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Protection of the EURO

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THE PROTECTION OF EURO COINS IN 2004

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 DEVELOPMENTS

In 2004, the procedure was finalised for the formal establishment of the European Technical and Scientific Centre (ETSC).

The ETSC had initially been 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 Finance¹. 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. Based on a Commission's proposal, the Council adopted, on 8 December 2003, the 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 coins².

Building on the Council Decision, the Commission adopted on 29 October 2004³ the Decision formally establishing the ETSC as a Commission service in Brussels, with staff detached to Pessac, carrying out the ETSC's functions. The same Decision provides for the coordination of the technical actions of Member States for the protection of the euro coins, in the Counterfeit Coin Experts Group (CCEG). The Commission's Decision will be completed with a formal exchange of letters between the Commission and the French Government.

The present report is presented in line with Commission Decision C (2004) 4290 establishing the ETSC and providing for coordination of technical actions to protect euro coin against counterfeiting. 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 found in circulation

The number of counterfeit euro coins as well as the number of classes and variants has increased substantially in 2004. The number of counterfeit euro coins removed from circulation rose to 74 564, mainly by National Central Banks, compared with 26 191 counterfeits in 2003 and 2 339 counterfeits in 2002. Counterfeit euro coins are found in almost all euro area countries and in several new Member States as well as two third countries.

The number of counterfeits found in circulation is by far lower than figures of legacy, pre-euro, coins. Given the very low starting point, the increase recorded is

¹ Exchange of letters of 28 February and 9 June 2000

² 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.

³ Commission Decision C(2004)4290 of 29 October 2004, OJ L 19/73, 21.01.2005.

broadly in line with expectations. The observed increase in euro coin counterfeiting may reflect the continuing adaptation of this type of criminality to the, still new, euro coinage; the lag in detection of counterfeit coins (longer compared to banknotes) from the time of their circulation; and the more efficient methods employed for the detection of counterfeits. The absolute number of the counterfeit euro coins, even including potential production, is also extremely small compared to the 56 billion circulating (genuine) euro coins.

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

| Counterfeit euro coins detected in circulation, 2002-2004 | | | | |
|--|----------------|---------------|---------------|--------------|
| | 50-cent | 1-euro | 2-euro | Total |
| 2002 | 28 | 1281 | 1 030 | 2 339 |
| 2003 | 185 | 6 318 | 19 688 | 26 191 |
| 2004 | 858 | 9 103 | 64 603 | 74 564 |
| TOTAL | 1 071 | 16 702 | 85 321 | 103 094 |

2.2. Counterfeit coins seized before circulation

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 2004, about 84600 counterfeit 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, 2002-2004 | | | | |
|--|----------------|---------------|---------------|--------------|
| | 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 |
| TOTAL | 70 751 | 6 274 | 84 588 | 161 613 |

The large number of counterfeits seized and the potential counterfeits produced underline the importance of the police operations and the necessity to continue, in order to also dismantle the major classes of counterfeit coins.

Indeed, at the end of 2004, around 60 % of the total quantity of counterfeit coins registered in the CMS were seized by law enforcement authorities during workshop dismantling operations, mainly in Italy.

These figures also demonstrate the need for implementing coin sorting processes at national level, which would allow the counterfeit coins to be withdrawn from circulation. Indeed, the police operations dismantled a number of clandestine mints but the counterfeits belonging to the classes concerned are still regularly found in circulation. In addition, none of the major classes of counterfeit coins has been dismantled yet.

According to the announcement of police authorities and the analysis carried out by the ETSC and the CNACs, the following mints have been dismantled in **2004**:

- § April 2004, Malaga/Spain: this workshop had been producing counterfeit 2-euro coins since 2002. 83 384 counterfeits were seized, plus materials, tools and equipment. In a two-year period, over two millions of 2-euro counterfeits may have been produced by this shop.
- § April 2004, Naples/Italy: 633 counterfeit 2-euro coins, twelve 50-eurocent counterfeits, materials, tools and equipment were seized
- § July 2004, Turin/Italy: this workshop was counterfeiting 1-euro and 50-eurocent coins.

