

# Pol-PRIMETT



## Tackling Metal Theft

*Prevention of and fight against crime*

### Metal theft: An emerging threat to Europe's economic security?

*The cooperation between European police forces and private sectors  
in the fight against theft and international metals trafficking*

DRAFT No. 6 (February 2013)

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With the financial support from the Prevention of and Fight against Crime Programme of the European Union,  
European Commission - Directorate-General Home Affairs



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# A. Global dynamics

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## *The nature of the problem*

Metal theft is a crime with one of the fastest growing rates in the world and it can be considered the most relevant *emerging crime* in Europe. Even though Metal theft is not usually included in the list of emerging crimes,<sup>1</sup> it has got all the characteristics usually present in the so called new global criminal offences that are transnational in nature and global in terms of impact.

The new wave of metal theft exploits - like many other rising global crimes - the advantages offered by the dark sides of international markets fuelled by the worldwide demand of goods, by the different environmental standards and by the diverse industrialisation levels.

Asia's developing nations, (China and India in particular) are driving the demand for metal resources and copper in particular, creating a vigorous flux of international trade. In this global unregulated market local metal recycler's act like "radars" that detects the rise in the global metal demand, filling the orders for commercial scrap dealers and activating the copper thieves' gangs on the territory. Recycled copper flows from metal scrap dealers to smelters to be re-used in the internal market or, more often, for supplying the international raw materials demand.

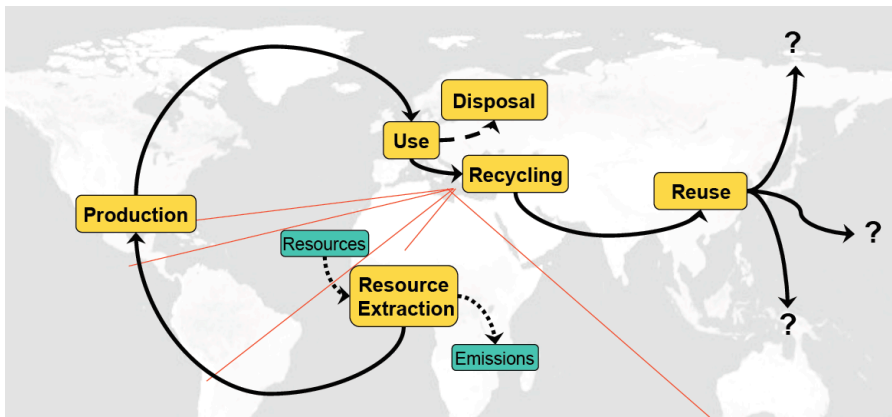
In the last decade the global scramble for metal resources has started to rise significantly and - as metal supply continues to tighten - the illicit market increased strongly, reaching unprecedented levels since 2006.

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<sup>1</sup> See for example UNICRI's (United Nations Interregional Crime and Justice Research Institute) approach to emerging crimes such as Counterfeiting, Cyber crimes, Trafficking in human beings at [www.unicri.it](http://www.unicri.it)

Nowadays, due to specific combinations of value, demand, uses and ease of theft, no metal is immune from being stolen, from copper to lead to iron, steel, and aluminium.

In a world of growing prices of metal resources the mature industrial countries have been increasing focusing their attention on the so called “anthropogenic stocks”, that is the stocks of metals buried in their societies, made up of mineral resources that have been already extracted, processed and put into use, currently providing services, or discarded over time.



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Metal Global Value Chain. Source UNEP 2009.

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This brought to the emergence of parallel recycling market that operates through the disposal – recycling – reuse chain that reduces the tension on the prices of the natural resources and the environmental impact of mineral digging. The recycling of used metal in the industrial world has become a very relevant source not only for the satisfaction of the Western demand of the so called engineering minerals (copper, lead, zinc, and iron) but it has also entered the global market and the export to the growing Asian countries.

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The issue of metal theft enters in this picture as the illegal component of this circuit, contributing to fuel the growing demand of import to the Asian rising

countries by depredating and attacking the stock of metal in service before they reach they end use.

*Metal theft: A crime underestimated for too long?*

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Since at least a decade, metal theft has become a major security problem in Europe and United States but still there is a widespread sensation among the main actors involved that the phenomena has been underestimated for too long. Several reasons could be considered responsible for this lack of awareness among analysts and experts. First of all, there is an issue of the correct assessment of the damage produced by metal thieves: the fact that booty's value of most copper thefts is relatively small and often take places in rural areas helps to explain the fact that for a long time this crime was not prioritised enough by the law enforcement agencies and not enough resources were earmarked to tackle what it was often referred to a "relatively small theft"<sup>2</sup>.

Another reason for the low level attention by public authorities to metal theft could be explained by the fact in the past –when this crime had a low quantitative impact on the society – copper and metal theft were usually addressed as minor transgressions whose perpetrators were rarely arrested and convicted (mostly sanctioned with low fines or very short prison terms).

Also the companies damaged by metal theft opted for some time for a policy of low profile about the phenomena, being reluctant to discuss the problem in the conviction that it was better not to draw attention on the issue fearing of becoming a greater target. In this regards, some UK security expert argues that even the true figures of the metal theft incidents and the average cost per incident are very often underestimated by the companies. The manager of a leading UK private security company comments in this way on the

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<sup>2</sup> Definition of a US law enforcement agent specialised in major theft crimes about metal theft. See <sup>2</sup> FBI Report *Copper Thefts threaten US Critical infrastructure*, 15 September 2008 [www.fbi.gov](http://www.fbi.gov)

reported yearly cost for metal theft publicly denounced by utilities companies: “I know the cost of security solution and I know that utility companies are investing a great deal more than the official incidents numbers suggests. You don’t spend more on a lock than you do on the contents of a room”<sup>3</sup>. It should also be considered the fact that the recorded crime statistics do not readily provide the level of granularity to quickly pick up on emerging trends. Theft records are many and varied and price recording systems are not sophisticated enough to separate out metal thefts.

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### Global honey for local thieves

The rise in prices of metal products is consistent with the trend of rise in price of raw materials registered in the last 20 years when prices have increased enormously due to the increase in global demand. This trend has been particularly strong over the last five years when even partial shortages occurred.

The main reason for the price increases and for partial shortages lies mostly in the significant changes occurred in the commodity markets over the last years. The commodity markets especially on the demand side. According to Egbert Tölle’s report on *Natural resources, secondary raw materials and waste* “The economic boom in China explains a third of the worldwide increase in the demand for raw materials. For example that China’s metal commodities imports have multiplied by a factor of 4 to 10 over the past decade”<sup>4</sup>

In the last decade the high rate of increase in demand has not been matched by an increase in supply due to the fact that during the past years, capacities were not increased as required. Few new raw materials deposits have been

<sup>3</sup> Opinion of John Whitwam managing director of G4S Gurkha. See *Metal theft problem is getting worse for network companies*, Utility Week 15 June 2010.

<sup>4</sup> See European Commission, Enterprise and Industry, Policies, Sustainable and responsible business: Egbert Tölle, REMONDIS, Ad hoc group 10 *Natural resources, secondary raw materials and waste*, [http://ec.europa.eu/enterprise/policies/sustainable-business/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sustainable-business/index_en.htm)

developed since 2003 but the development of new deposits is time intensive and it will take some time until market supply will keep the pace with the booming demand.

According to Tölle it is not only the effect of the global free market to increase the price of metal and other raw materials but there are also the effects of trade distortion policies, especially from China's state policies: "the situation is made more difficult by the fact that currently, there are *trends* in particular in the growth markets *to promote own imports of raw materials by means of trade-distorting state policies, and to hamper exports of raw materials*. In China there are quotas on the export of bauxite, as well as of tin in place and *taxes between 10 and 15 per cent on the export of copper of various forms*. The country has also an export quota with respect to wolfram. The *situation with respect to metal scraps is similar*. Because of the *substitutability of primary metal raw materials through secondary raw materials, prices of secondary raw materials have developed similarly*. And secondary raw materials also have increasingly become the object of trade distortions over the last years: *China imposes a 10 per cent tax on the export of steel scrap, in the Ukraine and Russia there are taxes on the export of steel scrap (30 EURO per ton, 15 per cent, respectively) as\_well as on the export of nonferrous metal scrap*"<sup>5</sup>.

For many market experts the present wave of surge in demand differs significantly from past trends, and the growth surge in the entire Asian region is likely to affect the commodity markets prices in the medium term.

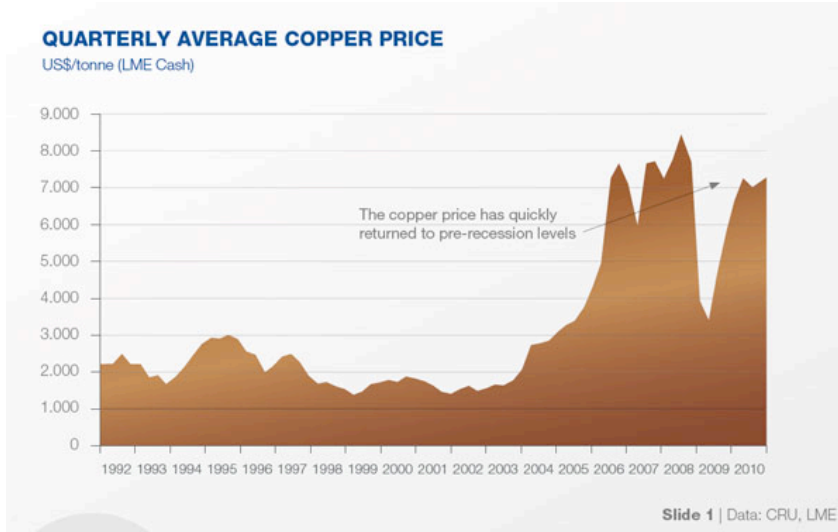
In 2003, the price per ton of copper established by the stock exchanges of London, New York and Shanghai was equal to 1,500 dollars. In 2006, after an agreement was signed between the Chinese company Minmetal and the Chilean mining company Codelco, it rose to 6,500 dollars. An initial peak was reached in 2008 when copper touched 8,864 dollars per ton. It then crashed - a fact that coincided with the international recession -

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<sup>5</sup> See Egbert Tölle, Supra.



before rising again, triggered as much by the end of the world economic crisis, as the earthquake on 27 February 2010 that determined a temporary standstill for the mining industry in Chile.

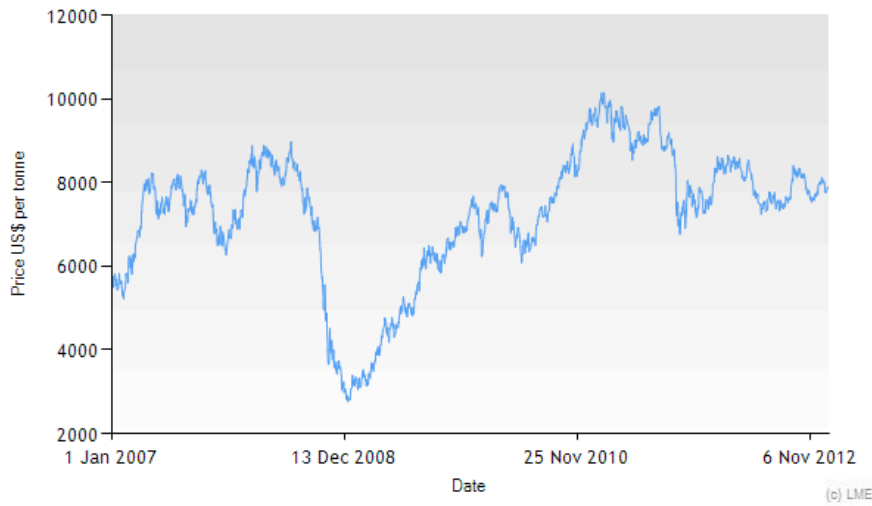


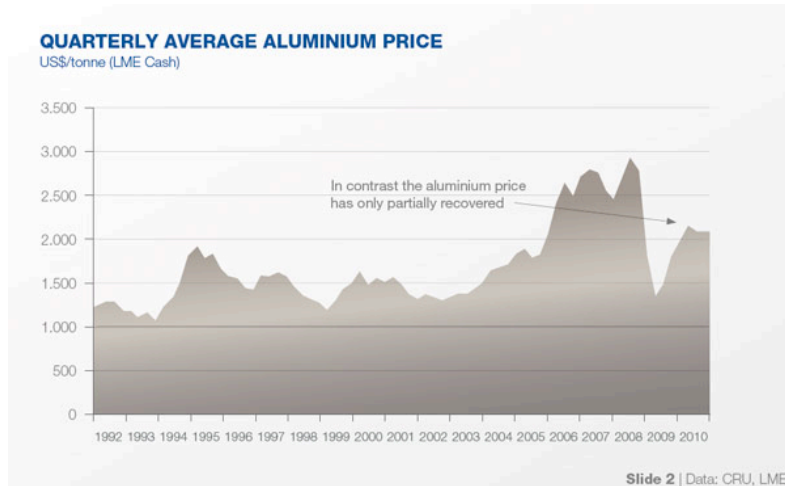
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Long-term variations in the price of copper and aluminium (1992-2010)  
Source: International Cablemakers Federation and Copper and Aluminium prices (1997 – 2012)

Metal market has an undeniable speculative component that tends to amplify exogenous shocks, also accelerating transmission. In 2011, copper prices have started to rise again, reaching the figure of 10,160 dollars per ton in New York on 7 February 2011<sup>6</sup>. Despite registering less dynamism,

<sup>6</sup> ANSA, *Rame: vola a nuovi record a Londra e New York*, 7 February 2011.

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**QUARTERLY AVERAGE AL**  
US\$/tonne (LME Cash)

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aluminium is also moving in the same direction although its price is approximately two thirds lower than that of copper.

The price index of the main commodities published on 5 March 2011 (referring to 1 March) estimated the increase in the cost of metal that had taken place over the previous twelve-month period as equal to 31.6%, with a 2% increase in the last week of February. If we consider the level reached in 2005 to be 100, on 1 March 2001 the price index for metals was equal to 204.4<sup>7</sup>.

Demand from China is growing considerably, since the major industrialisation process and the industrial delocalisation has transformed China into a great magnet that attracts metals and other commodities, transforming it into the largest world importer. An importer that it seems will continue to grow in the next years, if the projected figures of industrialisation and urbanisation for 2020 (+ 5 billion square meter of roadway, + 170 new mass transit systems, + 40 billion square meters of floor space + 100 million people will migrate from the countryside to the cities, and at least 220 cities will have a population of more than a million and 8 cities will have a population of more than 10 millions)<sup>8</sup> will prove to be correct.

According to some sources, the demand from China of metals is more than a million tonnes a year in excess of the effective needs of the People's Republic and this objectively reduces the offer of scrap available in Europe, at least according to the results of some interviews with operators in the sector. As far copper is concerned, according to figures published by the press agency II Sole 24 Ore-Radiocor, Chinese imports of copper and copper products rose to 360,000 tonnes per month in January 2011, recording a 25% increase that would appear to be determined by increased demand from automobile companies, companies that manufacture electrical

<sup>7</sup> *The Economist commodity-price index*, Mar 1st, The Economist, 5 March 2011, page 97.

<sup>8</sup> London fifth Pol Primett EUG meeting report.

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household appliances and companies operating in the electricity network sector; there is also a desire to stock-up on reserves. Out of a total of 25 Millions of tons of copper produced annually, Cina consumes for its industrial needs at least 5 million, that is a fifth of the global output.

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Of course, it should be understood that part of China's consumption of metals and copper in particular are not used for the internal market but they are used in order to feed the industrial delocalised production of western goods that has been extensively moved to China in the last decade.

An analysis of the main drivers that sustain China's import of metal aimed at weighting the internal demand vs. the external demand could be useful in order to predict more accurately the future price effect of China future industrialisation.

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The boom in world demand for metal would therefore appear to conceal both the speculative flows of virtual money freed from the *quantitative easing* promoted by the US Federal Reserve and the continuation of a regulatory structure for international financial markets that is fairly liberal - for example, ETFs make it possible for both institutional investors and small savers to take risks on the increase in commodities<sup>9</sup> - and the powerful forces of the real economy.

It is therefore not easy to envisage a fall in the incentive to steal metals in the short term, with the exception of the event of sudden exogenous shocks - for example, a recession caused by the crisis in north Africa and the Middle East, although Morningstar envisages a reduction in the pressure on prices in the 2012-2015 period when investments made now in metal extraction will translate into increased production capacity<sup>10</sup>.

<sup>9</sup> Asca, 13 December 2010. ETF or Exchange-Traded Funds are basically mutual investment funds that have been on the market since the 1990s and are exchanged on the Stock Exchange.

<sup>10</sup> Cf. Valerio Baselli, *Rame, chi vince tra domanda e offerta. Il prezzo è in salita per la richiesta dei Paesi emergenti. Morningstar rivede al rialzo le previsioni per il breve, ma le abbassa per il 2013-15*, in Morningstar.it, 27 January 2011.

The increase in the price of most metals is part of a more general trend registered in the growing materials price. According to Bernie Rickinson of the Institute of Materials, Minerals and Mining<sup>11</sup> there are at least four vectors that are pushing high the prices of most of the materials: Increasing demand (especially from China and the rising BRICs), the insecurity of supply (environmental issues, weather hazards, export taxes and tariffs and quota restriction), material scarcity, market speculation. A combination of these factor was responsible for the rise in the prices of some known commodities - and metal among them – in the last three years, as it can be seen in the following table.

MATERIALS PRICES RATE OF CHANGE IN 3 YEARS			
	2009 £ KG	2012 £ KG	
WOOL	0.75	1.71	X 2.28
NATURAL RUBBER	1.00	1.80	X 1.8
COPPER	2.50	5.60	X 2.24
GOLD	10,560	28,863	X 2.73
PLATINUM	17,600	29,568	X 1.68
<b>OTHERS</b>			
DIESEL	X 1.51		
OLIVE OIL	X 1.28		
HELIUM	X 1.85		
TIMBER	X 1.55		

Source: JOM3

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<sup>11</sup> Presentation given by Bernie Rickinson in April 2012 in London Pol-PRIMETT meeting.

Red Gold: the case of Copper

Among different metals, copper theft represents a special case due to the wide use that copper has in a huge variety of many appliances and for its strategic employment for the production of public goods (transport, communication, electricity, construction etc). Such versatility of employment in fundamental services/goods is one of the causes of its price increase that is one also a major cause for the rise of copper theft. From January 2001 to March 2008, the price of copper increased more than 500 per cent, although the price has considerably fluctuated between 2000 and 10.000 \$ per tonne. This has prompted unscrupulous and sometimes unwitting independent and commercial scrap metal dealers to pay record prices for copper, regardless of its origin, making the material a more attractive target for theft<sup>12</sup>.

