

# EUROPEAN COMMISSION EUROPEAN ANTI-FRAUD OFFICE (OLAF)

POLICY, LEGISLATION & LEGAL AFFAIRS **Protection of the EURO** 

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## THE PROTECTION OF EURO COINS IN 2005

Situation as regards euro coin counterfeiting and the activities of the ETSC

Article 4 of Commission Decision C (2004) 4290 of 29 October 2004

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#### 1. Institutional aspects

In accordance with Regulation (EC) No 1338/2001<sup>1</sup>, laying down measures necessary for the protection of the euro against counterfeiting, the European Technical and Scientific Centre (ETSC) is responsible for technical analysis and classification of counterfeit euro coins. In December 2003 the Council decided that the Commission ensures the functioning of the ETSC and the coordination of the activities of the competent technical authorities to protect euro coins against counterfeiting<sup>2</sup>. In October 2004 the Commission decided to establish formally the ETSC in the European Anti-Fraud Office (OLAF)<sup>3</sup>. Accordingly, the ETSC is established in Brussels, with staff detached at the plant of the French Mint in Pessac, where it carries out the necessary analyses. A formal exchange of letters between the Commission and the French Government will complete the Commission's Decision. Prior to the permanent establishment the ETSC was provisionally hosted, from October 2001, at the French Mint

The Commission is also responsible for implementing the Pericles programme for training and technical assistance for the protection of euro banknotes and coins against counterfeiting. Additionally, it prepares legislative initiatives and monitors the application of the relevant legislation.

In the exercise of its responsibilities regarding protection of the euro against counterfeiting, the Commission (OLAF) collaborates closely with the European Central Bank (ECB), Europol, Interpol and the competent national authorities.

The abovementioned Commission Decision provides for the coordination of the technical actions of Member States for the protection of the euro coins, in the framework of the Counterfeit Coin Experts Group (CCEG).

This report, concerning the protection of the euro coins in 2005, is presented in line with above Commission Decision. Article 4 of that Decision stipulates that "The Economic and Financial Committee, the European Central Bank, Europol and the competent national authorities shall be kept regularly informed of the ETSC's activities and of the situation as regards coin counterfeiting".

#### 2. SITUATION WITH REGARD TO COUNTERFEIT EURO COINS

#### 2.1. Counterfeit coins detected in circulation

The number of counterfeit euro coins removed from circulation mainly by National Central Banks in 2005 rose to 95.959, rising by 28.7% from 2004. The increase in the number of counterfeit euro coins in 2005 is lower than the increases in previous years.

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<sup>&</sup>lt;sup>1</sup> OJ L 181, 4.7.2001.

<sup>&</sup>lt;sup>2</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>&</sup>lt;sup>3</sup> Commission Decision C(2004)4290 of 29 October 2004, OJ L 19/73, 21.01.2005.

The number of counterfeits found in circulation is significantly lower than figures of legacy, pre-euro, coins. The absolute number of the counterfeit euro coins, even including potentially produced and circulating counterfeits, is also extremely small compared to the 63 billion circulating (genuine) euro coins.

The breakdown of counterfeit euro coins found in circulation and registered in the relevant database (Counterfeit Monitoring System/CMS) by denomination is shown below.

Counterfeit euro coins detected in circulation *							
	50-cent	1-euro	2-euro	Total			
2002	28	1 281	1 030	2 339			
2003	185	6 318	19 688	26 191			
2004	858	9 103	64 603	74 564			
2005	3 535	12 473	79 951	95 959			
TOTAL	4 606	29 175	165 272	199 053			

<sup>\*</sup> The figures comprise both stamped counterfeits (common classes) and cast counterfeits (local classes).

Over 90% of counterfeit coins found in circulation are detected with coin sorting machines mainly in National Central Banks but also in commercial banks and other financial institutions.

