sup>19</sup>, Netherlands<sup>20</sup> and Norway<sup>21</sup>).

The results of the various studies that have been undertaken so far converge, and e.g. show that, above 10-11 euro, non-cash payment instruments are more economical for society, that e-purse is always more economical for society than cash, or that cash is definitely the most expensive payment instrument to operate from a societal point of view (total costs consistently estimated around 0.4 to 0.6% GDP). Public authorities should in this respect contemplate measures aimed at “repositioning” cash (e.g. dispensing social allowances via electronic means of payment instead of cash) and at removing legal/regulatory obstacles that prevent banks to charge for cash withdrawals/deposits (thus distorting related price signals). They should also avoid further increasing the cost of cash by new regulations (e.g. in the field of cash transportation, or by piling up obligations and costs on providers of electronic means of payment thus further encouraging cash usage).

#### **4.7 Customer education**

Banks’ customers (i.e. retailers and end-users) should be educated about the societal cost of cash as well as about the risks cash handling involves.

National banking communities will in this respect be encouraged to develop customer-targeted information about the actual security issues and costs generated by the use of cash, as well as to support the creation of national Banknote-Watch-like organizations and develop campaigns aimed at convincing the public that “*a stained note is probably a stolen note*” (Banknote Watch International).

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<sup>19</sup> BNB, “Costs, advantages and drawbacks of the various means of payment”, 16 Dec. 2005 (available at [www.nbb.be](http://www.nbb.be))

<sup>20</sup> NVB, “Betalen kost geld”, March 2004 (available at [www.nvb.nl](http://www.nvb.nl))

<sup>21</sup> “Costs and income in the Norwegian payment system 2001: An application of the activity based costing framework”, by Olaf Gresvik and Grete Øwre (WP 2003/8)

## 5 ROLES OF AND REQUIREMENTS FOR THIRD PARTIES

Third parties are service providers contracted by National Central Banks and/or banks when outsourcing certain steps in the cash processing chain, or - if allowed - independent service providers (the legal regime applicable to them currently differs from one country to another). What follows are some best practices that banks should take into account when outsourcing part of their cash processing business.

### 5.1 Third parties in the cash cycle

The most obvious third parties involved in cash distribution and recycling activities are “professional cash handlers” (PCHs), covered under the scope of the Eurosystem Framework for the detection of counterfeits and fitness sorting – which created this new concept. This category of PCHs is believed to cover cash-in-transit (CIT) companies, represented in Europe by the European Security Transport Association (ESTA). Usual functions performed by CIT companies are: ATM management (including supply of cash to ATMs), network service, first level support for ATMs, counting and settlement of deposits, cash transport, packaging of notes and coins for NCBs, recycling, storage, cash management, and the handling of foreign currencies.

However, other third parties are involved as well in the cash processing chain:

- The vending industry: represented in Europe by the European Vending Association (EVA). A vending machine, according to the EVA Statutes, is “*a device aimed for the self-service sale or provision of goods and/or services that can be operated by entering a coin, a banknote, a token, a chip or other card/key or by other command. This does not cover entertainment and gambling machines*”.
- Retailers: when providing “cash-back” services to their customers, i.e. a service initiated with a card at a point-of-sale (POS) terminal in which the transaction amount debited against the cardholders’ account is given to the cardholder by the merchant in whole or in part in cash, or when refilling ATMs. Retailers are mainly represented in Europe by EuroCommerce.
- Independent ATM deployers: service providers deploying ATMs independently from the banking industry (i.e. explicitly excluding subsidiaries of banks to which the operation of ATMs would have been outsourced), represented worldwide by the ATMIA (ATM Industry Association).

The supervision regime of these third parties remains to be clarified, given that the Eurosystem has no regulatory powers over these actors.

Most of these market participants, classified under the broad category of “cash users”, are represented in the Euro Cash User Group (ECUG), co-chaired by the European Central Bank and the European Commission and which meets twice a year.

A dialogue with third parties’ representatives will be opened (for instance in the framework of the ECUG forum) on issues of common interest, e.g. in the following areas:

- Fight against euro counterfeiting across the Eurozone: coordinated actions involving all cash users, assessment of risks involved in cash recycling practices by non-banks<sup>22</sup>
- Cash processing efficiency: identification of best practices
- Standardisation: presentation to other users of banking needs in the area of stained banknotes, banknote/coin packaging, or harmonisation of security requirements for cash transportation.