Scrap copper has demonstrated to play an important role in responding to the stress on the prices registered in the last years due to a sustained Asian demand for copper, as well as for other metals. According to International Copper Study Group “Copper scrap generation, trade and use are playing a key role to balance the growth observed in recent years in the global copper market. If the demand for copper continues the dynamic growth related to electrification, infrastructure development and urbanisation observed mainly in developing countries, and led by China in the last two decades, then the domestic supply, demand and international flows of copper scrap are expected to remain important issues for all copper related business in the medium and long term. The scrap metal and recycling industry, that today already plays a vital role in the economies of several European countries, is probably destined to increase its share in the EU metal cycle. In this regard UK, that is the largest European scrap metal and recycling industry worth more than 7 billion euro, could be a model of future

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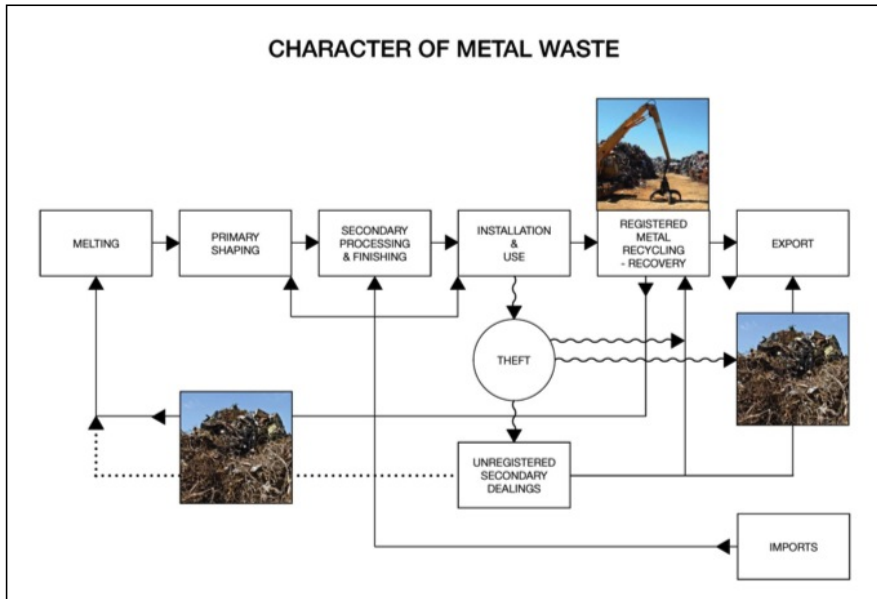
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<sup>12</sup> See FBI Report *Copper Thefts threaten US Critical infrastructure*, 15 September 2008  
[www.fbi.gov](http://www.fbi.gov)

development for many EU countries. Therefore the problematic of this sector and its growing role in the metal industry should be carefully studied and understood, also with the aim of balancing the regulatory needs, the environmental role of SMDs, the freedom of enterprise and the fight against the illegal scrap metal transactions. An illustrated description of the role and position of the scrap metal and recycling industry (including its proximity with the stolen metal markets) has been presented to Pol Primett participants by IOM3:



It should also be reminded that the price of copper has not always been this high, also in periods of growth and prosperity. Only a decade ago, the price of real copper has been following a different trend compared to the present one and its price tended to experience a falling long term trend. Consequently, the economic incentives for increasing the recovery of secondary copper or to start up a relevant market of stolen copper did not exist. The extensive period of excessive global copper supply in relation to the demand of 1966-2004 has been explained in different studies by the expansion of copper mine capacity, the increasing copper mine production and global exports of copper concentrate, anodes, blister and cathode in some selected copper mine producers (The World Bank IBRD 1987, Jolly 2008). Only in recent years, when copper prices recovered to real levels not observed since the early 1960s, we observed an important expansion in the export supply response coming from the secondary copper markets of the United States, Europe and the rest of the world to the fast growing Chinese demand, but not enough to break the 35% historic recycling input rate observed in the past 60 years. The abundance of credit in the world in 2002-2007 and the associated fast growth of the Chinese industrial exports caused a supply reaction in the mentioned secondary copper scrap markets, and also its recent collapse when the credit was abruptly cut. Then we can sustain that the condition of oversupply or excess of demand of copper mine production (copper concentrate and SX-EW cathode) have been playing a central role to stimulate and depress the global supply of copper scrap in the short term but not in the long term. The global production of copper and alloy fabricators grew from 19.2 million tonnes in 1998 to 21 million tonnes in 2007; this is equivalent to 1.75 million tonnes of copper and copper alloys per month in 2007. Monthly secondary refined production has been struggling unsuccessfully to achieve 200 Kt per month and mine SX-EW cathode production only achieved 250 Kt per month in 2008. The global copper concentrate production in 2000-2008 reveals that only after June 2004 miners became able to produce more than one million tonnes of copper

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concentrate per month, and the median below 1.02 Mt/months in 2005-2008 and not improving in 2009. The gap has been covered by an increasing use of copper scrap directly melted by fabricators and by the use of other metals in the alloys to face the increasing expansion of Chinese fabricators capacity and semis production”<sup>13</sup>.

The future trend of copper price are not easy to predict but, as it is discussed in the following factsheet there are enough elements to predict that in the short term the price of copper will remain high. This is mostly due not only to the increase in the demand from Asia, but also to the combined effect of the recent economic crises as well as the dynamics of the copper mine production. The stagnant situation of the supply and the fast growing demand will make more and more crucial for the world price equilibrium the global market of scrap metal. A market that contains – in an unknown but probably relevant proportion – also the copper that is illicitly stolen and recycled.

#### *The evolution of copper price in 2011 - 2012*

The last months of 2011 confirmed a phase of stagnation in the price of copper in the international markets, validating the trend of the second half of the year toward a reduction of price of the metal. 2011, in fact, started with the value of copper over 7.000/t a price that was maintained until the end of august when the LME price started to reduce from its year pick value floating around 6.000 euro. In the second half of the year copper price remained below euro 6.000/t and by the end of October touched the year negative record of euro 5.011/t (20/10/2011). In November and December 2011 it remained mostly stable close to 5.600 / 5.700 euro per ton.

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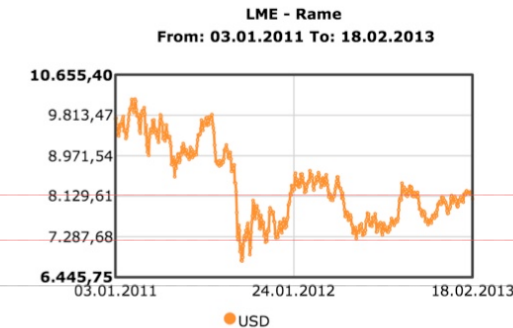
<sup>13</sup> ICSG 2010 Scrap Copper Report



Kme Metal Report No. 48 and 49.

The same stationary trend characterised the beginning of 2012 until the release of the data of Chinese monthly world import registered + 12.6 % in December 2011 compared to November 2011. This brought an increase to the global copper price, which again increased the value to over 6.000 euros per tonne for the rest of the month and a reduction<sup>14</sup> of the LME deposits of 11%. The monthly average quotation of LME price for copper for January has been of 6.232/ton with an increase of 8.5%.

This trend has been confirmed also during the beginning of 2012 when (February) the price of the copper at LME reached 6.500,



Source: KME

with a monthly average of 6,369.25 (+2.2% compared to January).

Consequently, LME Copper deposit decreased of 11.3% reaching 292.250<sup>15</sup>

<sup>14</sup> See KME Metal Report No. 50, January 2012.

<sup>15</sup> See KME Metal Report No. 51, February 2012

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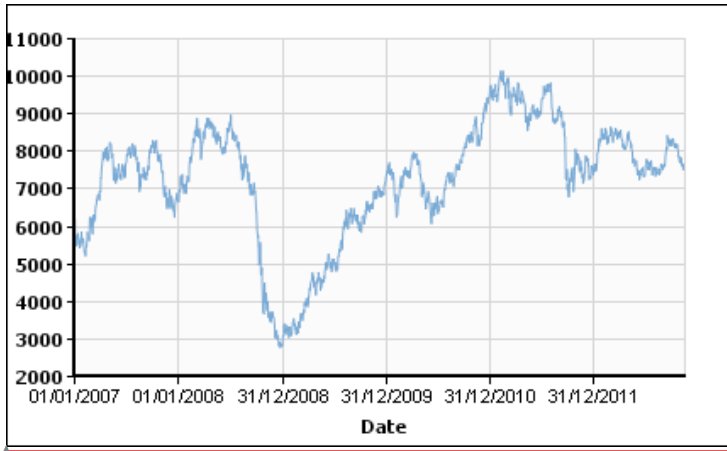
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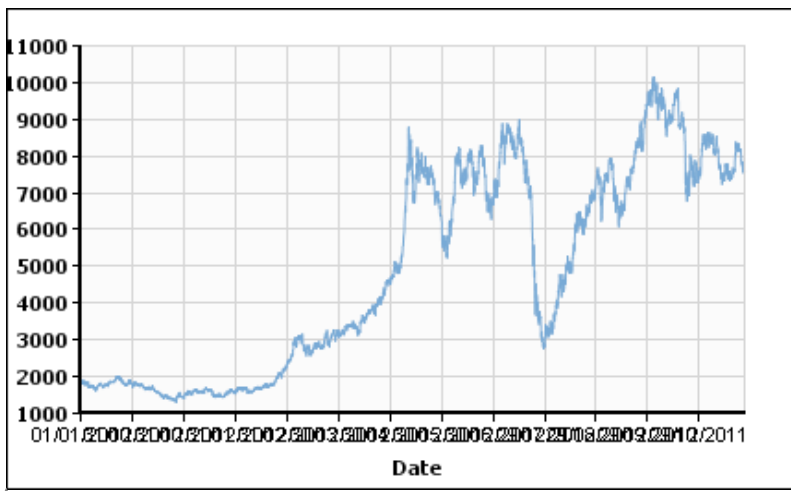
ton. The average price of copper in 2012 decreased compared to 2011 remaining abundantly below 8.000 \$.

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Copper price 2007 – November 2012 \$/Ton. Source: LME



Copper price 2000 – November 2012 \$/Ton. Source: LME

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LME Index (Aluminium, Copper, Lead, Nickel, Tin, Zinc).  
Price \$ Ton. January 2000 – November 2012

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**CASE STUDY****The impact of 2008 – 2009 crisis on Mine Capacity and Scrap Supply and the impact of new Mine Production 2010-2013 on Scrap Use.**

If we look at the new concentrate and SX-EW mine capacity projects delayed or cancelled permanently in 2008 and 2009, mainly as a consequence of the lack of project finance, we find a potential source to boost the global copper scrap demand in 2010 and 2011. A review of ICSG forecasts for copper concentrate supply based in copper concentrate mine capacity expected for 2010-2011 in the last two years shows that optimists concentrate supply expectations can change very fast: from 1843 kt new concentrate capacity expected for 2010-2011 in late 2007, the mining industry expected only 814 kt new capacity for 2010-2011 in early 2010. At least 1,027 kt-cu of new copper concentrate capacity was delayed or cancelled in 2008 and 2009. SX-EW refined copper mine capacity expectations also failed to deliver: at least 564 kty of new SX-EW refined copper mine capacity planned to start operations in 2010-2011 was delayed or cancelled in 2008-2009.

The total copper mine capacity expected for 2010-2011 delayed or cancelled in 2008-2009 was not less than 1591 kty. With annual total copper mine capacity growth expected to be no more than 2.6% in 2010 and no more than 3% in 2011, the consequences of a fast global industrial production recovery in 2010-2011 risks to create a bottleneck in copper mine production that should be absorbed only in part by a the expected recovery of the global copper scrap supply in 2010-2011.

Copper miners are a very optimist group of people: in January 2010 the expected concentrate capacity growth of 18.2% for the period 2009-2013 and an even more optimistic 19.7% growth in SX-EW cathode capacity. Copper smelters capacity is now expected to grow 10.0% in 2009-2013 and electrolytic refinery capacity growth is not less optimistic: 12.7%. If we look at the project pipeline 2010-2013 new capacity pipeline we should wait a moderate expansion in copper mine supply in 2010-2011, hopefully around 80% of the expected new mine capacity in a very optimistic scenario. New copper mine production may growth slightly over 400 Kt-cu in 2010 and below 480 kt-cu in 2011 is a reasonable target, assuming that the mine production of 2009 does not present any unexpected adjustment and without consider the expected production fall in old mines. Mine

capacity expansions are expected to grow in 1.1 Mt-cu in 2012 and 1.35 Mt-cu in 2013, this new capacity should add 880 kt-cu of mine production in 2012 and almost 1.1 Mt-cu in 2013 in a optimistic scenario. Assuming that old mines closures are not over 100 kt-cu in each one of the coming 4 years we can forecast an increasing annual growth of copper mine production over 2% a year starting in 2010, peaking in 2013 with a 5.8% annual growth. If the global copper first use grows annually over those levels in 2010-2013, the difference should have been provided by an increasing copper scrap use, stocks reductions or price changes. But if the global copper first use of copper grows below copper mine production growth rates, we will hardly see a significant expansion of copper scrap use in the next 4 years.

Exploration Budgets, Capital Expenditures and Scrap Balance. Reduced exploration budgets targeting copper mines, as those observed in 2008-2009 by main mining companies in different targets, should reduce future copper mine supply forecasts beyond 2012, increasing the share of copper recovered from scrap in the medium term. Taking a long term perspective, one of the critical factors that may drive an expansion of copper scrap for over the historic recycling rate of 35% is the lower ore grade in main mining districts, requiring more energy to remove the tonnes needed to obtain one tonne of copper and increasing the production costs of future copper mine supply. The discovery rate of large copper mines as Oyu Tolgoi in Mongolia (300 kt-cu per year of mine capacity at least) is falling and the expected contributions of mine capacity expansions are expected mainly in small and not in big mines in production (600 kty in 2013 from mines with less than kty versus the largest capacity expansion in Chile Los Bronces with 180 kty). If prices allow an increase of copper mine production over the 2% a year observed recently, to 4% a year, the 25 years of reserves will descend to less than 13 years and a dramatic increase in exploration expenditure should be seen, a difficult delivery given the global situation of private copper project finance. The seven largest mining companies where expected to reduce capital expending from 41 billion dollars in 2008 to only 32 billion in 2009 and the trend is down to only 26 billion in 2012 and a floor of only 18 billion in 2013.

(Source ICSG *Global Copper Scrap Report 2010* p. 141)

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## B. National studies

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### *Description of the problem*

*The debate on the causes of the phenomena*

*The magnitude of copper theft in Italy*

*Public perception of the phenomena*

*Institutional awareness of the phenomena*

*Profiles of the companies mostly involved*

*Preliminary conclusions*

## B.1 Italy

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*Description of the problem*  
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*The magnitude of copper theft in Italy*  
*Public perception of the phenomena*  
*Institutional awareness of the phenomena*  
*Profiles of the companies mostly involved*  
*Preliminary conclusions*



# Metal theft in Italy

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## *Description of the problem*

Italy is an industrial country that is relatively poor in raw materials and imports quite significant quantities from overseas to power its production system. In more modern times, this condition has long been considered a vulnerability and is a situation that continues to this day. Only in the years immediately after the end of the Second World War - and even then limited to just a few sectors, including however the strategic sector of iron and steel - was the possibility to obtain supplies from the cheapest international markets considered a competitive advantage worth exploiting.

Italy is one of the world's main consumers of copper after China, the United States, Germany, South Korea and India with 801,000 tons of refined metal used each year. Margins for manoeuvre on this market are however limited: the Indo-China block alone now drains the entire production of Chilean and Peruvian mines<sup>16</sup> from the market. Given this situation, it is a widely-held opinion that on the copper market, sellers have an objective advantage over purchasers<sup>17</sup>.

Having just a few small mines and facing competition for supplies of copper on the international market from countries that are notably stronger and that sometimes even follow a policy of buying-up resources, as is the case of the People's Republic of China, which according to some analysts dredges the markets and for precautionary reasons purchases a good 20% more copper than it effectively needs, Italy has focused attention on exploiting recycling that now covers 40.5% of its consumption.

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<sup>16</sup> *I signori dell'oro rosso che riciclano il rame rubato*, La Repubblica, 5 November 2010.

<sup>17</sup> Gianni Mattarelli, *Forte domanda di rame anche in Europa*, Il Sole-24 Ore, 16 November 2010.

This situation is not exclusive to Italy country, but it is shared with other countries in the European Union that, on average, satisfy 43% of their requirements thanks to recycling against a world average of 34.6%.

However, even recycling has structural limits because, as metal products have an average lifespan of 20-30 years the quantities of recyclable metal are a variable that depends on the production of two-three decades earlier. This time gap between life cycle and recycling objectively triggers an impulse to steal that makes it possible to alter the availability of scrap copper over time, transferring from future to present consumption resources that would otherwise reach the scrap market only many years later.

Materially, criminal organisations react to a stimulation embodied in price fluctuations that reflect the relative scarcity of the goods compared to the demand for them. This is a market with a turnover of hundreds of millions of euro, but to date nobody has managed to estimate its effective value. It is widely recognised that the phenomenon of metal and copper theft in Italy is closely linked to the global market's growing request for copper triggered by the rapid industrial development of the two Asian giants, China and India, and the corresponding speculation of the financial world on commodities.

In this situation, which is extremely unbalanced in favour of demand, metal from scrap, waste and processing off-cuts are fundamental and now represent approximately 34% of world availability of this raw material. Interest in the scrap market is also dictated by the favourable exploitation capacity that scrap metals offer compared to mined copper. Recycled scrap does not require particular processing, in particular "high grade" scrap not contaminated with toxic or hazardous substances. Once re-smelted, copper can be reused several times without this altering its basic characteristics and

a copper item can last up to 30 years and can be recovered and recycled several times.

Therefore, the enormous request for extracted metal and even more so for re-smelted metal has triggered a staggering spiral caused by factors strictly linked to the market logic of supply and demand and the resulting price rise (factors also influenced by financial speculation) and is an opportunity for the criminal market attracted by the realisation price of stolen metal and the ease with which it can be sold. Industry uses approximately 70% of scrap material. In Europe alone the share realised thanks to smelting is 41% and in Italy the trend will tend to rise to around 70% as the country does not have any raw materials.

The stolen scrap metal undergoes, mostly on national territory, a process of “legalisation” being smuggled into the circuit of legal collection and recycling in collection centres and through the transfer to foundries or exporting accompanied by “legal” tax documents. All this has led to the development of a lucrative, informal and illegal global market.

Metal and copper thefts follow the price trends like a thermometer, decreasing when the price drops and increasing when it rises. This elasticity of theft to LME price for copper is well demonstrated by the case of the theft of railway copper: taking the case of Turin railway sector and comparing the prices of copper in 2009 and 2010 it is a clear sign that the number of theft in 2010 (111 criminal episodes) is the result of the growth in price registered compared to 2009 (20 criminal episodes).

Italian Railway Network – with almost 16.000 kilometres of tracks managed throughout Italy – is one of the most relevant indicators of the phenomena of metal theft in Italy. From this point of view the criminal phenomena is alarming: compared to the previous year thefts quadrupled in 2010 on electrified railway lines compared to 2009.

*The debate on the causes of the phenomena*

It is not surprising that most of the open sources consulted during research and the information gathered thanks to interviews with stakeholders in the sector tend to acknowledge the existence of a direct relationship between the incidence of metal theft and commodity price trends that registered a notable increase from 2003 onwards reaching a peak in the 2006-2008 period, before falling during the international recession and rising again in 2010.

On 2 October 2010 the Italian Railway Police highlighted the statistics on which the belief that there is a close relationship between metal price trends and the intensity of the phenomenon of copper theft is based: in 2009 the cooling down of the economy led to an 89% drop in crime from the peak in the 2006-08 period. In parallel, the kilograms of “red gold” stolen in Italy decreased from 1,231,188 to 126,173, whilst provisional figures for 2010 indicate a new rise to 413,302 kilograms and the same seems to apply to the first few months of 2011.

There is a more complex link on the destination of stolen metal that, according to prevailing opinion, is quickly smelted by scrap dealers and then put back on the market so that it can be re-exported directly towards the markets in emerging economies, primarily China and India.

The Asian route of stolen metal is indicated in an interview granted on 3 October 2010 to the newspaper *Corriere della Sera* by the General Manager for Corporate Protection of the Italian Railways. Among other data he cites the 27 containers seized in August 2006 in the port of Gioia Tauro full of copper obtained by smelting metal from Enel or Telecom cables. Press agencies occasionally report the seizures that take place at land borders - for example, on 15 April two Romanian citizens were stopped by

the Border Police in Trieste driving a truck containing 900 kilograms of copper of illegal provenance<sup>18</sup>.

But the Asian trade is not the only route for stolen metal in Italy according to some investigations, as a consequence of stricter controls on Italian metal recyclers and foundries, part of the illegally obtained scrap is exported towards plants in third European Union countries sometimes are controlled by Italian entrepreneurs who subsequently “clean” it and re-import it into Italy in such a condition that it can be sold on the legal market<sup>19</sup>.

