



**EUROPEAN COMMISSION**  
EUROPEAN ANTI-FRAUD OFFICE (OLAF)

**Protection of the EURO**  
European Technical & Scientific Centre (ETSC)

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**THE EUROPEAN TECHNICAL & SCIENTIFIC CENTRE**

**ACTIVITY IN 2003**

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## **1. INSTITUTIONAL DEVELOPMENTS**

The European Technical and Scientific Centre (ETSC) was set up, on a temporary basis, in October 2001, based on an exchange of letters between the President of the Council and the French Minister of Finance<sup>1</sup>. Manned with staff from the Commission/OLAF, it has been carrying out its mission at Pessac (Bordeaux) using the facilities and staff of the French mint.

In 2003, the procedures were initiated by which the ETSC becomes permanent. In particular, Council Regulation (EC) No 1338/2001 and the above exchange of letters provide that the future status and the permanent location of the ETSC would be decided by the Council in due course. In line with the relevant agreement<sup>2</sup>, a status report was prepared assessing the performance of the ETSC. The report was prepared under the responsibility of the EU Mint Directors and concluded that the location at which the ETSC presently carries out its activity is appropriate and that the Commission ensures the appropriate administrative and institutional setting in terms of efficiency and independence. The status report was endorsed by the Economic and Financial Committee (EFC).

Along the same lines, the Ecofin Council, in its conclusions of 15 July 2003, welcomed the work of the ETSC and invited the Commission to continue coordinating Member States' technical work related to the protection of the euro coins and to take the appropriate action for ensuring the functioning of the ETSC in the same conditions.

In line with these conclusions, the Commission adopted, on 17 July 2003, a proposal for a Council Decision concerning the analysis and cooperation with regard to counterfeit euro coins. In its proposal, the Commission envisaged two formal steps: one Council Decision assigning to the Commission the responsibilities regarding the functioning of the ETSC and the co-ordination of the Member States technical actions to protect the euro coins against counterfeiting; and a subsequent Decision by the Commission by which it implements that responsibility. This involves formally establishing the ETSC as a Commission service in Brussels, with staff detached to Pessac, carrying out the ETSC's functions.

Based on the Commission's proposal, the Council adopted, on 8 December 2003, the Decision assigning the relevant responsibilities to the Commission<sup>3</sup>. The second step, i.e. the Commission's Decision, should be accomplished in the first months of 2004.

## **2. TASKS OF THE ETSC AND ACTIVITIES FOR THE PROTECTION OF THE EURO COINS**

The primary task of the ETSC, defined in Council Regulation 1338/2001<sup>4</sup> laying down measures for the protection of the euro against counterfeiting is the analysis and

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<sup>1</sup> Exchange of letters of 28 February and 9 June 2000

<sup>2</sup> Ecofin Council conclusions of February 2000

<sup>3</sup> Council Decision of 8 December 2003 concerning the analysis and cooperation with regard to counterfeit euro coins (2003/861/EC), OJ L 325/44, 12.12.2003.

<sup>4</sup> L 181/6, 3.7.2001

classification of new types of counterfeit euro coins. In addition, the EFC's Euro Coin Sub-committee assigned further tasks, while the ETSC takes initiatives which extend its tasks and objectives to a broader, pro-active role in the fight against fraud and euro counterfeiting.

Along these lines, the main developments in the area of the protection of the euro coins in 2003, were as follows:

- New types of counterfeit euro coins, with greater similarity to genuine coins, were analysed and classified by the ETSC in the Counterfeit Monitoring System (CMS).
- Technical and scientific assistance was intensified to authorities competent for the fight against counterfeiting, namely the Coin National Analysis Centres, Europol and the National Central Offices.
- Further specialised training was organised by the ETSC in the detection and analysis of counterfeit coins.
- The ETSC further developed its own databases on counterfeits and other fraudulent objects and assisted the ECB in improving the CMS database for euro coins.
- Contacts continued with the coin operated industry with a view to contributing to the protection against fraud related to the euro coins.
- New proposals were prepared related to the authentication of the euro coins and the rules for medals and tokens.
- Member States and the ETSC continued to coordinate their activity with respect to counterfeit coins in the Counterfeit Coin Experts Group and other relevant groups.