<sup>22</sup> Cf. results of the EPC Cash WG survey on cash distribution and recycling practices by non banks (Cash-013/05)

- Containing the societal costs of cash: dialogue and joint investigation on the societal cost of cash in the Eurozone and on ways to contain/reduce it.

## **5.2 Best practices for the outsourcing of cash handling activities to third parties**

It is proposed that the EPC Cash WG develops a list of national best practices that could be used by financial institutions as a basis for determining their relationship with CIT companies, in order to enhance the quality standards and productivity of the latter. The absence of an Internal Market for cash handling services is however an issue, as it creates obstacles to cross-border cash transportation and prevents banks from putting CIT companies in competition at Eurozone level.

Examples of best practices already identified by the EPC Cash WG<sup>23</sup> include the following:

- Optimisation of CIT Companies' services through Service Level Agreements (SLAs)
- Reduction of float at security carrier depots
- Use of "smart" boxes (both for security and efficiency reasons)
- Optimisation of the service frequency
- Overnight servicing of branch ATMs (when allowed, while still considering security).

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<sup>23</sup> Cf. EPC Resolution on a European set of banking best practices for cash handling

## **6 STANDARDIZATION: PROCESS AND FOCUS**

A number of Eurozone-wide standards will be required to achieve SECA, and priorities have in this respect been defined by the EPC Resolution on a European set of banking best practices for cash handling (June 2004). What matters is interchangeability: it must be possible to withdraw/deposit coins and banknotes at any Eurosystem NCB and access the services they offer, throughout the whole Eurozone, in a similar way and without any practical obstacle (e.g. different standard).

### **6.1 Process**

For each of the areas where a need for standardisation has been identified, this Framework will define - from a banking industry perspective - some high-level requirements for the standards to be developed, and will identify ongoing standardisation activities in this area.

These requirements will then be sent to the appropriate standardisation bodies for consideration, and the Cash WG will monitor their implementation.

### **6.2 SECA standards that have been already delivered**

Definition of fit/unfit euro banknotes → cf. Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004)

Definition of fit/unfit euro coins → Cf. European Commission Recommendation<sup>24</sup> concerning authentication of euro coins and handling of euro coins unfit for circulation (27 May 2005)

Harmonisation of euro banknotes' authentication methods → Cf. Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004)

Harmonisation of euro coins' authentication methods → Cf. European Commission Recommendation<sup>25</sup> concerning authentication of euro coins and handling of euro coins unfit for circulation (27 May 2005)

Minimum manual fitness sorting standards for euro banknotes → Cf. Annex to the Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004)

Terms of Reference for the use of cash recycling machines and cash-in machines → cf. Eurosystem Framework for the detection of counterfeits and fitness sorting by credit institutions and other professional cash handlers (December 2004)

### **6.3 Priorities for further standardisation activities**

#### ***6.3.1 Banknotes stained by protection devices***

Overall objectives are three-fold:

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<sup>24</sup> The non-binding character of this document (EC Recommendation) is however an issue

<sup>25</sup> Same remark as above regarding the non-binding character of such recommendation

- 1- The development of common European standards for banknotes stained by protection devices such as a smoke or dye agent (IBNS<sup>26</sup> technology) would assist in promoting common security requirements for cash transportation in the Internal Market<sup>27</sup> and would subsequently assist in facilitating in particular cross-border cash transportation across the Eurozone<sup>28</sup> - avoiding the risks of a costly levelling-up to the highest security standards in place in the EU.
- 2- Common European standards for banknotes stained by protection devices would also create one common European market for cash degradation systems manufacturers (higher competition, economies of scale, lower prices) and increase interchangeability between service providers (professional cash handlers) for banks.
- 3- Common European standards in this area would also facilitate the communication among stakeholders (banks, professional cash handlers, police, regulators, customers, retailers...) and allow the development of coordinated initiatives.