The theory that copper scrapped in Europe and Italy included the one of illegal origin is mostly sent to the Far East was confirmed in several interviews carried out by the research group. Anyway the idea that scrapping copper from theft *always and systematically* ends up going to emerging markets is not however correct and the picture is more grey, considering that the itineraries sometimes interweave and freight forwarders end up transporting metal of both legal and illegal provenance. What appears to operate is a wider and more complex mechanism, mediated by scrap dealers, a sector in which quite a few borderline subjects operate, especially so-called *wreckers*, some of them have one foot in the black market and the other in the legal economy. Precisely for this reason, they are increasingly targeted by Italian police forces.

In fact, the criminal chain seems integrated, in the sense that cable thieves, acting either independently or on commission, supply scrap dealers who then put the metal back onto the domestic and international markets using various techniques, including exporting and re-importing it.

Very often the first step of dissimulating the provenience of the stolen metal is done directly by the thieves, especially in the case of copper cables.

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<sup>18</sup> AGI, 15 April 2010.

<sup>19</sup> Therefore, there would appear to be a kind of *copper laundering* that aims to separate scrap from its illegal origin, precisely as happens with the proceeds from other illegal activities. Cf. also *I signori dell'oro rosso che riciclano il rame rubato*, art. cit.

The separation of the metal from the cables it is wrapped is done sometimes on the spot, sometimes in selected locations within few hours from the theft. In Rome, especially, it is often reported that this operations happens in nomad camps, bringing the attention of the municipal police forces due to the pollution caused by fires lit to carry out the operation<sup>20</sup>.

Recent studies have highlighted the complexity of a system that Polfer, in particular, is trying to combat. The *Recycling Copper* investigation that began in 2009 seems particularly significant and led to the arrest on 3 March 2011 of the owners of a Bologna-based company accused of handling a total of 12,000 tons of ferrous material from 2008 onwards, largely purchased illegally, with net proceeds of around 5 million euro and the recovery of 2 tons of copper stolen from R.F.I.<sup>21</sup>.

Metal theft in Italy assumed a more diversified character also due to the impact of foreign criminals leading to the suspicion that there is a link between the phenomenon of metal theft and the number of immigrants illegally residing in Italy. In fact, at least during the 2003-2008 period, the expansion of the theft of metal items increased parallel to the growth of the immigrant population from non-EU and new-EU countries present in Italy, whose rate of perceived growth rose considerably during two specific periods in particular; respectively, in 2004 when the fifteen EU countries welcomed ten new member states and above all, in 2007 after Bulgaria and Romania joined the European Union. However, a more careful study of trends reveals that a single-cause explanation of this criminal reality, founded mainly on the evolution of the number of foreigners, does not suffice to justify the trend of the phenomenon over the past decade as thefts show different fluctuations compared to those regarding the number of economic immigrants that have come to Italy. What seems clear in particular is the involvement of numerous individuals from Eastern Europe and the

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<sup>20</sup> Il Velino, 26 January 2011.

<sup>21</sup> AdnKronos, *Rifiuti. Traffico illecito materiale ferroso, 2 arresti a Bologna*, 3 March 2011.

Balkans - especially but not only from the Roma ethnic minority - which operate in the metal theft sector, either independently or in association with more or less organised criminal associations. Foreigners have also contributed to the extraordinary diversification of the victims or targets of crime, a veritable surprise for both Italian society and the forces of law and order in the second half of the last decade. This is true especially for the petty metal theft emerged as a mostly new phenomena in Italy, such as those involving the removal of funeral furnishings and items, the theft of manhole covers and road signs, the removal of gutters, doors and other fixtures from buildings, whether abandoned or not.

### *The magnitude of copper theft in Italy*

For a long time, in Italy copper thefts seem to have been almost exclusively the responsibility of foreigners, mainly Eastern-Europeans<sup>22</sup> and especially citizens of Romanian nationality or nomads. More recently, however, Italians seem to be frequently and increasingly involved in these criminal activities<sup>23</sup>. The phenomenon, risen to remarkable importance in the years 2000, after the peak in 2006 had showed for some years a declining trend; nonetheless, last year it has recorded again a dizzying rise. From January to September 2010, stealing had already amounted to “727, while they were 349 in 2009 and 805 in 2008”<sup>24</sup>, after a peak of 1,223 recorded in 2006<sup>25</sup>. In the vast majority of cases, these stealing are either planned or occasional, with just one case in all these years where the theft was a proper armed robbery. Since 2006, 375 people have been jailed for theft and re-selling of stolen copper, while 939 more people were prosecuted while being on the leave<sup>26</sup>.

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<sup>22</sup> Palagi, 2007, “Ladri di rame”, *Polizia Moderna*, febbraio.

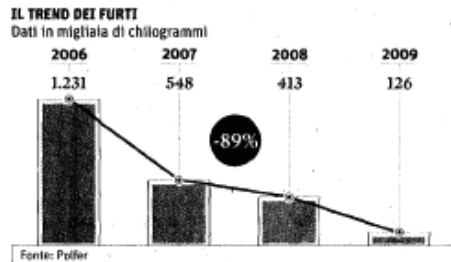
<sup>23</sup> Carletti Luigi, Griseri Paolo, 2010a, “I signori dell'oro rosso che riciclano il rame rubato”, *La Repubblica*, 05 novembre.

<sup>24</sup> Ibidem.

<sup>25</sup> Fatiguso Rita, 2010, “Riprendono quota i furti di rame”, *Il Sole 24Ore*, 20 marzo.

<sup>26</sup> Carletti Luigi, Griseri Paolo, 2010b, “Assalto al rame”, *Repubblica WebTV*, 12 novembre.

Hereafter, the amount of stolen copper, in kilograms, between 2006 and 2009<sup>27</sup> in the Italian railway system:



Railways' copper is the most sought, both for its quality and its accessibility: in the last two years, the direct damage amounted to ten million of Euros<sup>28</sup>. In 2007, the value of stolen copper reached three million Euros<sup>29</sup>; the increase is clearly a matter of concern. On top of this, these figures are just the direct material damage, not including equally important consequences in economic and efficiency terms. Sometimes thefts include reels and reserve and maintenance equipment stored in depots and warehouses, without other impact than the economic damage resulting from the unavailability of an asset previously owned by TRENITALIA, the Italian railways Company. However, there are many cases where the operational network of the railway system is directly attacked (originally, just the out-of-service and less-guarded legs, while today the thefts are directed also toward the actually used railways), thus not only damaging the property but causing also the interruption of commercial traffic for hours. Between January and September 2010, commercial service has been delayed for a total of 495 hours, against 495 in the whole 2009 and 876 in 2008<sup>30</sup>. According to the head of TRENITALIA's corporate security, Franco Fiumara<sup>31</sup>, however, this type of damage, although causing enormous stress to the entire rail system,

<sup>27</sup> Fatiguso Rita, 2010, op. cit.

<sup>28</sup> Carletti Luigi, Griseri Paolo, 2010a, op. cit.

<sup>29</sup> Palagi, 2007, op. cit.

<sup>30</sup> Carletti Luigi, Griseri Paolo, 2010b, op. cit.

<sup>31</sup> Palagi, 2007, op. cit.



fortunately cannot have a direct impact in terms of actual risk of accidents and disasters with potential physical danger to staff and passengers. Actually, the theft of copper cables merely triggers the security mechanisms that break the electric circuit, blocking it and then the railway for the time necessary to repair the failures, which could take very long time, in accordance with the amount of metal removed. This phenomenon involves indeed many companies, ranging from large realities as TELECOM and ENEL (even in these cases with theft both against stored equipment and the operational network) down to smaller companies involved in other activities, as the sugar factories. This, not to mention the private properties, such as houses, apartment blocks and building sites, as well as public entities, including local ones, such as graveyards and sports facilities. In such cases, thefts involve roofing, gutters, cables and various religious objects such as vases and crucifixes.

Generally, the phenomenon cannot be easily countered through a direct surveillance or remote-controlled cameras. The Italian railway system, which is extended for more than 16,000 kilometres with long legs outside urban centres, offers a clear example of such a complex problem. Thieves need more or less a quarter of an hour to steal a fair amount of copper, at least enough to fill a backpack, from these lines, as well as from telephone and energy networks<sup>32</sup>. Regarding the activities of burglary and theft from stores and warehouses, thieves need equipment a bit more advanced than simple wire cutters, such as trucks and forklifts<sup>33</sup>. For the contrast of this type of criminal activity, which, as already mentioned, is primarily conducted against railway network, in May 2006, in Italy, a task force was established in each of the 15 compartments of POLFER, Italian railway Police, composed by groups of specialist police officers, coordinated by the First Director of POLFER Pietro Milone. This task force has made it possible to achieve very noticeable results, especially in tracing the source of copper rail, at least until the material is finally blended. Actually, the policemen posted in the above

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<sup>32</sup> *Ibidem*.

<sup>33</sup> As reported by those involved in this type of activity interviewed in the documentary: Carletti Luigi, Griseri Paolo, 2010b, *op. cit.*

mentioned task forces have been equipped with a micron gauge in order to verify whether the diameter of copper, seized because of suspicious origin, matches the specific Italian railway network standard, since the copper wires used in it have a specific shape, size (11.9 mm) and a distinctive label<sup>34</sup>. In addition, thanks to the pressure of POLFER, in the context of COLPOFER, the body that brings together companies and police corps in 26 European countries, a permanent study group dedicated to the theft of copper have been set up, which meets on a quarterly basis in different European cities in order to exchange information and promote joint controls within the European Union.

At a national level the evaluation of the data of metal theft in Italy are carried out by the Ministry of Home Affairs, in the criminal analysis service of the Central Directorate of the criminal police. The Crime Analysis Service (SAC) of the Italian Ministry of Home Affairs has been created in the year 2000 in order to create a centre for concentrating all the anticrime relevant information and to coordinate – jointly among different security agencies – strategic analysis on criminal phenomena. In the recent years SAC has been more and more involved in the analysis of the metal theft phenomenon and in the strategic planning of adequate countermeasures.

Since December 2010, under the growing pressure from the disruption and costs caused by the growing metal theft phenomena in Italy, the Ministry of Home Affairs has launched a strategy to fight the phenomenon, focusing on a strong synergy between the police forces and the private companies mostly affected and the creation of joint - forces working groups. This public – public and public – private cooperation has been particularly relevant in some of the regions most hit by metal theft, Apulia in particular. At the central level it has been created a “National Monitoring Centre on Copper Theft” were periodically the main stakeholders of the metal theft phenomena in Italy (Police, Custom Agency, Italian State Railways S.p.a., Telecom S.p.a., Enel.

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<sup>34</sup> Palagi, 2007, op. cit.

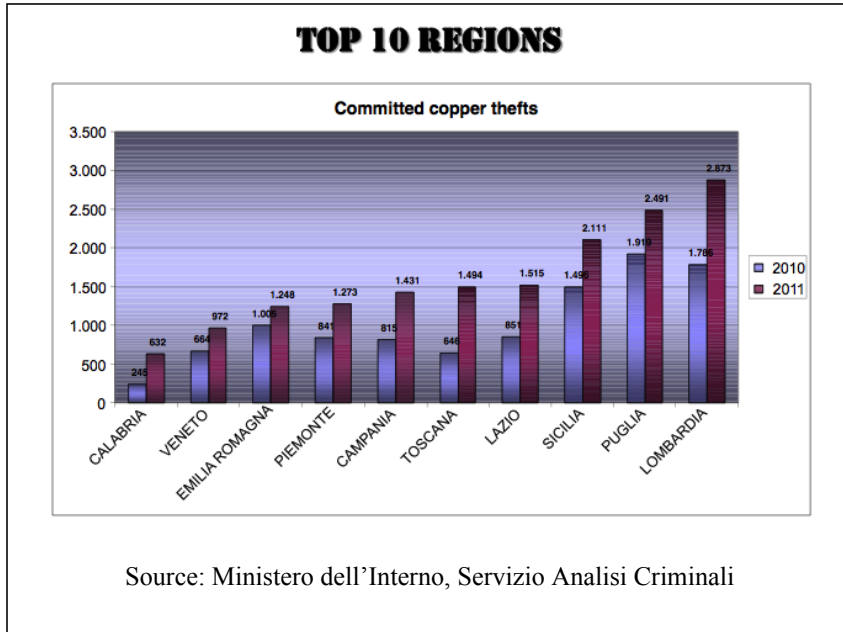
S.p.a. Anie - National Electrotechnic and Electronic Enterprises Federation) meets in order to assess the evolution of the situation of the metal theft related crimes, to exchange information and to draft possible countermeasures.

According to data provided by the SAC [WAITING FOR NEW DATA ON 2012 REQUESTED TO ITALIAN MINISTRY OF INTERIOR](#), the provisional figures for 2011 show how the phenomenon of copper theft has grown significantly in the last five years, with the sole exception of 2009, when the number of such crimes touched a relatively low minimum. In 2011 the number of copper theft reached an higher peak, increasing some 40% compared to 2007, 2008 and 2010, when the level of copper crime registered by the SAC remained almost constant with approximately 11.000 criminal records per year.



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According to the SAC data it is evident that copper related crimes have a very strong geographic nature, being over represented in some regions of Italy, namely Lombardia, Puglia, Sicilia and Lazio.



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The increase of metal theft crimes in 2011 resulted also in an higher number of perpetrators arrested (1834) or reported (3147). The number of arrested persons rose of more 70% compared to 2010. This data is not only the result of an increase of the phenomenon but also the "natural" outcomes of investigation activities and special operations started to be carried on extensively in the last few years.

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## Public perception of the phenomena

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The huge increase in copper and metal thefts has largely taken the Italian media and public opinion by surprise, as well as the companies whose services are mostly provided through transmission networks where copper is widely used. Only few years ago the main private stakeholders affected by the phenomena started to evaluate correctly the threat and only very recently few investments have been made for adopting preventive measures.

Despite being a country with a significant rate of criminality, for a long time metal theft has not been a relevant activity for the criminal underworld. The price effect, of course, is the main reason for the shifting of interest of thieves on metal but it shouldn't be underestimated the migration to Italy of petty criminals from the countries of Central and Eastern Europe, a socio-economic context in which metal theft is widely diffused or that in any case has been around for some time.

As in most of the industrialised countries, the theft of copper and metal involves a vast range of goods, mostly affecting utilities companies that provide essential public services. But, for a long time, the interruption of such services has been considered by the public opinion just an interruption of a service without distinguishing among the different possible causes of the disruption.

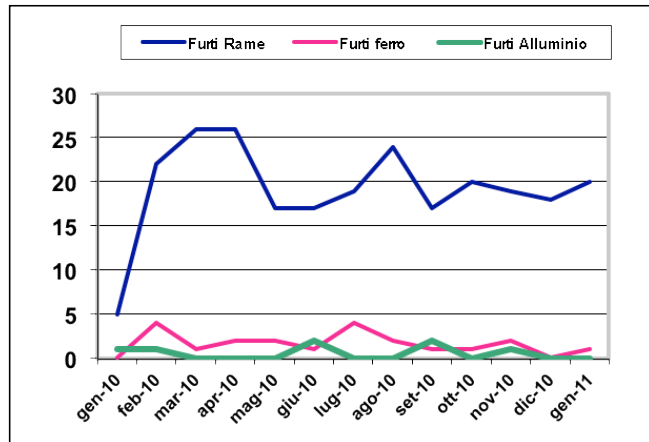
Interestingly, it seems that in Italy the level of effective social alarm against the phenomenon did not depend so much on the frequency of criminal events against the public utilities networks or on the value of the damage produced but mostly on two other elements: the impact they have on the personal properties of local communities and - above all - on media-exposure of the phenomenon.

Apart from public utilities networks Italy has a series of elements of urban furniture and accessories that have become irresistible targets for the labourers of new crimes, in particular because they are either scarcely defended or not at all: this is the case of funeral furnishings, frequently stolen from tombs, the covers of urban sewers, road signs, roof of churches, monuments. The rise of metal theft targeting these private or local community goods is, to a great amount, the main responsible for the rise in the public awareness of the phenomena of metal theft, even if this particular kind of criminality<sup>35</sup> doesn't affect strategic services and doesn't produce big economic losses.

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<sup>35</sup> It is also important to stress the sense of social insecurity that minor metal theft crimes produce when they occur in a familiar environment or in the neighbourhood

**Presence of news of metal theft in the main Italian press agencies**



Source: Our elaboration of the thefts reported by the leading Italian press agencies from January 2010 to January 2011<sup>36</sup>

In the attempt to assess the “presence” and relevance of the metal theft phenomena on the local media a second media survey has been made from January to march to 2011 focusing our attention on the different recurrence on the copper theft news on local and national media. The following table shows the results of this survey<sup>37</sup>.

<sup>36</sup> Elaboration made on the news produced by the following national press agencies: Ansa, Agi, AdnKronos, Il Velino, 9Colonne and Radiocor from January 2010 to January 2011. This search has been made using the agencies’ archives.

<sup>37</sup> This survey has been carried out by using the google alert service in the google search engine. The “alert” word was “furti di rame” (copper theft). The search engine has been set on this alert mode on January 30 and that recording will last for the duration of Pol-Primett project.

### Local and national media news survey for Copper theft January – March 2011

Date	N. of episodes per day reported	Reported on local media	Reported on national media	Arrested persons	Collateral damages
30 Jan	5	5	0	7	
01 Feb	2	2	0		
02 Feb	7	7	0	6	Electrocution of one perpetrator
03 Feb	3	1	2	7	
04 Feb	6	4	2	10	Interruption of water pumping service / Disruption of security cameras service
06 Feb	6	4	2		
07 Feb	3	2	1	5	
08 Feb	9	6	3	11	
09 Feb	6	3	3	1	
10 Feb	6	4	2		Fire produced
11 Feb	2	1	1	4	
12 Feb	4	3	1	3	
13 Feb	3	3	0	3	
14 Feb	6	5	1	9	Electrocution of one perpetrator
15 Feb	10	8	2	7	
16 Feb	3	1	2	2	
17 Feb	2	2	0	2	
18 Feb	5	2	3	3	
19 Feb	2	1	1		
20 Feb	5	5	0	5	
21 Feb	1	0	1		
23 Feb	1	1			
24 Feb	4	3	1	7	
25 Feb	2	2			
27 Feb	2	2			
28 Feb	2	2			
01 Mar	3	3		6	
02 Mar	4	2	2		
03 Mar	9	4	5	12	
04 Mar	10	7	3	4	
05 Mar	4	2	2	1	
06 Mar	1	1			
07 Mar	2	2			
08 Mar	5	3	2	1	
09 Mar	6	5	1		
10 Mar	5	4	1	10	
11 Mar	6	4	2	1	
12 Mar	1	0	1	2	
13 Mar	1	0	1	3	
15 Mar	7	5	2	2	15 residential houses without electricity for 7 days
<b>Total</b>	<b>176</b>	<b>126</b>	<b>50</b>	<b>127</b>	

Source: our data collection and analyses

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From the result of this survey few considerations can be highlighted about the media awareness of the phenomena:

1. **Frequency of the phenomena:** in the observation period from 1<sup>st</sup> February to 15<sup>th</sup> march there were very few days without copper theft occurring and without the press reporting about it to the population. In the month and half of this survey only 4 days went without media reporting about copper theft episodes to the public.
2. **Quantitative dimension:** a total of 176 news articles about copper related crimes have been registered by the media in the period of observation, with an average occurrence of 4 episodes per day<sup>38</sup>.
3. **Distribution between national and local media:** due to the frequency and social awareness of copper related crimes, this phenomenon made its way into the national media system and it is likely that it will remain a hot issue for journalists. Out of 176 news articles registered in the survey period almost one third were reported in the national media. Local media remains the main source of information of the phenomena outnumbering the national media 2,5 : 1
4. **News specialisation:** the more the journalists become experienced with the phenomena the more reporting about metal theft it's becoming more and more insightful and accurate. Even in local press, very often the articles refer to historical statistic on metal and copper theft; include analyses about the direct and collateral damages produced, about the costs of the damages, about the nature of the phenomena and its scale.

