

Chapter VII

The production of the euro banknotes and preparations for the cash changeover

1 Production of the euro banknotes

The euro banknotes and their individual components are being produced in different European countries by the NCBs and by privately and publicly owned companies. Production of the euro banknotes started in July 1999 after the successful completion of the printing of a pilot series. Before the end of the year printing had started in 9 of the 11 printing works involved in euro banknote production. The later start of production at some printing works is due either to the volume of euro banknotes they need to print, or to the production requirements for national banknotes.

For the time being, the denominations which will be produced in the largest volumes are being printed first. By 1 January 2002 around 13 billion euro banknotes will have been

printed for the 11 participating countries: 9 billion banknotes to replace national banknotes and 4 billion banknotes as logistical stocks (see Table 10). The nominal value of these banknotes amounts to approximately €600 billion. The estimates of the number of euro banknotes to be printed before the launch will be updated annually, in order to take account of possible changes in the demand for the banknotes.

The security procedures relating to the production and transportation of banknotes and individual components have been reviewed and consolidated. A set of obligatory rules has been developed to ensure a common minimum level of security at the various production facilities.

2 The quality of the euro banknotes and coins

Quality of the banknotes

Producing banknotes to the same quality standards at 11 printing works – using raw materials from different suppliers – is a demanding task. It is imperative to ensure identical appearance and consistent performance in both banknote-sorting and banknote-accepting machines, in line with best practice in the production of national banknotes. For this purpose, well-defined inspection and quality control procedures have been established.

All printing works involved in the production of the euro banknotes have implemented a common quality management system, based on ISO standards.¹ The structure of this common system focuses on the quality of the individual banknotes. Detailed procedures for inspection and testing have been defined in order to evaluate fulfilment of the requirements; these were tested during the production of the pilot series.

The proper implementation and application of the quality management system is being assessed by the ECB on the basis of detailed monthly reports prepared by the printing works and audits conducted at the production sites.

Quality of the coins

The euro coins are produced in 10 countries by 14 different mints. In June 1999 the EU finance ministers, the mints and the ECB agreed on a detailed quality management system to ensure a high and uniform quality of euro coins. Each mint is responsible for the quality of its own coins in accordance with common rules. The ECB acts as an independent assessor. It evaluates the monthly quality reports on the coins produced and conducts visits to the mints. The ECB would immediately alert the finance ministers if any quality-related problems were to occur.

¹ ISO 9002: 1994.

3 Protecting the euro banknotes and coins against counterfeiting

Since the decision of the Governing Council of the ECB to establish a database at the ECB to store all the technical and statistical data on counterfeit euro banknotes and coins, the planning process for the counterfeit monitoring system (CMS), comprising the database itself, the tools needed to exploit it and the links to the various users, has progressed. The user requirements have been established and will form the basis for further work. An outline of the technical architecture of the CMS has been elaborated and preparatory work for the development of the functional analysis has started.

In November 1999 the ECB published the "Report on the legal protection of banknotes in the EU Member States". The report is the result of a careful study and assessment of the various aspects of the legal regime for

the protection of the euro banknotes. These include counterfeiting; copyright protection; anti-copying devices for reproduction equipment; the adoption and publication of euro banknote designs; the exchange of damaged or worn euro banknotes; the withdrawal of euro banknotes; the issuance of banknotes by entities other than the ECB and the NCBs; and the issuance of non-legal tender banknotes, known as "fancy" banknotes.

Contacts with Europol, Interpol and the European Commission have been either established or intensified with a view to making the appropriate communication and collaboration arrangements which will be crucial to ensuring the effective flow of information in connection with the prevention and combating of counterfeiting.

4 The EURO 2002 campaign

The Governing Council selected a global communications group to assist in conducting an information campaign in preparation for the introduction of the euro banknotes and coins on 1 January 2002. Each NCB will be the key interlocutor of the global communications group at the national level.

The main goals of the EURO 2002 campaign are:

- to educate the general public and, more specifically, the different target groups in how to recognise genuine euro banknotes;
- to train shop and bank cashiers how to examine euro banknotes fast and efficiently in order to detect possible counterfeits;

- to ensure favourable reception of the euro banknotes and coins; and
- to gradually prepare the general public as a whole for the introduction of the euro banknotes and coins by repeatedly drawing attention to their designs.

In this context, the term "general public" is used to refer not only to the resident population of the euro area, but also to citizens of other countries in which the euro banknotes will circulate, as well as to visitors to the euro area countries. The campaign will be co-ordinated with the European Commission and the euro area Member States, as well as with Greece.

5 The changeover to the euro banknotes and coins in 2002

Changeover framework

With a view to ensuring a successful and smooth operation, the logistics of the 2002 cash changeover need to be clearly determined well in advance so that all those concerned can start the necessary preparations in a timely manner. During the second half of 1999 there were intensive discussions among all those concerned, which allowed ministers represented in the ECOFIN Council – in close co-operation with the NCBs and in line with the views expressed by the ECB – to reach a consensus on the outline of the cash changeover. This is as follows:

- Member States will make their best efforts to ensure that the bulk of cash transactions can be made in euro within a fortnight of 1 January 2002.
- Participating Member States consider that the period of dual circulation of the old and new banknotes and coins should ideally last between four weeks and two months. Member States may facilitate the exchange of old banknotes and coins after this period.
- In order to provide for a sufficient quantity for circulation in the first few days of January 2002, it would be helpful if financial institutions and certain other groups, notably cash-in-transit companies and retailers, were provided with banknotes and coins some time before 1 January 2002. Member States recall that such frontloading must not lead to putting euro banknotes and coins into circulation before 1 January 2002.
- In order to help citizens familiarise themselves with the new coins and to facilitate the changeover, Member States agree that making limited quantities of coins available to the public on request, notably to the vulnerable groups of the population, can be envisaged, but not before the second half of December 2001.