A number of initiatives have already been undertaken:

- European Committee for Standardisation (CEN): A working group<sup>29</sup> has been constituted on ‘cash degradation systems’ in the framework of CEN Technical Committee 263. Manufacturers of intelligent cash protection systems are already active in this WG and the delivery of a common standard<sup>30</sup> is due by November 2007.
- European Central Bank (ECB): the ECB plans to issue a new generation of euro banknotes by the end of the decade; a reflection about cash users’ requirements is taking place in this context, with the launch of an informal consultation among stakeholders in July 2005, and compatibility with cash degradation systems is naturally part of the debate.
- Banknote Watch Trust (BNW): Banknote Watch™ is a crime prevention initiative that aims to prevent criminals profiting from the proceeds of crime and reduce the risk of commercial robbery by raising public awareness that: “*a stained note is probably a stolen note*”. Officially launched on 29 January 2001, “Banknote Watch” Trust is a UK partnership between the manufacturers/installers and users of cash staining systems, the Government and Police. “Banknote Watch International” (BNWI) was subsequently launched in November 2004. Cf. Doc Cash-029/05.
- European Intelligent Cash Protection Association (EURICPA)<sup>31</sup>: this association, created in April 2005, represents European manufacturers of intelligent cash protection systems and its objective is to work with other organizations involved with cash-in-transit (banks and retailers) and with regulators in order to promote intelligent cash protection technologies. One of its missions is in particular to adopt a coherent approach on standardisation, and to promote high quality standards and mutual recognition in the area of cash degradation systems.

In order to meet banks’ needs, common European standards for cash degradation systems (IBNS) shall follow a number of essential requirements:

<sup>26</sup> IBNS: Intelligent Banknotes Neutralisation System

<sup>27</sup> Cf. draft EC directive on ‘Services in the Internal Market’ (COM(2004) 2 final/3, 5 March 2004), which aims at establishing a legal framework to facilitate freedom of establishment for service providers in the EU and free movement of services (including cash services) between EU Member States.

<sup>28</sup> Cf. EPC Resolution on ‘Facilitating Cross-border Cash Transport in the Eurozone’ (Doc EPC-0374/03)

<sup>29</sup> TC 263 of the European Committee for Standardisation (CEN) is dealing with “secure storage of cash, valuables and data media”. Its WG4 is dedicated to “cash degradation systems”. Cf. <http://www.cenorm.be>

<sup>30</sup> Ref. 00263019: “Secure storage units - Requirements, classification and methods of test for resistance to burglary - Banknote theft deterrent systems using dye or smoke-dye”

<sup>31</sup> For additional information: [www.euricpa.org](http://www.euricpa.org)

- Cross-border euro cash transportation across the Eurozone should not be hampered by a larger use of IBNS: homologation criteria should be standardised, mutual recognition should be promoted, and standards should be of high quality<sup>32</sup> (ease of use, security, reliability).
- Cash degradation systems should be interchangeable: banks should be able to change as swiftly as possible from one professional cash handler or intelligent cash protection solution to another without undue barriers (e.g. adaptation costs). A certain degree of standardization of the reception/host basis for IBNS would be convenient in this respect. The same applies with regard to the standardization of banknote packages (the system's effectiveness depends on it).
- Cash degradation systems must be suited for different commercial usages, such as cash transports (i.a. sufficient volume), safes, ATMs, etc.: given the number of potential handlers involved in banknote circulation e.g. banks, cash-in-transit operators and retailers there needs to be a degree of system compatibility.
- Cash degradation systems need to warrant that the banknotes affected will be useless for criminals (i.e. they can not be used as means of payment): the mutilation must send a strong, unmistakable signal that the banknote should not be acceptable for payments and it must be irreversible. Therefore a close and continuous dialogue must be organised between interested parties, in particular the ECB and the manufacturers (in particular in the context of the next generations of banknotes), in order to find solutions which would guarantee the irreversible character of degradation.
- Information campaigns towards the general public (“*a stained note is probably a stolen one*”) and other interested stakeholders (including police forces) should be organized: given the public security dimension, public authorities should be actively involved.
- There should be strict procedures surrounding the detection of affected banknotes which lead to appropriate handling and investigation: detection and isolation and/or rejection by sorting machines and vending/change machines must be possible.
- Cash degradation systems should be designed in such a way that an accidental triggering would be absolutely minimised: procedures at central banks' level for the redemption for accidentally stained banknotes should be as simple and fast and as standardized across Europe as possible. Adapted procedures should also be defined to facilitate the exchange of non-euro stained banknotes with NCBs outside the Eurozone (e.g. for reasons of economies of scale, the Eurosystem could centralise requests from banks and other professional cash handlers in the Eurozone).
- Health and safety requirements need to be taken into account: for instance in case of accidental triggering, for cash transportation and processing of notes.
- Tracing should be promoted: the link between the stained banknotes and the cash degradation device (e.g. smart box) that has been attacked should be traceable, e.g. using DNA
- Cash degradation systems should be complemented with other preventive devices: in order to face the risk of potential thefts, in particular non-professional criminality, cash degradation systems should envisage complementary preventive devices to banknote staining devices (e.g. strident alarm). IBNS in itself is indeed not totally sufficient, as some thefts could be interested in stealing smart boxes in order to retrieve even a very low percentage of non-stained banknotes.