Three clandestine workshops were dismantled in **2003**:

- § October 2003, Lumezzane (Brescia) /Italy: thirty counterfeit 1-euro coins, slightly magnetic like euro genuine coins, were seized, plus materials, tools and equipment.
- § November 2003, Villanova (Venice)/Italy: six counterfeit 2-euro coins of relatively bad quality were seized, plus materials, tools and equipment.
- § May 2003, Santa Maria da Feira / Portugal: four cast 50-eurocent counterfeit coins were seized, plus materials, tools and equipment.

Two clandestine workshops were dismantled in **2002**:

- § June 2002, Milan/Italy: 70 591 counterfeit 50-eurocent coins were seized, plus materials, tools and equipment.
- § October 2002, Turin/Italy: one hundred counterfeit 1-euro coins were seized, plus materials, tools and equipment.

The ETSC brought assistance and expertise to the concerned CNACs, carried out and reported the appropriate analysis and classification of counterfeit coins.

2.3. Common classes (stamped counterfeit coins)

In 2004, the overall number of stamped counterfeit coins found in circulation rose to 74.564, almost three times the number of the previous year. The diversity of counterfeit euro coins has continued to increase significantly, reflecting an intensification of coin counterfeiting activities: ninety-six new common classes and variants were created by the ETSC in 2004, among which twenty-two are new common classes.

The continuation of this trend may, in the medium term, render the situation more complex and difficult to manage for coin experts and competent authorities because of the increasing diversity of counterfeit stamped coins. The possibility may be considered to reconsider the classification methods.

The total number of classes created in the CMS so far is forty-eight. According to observed behaviour, this may correspond to at least ten illegal mints. Given the observed average capacity, this also means that over ten million counterfeit coins may have been produced. As in previous years, statistics still indicate an asymmetry between the quantity of counterfeits potentially produced and the number seized by police or removed from circulation, which is only around 265 000 coins since the introduction of the euro coins.

The national faces are still varied, however they remain statistically mainly German. All national sides are now counterfeited.

As in 2003, the counterfeits are of a good visual quality, they globally are in line with the dimensions and weight of genuine euro coins.

2.4. Local classes (cast counterfeit coins)

The total number of cast counterfeit coins as well as the local classes and variants created by the CNACs for each year since the introduction of euro coins amount to 2080. forty nine classes and variants were created.

In general, cast counterfeit coins consist mainly of the 2-euro coins found. These are of a relatively low quality and should not be considered as dangerous.

The proportion of cast counterfeits in the total quantity of counterfeits registered in the CMS is continuously decreasing and is less than 1 %, which is very low.

3. COORDINATION OF ACTIONS TO PROTECT EURO COINS

The coordination of the technical actions to protect the euro coins against counterfeiting takes place mainly in the Counterfeit Coin Experts Group, in relation also with technical groups specialised in coins and other relevant groups.

3.1. Counterfeit Coin Experts Group (CCEG)

The CCEG is the basic group serving to co-ordinate Member States' technical actions with respect to the protection of the euro coins against counterfeiting. Managed and chaired by the Commission/OLAF, the CCEG is the main forum where the Commission exercises the coordination provided for in the Council Decision of 8 December 2003 and in the Commission Decision of 29 October 2004. The Group held four meetings in 2004. The ETSC plays the key role in the CCEG, which brings together essentially the Heads of the Coin National Analysis Centres (CNACs), the ECB and Europol. In 2004, the CCEG integrated the representatives of the new Member States.

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 ECB and Europol update the group on new subjects and developments. The group discusses issues such as analysis of new cases of counterfeits, coin classification improvements, legislative initiatives, communication policy on counterfeit euro coins and any other issue related to coins and issues regarding the connection to the Counterfeit Monitoring System (CMS) at the ECB.

3.2. Groups specialised in coins

The *Mint Directors Working Group* (MDWG) 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 2004, the MDWG collaborated particularly with the ETSC in the technical aspects of the procedures, prepared by the Commission/OLAF, concerning the authentication of euro coins and the handling of coins unfit for circulation.

The *Euro Coin Sub-Committee* 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 2004.

The *MDC's (Mint Directors Conference)* brings together, every two years, heads of Mints world-wide. The Commission/OLAF makes regular contributions to the discussions, which placed particular emphasis on the measurement of conductivity. The ETSC contributes to the discussions particularly of the *Technical Committee*, regarding the safest materials for coins, with a view to reinforce protection of future generations of euro coins.