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<sup>38</sup> This data is not scientific usable in order to assess the dimension of the phenomena in Italy.

5. **Other considerations:** even if this survey has been carried out to assess the level of awareness of national and local media of the phenomena of metal theft, its findings could be useful also for a general assessment of the phenomena. In particular, the number of arrested persons – 127 in 43 days of media observation – appears to be a significant number. Considering the fact that usually the copper gangs are made of 2 – 3 persons the number of arrested people per criminal episode seems to be an important one approaching to 30% of possibilities of being arrested during the perpetuation of a metal theft.

Date	N. of episodes per day reported	Reported on local media	Reported on national media	Arrested persons	Collateral damages
30 jan		5	0	7	
01 feb	2	2	0		
02 feb	7	7	0	6	Electrocution of one perpetrator
03 feb	3	1	2	7	
04 feb	6	4	2	10	Interruption of water pumping service / Disruption of security cameras service
06 feb	6	4	2		
07 feb	3	2	1	5	
08 feb	9	6	3	11	
09 feb	6	3	3	1	
10 feb	6	4	2		Fire produced
11 feb	2	1	1	4	
12 feb	4	3	1	3	
13 feb	3	3	0	3	
14 feb	6	5	1	9	Electrocution of one perpetrator
15 feb	10	8	2	7	Local railway stopped for 4 hours / Disruption of service of a purification plant
16 feb	3	1	2	2	
17 feb	2	2	0	2	
18 feb	5	2	3	3	
19 feb	2	1	1		
20 feb	5	5	0	5	
21 feb	1	0	1		
23 feb	1	1			
24 feb	4	3	1	7	
25 feb	2	2			

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Police – Private Partnership to Tackle Metal Theft

27 feb	2	2			
28 feb	2	2			
01 mar	3	3		6	
02 mar	4	2	2		
03 mar	9	4	5	12	
04 mar	10	7	3	4	
05 mar	4	2	2	1	
06 mar	1	1			
07 mar	2	2			
08 mar	5	3	2	1	
09 mar	6	5	1		Residential houses without electricity for 3 days
10 mar	5	4	1	10	
11 mar	6	4	2	1	
12 mar	1	0	1	2	
13 mar	1	0	1	3	
15 mar	7	5	2	2	15 residential houses without electricity for 7 days
<b>Total</b>	<b>176</b>	<b>126</b>	<b>50</b>	<b>127</b>	

These media surveys are a quantitative example, however influential and important, of the generation of the perception of risk and threat felt by the public opinion. Figures concerning the actual dimension of the criminal phenomenon are effectively much higher compared to the number of episodes registered by local and national media. It is logical that this should be so, as not all crimes are worthy of mention in the press or on television, due to their size or the importance of the interests affected and to the “competition” of other news of the day in the media priority. In any case, the two media surveys we have been carrying out in this research reveal a rather interesting trend in the flow of news diffused under at least two different profiles.

Firstly, what emerges is a notable increase in the focus on the phenomenon of copper theft that took place in the first trimester of 2010, which dropped in the second trimester - without returning to the low levels of the start of the year - and then rose again before settling at an average of about 20 incidents a month, just under one a day.

Secondly, press agencies demonstrate different levels of sensitivity to thefts depending on whether they involve copper, ferrous materials or aluminium. In fact, focus on thefts of metals other than so-called “red gold” appears notably lower and at least in the case of aluminium, shows a trend that is not always balanced compared to that of crimes involving copper. The theft of iron mentioned by press agencies is lower than an average of one incident a week, whilst that of aluminium theft barely reaches the average of one a month.

The dynamics of the theft of ferrous materials and copper items shows a clear link that is not however, quite as evident in the case of aluminium.

Analysis of press releases also confirmed the perception of a phenomenon that now has a national scale and is diffused throughout Italy, with some critical points in the regions and provinces with particularly important infrastructures and where the presence of organised forms of crime is more evident.

This is the case of Puglia, for example, in particular the triangle comprising Taranto, Bari and Foggia, where news agencies have reported a significant concentration of crimes committed against railway property, telephone lines and power supply channels, but also in the Neapolitan hinterland, a critical junction on the Italian high-speed railway network, long stretches of the Adriatic coast and areas around the capital and other metropolitan cities like Turin.

The business of metal theft does not appear to be the sole domain of Italian criminality. On the contrary, there are various communities of more or less recent immigrants, in particular Romany gypsies of Romanian and Balkan origin, which independently run certain sub-types of this particular form of crime.

Other elements, in general from new-EU countries in Central and Eastern Europe, but with a significant number of North Africans too, seem to act on commission, on behalf of Italian or foreign receivers of stolen goods or as part of veritable criminal joint-ventures that vary in size and range of action.

In these cases, investigations carried out in 2010 ascertained that the proceeds from theft are very poor at the lower ends of the chain; given that in February last year thieves received no more than 30-50 cents a kilogram

for copper. This is therefore, an area reserved to the lower and most desperate elements of the criminal hierarchy<sup>39</sup>.

The influence on the phenomenon of the overseas workforce and in some cases by veritable integrated foreign criminal networks has had important political consequences as simultaneously; Italy experienced a very delicate moment marked by a growth in preoccupation regarding security linked to handling of the immigration problem.

*Evolution of copper theft in Italy in the first 3 months of 2012*

Months	N. of Alerts	Total number of episodes reported
March (until 6th)	5	36
February 2012	28	218
January 2012	27	105
December 2011	26	116
November 2011	29	112
October 2011	31	150
September 2011	29	163
February 2011	21	102
February 2012	28	218

Based on open source monitoring of Italian news in the press and electronic media, the following table had been created. It confirms that news with the report of metal theft is printed almost daily, in both national and local media. In February 2012 the number of copper theft related crimes that were present in the news peaked at 218, more than doubling the data collected with the same system in February 2011 (102). Very likely it is related to the increase of copper price registered in the January 2012. The first week of March showed a trend that is in line with the second half of 2011 averages.

<sup>39</sup> Ansa, 24 February 2010. The figures were recorded in the Province of Bari.

### *Institutional awareness of the phenomena*

In fact, what the press publishes and radio and television channels report on tends to reflect on parliamentary activity, triggering the production of a series of acts of parliamentary scrutiny in both houses of the Italian Parliament over the past few legislatures. In this situation, the notable fluctuations in the incidence of the phenomenon are effectively confirmed.

The first recent historical peak in metal thefts corresponded to an initial wave of parliamentary questioning starting from June 2006 - no acts of parliamentary scrutiny were presented in the XIV legislature that covered the previous five-year term - and accelerated in 2007, before falling in the period during which the international financial crisis cut the price of commodities, thus reducing the incentives to steal.

Seven parliamentary questions lodged by the Chamber of Deputies and the Senate of the Republic were collected during the XV legislature (June 2006-May 2008), during which Italy was governed by an executive consisting of a centre-left majority led by the Prime Minister, Romano Prodi. On 27 June 2006, two initial acts of parliamentary scrutiny were announced, presented respectively by Rifondazione Comunista party senators Santo Liotto and Russo Spina - addressing the Prime Minister as much as the Minister of the Interior and concerning some thefts in the Province of Catania against Elmec Elettromeccanica S.p.A.<sup>40</sup> - and the right honourable Riccardo Minardo of Forza Italia, who questioned parliament on the increase in thefts in general and copper theft in particular from agricultural properties in the Sicilian Province of Ragusa<sup>41</sup>. Both received a reply by the government. The following 19 September it was the time of senator Domenico Gramazio, then a member of the Alleanza Nazionale party, who presented a question that linked the phenomenon of copper theft to Romany

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<sup>40</sup> Senate of the Republic, XV Legislature, Act no. 4-00146

<sup>41</sup> Chamber of Deputies, XV Legislature, Act no. 4-00353

camps<sup>42</sup>. On 31 January 2007, senator Dino Tibaldi of the Comunisti Italiani party formally asked the Ministers of Transport and of the Economy and Finances for explanations regarding the increase in copper theft and its effect on the functioning of the national railway network. On 13 March 2007 it was the turn of the Lega Nord member of parliament Paolo Grimoldi who, in the Chamber of Deputies, brought up the problem relating to urban decay in the Lombard municipality of Pioltello in the Province of Milan, mentioning amongst other items a fire caused by cables containing copper, a low-cost method for separating the metal from the insulating plastic wrapped around it<sup>43</sup>. Less than a month later, on 11 April 2007, Mauro Fabris, a member of the Udeur party that at the time was part of the coalition government, questioned<sup>44</sup> the Minister for Economic Development with regard to the increase in copper theft in general and in particular, the armed robberies that had taken place in the Provinces of Arezzo, Chieti, Cuneo, Ferrara, Lucca, Milano, Salerno, Verona and Vicenza.

Fabris also reported how the victims of these particular crimes were primarily companies that produced electricity cables and for whom copper represented about 40% of production costs, companies that operated in the electrification of railway lines sector and those that used large quantities of cable, like the railways themselves and companies operating in the electricity sector. Fabris also mentioned figures relating to a sample survey carried out on dozens of producers that made it possible to deduce the extent of the phenomenon of copper theft, equal to over 2,000 tons for a value of approximately 10 million euro. The parliamentary question also highlighted the growth in theft against powered plants and the resulting rising frequency in power line failure, underlining the great disparity between the value of the stolen goods and the damage caused by the theft of copper

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<sup>42</sup> Senate of the Republic, XV Legislature, Act no. 4-00480

<sup>43</sup> Chamber of Deputies, XV Legislature, Act no. 4-02901

<sup>44</sup> In this document it is assessed that the increase in the price of copper from 1,600 to 6,000 euro a kilo produced a more than proportional increase in copper theft.



from transformers, with costs up to 30 times the value of the damaged property just for the environmental clean-up of the surrounding area<sup>45</sup>.

On 6 June 2007, Senator Cosimo Ventucci of Forza Italia, questioned the Ministers of the Interior, Justice and Infrastructures on the public order situation in some parts of the municipality of Rome, explicitly mentioning the theft of copper contained in street lighting cables and the theft of ferrous material in manhole covers. On 13 November 2007, the right honourable Fabio Rampelli of the Alleanza Nazionale party also began to formally deal with this issue by questioning the Ministers of Education and the Interior on the increase in copper theft in schools, mentioning an episode that had taken place in Rome against a private institute where first electricity power cables and then also bathroom taps and fittings had been stolen, endangering safety and leading to closure of the building at the start of the school year, forcing 140 families to enrol their children at other schools<sup>46</sup>. The following 4 February, Rampelli addressed another question to the Minister of the Interior regarding the problem of the deterioration of public order in some parts of the capital, making specific reference to the theft of electricity cables that had left the stretch of the Rome-Fiumicino motorway in the dark; the fact that sometimes the perpetrators – in this case Roma gangs – uses to lit fires at the border of the motorways increases the risk of possible car accident due to the heavy smoke produced by the fires necessary to separate the metal from insulating plastics<sup>47</sup>.

The XVI Legislature, which began in spring 2008, coincided with a relative ebbing of the phenomenon whose intensity tends to diminish in parallel with a fall in the price of commodities and maybe even due to an increase in the control of illegal immigrants camps introduced following the approval of a series of new laws on domestic security. At the time this work went to press, only two parliamentary questions had been recorded.

<sup>45</sup> Chamber of Deputies, XV Legislature, Act no. 4-03217

<sup>46</sup> Chamber of Deputies, XV Legislature, Act no. 4-05602

<sup>47</sup> Chamber of Deputies, XV Legislature, Act no. 4-06262

The first presented by the right honourable Luigi Bobba and addressing the Ministers for Economic Development and Labour and Social Policies on 16 February 2010, primarily concerned the position of an industrial plant suffering from the crisis and with an uncertain future, the Ermolli paper mill in Crevacuore, and explicitly mentioned the theft of copper from the company<sup>48</sup>. Finally, a question was presented on 28 June 2010 by Lega Nord members of parliament Alessandro Montagnoli, Marco Desiderati, Jonny Crosio, Gianluca Buonanno and Giacomo Stucchi addressing the Ministers of the Interior and Transport. The document highlighted how, despite the government's firm action to contrast it, the theft of copper continued "to hit, in particular, the railway infrastructures determining inconvenience in normal train circulation - as has occurred on the Milan-Turin (including the high-speed line), Milan-Novara, Milan-Varese and Milan-Domodossola lines due to the theft of copper braids from Milano Certosa station - but that involves a lot of other property, including funeral furnishings".

Presumably a new acceleration in the theft of copper and ferrous material, probably in light of the new increase in the price of commodities, will soon generate further acts of parliamentary scrutiny and perhaps, even other more incisive parliamentary initiatives such as motions, resolutions presented to a commission and the opening of fact-finding inquiries.

The government-parliament is not the only category of political and institutional players involved in combating metal theft. In fact, we should underline how, in the Italian legal system, important security functions are also exercised by local authorities through municipal and provincial police forces, especially following the regulatory interventions approved in the past two and half years that have significantly broadened the powers of mayors in this sphere. In fact, as confirmed by the local media interest, there is a growing sensitivity towards this phenomenon by the public administrations

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<sup>48</sup> Chamber of Deputies, XVI Legislature, Act no. 5-02483, hereby attached.

of some of the main Italian municipalities like Rome, a city where various council authorities stigmatize the emergency, demanding the adoption of measures that clamp down in particular on Roma communities, very often involved in the law chain of metal theft activities in the capital.

### *Profiles of the companies mostly involved*

Given the considerable social importance of the effects produced by the thefts carried out against large infrastructures, it is not surprising that press agencies mainly report crimes against the national railway and electricity and telephone networks. In these cases in fact, execution of the crime usually causes a more or less widespread interruption to the service affected, which has repercussions on the public and alerts the media.

As it is an objectively loathsome act, the wall of indifference is also broken down with thefts of funeral furnishings and items, whilst in other circumstances the minor crimes perpetrated against building sites, private homes and warehouses are highlighted, in particular, when connected to the arrest of those responsible.

Although dominant in the panorama of crimes of this type reported by the press, railways and electricity and telephone lines are not the only public utility services involved in the phenomenon of metal theft.

During the period monitored for example, thefts were perpetrated against waste disposal plants (in particular, in Reggio Calabria in September 2010 where iron was stolen and more recently in Padua in January 2011 where copper components were stolen instead), purification plants (for example, the Pugliese Aqueduct that was blocked on 17 January in Taranto and seven days later in Grottaglie and Monteiaso<sup>49</sup>) and even infrastructures that are theoretically protected like the military airport of Comiso hit in April 2010 and “visited” again by a group of Romanians the following 14 December.

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<sup>49</sup> AGI, 25 January 2011 that recalls how the infrastructure of the Pugliese Aqueduct sustained damage amounting to a million euro in 2010. The attack on the evening of 24 January led to some purifiers being closed for 72 hours.

The theft of cast iron manhole covers (some crimes committed in Bergamo and Matera have made the news) and road signs (reported in Turin and Reggio Emilia) also have a social cost.

*R.F.I.-Trenitalia*

Rete Ferroviaria Italiana and Trenitalia are the main companies that are part of the Italian State Railway Group. R.F.I. was set up on 1 July 2001 as an infrastructure company by effect of the implementation of community directives that imposed on all European Union member states the principle of the corporate separation between the manager of the network and the producer of transport services. Its mission was to guarantee security and safety on the railway network, develop technologies regarding the systems and materials used and to guarantee maintenance of the efficiency of the Italian network infrastructure. As such, it is certainly a corporate subject heavily damaged by the growth of the theft of copper cables and other materials that are essential for the functioning of the railways lines existing on the national territory.

Trenitalia on the other hand, is the main company that manages the rail transport of passengers and goods. It also suffers damage caused by the theft of copper and ferrous metals perpetrated on the railway network as these thefts generally determine train cancellations and delays, thus compromising income and profit.

The theft of metal from railway infrastructures represents the main component of the phenomenon in Italy due to the large quantity and excellent quality of the material used on the network and the relevant difficulty in protecting it sufficiently. In fact, the Italian railway network covers over 16,000 kilometres, a figure that means it is not objectively feasible to implement a strategy to combat theft based on the defence of vulnerable points.

Analysis of the statistics concerning the thefts sustained by the Italian railways highlight a series of critical areas in correspondence to the main junctions in the network, large cities, construction sites of the high-speed

railway line and some geographical areas, like Puglia. It also confirms what has been so far stated with regard to the link between thefts and commodity prices.

Quantitative figures regarding the incidence of the phenomenon make it possible to identify a significant increase in this type of crime in the period between 2009, when 349 criminal episodes were registered, and 2010 when these episodes rose to 1,029. This triplication also has repercussion on other figures; for example, the weight of copper stolen rose from 126,000 to 430,000 kilograms and the estimate of economic damage caused from 812,000 euro to 2.77 million euro.

In 2010 **WAITING FOR UPDATED DATA FROM RAILWAYS** alone, R.F.I. registered over **one thousand copper thefts** on its railway network, which led to the closure of entire stretches of railway line, with problems for the circulation and security of trains.

In the long term the figure rose from 500 thefts registered along the railway network in 2005, to approximately 1,330 thefts in 2010; indeed, the number quadrupled in 2010 compared to the previous year.

Each year the state railways suffer an average damage of more than 3 million euro, but in the last two years alone, “direct damage” seems to amount to 10 million euro. At peak commuting times, up to 90 trains have been “blocked”, as highlighted by the Director of Railway Security, Franco Fiumara, causing considerable pressure on the rail transport system and the impelling need to make the stretches of railway hit operational again. There are about 16,500 kilometres of railway lines to monitor due to this

phenomenon that is perhaps still underestimated and deserving of more in-depth study.