The complete implementation of the Commission Recommendation 2004/504 of 27 May 2005 concerning *authentication of euro coins* and handling of euro coins unfit for circulation will allow a higher number of counterfeit euro coins to be removed from circulation.

Counterfeit euro coins are found throughout the euro area and in several other EU Member States as well as outside the EU: Serbia & Montenegro, Bulgaria and Turkey.

The *diversity* of the counterfeit euro coins continued to increase substantially. In particular, eighteen new families of counterfeits (common classes) were created in 2005, with the total number rising to sixty-six. In total, one hundred types of counterfeits (classes and variants) were created in 2005, bringing their total number to 293.

The observed increase in the types of counterfeit coins reflects the continuing activity of counterfeiters, producing new minting tools and additional quantities of counterfeit coins.

Counterfeit coins overall improve in quality and *sophistication*. They are generally of a good visual quality, so they are frequently deceptive in hand to hand

transactions. All national faces are counterfeited but remain predominantly German.

As regards technical features, the counterfeits are globally similar to genuine euro coins in dimensions and weight. The electrical or magnetic parameters are generally different but increasingly close to those of the genuine euro coins. Despite the increasing sophistication, counterfeit coins will be rejected by appropriately adjusted vending and sorting machines, using the security characteristics of euro coins.

In terms *geographical areas*, counterfeit coins are found in all euro area Member States but mainly in Germany, Austria, Netherlands and Belgium. In terms of denominations, 50-eurocent counterfeits were still mainly found in Italy in 2005, 1-euro counterfeits in France and 2-euro counterfeits in Germany, Austria, Netherlands and Belgium. Counterfeit euro coins were also found in small quantities in the Czech Republic, Hungary, Poland, Slovenia and Slovakia. In addition, counterfeit euro coins were also found in Turkey.

A substantial increase was recorded in the number of counterfeit euro coins detected in Belgium and in Netherlands, as a result of the progressive implementation of coin authentication processes under the supervision of the national Mint, in line with the Commission's Recommendation concerning authentication of euro coins

## 2.2. Counterfeit coins seized before circulation – activity of law enforcement

In addition to the counterfeit euro coins removed from circulation, counterfeits are regularly seized before they enter into circulation, in the framework of police operations, mainly to dismantle clandestine mints. In 2005, 3 557 counterfeit euro coins were seized in that way.

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							
	50-cent	1-euro	2-euro	TOTAL			
2002	70 590	99	2	70 691			
2003	0	5 795	8	5 803			
2004	161	380	84 578	85 119			
2005	48	55	3 454	3 557			
TOTAL	70 799	6 329	88 042	165 170			

Three illegal mints were dismantled in 2005 in Poland, Hungary and Bulgaria.

Since the introduction of the euro currency in 2002, eleven counterfeit coin workshops have been dismantled: six in Italy and one in each of Portugal, Spain, Poland, Hungary and Bulgaria.

Technical analysis, conducted by the ETSC, allows the conclusion that, despite the successful action by law enforcement, the vast majority of *counterfeit workshops remain in operation*, among which the ones producing the most frequently encountered types of counterfeits.

The types of tooling and working methods of counterfeiters allow some conclusions to be drawn on the counterfeit production. Thus the ETSC estimates that the number of *counterfeit coins potentially produced* for circulation since 2002 may be well over ten million. Against this estimate, the total number of counterfeits found since the introduction of the euro coins in 2002 amounts to 364 223 pieces.

The asymmetry between the number of counterfeit coins potentially produced and those detected demonstrates the need to enhance the action to fight against euro coin counterfeiting.

#### 3. COORDINATION OF ACTIONS TO PROTECT EURO COINS

## 3.1. Counterfeit Coin Experts Group

The Counterfeit Coin Experts Group (CCEG), chaired by the Commission/OLAF, is the basic group serving to co-ordinate Member States' technical actions with respect to the protection of the euro coins against counterfeiting, in line with Council Decision of 8 December 2003 and the Commission Decision of 29 October 2004.