### **3. STATUS OF COUNTERFEIT COINS IN THE COMMUNITY**

During the second year of circulation of the euro coins, 26 191 counterfeit euro coins were detected in circulation and removed, mainly by National Central Banks. This compares with 2 339 counterfeits detected in circulation in 2002. Counterfeit euro coins are found in all euro area countries, except Luxembourg.

The breakdown of counterfeit euro coins found in circulation and registered in the CMS by denomination is shown below. The figures comprise both cast counterfeits (local classes) and stamped counterfeits (common classes).

COUNTERFEIT EURO COINS WITHDRAWN FROM CIRCULATION:

<b>Number of counterfeit coins</b>	<b>50-cent</b>	<b>1-euro</b>	<b>2-euro</b>	<b>Total</b>
<b>2002</b>	28	1281	1030	2339
<b>2003</b>	185	6318	19688	26191

In addition, about 5 800 counterfeit 1-euro coins were seized and three clandestine workshops were dismantled.

The breakdown of counterfeit euro coins found before circulation and registered in the CMS by denomination is shown below.

COUNTERFEIT EURO COINS SEIZED BEFORE CIRCULATION:

<b>Number of counterfeit coins</b>	<b>50-cent</b>	<b>1-euro</b>	<b>2-euro</b>	<b>TOTAL</b>
2002	70 590	99	2	70 691
2003	0	5 795	8	5 803

### **3.1. Common classes**

In the course of 2003, the ETSC identified nine new common classes totalling fifty-eight variants for 1- and 2-euro counterfeits and six classes for 50-eurocent counterfeits. The national faces are various, mainly German, but also French, Italian and Austrian. On the whole, the ETSC has created twenty-six common classes totalling ninety-seven variants since the introduction of the euro coins. The large number of variants indicates that the same counterfeiting workshops continue, diversify and develop their activity.

Generally, stamped counterfeit coins are still mainly detected in Italy for 50-eurocent, in France for 1-euro, in Germany and Austria for 2-euro. For the first time, stamped counterfeits were found in Finland, Ireland and Greece. Two workshops producing such counterfeits were dismantled in 2003.

Current statistics indicate an asymmetry between the quantity of counterfeits produced and the number seized or removed from circulation. For example, with regard to 50-cent and 1-euro counterfeits, the conclusion remains that over two million may have been produced by the two Italian illegal workshops dismantled in June and October 2002. Out of that potential quantity, only about 80 000 have been (mainly) seized or found in circulation.

Nonetheless, the risk that public confidence could be undermined seems to remain relatively low. This is because the quantity of potentially produced (and presumably circulating) counterfeit coins is very low compared to the 49 billion circulating (genuine) coins, as well as due to the low number of counterfeit coins found in circulation.

The counterfeit coins found so far can be rejected by automatic sorting machines as well as vending equipment, if they are properly adjusted to function on the basis of coin electrical conductivity and magnetic moment. This is because none of counterfeit coins found so far cumulate parameters conforming to the euro specifications, although the ETSC has analysed counterfeit 1- and 2-euro coins

having either the conductivity or the magnetic moment parameters matching to the euro specifications.

A general description of the stamped counterfeit coins found in 2003 is as follows:

### **2-euro**

The amount of counterfeit stamped 2-euro coins found in circulation and the number of variants have significantly increased in 2003. Overall, five additional common classes of 2-euro stamped counterfeit coins, totalling fifty variants, have been identified for 19688 counterfeits in 2003, with mainly German and French national sides, but also Belgian, Irish, Dutch and Spanish ones. These are mainly circulating in Germany and Austria.

Globally, ten 2-euro common classes totalling sixty-nine variants were recorded in the CMS since the introduction of euro coins.

On 26 November 2003, the Italian authorities dismantled a clandestine workshop in Villanova in the Venice area, ready to produce 2-euro counterfeit stamped coins.

In addition, 398 counterfeit stamped 2-euro coins were detected in Finland in October and November 2003. Some of these coins were traced in a Finnair flight from Turkey to Helsinki.