3.3. Other groups related to the protection of the euro

Other relevant groups, where the Commission participates, include:

- The *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.
- The *ECB's* group concerning counterfeit banknotes.
- *Europol's Forgery of Money 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.

4. ACTIVITY OF THE ETSC

4.1. Assistance to competent authorities

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

- *Coin 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 enlargement, there was particular emphasis on cooperation with the new countries, while a number of requests were processed, coming from candidate and third countries, among others Bulgaria, Croatia, Turkey and Montenegro.
- *Europol and National Central Offices (NCOs)*: 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.

In 2004, the ETSC collaborated with Europol particularly on the issue of the 2-euro counterfeits. In particular, the ETSC carried out scientific forensic analysis concerning the origins of certain categories of counterfeits at the request of Europol.

- *European Central Bank (ECB)*: 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 5.6.0 of the CMS in May 2004 and, in July and August 2004, a new type of connection to the CMS via an ISDN line. The ETSC, acting as a representative of the CNACs prepared the transfer from the existing XT-COM frame relay connection to the envisaged

ISDN line. The ETSC also assisted in transmitting CMS change requests to the ECB.

Finally, The ETSC has provided assistance to the French and Belgian authorities in the technical implementation of the standards of the procedures for euro coin authentication, in particular in terms of testing coin sorting equipment.

4.2. Specialised training

In the framework of the Pericles programme, the ETSC organised “Study visits to the ETSC for coin experts from Member States” and a “Basic technical analysis training for experts from the new Member States”.

Two sessions of study visits were carried out, one in June and one in October 2004, with a view to improving the knowledge in analysis techniques and particularly coin classification of the coin experts in the Member States and harmonizing the analysis approaches regarding counterfeit coins. Three and four technical experts respectively spent one week at the ETSC in Pessac collaborating with the Commission/OLAF agent in the analysis and classification of suspected counterfeit euro coins

On 9 and 10 November 2004, the ETSC organised a “Basic technical analysis training for technical experts from the new Member States” in Pessac/Bordeaux, on the premises of the ETSC. The target group of that training were technical experts from the Coin National Analysis Centres (CNACs) of the new Member States who are responsible for analysing and classifying counterfeit euro coins.

The training introduced the colleagues from the new Member States to the analysis techniques regarding counterfeit coins. During the seminar, the participants analysed coins that could be counterfeit, mis-struck or genuine. They worked in small groups and had to act as if it was a real delivery of suspect coins to a CNAC carrying out an exhaustive technical analysis.

Further training initiatives are planned in 2005.

4.3. Databases, registers and technical framework

The ETSC continuously updates its registers, in particular:

- “*Register of materials used for coin counterfeiting*”, which is on one hand a useful document 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. The number of cases of fraudulent use of this type of objects has strongly decreased in 2004.

- *Technical framework*, which the ETSC maintains and updates, mainly consisting of technical documents and procedures, providing all technical elements and procedures necessary for the analysis and classification of counterfeit euro coins in the Member States by the CNACs.
- *Technical sheets* on counterfeit euro coin classes and variants, used by the CNACs, Europol and the National Central Offices. This extensive work was accomplished in close cooperation with the French CNAC.
- The ETSC prepared a specific, *protected web-site* designed to facilitate communication among the CNACs. This is particularly relevant in the case of documents and registers to be made available to CNACs.

5. FRAUD PREVENTION IN COIN-OPERATED MACHINES

In 2004, the cooperation continued with the coin-operated industry, in the framework of regular meetings.

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. One further meeting was held in February 2004.

The ETSC, in close collaboration with the French CNAC, also organized and welcomed in Pessac a number of meetings with coin mechanism manufacturers, aimed at updating sorting and coin validating equipment in the recognition of euro coins and the rejection of counterfeits. This initiative was taken by the ETSC in view of the recommendation for a minimum standard in euro coin authentication procedures, prepared by the Commission.

Finally, a cooperation was organised with the Turkish authorities concerning a similarity between new Turkish coins planned and the the 1-euro and 2-euro coins. Following a series of meetings and tests, carried out in Pessac, the specifications of the new Turkish coins were slightly modified and the manufacturers of coin processing and validating machines obtained the necessary indications for the adjustment of the machines, so that these would safely distinguish the relevant coins.