The Group held four meetings in 2005. These bring together typically the Heads of the Coin National Analysis Centres (CNACs), the ETSC as main player, the ECB and Europol.

The CCEG enables the exchange of information on subjects emerging from the daily work at the CNACs and the ETSC and allows a common position to be taken. The Group discussed issues such as analysis of new cases of counterfeits, coin classification improvements, legislative initiatives, communication policy on counterfeit euro coins, technical registers and procedures for the analysis of counterfeit coins, and other issues related to coins, including the connection to the Counterfeit Monitoring System (CMS) at the ECB.

#### 3.2. Groups specialised in coins

The <u>Mint Directors Working Group</u> (MDWG), which brings together the heads of the Mints of the EU Member States, co-operates in the protection of the euro coins. The ETSC particularly maintains close relations with the MDWG regarding coin technical issues, such as measurement procedures, materials to be used to prevent

fraud, improvements of euro coin specifications etc. In 2005, the MDWG collaborated particularly with the ETSC in the technical aspects of the procurement of reference pieces to be used for testing authentication processes of euro coins and of a study on the euro coin conductivity calibration.

The ETSC also brought its technical expertise to the MDWG for the design of the new common side of euro coins, following the enlargement of the European Union.

The <u>Euro Coin Sub-Committee</u> of the Economic and Financial Committee brings together representatives from the coin issuing authorities of the Member States. The ETSC also participates as part of the Commission/OLAF representation.

Each of these groups met twice, in April and October 2005.

## 3.3. Other groups related to the protection of the euro

Other relevant groups, where the Commission participates, include:

- The <u>Euro Counterfeiting Experts Group</u>, functioning in the framework of the Advisory Anti-fraud Coordination Committee (Cocolaf). This group, 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. The ETSC participates at the quarterly meetings of that group.
- The <u>ECB's</u> group concerning counterfeit banknotes.
- o <u>Europol's Forgery of Money Group</u>. The ETSC highlights the counterfeit coin aspects at the Europol meetings.

The ETSC maintains 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.

## 4. ACTIVITY OF THE COMMISSION (OLAF – ETSC)

#### 4.1. Analysis and classification

The primary mission of the ETSC is the analysis and classification of common classes of counterfeit coins. To this effect, the ETSC created, in 2005, a total of one hundred common classes and variants, of which eighteen common classes.

## 4.2. Assistance to competent authorities

The ETSC provides assistance to the competent authorities in the Member States, in particular to:

- Ocin National Analysis Centres (CNACs): the ETSC is in daily contact with most CNACs. It provides technical advice regarding cases of suspect euro coins, particularly in terms of coin classification, as well as results of the technical and scientific analysis carried out. Following the 2004 enlargement, particular emphasis was put on cooperation with the new countries, in particular with Slovenia, the Czech Republic, Hungary and Poland. A number of requests were also processed, coming from candidate and third countries, among others Turkey.
- <u>Europol and National Central Offices (NCOs)</u>: with a view to facilitating the tasks of law enforcement agencies, the ETSC keeps regular contact with Europol and individual National Central Offices (NCOs). The ETSC also provides an annual evaluation and specific information useful for law enforcement.
- <u>European Central Bank (ECB)</u>: the ETSC continues to contribute to the improvement and testing of the CMS database (Counterfeit Monitoring System). In particular, the ETSC successfully tested the latest version 6 of the CMS in September 2005 and, in June 2005, improvements brought to the new connection to the CMS via an ISDN line. In June 2005, the ETSC also requested the ECB for improvements of the CMS response times; collaboration with the ECB and various tests took place. As in previous years, the ETSC centralized CMS change requests, including a request for declaring "commemorative euro coins" in the CMS, and transmitted them to the ECB on behalf of the CNACs.
- O <u>Central Banks from third countries</u>: the ETSC had contacts, among others, with the Central Banks of Georgia and Romania in order to avoid any potential overlapping between the technical specifications of the new coins planned to be issued by these countries with those ones of euro coins.