### 6.3.2 Coins and banknotes packaging

Current requirements relating to coin and banknote packaging are extremely demanding, generating substantial compliance costs. Most banks have e.g. currently the obligation to return banknotes to the NCBs “each and everyone put in an identical way” (face-to-face) in the bundles. Other requirements imposed to the banking industry include:

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<sup>32</sup> If not, European regulators will not accept the new standard as a security requirement substitute to armoured cash transportation for cash transportation in the Internal Market.

- Bundle types: content, number of coins/banknotes, single or multiple denominations
- Packaging: identification, traceability
- Special procedures for returning counterfeits and stained banknotes

These NCB requirements widely differ from one country to another and need to be harmonized across the Eurozone.

In order to meet banks' needs, common Euro-wide standards for euro coin and banknote packaging should be defined and follow a number of essential requirements:

- NCB cash services shall be interchangeable: it must be possible to withdraw and deposit euro coin and banknote standard packages at any Eurosystem NCB throughout the whole Eurozone in a similar way (*no difference of standards*) and without any practical obstacle (*no difference of conditions*). This should furthermore be a free-of-charge service from Eurosystem NCBs.
- The number of packaging requirements should be as reduced as possible: NCB free-of-charge services should be progressively adapted to the latest technologies available in order to curb/cancel existing packaging requirements (the more requirements, the more costs): state-of-the-art technologies now indeed allow e.g. multi-layered and multi-denominational deposits and processing of banknotes, which would make processing at the bank offices or at the cash centers much easier and would save substantial costs for the banking industry.
- Packaging standards for unfit coins/banknotes: packaging standards for unfit euro coins/banknotes should be harmonised as well and as much as possible aligned with packaging standards for fit euro coins/banknotes.
- Coin/banknote standard packages must be suited for different commercial usages, such as cash transport, safes, ATMs, etc.: given the number of potential handlers involved in banknote circulation e.g. banks, cash-in-transit operators and retailers there needs to be a degree of system compatibility.
- Compatibility with cash degradation systems: banknote standard packages need to be compatible with cash degradation systems (e.g. smart boxes, smart containers, smart trucks...).

### 6.3.3 Common security requirements for euro cash transportation

The harmonisation of the EU legal framework for the provision of cash services, and in particular cash transportation services, is generally supported as it will encourage service providers to expand their activities across borders and thereby contribute to enhance competition, innovation and growth. Nevertheless, given the crucial public security aspects involved in CIT services, any implementation of the “country of origin principle” (as e.g. initially foreseen in the draft EC directive on ‘Services in the Internal Market’) should be strictly subject to the prior adoption of harmonizing measures by the European Commission.

With this regard, and whilst legislation should remain technology-neutral, the harmonisation of modalities for performing cash-in-transit activities could be largely facilitated by the development of IBNS (Intelligent Banknotes Neutralisation Systems) technology, avoiding the risks of a costly levelling-up to the highest security standards in place in the EU. Any EU legislation in this area should thus refrain from detailed technical harmonisation and favour a flexible enough framework legislation that would only regulate the essential requirements, leaving room for IBNS development - which has proved to be a fully-secure and less costly alternative to armoured cash transportation (protection of truck and foot transport with the use of “intelligent trucks” and of “smart boxes”) – as well as other industry standardisation initiatives.

#### 6.3.4 Testing procedure/criteria for cash handling machines

Banks have expressed the need for common test procedure/criteria for testing fitness sorting machines: there is ongoing work by the Eurosystem on this matter.