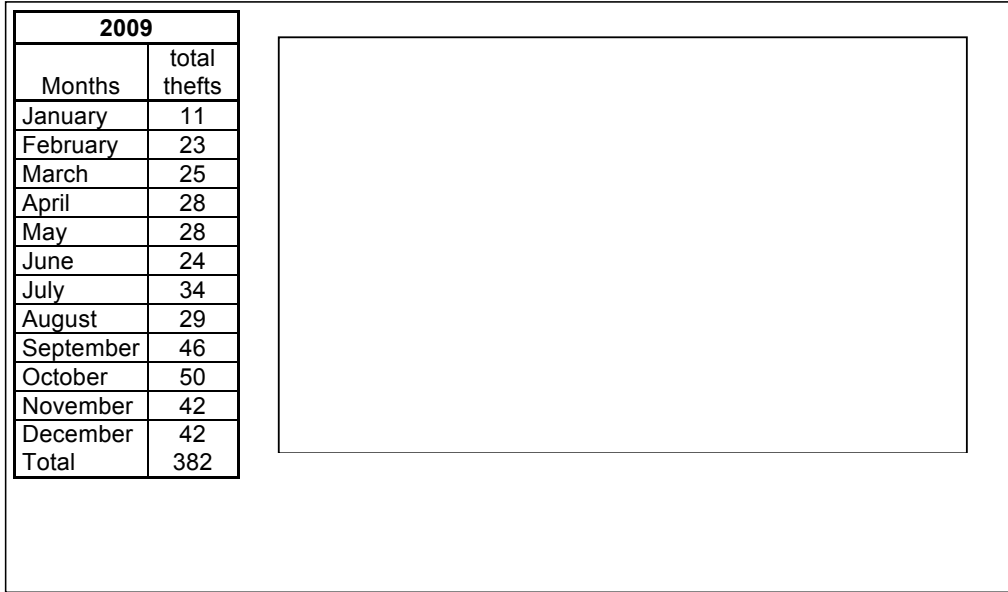
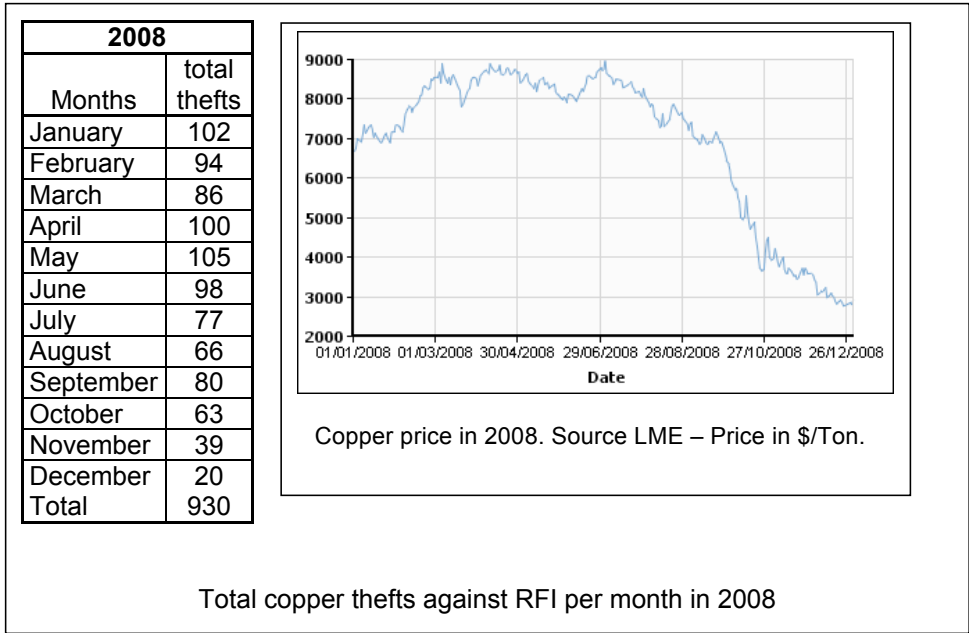
Total copper thefts from warehouses

<b>2008</b>	<b>125</b>
<b>2009</b>	<b>33</b>
<b>2010</b>	<b>113</b>

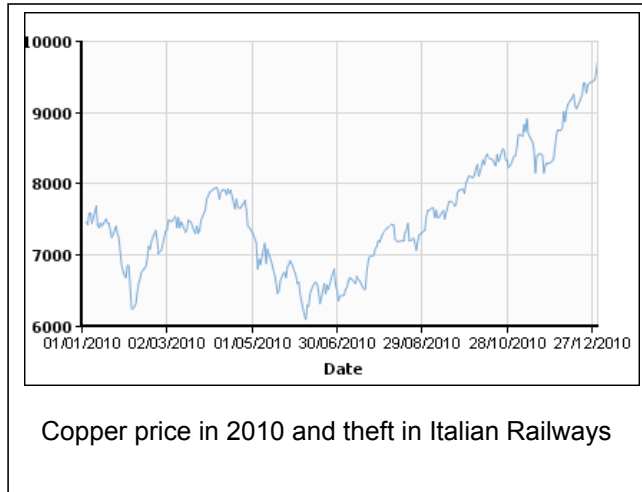
Total copper thefts on the lines

<b>2008</b>	<b>805</b>
<b>2009</b>	<b>349</b>
<b>2010</b>	<b>1,226</b>

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2010	
months	total thefts
January	67
February	122
March	140
April	122
May	116
June	105
July	136
August	84
September	120
October	131
November	102
December	94
Total	1339



As the same sources close to Polfer and the company that runs the rail network specify, the theft of cables does not determine real security problems for transport services thanks to the presence of systems that slow down trains when the emergency occurs and if it should prove necessary, stop them in transit. However, this causes poor service.

In 2009, a total of 1,394 trains were affected by the theft of metal, whilst in 2010 this figure rose to 2,086. Meanwhile, the hours of delay accumulated increased from 464 to 616, with further repercussions on the economic activities of travellers that are not immediately quantifiable<sup>50</sup>.

The increase in thefts and the damage caused is alternatively explained by the surge in the price of copper registered during 2010, following the earthquake in Chile, an external shock that caused preoccupation on the market resulting from the fears of a standstill in local copper mines and also a less intensive activity to combat these crimes by Polfer, after the successes recorded the previous year. The pressure on the rail network and its sites was nevertheless constant during the period

<sup>50</sup> Figures diffused in December 2010 during a conference dedicated by Icsa to the question of the protection of critical infrastructure. Cf. Ansa, 7 December 2010.

monitored and given the socio-economic importance of the infrastructure; the agencies undertake to bring the most extraordinary events to public attention with a certain frequency.

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The year 2011 did not open with encouraging news and it is foreseeable that the continuing trend in the increase of main commodities, including all metals, will keep the frequency of this type of crime at significantly high levels.

Electricity cables were stolen from the railway station of Rome Prenestina as early as 10 January, resulting in significant delays to rail traffic, whilst on 12 January; the TAV high-speed rail network was subjected to a multiple attack in Rome, the Naples junction and Puglia. Services on both the Florence-Rome-Naples-Bari axis and the southern Adriatic stretch, suspended between San Severo and Rignano Garganico, were seriously disrupted<sup>51</sup>.

More railway cables were stolen on 13 January near Naples, on 19 January Italian criminals were arrested near Civitavecchia and more cables were stolen on 25 January, on the Naples-Caserta line, causing further delays to traffic.

Stemming the phenomenon seems particularly difficult given the size of the infrastructure and the impossibility to guarantee effective defence of all its potential vulnerable points, even though Polfer and the Corporate Protection Service of the FS Group have recorded considerable success in combating this type of crime.

In fact, many criminals are arrested by the police forces, but their rapid release - they are often out after just two or three days - seems to invalidate efforts. This, at least, is the sensation operators in the sector have, such as Franco Fiumara who expressed his concerns in an interview with the *Corriere della Sera* on 3 October 2010.<sup>52</sup>

<sup>51</sup> TmNews, 12 January 2011.

<sup>52</sup> Gianvito Lavinia, <<L'oro rosso finisce in India e in Cina>>. Franco Fiumara: <<il rame segue il mercato. Ora il prezzo sta salendo: ogni volta che accade aumentano anche i furti. Lo rivendono a circa tre euro al chilo>>, *Il Corriere della Sera*, 3 October 2010.



*ENEL S.p.A. and Terna*

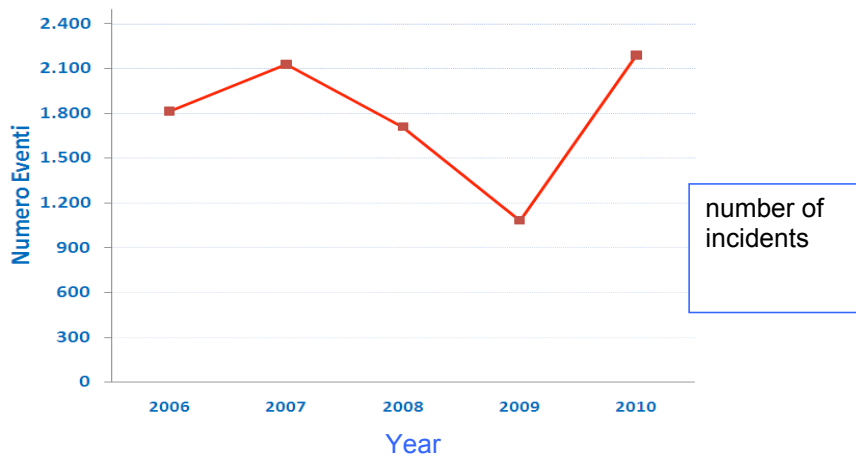
Enel, on the other hand, is the largest national electricity provider with an installed capacity of about 40,400 MW, a production of 84TWh and almost 30 million customers, the result of a measure that led to nationalisation of the sector in the 1970s. Terna Group is the main owner of the National Electricity Transmission Network with over 62,000 kilometres of high-voltage lines on the entire Italian territory and is responsible for transmitting and supplying energy in Italy.

Enel Spa suffers relevant theft of copper conductor wires in several points of its transmission lines including low and medium voltage lines. The economic impact can be estimated extremely relevant, especially in some areas of the country, both in terms of **direct damage** and the cost of restoring services. The company estimates the direct values of these crime in the figures reported below, figures that however don't take into consideration the indirect damage deriving from disruption to services or other collateral damages.

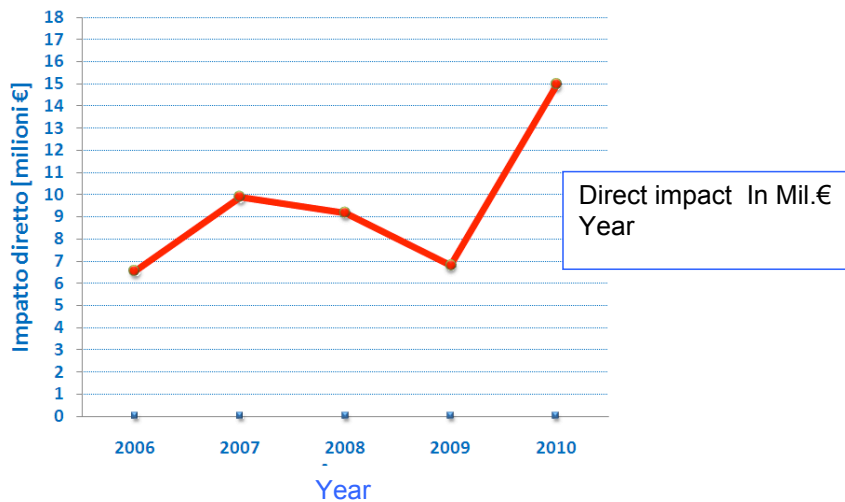
The most heavily affected areas were **Sicily** and **Puglia** where 88% of total direct damage occurs. This can be partly explained with the territorial configuration of these regions and the extension of rural scarcely inhabited areas. But such high figures cannot be explained only with the orography of these regions but also with the presence of well organised criminal bands, demonstrated by the fact that in very short time they are able to steal significant quantities of copper that requires important logistic as well as some technical know-how. In the past also ENEL deposit of copper – scattered through the whole territory in order to easily provide spare material to repair broken lines after theft – have been targeted by criminal bands but recently this phenomena has been significantly reduced by concentrating deposits only in few spots highly protected.

Therefore, nowadays, direct damage **mainly** derives from the **theft of conductor wires from operational electricity lines** (92% of total direct damage coming from). The rest concerns the theft of copper from industrial and civilian sites.

The trend of thefts against ENEL electric network in the last years is in line with the national trend of temporal diffusion of the phenomenon and follows the international price fluctuation and it can be seen in the following graphic.



Naturally the variation of the economic impact for the company strictly follows the trend of the number of incidents even though the value of the direct impact doesn't increase or decrease proportionally. The direct economic damage to the company in 2006 - for example - was minor than the reported damaged suffered in 2009 even if the number of thefts in 2006 were significantly higher than three years later (when they almost halved).



This is probably connected to the fact that when the price of copper is reducing there is a reduction of the small value attacks and an increase of the attacks on higher value targets. The result is that even when the price reduces, the abundance of the material and the extension of electric lines in isolated territories gives to criminal gangs the advantage of selecting targets whose value can compensate the reduction in price.

As far as the territorial distribution of the criminal attacks, as it is shown in the next table, it is possible to say that only very few regions in the country don't experience this phenomena. The regions mostly affected seem to be those in the South of Italy with the remarkable data of Sicily and Puglia that together account for more than 90% of the direct economic damage to the company. The impressiveness of the concentration of theft of electric wires in these two regions can be explained probably with a variety of reasons; but it cannot be underestimated the fact that in both these region there is a presence of professional criminal organisation that could facilitate the creation of a structured and organised chain linking the band of copper thieves to the organised crime to the recycling industry

Diffusion of the phenomenon per region in terms of the number of incidents and costs in 2010: **WAITING FOR DATA OF 2012**

Region	No. of incidents	Impact in €
Sicily	905	€ 7,973,000.00
Puglia	1,026	€ 5,807,000.00
Calabria	27	€ 111,780.00
Sardinia	25	€ 79,817.00
Molise	23	€ 57,650.00
Emilia Romagna	18	€ 23,855.00
Basilicata	93	€ 527,000.00
Lombardy	14	€ 128,550.00
Campania	12	€ 25,090.00
Lazio	10	€ 36.630,00
Toscana	7	€ 6,740.00
Marche	6	€ 7,150.00
Piedmont	6	€ 900.00
Abruzzo	5	€ 9,450.00
Veneto	4	€ 97,382.00
Liguria	4	€ 4,750.00
Friuli Venezia Giulia	3	€ 45,046.00
Umbria	1	€ 850.00
Trentino AA	-	-
Val d'Aosta	-	-
Italy	2,189	€ 14,942,640.00

lillo lello 2/20/13 9:38 AM

Comment [5]: AGGIORNARE DATI 2011

Basically, the national system boasts a dominant producer and distributor that combine, in various ways, to guarantee the supply of electricity to final customers; in other words, Italian companies and citizens. It is for this reason that, depending on the part of the electricity network affected by the theft of cables and electrical material, either one or the other of the two companies, if not indeed both, are damaged.

It is not uncommon that, during attempts to steal from the national electricity network, ends with the death by electrocution of the perpetrators of the crime, as happened for example on 29 January 2001 when an Italian thief died and another was injured attempting to remove cables from an electricity substation in Giarre in the Province of Catania and also on 10 February when another Italian citizen was electrocuted in the Province of Como attempting to steal electricity cables from an Enel substation. Exactly a month later, on 9 March, the same fate awaited a Romanian citizen intent on perpetrating a theft from an electricity substation in the Turin area. On 13 March, an incident perpetrated by Italian thieves was registered on the electricity lines in the Ragusa area, without causing any victims. Two days later, an attempt to steal electricity cables in the Trapani area caused the death of another Italian.

On 1 April, a band of Italians targeted street lighting on the provincial road in the Foggia area, stealing 300 kilograms of copper cable, whilst on 22 April a crime was committed in an Enel warehouse in Lecce, from which a kilometre of cable was stolen, was made public. The same day, a gang of Italians and Romanians stole some disused, Enel-owned cables from the Pescara area. The event is emblematic of how the problem is handled in Italy; the press agencies informed the public that those responsible had been arrested and summarily brought to trial, but immediately freed again. On 10 May an Enel warehouse in Rome was targeted by Italian criminals from where 18 tons of copper disappeared, only to be recovered two days later. On 12 May other cables belonging to the same company were stolen

by Italians in the Palermo area and six days later, on 18 May, Enel suffered another theft of 150 metres of copper cable and the perpetrators were arrested by the police forces of Termini Imerese, in Sicily.

On 21 May representatives of Enel's External Relations and Distribution Department visited the Prefecture of Palermo in order to raise awareness amongst public security authorities on the consequences of copper cable thefts from the company's plants in the province<sup>53</sup>. On 31 May an attempt to steal cables from an Enel high-voltage substation caused the death by electrocution of a Romanian in Ravenna.

It is worth underlining that not only Enel and Terna are being damaged but how the phenomenon also involves other companies operating in the electricity sector, such as Dolomiti Energia in Trentino, where thieves struck on 18 June 2010.

On 22 May 1,800 metres of Enel network copper conductor cables disappeared from the countryside near Lecce and three days later, another 630 metres of cable were stolen from the same area. On 29 June, a little further north in the Foggia area, the theft of 1.2 kilometres of electricity cables, weighing a total of 336 kilograms, taken from Enel pylons in the Gargano area was discovered<sup>54</sup>.

In July, the press agencies focused public attention on a couple of episodes that led, to the arrest of some Italians and Moroccans respectively considered responsible for thefts perpetrated against an electricity power station near Pescara on 6 July and the public lighting network in the Bari area on 21 July<sup>55</sup>.

Between 3 and 4 August, a gang of Romanian thieves attacked high-voltage lines in the Foggia area, stealing two kilometres of cable and determining a five-hour interruption in the electricity supply. The members of the gang were discovered and arrested by the police<sup>56</sup>. On 13 August elements of Enel street lighting systems were stolen in Potenza and during

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<sup>53</sup> AGI, 21 May 2010.

<sup>54</sup> AGI, 29 June 2010.

<sup>55</sup> Itaipress, 21 July 2010

<sup>56</sup> AGI, 4 August 2010.

the same period, high-tension cables in the Bari area were once again targeted, as the seizure of an abandoned van full of stolen property by the Finance Police confirmed.

In September, press agencies signalled another wave of crime. On 2 September an Enel warehouse was targeted by unknown criminals in Teramo, on 6 September it was the turn of a plant in the Province of Reggio Calabria, damage to which caused interruption to the power supply in the area served, on 8 September thieves hit an electricity power station causing further disruption to the supply of energy in the area and on 28 September thieves chose another Enel power station in Rignano Garganico in the Province of Foggia with the same result - the power supply was interrupted. This time however, the perpetrators were identified and stopped. They were Romanians, as were those who the following 7 October targeted Enel plants in the Province of Matera. On this occasion, a work uniform given to employees of the electricity company was recovered along with the stolen property.

On 29 October, Italian criminals were stopped and accused of having damaged electricity pylons in Taranto with the aim of stealing cables containing copper and on 25 November, a kilometre of Enel cable was stolen in the Province of Foggia by a mixed gang of Romanian and Albanian criminals<sup>57</sup>. On 1 December, the police stopped four Romanians in Pomezia in the Province of Rome after they had just stolen 240 kilometres of copper cable from local Enel lines. On 7 December the press agencies released the news of another theft of Enel cables by Romanians in the Province of Siracusa, whilst on 22 December a similar event in Castellana Sicula led to the theft of 720 metres of copper cable, corresponding to over 500 kilograms of metal with a value of approximately 9,300 euro.

The trend appears to be continuing this year too; in fact, on 2 January a gang of Romanians stole 600 kilograms of cables from an electricity

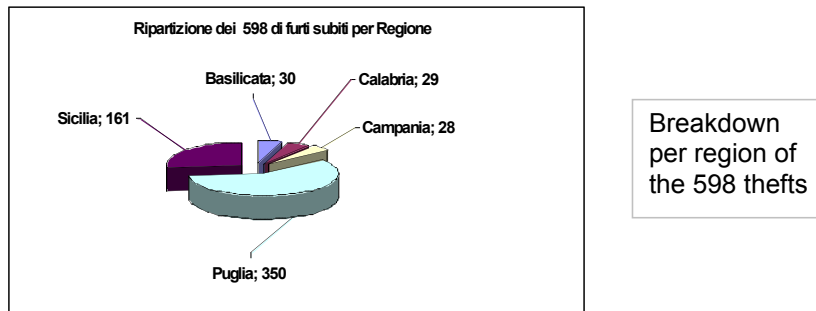
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<sup>57</sup> AGI, 25 November 2010.

substation in Bari<sup>58</sup>. Two weeks later, on 15 January, another 500 kilograms of Enel cable, stolen by unknown criminals in the Palermo area, were recovered by the police and on 19 January a gang of Italians stole other cables in the Bari area. The same day, press agencies reported the theft of Terna electricity cables in the Bari area that had occurred the previous evening, perpetrated by members of the Romanian crime world.

## TELECOM

Companies operating in the telephone sector - of which Telecom, the company that inherited the majority of the old national telephone service network is merely the largest actor - are also heavily affected by the phenomenon of metal theft, given the extent of the presence of copper cables in the lines. The transition to fibre optic cables should however, notably alleviate the damage caused to companies and the public in the medium term. The breakdown per region of the 598 thefts perpetrated in 2009 in the South of Italy, the area most targeted by criminals, shows that Puglia – like in the case of Enel – is the region mostly affected by the phenomena accounting for more than half of the thefts occurred in the whole South of Italy.