Finally, The ETSC has continued to provide assistance to the French, Belgian and Dutch authorities in the technical implementation of the standards of the Commission's recommendation 2005/504 of 27 May 2005 concerning the "authentication of euro coins and handling of euro coins unfit for circulation".

#### 4.3. Cooperation with the Turkish authorities

The Commission takes steps such that any confusion about validity of euro coins be avoided. Since the introduction of the euro currency in 2002, a number of incidents have revealed resemblance between euro coins and foreign coins.

While such foreign coins have been used either incidentally or deliberately instead of euro coins, the number of incidents is limited.

With regard to Turkish coins, since the introduction of the New Lira denominations in January 2005, numerous inquiries have been made concerning the resemblance of these coins to euro coins. In particular, the 1-Yeni Lira and the 50-Yeni Kurus Turkish coins bear some similarity to the 2- and 1-euro coins, respectively. A few months before the introduction of the new Turkish coins, the European Commission/OLAF was informed of Turkey's intentions and of the potential similarity. Accordingly, it organised close cooperation with Turkish

authorities, Member States and the coin operated industry in order to minimise all possible confusion for the public. Current information suggests that, although a risk of confusion exists, it is however limited.

At the level of hand-to-hand transactions, euro coins are readily distinguishable by simple visual inspection. Vending machines will reject Turkish coins if properly adjusted; the Commission has kept the manufacturers of coin mechanisms informed, so that they are able to make the necessary adjustments to the relevant equipment. The Turkish authorities have agreed to modify slightly the production parameters of the new coins. These revised parameters improve the recognition of these coins by vending machines.

The Commission is maintaining its contacts with the Turkish authorities and is attempting to ensure that future changes in Turkish coins will eliminate the possibility of confusion.

## 4.4. Conferences and training

In the framework of the Pericles programme, the ETSC organised an OLAF conference entitled "Interaction between investigation and technical/scientific analysis with regard to counterfeit euro coins".

This conference took place on the ETSC's premises in Paris at the French Mint on 28 and 29 November 2005; it brought together about fifty specialists in the analysis of counterfeit euro coins, mainly representatives of the CNACs, and law enforcement investigators from the European Union Member States as well as third countries, with the participation of the ECB, Europol and Interpol.

The experts agreed on the importance of closer cooperation between technical/scientific analysis and law enforcement, involving national competent authorities, Europol and the ETSC. Concrete suggestions were made for a better flow of information between services involved, with a view to sharing experiences and expertise. The main suggestions included the creation of specific working groups on technical issues, which should be created in 2006 around the ETSC, in the framework of the CCEG, for supporting a law enforcement task force coordinated by Europol. Extensive training for investigators as well as specialized sectors including financial institutions, should also be performed.

The protection of the euro benefits generally from the seminars, conferences and technical assistance under the Pericles programme. Among the other Pericles actions organised by Member States in 2005, the Italian authorities carried out, in December 2005, a multinational and inter-disciplinary training seminar specific to the protection of the euro coins. Among others, the Commission, the ECB and Europol participated in the training.

#### 4.5. Databases, registers and technical framework

The ETSC continuously updates its registers, in particular:

- o "<u>Register of materials used for coin counterfeiting</u>", which is on one hand useful for coin experts at CNACs, for determining the type of material of a counterfeit coin without conducting sophisticated or destructive tests, and on the other hand, a helpful tool for law enforcement agencies in their investigations against the producers of counterfeit euro coins.
- "Register of medals, tokens, genuine foreign coins and other metallic objects similar to euro coins" (other than counterfeits), which is useful for future improvements of the euro coinage, under the responsibility of the Mint Directors Working Group (MDWG). 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. There was no substantial fraudulent use of this type of objects in 2005.
- o <u>Technical framework</u>, which the ETSC maintains and updates, mainly consisting of technical documents and procedures, useful in the analyses of counterfeits.