## 7 GLOSSARY

<i>Additional services</i>	Cash services provided by NCBs going beyond their core functions
<i>ATMs (Automated Teller Machines)</i>	An unattended electronic self-service and customer-operated device that allows a cardholder to make cash withdrawals
<i>ATMIA</i>	ATM Industry Association
<i>Authenticity</i>	Genuineness of a banknote or coin
<i>BANCO</i>	ESCB Banknote Committee
<i>Bank</i>	Credit institution having a banking license
<i>Banknote</i>	A banknote is a piece of paper money issued by central banks as legal tender. With coins, banknotes make up the cash forms of all modern money.
<i>Cash</i>	Banknotes and coins denominated in a currency
<i>Cash-back</i>	A service initiated with a card at a point-of-sale terminal in which the transaction amount debited against the cardholders' account is given to the cardholder by the merchant in whole or in part in cash.
<i>Cash centre</i>	Interbank service point for cash services
<i>Cash in circulation</i>	Banknotes and coins issued minus vault cash held by banks
<i>Cash in transit (CIT)</i>	Cash being transported from one business to another, or between two parts of a business
<i>CIT Company</i>	Usual functions performed by CIT companies are: ATM management (including supply of cash to ATMs), network service, first level support for ATMs, counting and settlement of deposits, cash transport, packaging of notes and coins for NCBs, recycling, storage, cash management, and the handling of foreign currencies.
<i>Chain</i>	Sequence of processing steps in the cash distribution/recycling process
<i>Coin</i>	A small piece of metal, usually flat and circular, authorized by a government for use as money.
<i>Core functions</i>	Cash services that central banks are obliged to provide (free of charge) to the banking industry
<i>Counterfeit</i>	Banknote or coin that is not genuine
<i>Denomination</i>	One of a series of values in a system of currency
<i>ESCB</i>	European System of Central Banks (25 EU countries)
<i>ESTA</i>	European Security Transport Association

<i>Euro</i>	The single currency of the European Economic and Monetary Union (EMU) introduced in January 1999.
<i>Eurosystem</i>	Eurozone System of Central Banks (NCBs of 12 euro countries + European Central Bank)
<i>Eurozone</i>	The European Economic and Monetary Union (EMU). EMU members are Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, and Spain (12 EU countries in total).
<i>EVA</i>	European Vending Association
<i>Fitness</i>	Meeting a certain number of quality standards
<i>Framework</i>	Set of rules and best practices
<i>IADs (Independent ATM Deployers)</i>	Service providers deploying ATMs totally independently from the banking industry (i.e. explicitly excluding subsidiaries of banks to which the operation of ATMs would have been outsourced)
<i>IBNS</i>	Intelligent Banknote Neutralisation Systems
<i>Lodging</i>	Deposit of cash at a NCB branch
<i>NCB</i>	National Central Bank
<i>OTC (Over the Counter)</i>	At the teller of a bank branch
<i>Package</i>	Bundle of banknotes or coins
<i>Processing</i>	Handling of the wholesale cash cycle chain (transport, sorting, counting and storage)
<i>PCH (Professional Cash Handler)</i>	Non-bank professional cash handlers, including CIT companies
<i>Cash Recycling</i>	Cash re-issued to customers and not returned to NCBs
<i>Retail cash</i>	Cash in circulation at the level of banks' customers (individuals and retailers)
<i>SECA (Single Euro Cash Area)</i>	The Eurozone - once the provision or sourcing of cross-border wholesale and retail cash services will be possible under the same conditions than the provision or sourcing of equivalent domestic services
<i>SEPA (Single Euro Payments Area)</i>	SEPA will be the area where citizens, companies and other economic actors will be able to make and receive payments in euro, within Europe (currently defined as consisting of the EU 25 member states plus Iceland, Norway, Lichtenstein and Switzerland), whether between or within national boundaries under the same basic conditions, rights and obligations, regardless of their location. <sup>33</sup>
<i>SEPA Scheme</i>	A SEPA payment scheme is a common set of business rules, practices and standards for the provision and operation of a

<sup>33</sup> The definition of SEPA is part of the EPC Roadmap approved by the EPC Plenary in December 2004.

SEPA payment instrument agreed at interbank level in a competitive environment.

*SLA (Service Level Agreement)*

*A contract between a network service provider and a customer that specifies, usually in measurable terms, what services the network service provider will furnish.*

*Stained notes*

Banknotes maculated using IBNS technologies

*Third-party ATMs*

ATMs deployed by service providers totally independently from the banking industry (i.e. explicitly excluding subsidiaries of banks to which the operation of ATMs would have been outsourced). These service providers are called Independent ATM Deployers (IADs).

*Vending machine*

A device aimed for the self-service sale or provision of goods and/or services that can be operated by entering a coin, a banknote, a token, a chip or other card/key or by other command. This does not cover entertainment and gambling machines

*Wholesale cash*

Cash in circulation in the interbank space (i.e. between central banks, banks and/or their respective outsourcers)

*Withdrawal*

The act of taking out cash from an account