Even if the overall amount of counterfeit 2-euro coins remains low, the large number of variants of existing classes, precisely sixty-nine in total, indicate that the counterfeiting activity is relatively intense.

### **1-euro**

Counterfeit 1-euro coins are still mainly found in France and Italy. They are mostly originating at the illegal mint dismantled in October 2002 in Turin by the Italian authorities.

Four additional common classes of 1-euro stamped counterfeit coins, totalling seven variants, have been created for 6318 counterfeit coins in 2003. Overall nine 1-euro common classes totalling twenty-one variants have been identified since the introduction of the euro coins.

In addition, at the beginning of September 2003 a restaurant owner in Greece handed over to the police 20 x counterfeit 1-euro coins. These coins were exchanged by a male person for a banknote of 20-euro. One week later 5808 counterfeit coins of the same type have been found at the house of a Greek national who was arrested. The Greek authorities indicated that the counterfeit coins may originate from Turkey.

On 29 October 2003 the Italian authorities discovered and dismantled an illegal mint shop aiming at producing counterfeit 1-euro coins with Italian and German national sides in Lumezzane (Brescia). Thirty counterfeit 1-euro coins, materials and tools for the production of counterfeit euro coins have been seized.

## **50-cent**

50-eurocent counterfeits are mainly found in Italy, some in Austria, Germany and France. Six common classes have been created for counterfeits found first in Italy and Austria in 2003. Globally, seven 50-eurocent common classes were created since the introduction of euro coins.

The total quantity of 50-eurocent counterfeit coins found in circulation is very low as compared to bicolour coins: less than 10%.

The visual appearance of those new common classes is relatively bad, as compared to bicolour counterfeit coins.

These counterfeits are made of brass and bear an Italian national side. The quality of these six new classes is substantially lower than the first class, related to the illegal mint dismantled in Italy in June 2002.

### **3.2. Local classes**

In 2003, the CNACs created eighteen additional local classes. In total, twenty-six local classes were created, for 1713 counterfeit cast coins globally. Most of the classes are of 1- and 2-euro.

In general, cast counterfeit coins consist mainly of the 2-euro coins found in Germany. However, in January 2003 the Spanish police seized 924 counterfeits (1- and 2-euro coins). In addition, in May 2003 the Portuguese police discovered counterfeit cast coins and could subsequently dismantle the corresponding illegal workshop. Only a few coins were found. The clandestine workshop was located in an industrial area producing shoes.

The casting process for obtaining these counterfeit coins does not allow the production of large quantities, while their quality is mediocre.

## **4. ASSISTANCE TO COMPETENT AUTHORITIES**

### **4.1. Coin National Analysis Centres (CNACs)**

The Member States coordinate their activity through the Counterfeit Coin Experts Group and, particularly, the ETSC which is in daily contact with several of the CNACs. The ETSC continues to provide assistance by communicating the relevant information gained from its technical analysis on a regular basis or through specific reports. In addition, the ETSC responds to requests for technical advice regarding cases of suspect euro coins or blanks and checks periodically the data of counterfeit euro coins in the Counterfeit Monitoring System (CMS) for consistency.

### **4.2. Europol / National Central Offices (NCOs)**

Police involvement in the protection of the euro coins is more developed in Italy and, to some extent, in Greece and Portugal. In none of the other countries have there been arrests or dismantling of illegal workshops. With a view to facilitating

the task of the law enforcement agencies, the ETSC keeps regular contact with Europol and with individual National Central Offices (NCOs) competent for the fight against counterfeiting. It provides evaluations of specific cases of coin counterfeiting.

#### **4.3. Co-operation with the European Central Bank (ECB)**

The ECB makes an important contribution to the protection of the euro coins, through the establishment and maintenance of the CMS. The ETSC and the CNACs make the appropriate insertions in this database, which constitutes one of the basic instruments for efficient protection of the euro banknotes and coins. The ETSC contributes to the improvement and testing of the CMS, also acting as a representative of the CNACs.

### **5. SPECIALISED TRAINING**

The ETSC organised a training seminar “Basic analysis training on the recognition of counterfeit euro coins for investigators” in Pessac/Bordeaux on the premises of the ETSC.