#### 5. FRAUD PREVENTION IN COIN-OPERATED MACHINES

In 2005, the cooperation continued with the coin-operated industry. The Commission keeps the coin-operated industry informed of technical developments regarding counterfeits, foreign coins and other objects, so that equipment may be adjusted to safely reject these.

The ETSC organized a meeting in Paris on 24 May 2005, with participation of European representatives of the coin operated industry, as well as four individual companies. In addition to Turkish coins (see section 4.3), issues discussed included the Council Regulation on medals and tokens and the Commission Recommendation on euro coin authentication and handling of unfit euro coins.

The ETSC, in close collaboration with the French CNAC, continued to organize and welcome in Pessac a number of test sessions with coin mechanism manufacturers, aimed at updating sorting and coin validating equipment in the recognition of euro coins and the rejection of counterfeits. In 2005, the ETSC and the French CNAC received six such visits.

#### 6. Initiatives concerning the protection of the Euro Coins

## 6.1. Rules on medals and tokens

The Commission proposal for a Council Regulation on "Medals and tokens similar to euro coins" was formally adopted by the Council on 6 December 2004<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> JO L373, 21.12.2004, p. 1, n° 2182 and 2183/2004.

Under the Regulation, the Commission is responsible for declaring whether a design, on a medal or token, is similar to euro coin designs, with a view to deciding whether the medal or token needs to be forbidden. In considering these cases, the Commission seeks the view of the CCEG.

In that capacity the Commission addressed, following consultation of the Counterfeit Coin Experts Group (CCEG), the following requests in 2005:

## ➤ Germany: Euro medal "Football World Championships 2006"

The German Bundesbank advised the Commission on a medal resembling a 2-euro coin which is sold over the internet on the occasion of the Football World Championships 2006 in Germany. The Commission opined that these medals were indeed similar to the 2-euro coin as essential elements of the medals' design reproduce to a large extent the equivalent elements of euro coins. In addition, these medals are advertised for sale on the internet as 2-euro coins, which emphasises the producers' effort to achieve similarity.

## ➤ Italy: Euro Coins Pattern – Vatican

The Italian Mint informed the Commission on a set of 'Vatican' medals. The Commission concluded that, indeed, there was an intention by the manufacturers of these medals to imitate circulation Vatican coins to the extent that the former Pope is depicted on the national side and to the extent that there is a similarity in the figures which may be taken to represent face value, as well as a general visual resemblance. The Commission also advised the Italian authorities that these medals were not usable in vending machines and the selling price and the wrapping of these medals make it unlikely that they will be used in hand-to-hand transactions.

## France: Euro Coins Pattern – Corsica

The French Mint requested the Commission's opinion as regards a set of medals offered for sale as "Euro Coins Pattern – Corsica". The Commission confirmed that there was an effort to imitate euro coins, in terms of visual characteristics. However, those medals are well packaged and sold at a price well above the nominal value of the equivalent euro coins; in addition, they should not present any risk for use in vending machines as their technical properties are different from those ones of euro coins. As a result, there did not seem to be a significant risk of confusion.

## > Czech Republic: Commemorative medal

A project by the Czech Mint for producing a set of medals following closely the medals previously authorised to the Slovakian Mint was considered sufficiently different from euro coins within the meaning of the Regulation.

#### 6.2. Authentication of euro coins and coins unfit for circulation

The Commission adopted, on 27 May 2005, a Commission Recommendation on the "authentication of euro coins and handling euro coins unfit for circulation"<sup>5</sup>.

The Recommendation provides common rules for national authorities (i) to control authentication processes of euro coins during the cash cycle, with a view to removing from circulation counterfeits, euro coin-like objects, foreign coins and euro coins unfit for circulation, (ii) for handling and reimbursing genuine unfit euro coins.