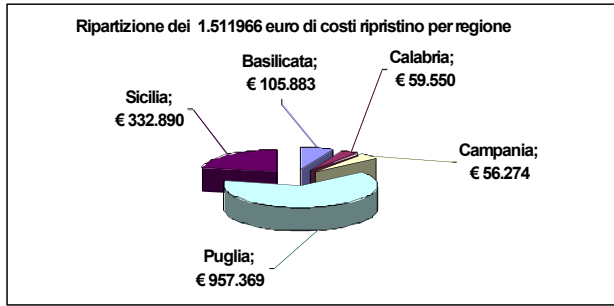


In 2009 the direct cost of repairing the disrupted services in the South of Italy reached € 1,511,966 with 322.405 km of stolen cables. Two thirds of this cost occurred for the reparation of the telephone lines in the region of Puglia while

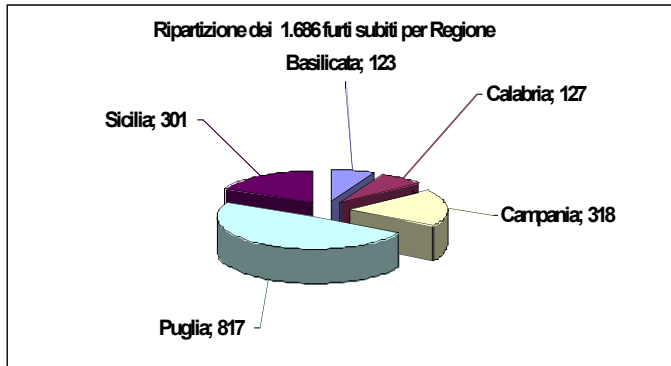
<sup>58</sup> AdnKronos, 2 January 2011.



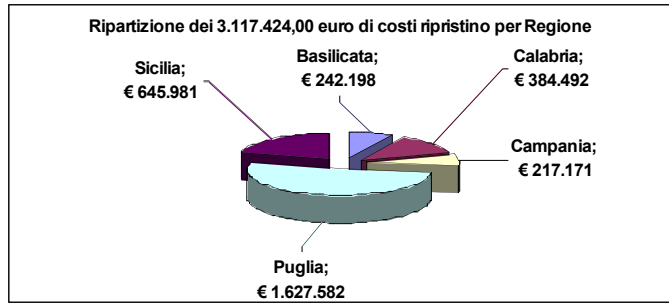
for Sicily, the second region for intensity of the phenomena, the reparation costs reached 332.000 euro.



In 2010 the situation in the South of Italy worsened considerably when only in Puglia - the region most hit by the phenomena – the number of theft was higher than the value for the whole South in 2009, while the total number of attacks reached the level of 1,686, almost three times higher than in 2009.



Damage suffered in 2010 in the South of Italy reached € 3,117,424 for the reparation of 720.296 km length of cable stolen:



On 12 March, a theft of Telecom cables perpetrated in the Catania area was reported as it cut off a call centre. In May, Puglia emerged as a particularly critical area for companies managing telephone lines and services. In fact, on 17 May thefts perpetrated by Italians on aerial telephone lines determined the temporary disruption to services to subscribers in the Brindisi area and the same happened the following 30 May in the Foggia area after the theft of telephone cables by unknown perpetrators. These are simply the most noteworthy episodes as disruptions to local services are signalled by numerous private subscribers that sometimes even report the news through social media tools.

Thefts and disruptions to services also gained space in press agency releases in August; on 7 August, for example, news was given of the theft of telephone cables in the Salerno area that would determine disruption to services in the Paestum area would last a week.<sup>32</sup> Ten days later, on 17 August, the theft of 600 metres of aerial and underground telephone cables by Calabria's criminal underworld in the Province of Crotona, led to the isolation of the local Telecom network. Telephone cables were also stolen by Italian thieves, who were promptly identified, in Messina as the press agency releases dated 30 August confirm.<sup>33</sup>

On 31 August nine Romanians were arrested in Gravina di Puglia accused of having stolen 1,500 metres of copper cable belonging to

Telecom in the countryside of the Murgia area<sup>34</sup> and in September, the theft of aluminium material, stolen from phone boxes in Rome, was also reported. In November, agencies reported a surge in crimes against Telecom infrastructures. Thefts of telephone cables were in fact, registered on 16 November in Taranto and on 22 November near Bari; in both circumstances Italian criminals were caught red-handed. On 22 November, the police also stopped two Romanians and recovered a ton of Telecom cables stolen from company premises in Picciola and Pontecagnano Faiano, whose value was estimated at about 10,000 euro.

In some cases, it is users who report the seriousness of the phenomenon and the economic repercussions on the business world. This is the case, for example, with entrepreneurs in Adrano, in the Catania area, who wrote a letter of complaint against Telecom to the local press in December accusing the company of being guilty of not restoring services disrupted by thefts with the necessary promptness.<sup>35</sup>

The involvement of groups of nomads with regard to this particular type of criminal activity emerged with a certain clarity on 26 January 2011 when a search in Rome led to the discovery in a Roma camp of three tons of copper, the proceeds of the theft of a huge quantity of Telecom cables. On 27 January, the theft of other Telecom cables perpetrated by a gang of Italians, promptly identified by the police forces, led to the temporary disruption to telephone services to about 200 subscribers in the district of Fontane Bianche di Paternò, in the Province of Catania.<sup>36</sup> Finally, on 30 January another attack was reported in the area near Crotone and on 3

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<sup>32</sup> Ansa, 7 August 2010.

<sup>33</sup> AdnKronos, 30 August 2010.

<sup>34</sup> A fact taken up with a certain interest by the local press too, given it focuses on micro-criminality much more than the national press.

<sup>35</sup> Salvo Sidoti, *Adrano. Nuovo furto in contrada Contrasto. Aziende ancora isolate*, in *La Sicilia*, 20 December 2010. The article recalls numerous local episodes of theft and disruptions to telephone services and recalls how Telecom had tried to defend its position by highlighting the extent of the emergency faced in the area near Etna, with 38 thefts amounting to a total of 45 kilometres of copper cables stolen from poles.

<sup>36</sup> *Trafugano i cavi della Telecom e isolano 200 persone, due arresti a Paternò*, *Il Corriere del Mezzogiorno*, online edition dated 27 January 2011. The thieves, two young Italians, one of whom a first offender, had stolen 300 metres of copper cable from aerial lines.

February, nomads were caught stealing copper and steel cables in the Oristano area.<sup>37</sup>

It is interesting to note that it is not only the territorial units of the Carabinieri Police Forces and the State Police that make a fundamental contribution to the activity of combating the phenomenon, but also the Railway Police - Polfer. In fact, the latter often catch the perpetrators of attacks to Telecom lines whilst carrying out their own activities to prevent and combat thefts against railway property.

#### *Preliminary conclusions*

The phenomenon of metal theft in general and copper theft in particular now seems to be a structural feature of the Italian criminal scenario. Hopes triggered by the fall in this type of crime in 2009 soon evaporated when thefts began to rise again, in parallel with an increase in the price of commodities.

It is this macro-economic variable that decisively influences the trend of the phenomenon, which has in any case developed into an extremely complex chain that now involves thousands of Italian and overseas criminals: in fact, according to the estimates of some operators in Rome there are now at least 200 - 300 people who dedicate their time *permanently* to this criminal activity.

Thefts are perpetrated on the entire national territory and involve a vast range of property and goods, some of which were never the object of such a large number of crimes before the middle of the last decade. As a result, awareness of this reality, which is already high in other European countries, is increasing in Italy too. Press agencies mirror the situation

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<sup>37</sup> Marrubiu, *quattro nomadi arrestati in flagranza di reato*, Sardegna del Nord, online newspaper, 3 February 2011.

perfectly, despite only reporting the episodes with the greatest social impact.

In this context, what assumes particular importance are thefts against public utilities, managed by leading companies such as R.F.I. - Trenitalia of the State Railway Group, Enel and Terna and Telecom Italia that own infrastructural networks that extend all over the national territory and are basically impossible to defend, even though the same companies having tried to set up internal protection services that can, if necessary, also collaborate with national and local police forces.

This highlights the need for an integrated approach that at least targets curbing the most damaging crimes that are part of this phenomenon, such as disruption to or malfunctioning of essential public services that represent a cost for society as a whole.

As it is impossible to set up truly reliable protection for the largest infrastructural networks, the activity to prevent and combat thefts has recently moved towards focusing on the intermediate parts of the criminal chain, concentrating monitoring on certain areas of presumed illegality such as Romany camps and above all, scrap metal dealers or *wreckers* whom a growing part of the criminal labour force contact in order to convert the fruits of their activity into cash.

Some investigative activity is currently moving towards a higher level - medium and large-scale foundries - suspected of using part of the illegally obtained copper to keep their ovens working at full capacity, recycling the copper by re-importing metal purchased illegally from overseas subsidiary companies and finally, mixing it with metal purchased through normal market mechanisms.

The transnational dimension of the phenomenon has already determined forms of cross-border cooperation that it is considered

opportune to encourage so as to combat this particular type of crime more effectively in all its phases. Especially as there is an objective European interest in doing so, given that European Union member states are heavily dependent on recycling.

# The illegal path of metal theft

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*The theft of metals*  
*Transportation to authorised dealers*  
*Recycling, smelting and export*  
*The creation of a metal crime risk index*

### *The theft of metals*

In the legal – illegal metal theft chain, one of the key actors that lie in-between the two worlds is represented the world of the itinerant scrap collection community, who are still part of the legal metal recycling industry but they also represent the point of contact (receivers or commissioners) for the illegal community of small general thieves, who performs the metal theft only as a pure criminal activity, without being involved in the metal recycling chain. This borderline world of “simplified scrap collectors” companies, that operates under very few – if any – regulations, had been boosted by the liberalisation process that has affected the sector, in the last decade, and especially the amendments to the some environmental laws introduced in Italy in 2006 in compliance with a sentence of the European Court of Justice 2006<sup>38</sup> that condemned Italy for not having simplified its authorising procedures for waste collection. These amendments permitted the setting up of a new type of company which we have already called “borderline”, favoured by the introduction of “simplified” authorising procedures or by the application of the exemption from authorisation obligations, the keeping of loading and unloading registers and the issuing of a waste transport form for companies carrying out activities relating to the collection and sale of scrap in itinerant form.

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<sup>38</sup> The amendments to the Italian law originate from the sentence dated 7 October 2004 (case no. C - 103/02) of the European Court of Justice, whereby Italy was found guilty of not having legislated in the decree dated 5 February 1998 on the identification of non-hazardous waste subject to simplified recovery procedures, which can be the subject of recovery with waiver of authorisation. With the adoption of Ministerial Decree no. 186 dated 5 April 2006 the Italian government legislated on the matter.

<sup>39</sup> In 2006, the 15-year agreement between the Chinese company Minmetal and the Chilean company Codelco marked the start of a privileged relationship between the two countries on the Pacific and triggered the race for the control of strategic copper reserves. Consequently, the price rose to 6,500 \$ ton. Between 2007 and 2008, this reached 8,864 \$ ton and then, due to the international crisis, prices slumped.



The introduction of such concessions (starting in 2006) coincided with the soaring price of metals, especially copper, which touched an all-time record in that period<sup>39</sup>. It was at that time that episodes of metal theft began to multiply and there can be no doubt that these concessions have meanwhile favoured the activity of unscrupulous persons already involved in the sector.

Without the intention of criminalising the whole category of “simplified scrap collectors” it appears to be a fact that the proliferation of these companies has even further extended that grey area which exists between those with a vocation for scrap collection and recycling in a professional way and metal thieves, creating additional problems also for the monitoring and inspective activities of the police forces. Such a simplified law, despite its environmental friendly nature (that is removing polluting wastes from the environment) and being centred on facilitating and increasing waste recycling through liberalisation, has in fact generated an extensive presence and circulation on the national territory of business enterprises without real operating organisations, not always respectful of applicable laws. When this business subject already had ties with criminal environments, they found it easy to make a profession out of stealing and recycling metals.

Such enterprises nearly always take the form of sole-proprietor companies, many of which registered in the name of members of the Roma ethnic minority and often involved in the crime of receiving stolen goods and even of theft, above all of copper. This became clear from the operation called “CUPRUM NOVUM” where, out of 20 foreign suspects, four were Romanian nationals and sixteen belonged to the Roma ethnic minority; of the latter, eight were owners of sole-proprietor companies involved in recycling and selling scrap metal and did not file any income tax returns.

The processing of statistical data relating to those enterprises that carry on this type of activity has shown that about 60% of enterprises has the legal

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status of sole-proprietor companies, with maximum percentage peaks with respect to the national volume (and with respect to other forms of enterprise present in the region in those worst hit by copper thefts) to the detriment of ENEL, TELECOM and R.F.I.<sup>41</sup> infrastructures:

- Sicily, where about 19% of Italian enterprises are concentrated and where, out of a total of 1,013 companies dealing only in scrap, 875 are sole-proprietor companies;
- Campania (9.4% at national level) with 440 sole-proprietor companies out of 853 regional companies operating in the sector;
- Puglia (7.9% at national level) with 368 sole-proprietor companies out of 548 regional companies;
- Calabria (2.5% at national level) and 119 sole-proprietor companies out of 185 regional companies.

The figures relating to the distribution of the companies operating in the scrap industry is also symptomatic. These are classified according to their yearly turnover<sup>42</sup> which shows how, at national level, in the above mentioned regions, there is a greater concentration of scrap companies with turnovers of between 0 - 100,000 euro (indicated as low bracket<sup>43 44</sup>).

At this level, investigations have shown that the stolen metal, above all so-called “railway” material was purchased with a discount quantified at around 35% from “non-entrepreneur” private individuals operating completely outside the law.

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<sup>41</sup> Statistical data provided by ENEL, TELECOM and R.F.I. relating to 2010.

<sup>42</sup> I.e. yearly turnover.

<sup>43</sup> Classified from 0 to 100,000 euro turnover.

<sup>44</sup> See statistics on relevant printout.

### *Transportation to authorised dealers*

The term storage centres and/or centres for the treatment of ferrous and non-ferrous scrap metal means those centres which collect, store and sort scrap non-ferrous scrap in order to sell it, as long as not contaminated with toxic and/or hazardous substances, using systems authorised for carrying out such business activities.

The phenomenon of illegality in the scrap metal industry, which regards the collection (receiving or recycling) of stolen metal, presupposes the necessary involvement in the illegal chain of companies actually operating and authorised, which thus make legal what was previously illegal.

As industry operators have clearly stated, in the 1970-80-90s, the collusion between foundries, used to purchase and partially resell material with “tax evasion” and scrap, on the basis of mere verbal agreements, was a widespread occurrence, especially in some valleys of the Brescia area, first and foremost the Val Trompia, where there is a concentration of companies operating in the industry.

Above all, during the course of the last decade, the situation has changed somewhat, both because of the greater number of fiscal controls made, and because of a sort of natural selection of the market, which has in fact rewarded above all those companies which have managed to update their production systems to cater for the new and stricter rules of the global market. It must also be said that the possibility of easily setting up and using offshore companies<sup>45</sup> has definitely made it simpler for some entrepreneurs first of all to stash their illegal gains away in safe havens and use the same channels to manage the money flows relating to the rather dubious trafficking

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<sup>45</sup> A company registered according to the laws of a foreign country, but which runs its business outside the state or the jurisdiction in which it is registered.

of scrap between Italy and third countries, of which we shall speak in the next paragraph.

In 2011 a major operation by the Finance Police of Brescia<sup>46</sup> uncovered a big tax fraud amounting to 180 million euro in the scrap metal trading sector committed by means of the issuing and accounting of invoices for non-existing operations by companies located in **Lombardia, Sicily and Campania**, which, with false invoices “covered from an accountancy viewpoint” large “illegal” sales of scrap metal<sup>47</sup>.

We have focused on “tax fraud” to underline the continuing presence of pockets of illegality in the analysed sector which represent a high level of risk in the management of scrap and among these, very likely, also that of illegal provenance. Without forgetting that the same sector is also distinguished by the presence of persons associated with or operate in the illegal collection and disposal of wastes<sup>48</sup>.

The police operations analysed showed that medium-large companies were also involved with criminal organisations, most of which set up as joint-stock companies representing (limited-liability and joint-stock companies) over 33%<sup>49</sup> of the enterprises operating in this sector on the national level.

In terms of size, most of the companies involved fall within:

- an average bracket<sup>50</sup> (in which companies achieving turnovers from 1 to 10 million euro have been included) and at national level represent about 22% of the companies operating only in the scrap metal recycling and trading sector;

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<sup>46</sup> Operation PULCINELLA.

<sup>47</sup> Evading direct and indirect taxes.

<sup>48</sup> Scrap metal is classified as “waste”.

<sup>49</sup> See printout on the statistical data of companies operating in the scrap sector.

<sup>50</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

- followed (in terms of number) by those which achieve a turnover classified in the medium-low bracket (between 100 thousand and 1 million euro) (35% on a national level);
- finally those which achieve turnovers such as to classify them in a medium-high bracket<sup>51</sup>, comprising firms which achieve a turnover of between 10 and 100 million euro and which at national level represent approx. 6%<sup>52</sup> of the companies operating in the scrap metal recycling and trading sector.

These same investigations show that the stolen metal, above all so-called “railway” metal, was sold to this type of company with a discount quantifiable at around 25% compared to official LME quotations and without the application of the relevant taxes, applied to sales made by smaller companies such as those belong to Romany citizens engaged in collecting and stealing metals.

Investigations also showed that the received metal materials were often ground up by the above companies to make them unrecognisable in case of inspections.

#### *Recycling, smelting and export*

From a number of major police reports, a network of contacts, negotiations and economic agreements appear between the various protagonists of the business involved in intercepting and recycling stolen copper and sending it to the foundries of northern Italy, especially the Brescia area. In relation to these latter steps, investigations have failed to shed light on any abetment on the part of the recipients of the final product.

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<sup>51</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

<sup>52</sup> See the statistical analysis in this project regarding the distribution of Italian companies that operate in the scrap metal trade and recycling sector.

On the other hand, the frequent involvement of industry operators in tax fraud offences, including persons involved in exports outside the EU, leads to the conclusion that sales transactions with foreign foundries and/or importers are particularly insidious inasmuch as often mediated by “fictitious” companies or performed with the issuing of false tax documents.

The methods used to sell scrap in Italy also help make the industry even more obscure and less straightforward. Unlike what occurs in Europe, where supplies are made prevalently by means of monthly contracts at fixed prices, in Italy, different purchase procedures continue to exist. For the time being, agreements prevail on a weekly basis or in relation to determinate quantities, even though the trend is to achieve a greater continuity as regards supplies, both in terms of quantity and of price, gradually turning towards the use of contracts. This is an evolving process that is hard to manage because of the fragmentation which distinguishes the local scrap market<sup>53</sup>.

The data acquired through the Customs Agency or Corps Contingents operating in the major ports, such as those on the Tyrrhenian Sea (Genoa, La Spezia, Livorno and Naples) or Gioia Tauro, have not shown any seizures of stolen metals being exported towards third countries, even though, as we shall see, the volume of scrap metal traffic towards such countries, first and foremost the People’s Republic of China, is considerable.

The seizures made of copper scrap metal refer only to containers, in this case as well nearly all travelling to China, containing copper pieces (technically “copper waste and off-cuts”), exported in violation of the laws on waste<sup>54</sup>.

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<sup>53</sup> <http://www.steelorbis.it/notizie/interviste/intervista-a-cesare-pasini-presidente-di-nuovo-campsider-531686.htm>

<sup>54</sup> See seizure made in the port of Livorno on 3 March 2010 of a container of copper cables and pieces of power cables travelling to China.

The heads of the Italian companies most affected by thefts (ENEL, TELECOM, R.F.I., etc.), often required by the police to recognize quantities of copper of dubious provenance discovered during the course of inspections, have also stated never having been called upon to identify any materials stolen from them found in port areas.

On 12 July 2010, on the other hand, a case was recorded of Bulgarian citizens found in the port of Bari on board a vessel which was setting sail for Greece (along the Balkan route normally distinguished by various types of illegal traffic) and which was carrying 2.5 tons of stolen copper wire. This latter episode could, in one way, be read as an attempt to export the metal due to the difficulties found in selling the stolen product within the country because of the controls in progress and to the easier marketing through the channels of Eastern European countries. Diversely, it is less reassuring to think that it is tied to a burgeoning demand for this type of material, paid for at high prices by those same countries, a circumstance resulting in an attempt to try exporting the material in a motor vehicle, notwithstanding the risks associated with increasingly more widespread inspections in port areas.