The target group of the seminar were investigators from the National Central Offices (NCOs) for combating currency counterfeiting in the Member States.

The aim of the seminar was to introduce the investigators to the analysis of counterfeit coins and to harmonise the law enforcement approach in counterfeit coin investigations. The investigators were familiarised with the production of genuine and counterfeit coins and were trained in the recognition of counterfeit euro.

### **6. DATABASES, REGISTERS AND TECHNICAL FRAMEWORK**

#### **6.1. Counterfeit Monitoring System (CMS)**

In close cooperation with the CNACs, the ETSC continued assisting the ECB in improving the functionalities of the CMS with a view to adapt the counterfeit coins components of the system to the needs of the CNACs.

#### **6.2. Register of medals, tokens and other metallic objects similar to euro coins**

The ETSC has established and maintains a register of medals, tokens and other metallic objects similar to euro coins (other than counterfeits). These objects can cause confusion among the public if they enter into circulation and can be used fraudulently in coin-operated machines. The ETSC evaluates the risk for the public and the vending machines. The result of its evaluation is transmitted regularly to CNACs, Europol and the industry. In 2003, information was inserted on eleven new cases of such objects.

In the same framework, the ETSC acts as the centre for fraud-related information from the coin-operated industry. It updates its specific register with information on

objects fraudulently used in coin-operated machines, mainly tokens, medals and genuine foreign coins supplied by the Coin Operated Industry.

This register is also useful for future improvements of the euro coinage, under the responsibility of the Mint Directors Working Group (MDWG).

## **7. FRAUD PREVENTION IN COIN-OPERATED MACHINES**

At the request of the Coin Operated Industry with respect to the protection against fraud in vending and sorting machines, the Commission/OLAF had organised three meetings with the industry in 2002. In the course of 2003, two additional meetings took place.

Issues addressed during these meetings concern mainly the techniques for counterfeit coin detection by sorting machines, the conditions for discrimination between euro coins and similar medals and tokens and the risk that counterfeit euro coins may cause for vending machines.

In addition, the ETSC organized two meetings in Pessac with representatives of coin mechanism manufacturers for an update on technological developments in coin-processing and coin-operated equipment.

## **8. INITIATIVES FOR THE PROTECTION OF THE EURO COINS**

### **8.1. Rules on medals and tokens**

A rising number of incidents involving medals closely similar to the euro coins has demonstrated the need for stricter and binding measures, aimed at creating a level playing field throughout the Community with regard to medals and tokens. Consequently, the Commission elaborated, in 2003, the basic rules concerning medals and tokens similar to the euro coins, designed as a proposal for a Council Regulation, aimed at establishing a level playing field, throughout the Community, for the production and circulation of such objects. The rules are aimed at preventing medals and tokens causing confusion to the public through a potential similarity to euro coins.

These rules, prepared on the basis of the technical expertise of the ETSC :

- define thresholds inside which medals and tokens are considered to be similar to euro coins in terms of visual appearance, size and metal properties;
- would prohibit medals and tokens which are similar to euro coins; and
- provide for appropriate exemptions and derogations, as well as for procedures enabling a degree of harmonisation in the interpretation of the Regulation.

Extensive consultation with Member States and representatives of the private sector showed strong support for the introduction of such rules.

### **8.2. Authentication of euro coins**

The relatively small number of counterfeit euro coins detected in circulation, compared with the possibilities available to counterfeiters for a massive production

of counterfeits, indicate the necessity to establish rules by which the authenticity of circulating euro coins should be verified. Based on the ETSC's expertise, the Commission /OLAF has discussed and is in the process of finalising a procedure for the authentication of euro coins. The proposal defines appropriate coin parameters and tolerance ranges to be applied by electromechanical sorting machines. In particular, it introduces three complementary types of test: a sorting test, a detection test and a discrimination test, concepts that seem particularly apt for the current types of sorting machines.

The draft procedure was discussed with the coin-operated industry, the MDWG and the ECB, as well as the Euro Coin Sub-committee of the Economic and Financial Committee. The procedure should be finalised in early 2004.