The ETSC issued a note to the CCEG on 29 September 2005, providing detailed technical elements for the implementation of the Commission's recommendation. Several Member States have started implementing this recommendation, mainly including Germany, Belgium, France, Netherlands and Austria. Technical support is provided by the ETSC. One direct effect has been the progressive increase in the number of counterfeit coins found in circulation during sorting operations in those countries.

#### 6.3. Technical initiatives

In the framework of the Commission Recommendation on authentication of euro coins and generally to reinforce the protection against euro coin related fraud the Commission/OLAF took two technical initiatives:

- (a) The procurement of reference pieces to be used for testing authentication processes of euro coins. These pieces aim at enabling the adjustment of coin operated machines in such a way that they securely reject all counterfeits and other objects which do not strictly comply with the specifications of euro coins.
- (b) A study on the euro coin conductivity calibration procedure and the procurement of certified reference standards. The aim of the study is to provide a basis for a better recognition of euro coins based on the electrical conductivity.

#### 7. SUMMARY AND CONCLUSIONS

In 2005 an increasing, yet low, number of counterfeit euro coins was removed from circulation, the Commission took further initiatives for the protection of the euro and the police authorities continued successful repression.

In particular, about 96.000 counterfeit euro coins were removed from circulation, an increase of about 29% from 2004, and 3.557 were seized before circulation, bringing to about 365 000 the total number of counterfeits recorded since the introduction of the

<sup>&</sup>lt;sup>5</sup> JO L184/60, 15.7.2005, n° 2005/504

euro coins. Mostly, the counterfeits are 2-euro with German national side. This number is considerably lower than the counterfeit coins of legacy currencies, before the introduction of the euro.

Globally, certain types of these counterfeits may be deceptive in hand-to-hand transactions, especially the 2-euro counterfeits but they should generally be rejected by properly adjusted vending and other coin-operated machines and their number is small compared to the 63 billion circulating (genuine) euro coins.

Counterfeiting activity continues to increase in 2005, as indicated by the increasing diversity of counterfeit euro coins, where the number of types rose by half. Thus the number of potentially produced counterfeits may be well above ten million pieces. Counterfeits also become increasingly sophisticated, as an increasing proportion now approaches the magnetic and electrical characteristics of the genuine coins. However, the industrial quality of the euro coins is high, so that these two features, combined together, have not been copied with a high degree of precision.

In the year 2005 the Commission (OLAF – ETSC) continued its action to protect the euro, in close cooperation with the competent national authorities, the ECB, Europol and Interpol. This materialised through the Commission's specialised groups, as well as the actions carried out by Member States and the Commission under the Pericles programme. In 2005, two of these actions concerned specifically euro coins.

The Commission continued talks with the Turkish authorities with a view to minimising and, at a later stage, eliminating potential confusion with regard to Turkish coins similar to euro coins. Finally, the Commission issued, on 27 May 2005, a Recommendation concerning authentication of euro coins and handling of euro coins unfit for circulation and took further technical initiatives aimed at reinforcing the secure distribution of genuine coins to the users.

Law enforcement continued successful action in 2005. Three illegal euro coin workshops were discovered in 2005, thus bringing to eleven the total number of illegal workshops dismantled since the introduction of the euro coins. Despite the successful police operations, the vast majority of counterfeit workshops remains active, including the ones that produce the major proportions of detected counterfeits.

Consequently, the current successful action to protect euro coins against counterfeiting needs to be enhanced. As shown at the conference on this issue organised in Paris in November 2005, a double approach is necessary. On the one hand the ETSC should play a stronger role, assisted by specific technical working groups, with a view to supporting law enforcement coordinated by Europol. On the other hand, for the effective detection of counterfeits and the separation of other objects, such as foreign coins, it is necessary for all Member States to implement the Commission Recommendation of May 2005, concerning the authentication of euro coins.