This framework allows Member States to implement the cash changeover in the

way which best suits the circumstances prevailing in each country.

Frontloading

The need and the lead time for frontloading euro banknotes and coins to banks prior to 1 January 2002 – and, in principle, through the latter to certain other target groups – greatly depends on the national changeover scenario chosen, as well as on the national logistical infrastructure. As a general principle, any frontloading should be carried out “as late as possible and as early as necessary”. In accordance with this, the Governing Council has agreed on the principle of harmonised earliest delivery dates for supplying relevant target groups with euro banknotes and coins prior to E-day. Each NCB would be free to operate within the maximum lead time in order to meet the domestic needs of frontloading.

With regard to the different target groups, all participating countries acknowledge the need to supply commercial banks with both euro banknotes and euro coins prior to E-day. This will be a prerequisite for a smooth and rapid changeover. In addition, there is a consensus on the need to supply the retail sector, or parts thereof, with euro coins via the banks prior to E-day (sub-frontloading). This stems from the fact that, unlike banknotes, coins are generally brought into active circulation by the retail sector, rather than by banks. In other words, the retail sector will need to have sufficient amounts of euro coins available, from the very first day of circulation, to be given as change for the banknotes which consumers will have withdrawn from automated teller machines (ATMs) and over bank counters. Frontloading, as mentioned above, would help to contribute to the important requirement of completing the changeover process within a relatively short period of time.

In accordance with the common statement issued by the ECOFIN Council, several Member States are considering frontloading coins to citizens in the second half of December 2001. As for the euro banknotes, the Governing Council holds the view that the possibility of frontloading to the general public is excluded by Articles 10 and 11 of Council Regulation (EC) No. 974/98 on the introduction of the euro, since it would have the same effect as putting them into circulation.

Adaptation of ATMs, currency sorting and accepting machines

A considerable number of euro banknotes can be expected to be distributed via ATMs or paid in via cash-in machines. In addition, consumers will be interested from the outset in using euro banknotes and coins to pay for goods and services available from all types of vending machines. Finally, the banks and the cash-in-transit industry will require counting

and sorting equipment which is capable of processing the euro banknotes and coins reliably and securely as soon as they are put into circulation.

It should, therefore, be clear that the adaptation of the relevant machines will be of crucial importance to ensuring a smooth introduction of the euro banknotes and coins in 2002.

Related discussions with the relevant industry and its associations began some years ago. These discussions focused on the question of the timely availability of information on the technical specifications for the euro banknotes and coins and on their availability for the development and testing of the required sensors and other devices.

The relevant industry will have the opportunity to test their sensors and other equipment with euro banknotes in 2000 at a central location provided by the ECB, and in 2001 under a decentralised scheme.²

6 Cash circulation before 2002

On 1 January 1999 the national currency units became sub-units of the euro. However, the euro banknotes and coins will not be issued until 1 January 2002. In the meantime the banknote circulation in the euro area consists of national monetary tokens. The ECB authorises the issue of the national banknotes and the volume of coin issuance. During the transitional period, to ensure substitutability between the national currency units, the exchange of banknotes denominated in the national currencies of the euro area will be governed by Article 52 of the Statute of the ESCB, which reads as follows:

“Following the irrevocable fixing of exchange rates, the Governing Council shall take the necessary measures to ensure that banknotes denominated in currencies with irrevocably fixed exchange rates are exchanged by the NCBs at their respective par values.”

Against this background, the Governing Council has decided that the NCBs shall, at least in one location in the national territory, by themselves or through their appointed agent, ensure that banknotes of other participating Member States can be either exchanged against national banknotes and coins or, upon request, credited to an account with the institution effecting the exchange, if the national legislation provides for such possibility, in both cases at their respective par value. The NCBs may limit the number and/or the total value of the banknotes they are prepared to accept for any given transaction or on any one day.

² With regard to the euro coins, the industry has the possibility to conduct tests in test centres established by Member States for that purpose.

Table 10
Quantity of euro banknotes to be produced by 1 January 2002

(1999 estimates, in millions of banknotes)

Belgium	530
Germany	4,030
Spain	1,925
France	2,585
Ireland	180
Italy	1,950
Luxembourg	45
Netherlands	605
Austria	520
Portugal	450
Finland	170
EU-11 TOTAL	12,990

In accordance with the above, some 500 NCB branches throughout the euro area have been involved in the exchange of non-national euro area banknotes. From a practical point of view, the exchange within the framework of Article 52 ran smoothly in all the participating Member States in 1999.

In addition, the NCBs may repatriate the banknotes of other participating countries or appoint an agent to perform this repatriation service on their behalf or use existing commercial repatriation channels.

Banknotes repatriated to their respective issuing countries were worth a total value of €6.2 billion and amounted to 115.7 million banknotes in total. The highest amounts (in terms of value) were denominated in Italian lire (€1.7 billion), Dutch guilders (€1.1 billion) and Austrian schillings (€0.8 billion).