## **9. GROUPS RELATED TO THE PROTECTION AGAINST COIN COUNTERFEITING**

In 2003, the necessary coordination of the actions related to the protection of the euro coins continued in the framework of the relevant groups. Emphasis was given to the analysis of the counterfeits, the rules appropriate for medals and tokens similar to euro coins, also including examination of specific cases, and the procedures to be applied for the authentication of the euro coins by relevant institutions.

The Counterfeit Coin Experts Group (CCEG), managed and chaired by the Commission, with the ETSC playing the key role, is the main group which serves to co-ordinate Member States' technical actions with respect to the protection of the euro coins against counterfeiting. Four meetings of the CCEG were held in 2003. The Council Decision concerning the analysis and cooperation with regard to counterfeit euro coins, mentioned in section 1 above, also responds to the necessity for the formalisation of the CCEG. Consequently, a Commission Decision will formally provide for the CCEG.

Other groups participating to the protection of the euro coins include the Mint Directors Working Group (MDWG) and the Economic and Financial Committee's Euro Coin Sub-committee. The ETSC has been contributing to the work of these bodies, as part of the Commission/OLAF representation. In that context, the ETSC has made a substantial contribution, inter alia, to the preparation of procedures allowing to clean the market from coins unfit for circulation. This issue is closely related to the procedures for coin authentication. The ETSC also maintains close relationship with the MDWG regarding coin technical issues, such as measurement procedures, materials to be used to prevent fraud, improvements of euro coin specifications, etc.

Finally, the following groups, in which the ETSC participates, are more broadly relevant to the protection of the euro:

- *Euro Counterfeiting Experts Group of the Advisory Anti-fraud Coordination Committee (Cocolaf)*. This group, managed and chaired by OLAF, brings together counterfeit experts from law enforcement, central banks and ministries thus ensuring the multidisciplinary character necessary for the elaboration of legislative proposals, the implementation of training and technical assistance projects etc.
- *MDC's (Mint Directors Conference) Materials Committee*. The ETSC contributes to the discussions, at that Committee of the world-wide MDC, regarding the safest

materials for coins, with a view to reinforce protection of future generations of euro coins.

- Europol's Counterfeit Experts' Group. The ETSC's highlights the counterfeit coin aspects at the Europol meetings.

The ETSC keeps informal contact with the Counterfeit Currency Unit of the General Secretariat of Interpol, which is responsible for counterfeit euro banknotes and coins detected outside of the European Union Member States.

## 10. CONCLUSIONS

In 2003, the procedure was initiated for the ETSC to formally become part of the Commission services. To that effect, the Council adopted a Decision assigning to the Commission the responsibility for the ETSC, as well as for the coordination of Member States' technical action to protect the euro coins. For the completion of the procedure, the Commission will adopt a follow-up Decision formally establishing the ETSC.

The statistics compiled and analyses carried out by the ETSC in 2003 indicate a substantial increase of euro coin counterfeiting activity. This is shown not only by the higher number of counterfeit coins detected in circulation (from 2 339 in 2002 to 26 191 in 2003) but also by the large increase in common classes and variants (reaching 26 and 97 respectively).

This development does not risk undermining the credibility of the euro coins. Indeed, the number of counterfeit coins found in circulation and even the quantity of potentially produced and circulating counterfeits are very low compared to the 49 billion circulating (genuine) coins. In addition, all known counterfeits should be rejected by sorting and vending machines, if properly equipped and adjusted.

However, these findings point to the necessity to take action to improve the protection against counterfeit euro coins. **Firstly**, increased vigilance is necessary by police authorities, especially in those countries where little action was taken until now, also including cooperation with authorities outside the EU. **Secondly**, the competent national authorities should undertake or intensify efforts to authenticate circulating euro coins. For that purpose appropriate common methods should be agreed; the Commission will make appropriate proposals.

In addition to the analysis of counterfeit coins, in 2003, the ETSC continued its cooperation with all authorities and groups competent for the protection of the euro coins, organised further training, developed the relevant databases and contributed its expertise to the development of rules designed to strengthen the fight against coin-related fraud and counterfeiting.