As we shall see in the following paragraph, a risk index exists related to the export of stolen scrap metal, tied to the profile of the scrap metal exporting companies.

*The creation of a metal crime risk index  
for the export of non-ferrous scrap metal outside the EU.*

Before going on to analyse a risk profile for exports, we should briefly like to mention the situation of scrap metal exports tied to the rapid growth of the two Asian giants, China and India.

The importance of metal from scrap, above all copper and top-quality scrap (classified as “HIGH-GRADE”), has become increasingly more decisive because, unlike freshly-mined copper, recycled copper does not require any special processing operations and once smelted can be used again several

times without its essential characteristics being altered<sup>55</sup>. The growing demand for this product on the global market contributes to the worldwide growth of a lucrative illegal market to which not only the copper thieves belong, but also those who defraud the Inland Revenue and get round the stringent laws on waste management.

The processing and analysis of the export data for the purpose of calculating the risk profiles<sup>56</sup> in the current research activity, has been done by taking as reference the type of product described as “refined copper waste and off-cuts” and has never included in product classification “non-refined copper waste and off-cuts (consisting of copper-zinc alloys or other alloys)”.

Consequently, the number and relevant volume of exports determined at national level must be considered lower than the real figure<sup>57</sup>, but more consistent with and functional to the research activity within the scope of which the processing was done. The pursued objective was not to quantify the total flow of exported scrap, easily obtainable from ISTAT surveys<sup>58</sup>, but rather to determine the export trend of products in whose category it is thought the “stolen objects” being analysed in this project might belong. The data were analysed at time and geographic level and also gauged according to the profile of the exporting companies assessed in relation to their involvement in “illegal actions” committed in Italy in the following segments:

- receiving of stolen metals;
- illegal waste trafficking;
- use and issuing of invoices for non-existent operations;

All crimes involve different industry operators.

To give an idea of export volumes, we shall summarise a number of data:

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<sup>55</sup> A copper product lasts between 20 and 30 years, but can be recycled many times.

<sup>56</sup> See attached printout.

<sup>57</sup> Despite the different quantities, the trend in the importing countries is substantially the same.

<sup>58</sup> Generic inasmuch as also comprising non-ferrous metals and relative alloys.



**The first four non-EU countries importing from Italy and relevant percentages of total volume of “refined copper waste and off-cuts” exports in 2005/2010:**

Country of destination	Quantity of goods in kg	Percentage of total export quantities	Statistical value of goods in euro
	Kg	%	euro
CHINA	121861357.00	81.35	166746931.14
Hong Kong	19524451.00	13.03	21469590.00
Taiwan	1967260.00	1.31	6972527.33
PAKISTAN	1948430.00	1.30	989533.16

**The first five non-EU countries importers of “refined copper waste and off-cuts including alloys” from Italy:**

Country of destination	Total in kg
CHINA	310289423
HONG KONG	30279076
INDIA	7622615
TAIWAN	4297464
PAKISTAN	3323015

**Over 93% of transport is by sea in containers. This scrap is exported mainly by operators located in the following Italian Provinces (indicated in sequence in order of importance in terms of total export volumes): Brescia - Milan - Bergamo - Alessandria - Pavia - Naples.<sup>59</sup>**

**Risk Index**

Calculated on exports from Italy to the People’s Republic of China<sup>60</sup> in 2010 relating to products classified as “copper waste and off-cuts” in relation to the involvement of the exporting countries in criminal activities involving the receiving and recycling of stolen metals

<sup>59</sup> See Graph 1.10 on attached printout.

<sup>60</sup> The largest importing country from Italy.

25% approximately equal to the incidence percentage of the number of exports made by companies involved in receiving activities compared to the total volume of export operations from Italy<sup>61</sup>.

Risk index on non-EU exports 2010 of the same product

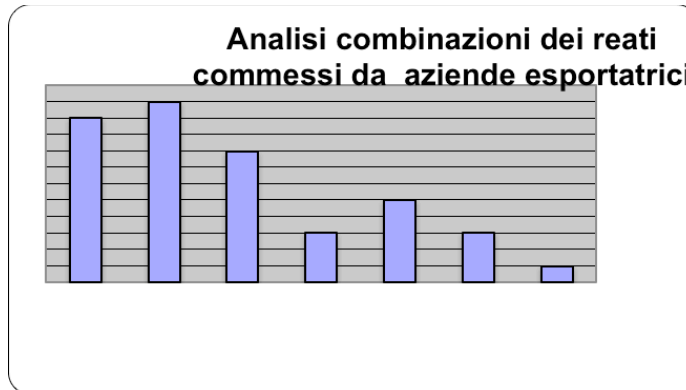
The number of companies exporting towards all the non-EU Countries, involved in crimes concerning the use or issuing of invoices for non-existent operations (invoices for non-existent operations) is even higher, as can easily be seen from reading the graph below, compared to those involved in the receiving of stolen goods and even higher is the number of those involved in illegal waste trafficking.

This is a graphic representation of the data together with the combinations relating to the involvement of exporting companies in cases relating to individual criminal acts and several of these at the same time:

Invoices for n  
Waste

Analysis of crime combinations committed by exporting companies

- 1. Invoices for non-existent operations
- 2. Waste
- 3. Receiving of stolen goods
- 4. Invoices for non-existent operations - receiving of stolen goods
- 5. Invoices for non-existent operations - waste
- 6. Waste-receiving of stolen goods
- 7. Invoices for non-existent operations - waste - receiving of stolen goods



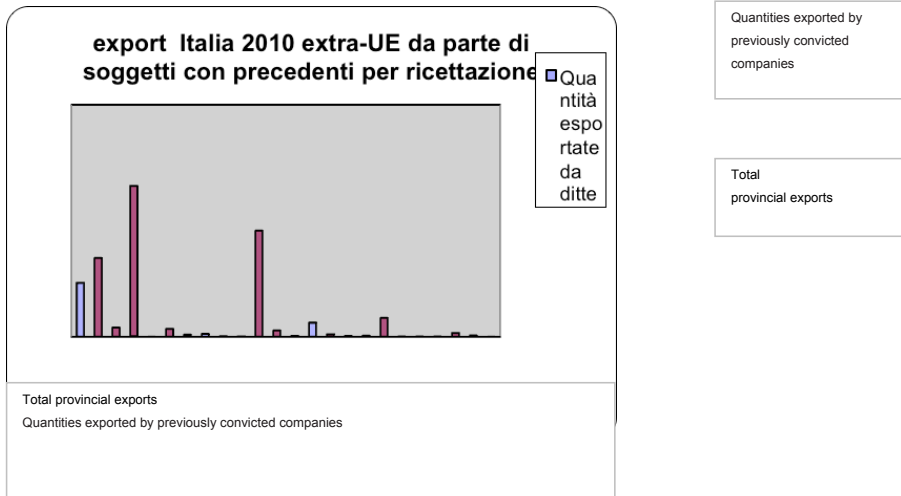
<sup>61</sup> See Printout 1 - export analysis printout.

The combination between the crimes of receiving of stolen goods and invoices for non-existent operations is considered more worthy of attention inasmuch as the invoices for non-existent operations, mainly used to obtain undue tax advantages, can in any case be used for the further purpose of “covering up” the illegal trafficking of metal of illegal origin, thus giving the business transactions an air of legality.

Consequently, it is thought that the heavy involvement of companies in the industry in the issuing of invoices for non-existent operations increases the overall risk index because in all likelihood it is also functional to the “covering up” of stolen-metal trafficking.

The following analysis is further deserving of attention:

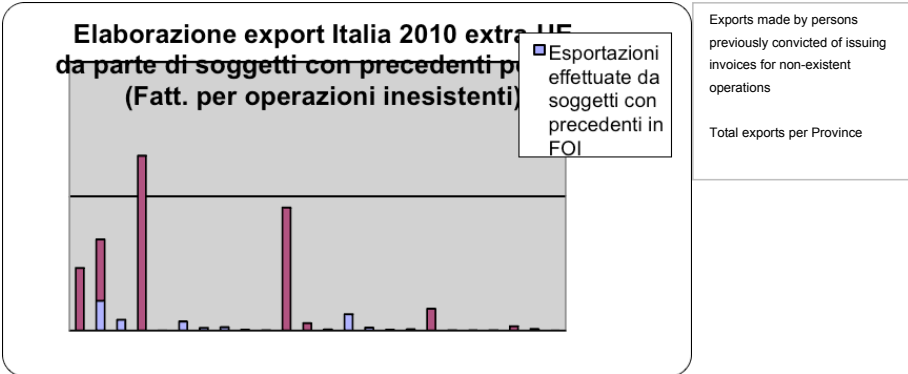
- comparison of the export volumes 2010 achieved by Italy towards non-EU countries by companies already involved in the “receiving of stolen copper products” also in relation to the respective Italian Provinces of departure of the exported products (Graph 2.1 statistical printout attached);



The graphic representation does in fact show that total exports of the product examined in export achieved in the Provinces of Alessandria, Naples and Ferrara (indicated in order of sequence according to export volumes achieved) is fully attributable to operators implicated in the receiving of stolen metal. The same goes, although to a lesser extent in terms of quantities, to the Provinces of Rome, Pesaro-Urbino and Treviso. A minimum part, compared to the total volume of exports, involves the Province of Brescia.

- comparison of the export volumes 2010 achieved by Italy towards non-EU countries by companies already involved in the “issuing/use of invoices for non-existent operations” also in relation to the respective Italian Provinces of departure of the exported products (Graph 2.2 of the statistical printout attached);

**Printout of Italian exports for 2010 to non-EU countries by persons formerly convicted of issuing invoices for non-existent operations.**

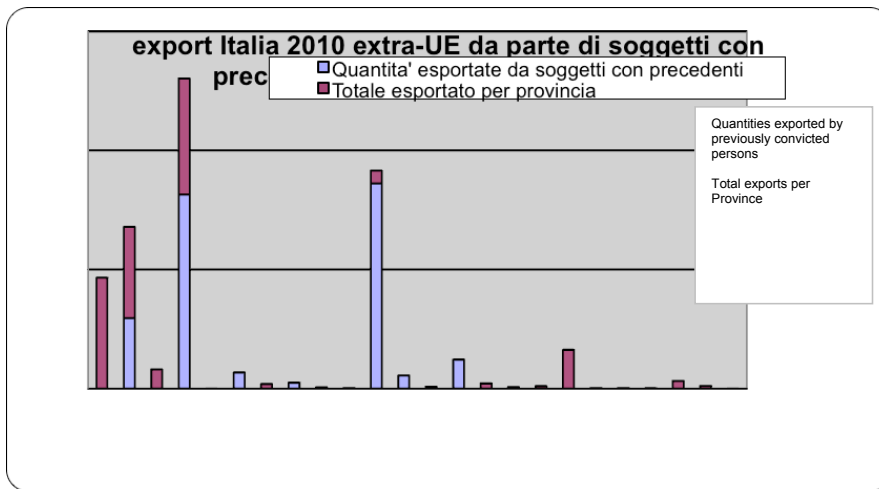


The graphic representation does in fact show that the total exports of the product examined in export, achieved by the Provinces of Naples, Como and Bologna (indicated in order of sequence according to the export volumes

achieved) is fully attributable to operators implicated in crimes involving the issuing of invoices for non-existent operations.

- comparison of the export volumes 2010 achieved by Italy towards non-EU countries by companies already involved in “illegal waste trafficking” also in relation to the respective Italian Provinces of departure of the exported products (Graph 2.3 of the statistical printout attached);

Printout of Italian exports for 2010 to non-EU countries by persons formerly convicted of illegal waste trafficking.



This last graphic representation shows that the total exports of the product examined in export, achieved by the Provinces of Naples and Como (indicated in order of sequence according to the export volumes achieved) is fully attributable to operators implicated in crimes involving illegal waste trafficking, and a consistent part, although not representing the entire export volume, is achieved in the Provinces of Milan, Brescia and Bergamo.

To conclude this last analysis, carried out on a Province basis, we would like to recall that Campania is among the regions most affected by metal thefts, as indicated by the figures provided by ENEL, TELECOM and R.F.I..

# Profiles of criminal organisations and other perpetrators

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*The perpetrators*  
*The targets*  
*Modus operandi*  
*Crimes committed*  
*The role of receivers*

### *The perpetrators*

The criminal profile of the perpetrator of “metal thefts”, meaning not only the mere stealing of the stolen material, but as a crime committed by the entire activity chain related to this phenomenon and the different forms of illegal behaviour associated with it, is distinguished by various aspects, depending on the level in which “the entity” operates and its more or less stringent interconnection with the world of the legal economy, the natural terminal point of the phenomenon as a whole. As we shall see by examining the entire “metal theft” chain, it is necessary to also analyse other strictly related criminal activities, such as the receiving of stolen goods, the recycling of the originally stolen assets, the illegal trafficking of waste and the world of the underground economy that acts as a backdrop to the problem which, over recent years, has been the subject of renewed interest on the part of experts and proposed amendments to the laws to contrast it, with reference to all the economic activities that contribute to the calculation of the GNP of a country, but which are not officially recorded and which comprise both illegal activities in the strictest sense and legal activities carried on in an irregular way.

We can first of all classify on several levels those who commit “metal theft” and related crimes:

- the first level is represented by those who actually steal the metals;
- ↓
- the second or higher level, functional to the first, consists of those who receive/recycle the stolen metals and perhaps export them.



FIRST LEVEL:

Actual metal thieves

These can be roughly split into two categories:

- Organised groups
- Individual perpetrators or non-organised groups

The categories differ in terms of composition, individual profiles, goals and modus operandi.

Organised groups  
(In slang so-called “batterie”):

COMPOSITION OF CRIMINAL GROUPS:

- several persons of Italian nationality, nearly always with a number of Romany or having contacts with the latter. Leadership is nearly always entrusted to one or more Italian national with roots in the area where the gang has its logistic base;
- many members of the group are of Italian nationality, nearly always with previous criminal records involving crimes against private property;
- members of these criminal groups hardly ever also carry on manufacturing or service activities related to the metal sector.

#### GOALS:

- large quantities of metals amounting to several hundred thousand euro in value stolen from:
  - o companies with metal deposits;
  - o vehicles for metal transport;

#### THE PLACES WHERE CRIMES ARE COMMITTED

- above all in the regions of northern Italy in the districts where several companies operating in the metal production and processing sector are located or along the main road haulage routes;

#### MODUS OPERANDI:

The knowledge of the area by group members and their integration in the socio-economic fabric allows the group to acquire important information from the employees of the companies selected to carry out criminal actions, regarding stocked quantities and types of stored or moving raw materials or semi-finished products.



Besides traditional breaking-in means, they use more sophisticated methods to disable the alarm and video-surveillance systems of the victim companies and/or to dissuade guards, or else promise or pay money to the drivers of the vehicles transporting metals in order to steal loads without using threats or violence.



Relations with companies which receive or recycle (in a criminal sense) the stolen material are mediated by companies (so-called “missing traders”<sup>62</sup>)

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<sup>62</sup> Legally established companies, which do not in fact operate but pursue the sole purpose of issuing or receiving fiscal documents that do not correspond to the truth or mediating “only

which recycle in a “documentary way” before presenting and selling such material to purchasers often unaware of its illegal provenance, at prices slightly lower than those of the market, issuing sales invoices which appear to be in order and which legitimate the sale of the product (later we shall see that, when speaking of the subsequent “level”, in the metal sector, borderline persons exist who are also implicated in tax fraud systems which make the sale of metals even more obscure, inasmuch as the price of such material is altered - downwards - by the undue tax advantages achieved by means of these fraudulent systems and therefore make it even more difficult to recognise the legal or illegal provenance of the metal offered on the market); in some cases, the actual directors of said documentary companies are an actual part of the organisation or associated with it.

These categories of organisations also perpetrate metal thefts using atypical<sup>63</sup> procedures with respect to predatory activities in the strictest sense; they use sophisticated mechanisms consisting of stratagems and fraudulent means against companies in the industry with the univocal result of coming into possession of large quantities of metal to be placed on the always flourishing illegal market of this type of material. This was the case monitored as part of the operation “TITANO II”<sup>64</sup>.

Relations with organised crime have never been recorded over the years, or better, said organisations do not appear to be part of the “typical” structures of criminal organisations operating within the country and rooted in specific geographical areas.

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on paper” existing business relations to provide the “*system users*” with unfair tax benefits and/or create a sort of screen for illegal activities.

<sup>63</sup> “Atypical” inasmuch as, though pursuing the same end, these are not traditional criminal methods most often occurring in the sector of illegality and less worrying compared to the latter.

<sup>64</sup> See investigation of PT squad of the Finance Police of Brescia referred to in the paragraph dedicated to “*Success Stories*”.

In this respect, cases of theft have been recorded at national level, involving civil infrastructures and precious metals such as copper, carried out by criminal organisation belonging to the mafia, but the purpose of which was not to profit from the sale of the stolen materials, but rather concerned the payment of bribes to the so-called “guardian’s office”, obliging the contracting companies to hire persons operating in areas tied to the clans who received a sort of monthly salary to ensure the regular continuity of work on the worksites, threatened and slowed-down by the removal of the materials required to build the works.

The situation clearly emerges represented by the evidences of the operation called “Scorpione” directed by the Antimafia District Office of Caltanissetta which struck a blow at the typical mafia consortium activities such as the “Stidda” and “Cosa Nostra” operating in Gela (CL), which operated according to the above system, to the detriment of Gela building companies engaged in major civil building works.

#### THE CRIMES COMMITTED

The major crimes committed by these organisations or persons at their service are:

- Organised crime (those who associate to commit an indeterminate series of thefts, etc.);
- Burglary (inasmuch as they take possession of metals belonging to others, committing the crime using violence, dexterity or fraudulent means);
- Robbery (in the case of thefts from articulated vehicles loaded with metals using violence or threats);
- Recycling of assets (for the carrying out of operations suitable for preventing the identification of the illegal provenance of metals, by issuing false tax documents).

The police operation named “PREMIATA DITTA METALLI PREGIATI” with the related operations “RE MIDA” and “TITANO”, mention of which is made in the chapter relating to the investigative methodologies dedicated to “Success Stories” (with attached case summary for each service operation carried out), explains in detail this category of criminal groups, which often manage to accumulate large sums of money of illegal origin (See infra).

## Individual perpetrators or non-organised groups

### PROFILE

- generally people of the Romany ethnic minority or of Romanian or Italian nationality with previous convictions for minor property thefts and regarding the most recent crimes committed, also those of Bulgarian nationality;
- their groups include, above all as concerns those groups composed by members of the Romany community, individuals who also engage in apparently legitimate activities (with regard to the required registration with the appropriate public authorities<sup>65</sup>) in the sector of collection and trade in scrap metals, who normally carry out their business with their own vehicles, collecting miscellaneous metals from companies or other sources;
- the ranks of these "perpetrators" are also added to by people using or dealing in illegal drugs, who carry out thefts against infrastructures or items present in public spaces (including cemeteries).

### TARGETS:

- railway copper;
- power or telecommunication lines;
- street furniture and similar items;
- unguarded construction sites.

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<sup>65</sup> Italian Revenue Agency, Chambers of Commerce, etc.

PLACES WHERE CRIMES ARE COMMITTED:

- committed indistinctly throughout the national territory, substantially mirroring the trend in the geographical diffusion of the phenomenon as outlined in the specific chapter.