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 2004⁴. A number of authorization requests was addressed to the Commission/OLAF, mainly from the new Member States such as Poland, Slovenia and Slovakia in 2004 before its entry into force. The technical evaluation of the similarity between planned metallic objects to be produced and euro coins is carried out by the ETSC.

6.2. Authentication of euro coins and coins unfit for circulation

The procedure for the authentication of euro coins, drafted by the Commission/OLAF and the ETSC, was agreed by the Euro Coin Sub-committee (ECSC) at its meeting of 6 May 2004. On this basis, the Commission/OLAF will be proposing a formal recommendation, also including the handling of coins unfit for circulation.

7. SUMMARY AND CONCLUSIONS

In 2004, further steps were taken to protect the euro coins against fraud and counterfeiting, including, among others, the adoption of the Council Regulation on medals and tokens similar to euro coins, the finalisation of the coin authentication procedures and the formal establishment of the ETSC. Coordination of technical actions to protect euro coins now formally takes place at the Counterfeit Coin Experts Group.

The ETSC has continued to provide assistance to technical and law-enforcement authorities of Member States and third countries, in the way of classification, technical and scientific analyses, as well as specialised training. Following enlargement, emphasis was given to collaboration with the new EU Member States, while a number of requests were processed and consultations were carried out in relation with candidate and third countries.

The number of counterfeit euro coins removed from circulation tripled in 2004, compared to the previous year, to almost 75 000. The most counterfeited denomination is the 2-euro, with varied national sides, mainly German but also French, Spanish, Italian and others. They are found mainly in Germany but also in almost all euro area Member States (mainly in Austria, Italy, France and Belgium) as well as in other Member States, candidate and third countries.

In addition, the variety of the counterfeits detected is increasing rapidly and their sophistication develops, in a way that they become increasingly deceptive, in both hand-to-hand transactions and the use in coin-operated machines.

⁴ JO L373, 21.12.2004, p.1

The increase in euro coin counterfeiting may reflect the continuing adaptation of this type of criminality to the, still new, euro coinage and the lag in detection of counterfeit coins (longer compared to banknotes) from the time of their circulation. Moreover, the more efficient methods, which start to be employed for the detection of counterfeits, contribute to the increase in the number of counterfeit coin detected in circulation.

Law-enforcement agencies discovered three more illegal minting workshops, in 2004. In total, eight illegal mints have been dismantled, since the introduction of the euro. The number of counterfeits seized during these police operations is considerably higher than the number of counterfeits detected in circulation, while a rough estimate indicates that several millions of counterfeit coins may have been produced and are, presumably, circulating.

The counterfeits detected do not risk, presently, to impair the credibility of the euro coins: their number is small, even including the ones potentially produced, compared to the 56 billion of circulating (genuine) euro coins, and the numbers detected are lower than the corresponding figures for legacy, pre-euro coins. In addition, all detected counterfeits should be rejected by properly adjusted vending or other coin operated machines.

However, an intensification of vigilance and determined action are required in order to avoid any increase in coin counterfeiting that might change the perception of the public as regards the security of the and the confidence in the euro coinage. This should take the following two directions.

Firstly, action by law enforcement needs to be enhanced. This is because activity in euro coin counterfeiting continues to increase, as evidenced by the rapidly increasing number of families and variants; and, despite the successful operations, none of the illegal mints dismantled was producing any of the major counterfeit classes. This report and other specific documents prepared by the ETSC contain indications potentially useful for law enforcement, in the way of origins of counterfeits and materials used.

Secondly, efficient controls need to be implemented during the sorting process, ensuring that the circulating euro coins are authentic. The need for such methods is evidenced by the pronounced asymmetry between detected and circulating counterfeits, where the number of coins detected or seized is very small if considered against the variety of origins and types and, particularly, to the number of counterfeits potentially produced and presumably circulating. Practice in some Member States has shown that appropriate authentication methods achieve to efficiently remove counterfeits from circulation. The Commission has prepared authentication procedures, agreed with the Member States, which will be formally presented with a view to further strengthening the protection against counterfeiting and fraud related to the euro coins.