MODUS OPERANDI:

- use of traditional breaking and entering methods and of methods that include "artisan" ones, tried and tested in effective application, for example in cutting power line cables;
- the illegal activity of these perpetrators, given the targets of their actions, also has effects in socio-economic terms on non-entrepreneurial social groups and on population categories that are not always particularly affluent who are harmed by this phenomenon (removal of gates and doors, gutters, drainpipes, industrial machinery to be broken up only for the sale of metal components as scrap, catalytic exhaust silencers, etc.);
- precisely due to the composition of the structure of these groups and the inclusion also of persons engaging in a primary low-level activity of metal recycling, the activities of metal procurement pursued by these groups are a preliminary to further activities undertaken by the same to make the stolen materials unrecognisable, burning the sheaths of power cables marked with the indicia of producers or users, or removing these sheaths from the metal cables or shredding or crushing the pieces of metal manually;
- the actions of these latter groups produce even more negative effects for the community, with the unscrupulous release into the atmosphere of pollutants deriving from the combustion fumes of the materials, and the

indiscriminate dumping of components or other non-metallic wastes separated or extracted from the stolen materials;

- cases have recently emerged showing a greater degree of violence in the criminal actions committed by these groups in their attempts to retain the spoils of their thefts, as occurred for example in October 2010 in the Province of Bari, when a Finance Police patrol pursuing a car was repeatedly rammed by the criminals in their efforts to escape; once stopped, the vehicle was found to be loaded with stolen copper, and both driver and passenger, of Romanian nationality, were also arrested on a charge of attempted murder;
- even modified motor vehicles, like those used in the past for the transport of smuggled cigarettes, are now used to move stolen copper, as in the case of the van confiscated in the Province of Bari by the Finance Police, loaded with stolen copper; the suspensions of the vehicle had been deliberately modified to give it a normal appearance during transport, as if not excessively heavily loaded, so as to avoid attracting the suspicions of traffic police.

The police operations called “RED GOLD” and “CUPRUM NOVUM”, to be illustrated more fully in the specific section of the chapter on investigative methodologies dedicated to “Success Stories” (with attached case summaries of the services carried out for each operation), shed the best light on the crimes of these perpetrators and of the negative consequences common to their actions, despite the two groups operating in two different areas, as will be seen, one in Piedmont and the other in Palermo in Sicily.



## CRIMES COMMITTED

The crimes committed by this type of perpetrator are generally the following:

- Criminal association (for those associating for the purposes of committing an unlimited series of crimes involving theft, receiving and recycling of stolen goods);
- Aggravated theft (for those stealing metals, committing the crime with criminal deception or violence, including on property destined for public service) ;
- Receiving (for purchases of metals from metal thieves);
- Recycling of stolen goods (for purchases of stolen metals, on which suitable operations are performed such as to impede the identification of their criminal origin - by unwinding reels of copper<sup>66</sup>, shredding or crushing metals, etc.);
- Environmental offences (for the release of fumes into the atmosphere, dumping or trade in waste by persons lacking the necessary authorisations for these activities).

A suitable reflection on the distinction made between the two different profiles of the perpetrators of metal theft crimes is that this distinction is clearly more evident for crimes committed in central-northern Italy, becoming less obvious as we gradually move towards the regions of southern Italy, where there are also organised gangs composed only of Italians that engage in metal thefts on railway lines or power lines, above all in the region's most seriously affected by this problem, as can be easily noted from the data on the geographical diffusion of the phenomenon in Italy.

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<sup>66</sup> Some braids of railway copper are characterized by a specific number of strands used only for railway purposes, and therefore by unwinding them this characteristic and their recognizability can be eliminated.

## SECOND LEVEL:

### Receivers and recyclers of stolen metals

#### PROFILE

The persons involved in this level generally play a double role, on the one hand as offenders either directly belonging to or otherwise closely associated with criminal organisations engaging in metal thefts, from which they receive stolen metals to be recycled, and on the other as an "entrepreneur" with a more or less solid position on the panorama of the so-called "legal economy"<sup>67</sup>, acting as the qualified partner in the sales of the spoils of thefts.

Commonly known as receivers<sup>68</sup>, these persons can be identified as persons with a legal activity for the recovery of industrial wastes, and they function as the driving force for the entire criminal chain.

The legitimacy of industrial waste collection companies is projected onto the illegal phenomenon of metal theft, casting the light of legitimacy on the immediately subsequent phases of trade in the illicitly purchased products through to their definitive passage into foundry furnaces, or more probably, into containers destined for shipment outside the EU.

At the lowest levels of this category we have small businessmen, generally of the Romany ethnic minority, with permits for the collection of scrap metals on an itinerant basis (and therefore exempted from the obligations envisaged for wastes), who accept small quantities of materials stolen by members of the same community or by others closely associated with it, then offering them for sale to authorised collection centres that may be more or less aware of

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<sup>67</sup> Companies for the collection and recovery of ferrous and non-ferrous metals, to be discussed later.

<sup>68</sup> Technically, and also from the legal viewpoint, the term "recycler" is more appropriate.

the illicit origin of the product. This is the case for example of small companies belonging to nomadic Romany residing in Sardinia that offer a large scrap collection company based in Piedmont significant quantities of copper procured by theft, and most probably from the R.F.I. - Italian Railway Network.

At higher levels instead we find the presence of companies, even of considerable dimensions, that recycle scrap metal from legitimate production processes and separated waste collections in parallel with the purchase of batches of stolen metal, the illegal provenance of which they cannot fail to be aware, for these reasons:

- the type of person offering the metal (natural persons who are not entrepreneurs, with numerous previous convictions for property theft and known in the local criminal community) and the methods of consignment used (there was a case of a drug addict in the Alessandria area who went to scrap metal collection centres by taxi to sell copper items stolen from local cemeteries);
- the specific characteristics of the materials received (for example, so-called “railway copper”, or batches of brand-new objects or items marked with the distinctive indicia or the original producer or owner).

With regard to the cases examined, there appears to be no criminal involvement in this illicit trade of the foundries to which these higher levels in the receiving chain consign the illegally procured materials for smelting, or of the foreign importers of these products.

## TARGETS:

Receiving of materials of all types, with a preference for those of illicit origin stolen from railway systems or power and telecommunication lines, these being of excellent “first-rate” copper, meaning the metal in its highest grade of purity.

## PLACES WHERE CRIMES ARE COMMITTED

Generally located in the vicinity of industrial areas or the larger civil settlements, where normally a greater flow of metallic wastes is generated.

## MODUS OPERANDI

The manual collection centres run by small businessmen with permits only for “collection on an itinerant basis”, but effectively acting as the operators of makeshift “illegal” deposits, located in small private infrastructures or even directly in nomad camps, carry out an initial sorting process on the materials, separating non-metallic components using manual methods and crushing the metals, and in some instances even shredding them, above all in the case of copper. Manual smelting operations attributable to the same groups have also been found, as in the case of copper cables stolen from Telecom in the Puglia region and smelted manually at an agricultural settlement near the area of the theft.

Collection centres of significant dimensions with full authorisations for the activity in question sometimes act as a hub for the traffic in stolen copper, with links to dozens of other smaller scrap metal companies in the same province or region or in different parts of Italy.

These centres rapidly shred the materials to eliminate their distinctive markings, and mix them with other materials acquired legally.

The presence of stolen materials at deposits is concealed by the creation of false tax documents issued in the name of unsuspecting parties indicated as the consigners of these materials or by the presentation of tax documents for purchases issued by qualified suppliers (like the Fiat Group, for example, well known for its trade in scrap materials from power lines and railways, etc), followed by the subsequent sale to further collection centres of foundries, either directly or in deals brokered by “agents”<sup>69</sup>, and in all probability “without the issue of tax documents”, or indicating smaller quantities than those effectively supplied, or even with the fictitious intermediation of “missing traders”, as discussed earlier in this paper.

The control system is compromised and made more insidious, for the purposes of tracing the illicit provenance of the materials traded in, by the presence in the sector of borderline subjects who are also involved in systems of tax fraud that help to make the sale and purchase of consignments of metals even hazier, with prices that sometimes appear to be distorted - downwards - by the unmerited fiscal advantages ensured by these systems of fraud, making it even more difficult to identify the legitimate or illegitimate provenance of the batches of metals traded.

The fear of being subjected to inspections and the consequent application of the envisaged corrective penalties is perceived by scrap metal companies more as the risk of the immediate economic damage suffered due to the confiscation of the metals illegally received and already paid for than that of the subsequent criminal consequences, partly also due to the frequent use by these companies of “administrators” or “front men” to which the legal representation of the company is deceitfully transferred.

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<sup>69</sup> These are entrepreneurs in the sector that broker important supply contracts for metals with foundries, to which they undertake to supply consignments of scrap metal to be smelted down.

As we will see as we analyse the “scrap metal chain”, margins of risk also exist in the sector of scrap metal exports, of which some 25% is organised by companies that have already been involved in stolen metal receiving crimes, although several references to exports of stolen metals to China published in the press with regard to a number of police operations remain extremely circumstantial, since no effective correspondence with the preliminary evidence gathered during these enquiries has been found, and neither has proven collusion with the phase of smelting in the foundries of northern Italy emerged, precisely due to the passage through the hands of “scrap merchants” who “legitimize” the stolen metal.

### CRIMES COMMITTED

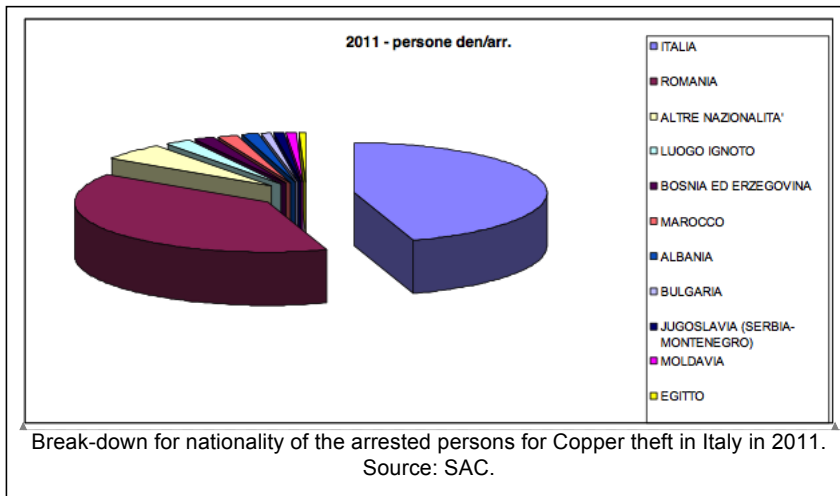
- Receiving (for purchases of stolen metals directly from the thieves or from smaller collection centres);
- Recycling of stolen goods (for purchases of stolen metals, on which suitable operations are performed such as to impede the identification of their criminal origin - by unwinding reels of copper<sup>70</sup>, shredding or crushing metals, issue of false tax documents);
- Illegal trafficking in wastes;
- Use and/or issue of invoices for non-existent operations.

The police operation named “ORO ROSSO”, to be illustrated more fully in the specific section of the chapter on investigative methodologies dedicated to “Success Stories” (with attached case summaries of the services carried out for the operation), sheds light on the activities of this category of criminals in the stolen metal trafficking chain.

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<sup>70</sup> Some braids of railway copper are characterized by a specific number of strands used only for railway purposes, and therefore by unwinding them this characteristic and their recognisability can be eliminated.

These distinctions among the different kind of offenders can be traced based on the assumed role that they may play in the criminal activity. A More accurate sociological brake-down of the offender's profile on recent data has been produced by SAC. According to the Italian Ministry of Home Affairs among the 3.147 subjects reported / arrested for copper theft in 2011 less than half are Italian (46%) while the majority of the offenders were reported foreigners. Among the foreigners nationals from Romania play the biggest role in this criminal activity, accounting to almost 80% of all the foreigners offenders.



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# Contrast activities, investigative methodologies and results obtained

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*Investigative inputs and methodologies*  
*Countermeasures and public private cooperation*  
*Investigative success stories*  
*Open problems in fighting metal theft*  
*Legislative proposals for improving the fight against metal theft*



## Investigative inputs

The investigative inputs in the sector of stolen metals and their illicit trading chain have their origin in the various compartments of information gathering and investigative activities, each complementary to the other, from control of the territory with regard to episodes of theft, through to that of checks on companies trading in scrap metals, a strategy adopted in recent years by the Italian Railway Police.

Other inputs come from risk indices for money transfers involving persons with interests in the sector of metals. These are in fact indicated in Italian with the acronym of “SOS”, standing for “Suspicious Transaction Reports” or “STR” in English, and are the reports that must be sent by financial intermediaries, non-financial operators and accounting professionals to the UIF<sup>71</sup>, “whenever they know, suspect or have reason to suspect that money-laundering is being or has been carried out or attempted”<sup>72</sup>. Here, for the purpose of STRs, “money-laundering” can be taken in the less serious meaning of the term (depending on the crimes from which the sums of money transferred originate) and not necessarily as a result of the crime of “money-laundering” as envisaged by the Italian Criminal Code. The suspicious nature of the transaction is deduced from the characteristics, amount and nature of the operation and from all and any other circumstance emerging with respect to the functions exercised by the party obliged to make the report, and also taking into account the income-earning capacity or activity pursued by the suspected person<sup>73</sup>.

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<sup>71</sup> Financial Intelligence Unit of the Bank of Italy.

<sup>72</sup> The UIF analyses the suspicious-transaction reports (STRs) and transmits them, together with the financial analyses performed, to the Nucleo Speciale di Polizia Valutaria - NSPV of the Guardia di Finanza (Finance Police) and the Direzione Investigativa Antimafia DIA (Bureau of Antimafia Investigation). Anomaly indicators issued and periodically updated by proposal of the UIF facilitate the identification of suspicious transactions.

<sup>73</sup> [http://www.bancaditalia.it/UIF/prevric/sos;internal&action=\\_setlanguage.action?LANGUA GE=en](http://www.bancaditalia.it/UIF/prevric/sos;internal&action=_setlanguage.action?LANGUA GE=en)

The inputs deriving from the private sector are far from negligible, including the respective trade associations, and these help to identify the strategic targets to be implemented in specific geographical areas and to be agreed at the level of the Provincial Committees for Public Order and Security, which for many years have been taking an interest in the problem, a circumstance that highlights the way in which the phenomenon has increasingly assumed the nature of a threat to public order and security.

#### *Investigative methodologies*

The methods used up until now to combat this particular phenomenon have differed widely, but are characterized nevertheless by the use of investigative techniques normally used to combat other forms of criminality.

In police operations, when technical investigative methodologies have been used<sup>74</sup>, reasonable results have been achieved in terms of the number of persons and companies discovered and the quantities of materials seized, but the results have been excellent only in the case of enquires carried out using more incisive methods of combating the instruments and infrastructures used for illicit activities as well, including the wealth illegitimately accumulated by the offenders, as these interrupt the chain of crime that has been discussed so many times during this research activity.

The technical investigative methodologies used in the sector of metal thefts have so far included the use of:

- telephone tapping and electronic eavesdropping;
- monitoring of locations and movements using GPS systems;
- analysis of the records of telephone conversations arriving at and leaving the telephone devices identified;

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<sup>74</sup> Telephone tapping, etc.

- in addition, the tracing of telephone numbers involving the telephone operator installations covering the territory with their mobile phone services<sup>75</sup>

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This last technique was used during the “PREMIATA DITTA METALLI PREGIATI” operation, and made it possible to identify the telephone numbers and subsequently the users of the same that were present in the area where the thefts were committed and at the same time as they were committed, and also crosschecking them against similar data from other locations where thefts had previously been carried out with the same operative methods. These were generally isolated industrial areas with little telephone traffic during the night-time hours when the crimes were committed, and the volume of data to be analysed was therefore acceptable.

Telephone tapping and electronic eavesdropping activities are permitted in combating this phenomenon, because the crimes being investigated (receiving, recycling of stolen goods, etc.) are included amongst those envisaged by the criminal procedure legislation authorising eavesdropping operations and the use of tapped telephone conversations.

The increasingly intensive activities pursued by the Italian police services have the effect of causing a general crisis in the collection system for stolen metals, to the extent that some operators in the sector now prefer not to handle products of this type directly at their collection centres, storing them temporarily instead in containers that once full are most likely exported using false documentation. The use of similar techniques has been noted in the activities of North African citizens who accumulate tyres, electrical appliances and other materials to be recycled inside containers, then organising their

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<sup>75</sup> The “telephone cells” that identify the area of installation of the mobile phone signal repeater.

shipment to their countries of origin, thereby breaking regulations on the traceability of wastes<sup>76</sup>.

As emerged from a number of telephone calls tapped during the investigations considered, operators in the sector fear above all the immediate economic damage caused by the confiscation of consignments of metals received and already paid for to the illicit suppliers. Frequently, the effective managers of these companies use third persons to whom they deceptively transfer the legal representation of the company in order to avoid their criminal liabilities<sup>77</sup>.

Only some of the investigations analysed and discussed in the section dedicated to “success stories” in this chapter showed a more systematic approach that included a variety of investigative methodologies. The coordination of the judiciary authorities and the addition of checks on assets and tax returns to the system of technical investigative methodologies (telephone tapping, etc.) and to the investigations made directly on the territory has made it possible to definitively defeat the organisations (the Premiata Ditta Metalli Pregiati, Re Mida, Titano and Titano II operations) that until that moment continued to operate, despite the fact that several of their members had already been arrested, charged and sentenced.

The companies that receive large quantities of stolen metals are all “legal” ones, almost all normally working in the scrap metal recycling sector and of medium-large dimensions (with respect to turnover). The investigation methodology as used in the “RED GOLD” operation and the measures taken by the judiciary authorities with the preventive sequestration of companies that may even have been “legal”, but for which recidivism in the receiving of stolen metals and the awareness of their illicit origin had been demonstrated,

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<sup>76</sup> These are references to containers seized at Italian ports, including Ancona and Genoa.

<sup>77</sup> This was the case, for example, of one company in Rome investigated as part of the “ORO ROSSO” operation.

constitute the most valid instruments in the halting of this criminal activity, blocking the channels for the disposal of stolen metals and creating an effective barrier between the world of copper thieves and the foundries or foreign companies that buy scrap metal.

Taken together with the developments of elements of evidence that can be obtained from “Suspicious Transaction Reports”, the use of tax return enquiries, if necessary complemented by bank account investigations, contributes in shedding light on the money flows associated with these illicit trading operations, although the confusion deriving from the combination of tax crimes, waste disposal crimes and crimes involving the receiving and recycling of stolen metals that can be attributed to this category of “illegal companies” does certainly not help, unless backed by other forms of investigative activity, in precisely delineating the criminal actions lying behind unjustified transfers of money, and also in terms of charges and prosecution.

#### *Countermeasures adopted and forms of public/private cooperation*

The new approach to the problem unavoidably requires the direct involvement of the socioeconomic partners amongst the protagonists of the process, and these can be considered to be the trade associations of the companies working in the sector of scrap metal collection and recycling and of the foundries, together with the companies whose interests are damaged by metal theft crimes, represented mainly by businesses working in the areas of power supplies, telecommunications and rail transport, and last but by no means least, in the sector of metal processing and the production of semi-finished and finished metal products. The innovative process necessarily calls for the organisation of “working parties” with public and private partners for activities of analysis and planning constructed and shared by the participants, involving them in the phase of application of the policies implemented to combat the phenomenon.

Some forms of this kind of collaboration are already operative at a central level, but they need to be implemented and incentivized to overcome the obstacles facing such collaboration projects, to be found in excessive bureaucratisation, sometimes accentuated by unjustified opposition to forms of protection and confidentiality of the data in the possession of the institutions, an attitude that is certainly inconsistent with the approach of an effective and carefully planned strategy of prevention and contrast of the phenomenon at a national level, and even worse, at a European level.

Ministerial directives have been emanated to address the problem of metal theft even at the level of the Provincial Committees for Public Order and Security, so as to implement the system of control and vigilance with the necessary information held by private companies and their respective trade associations on the location of installations with important temporary storage centres for valuable metals, which are highly attractive targets for criminals, and also to incentivize the application of measures of passive protection, video surveillance, private security firms, remote alarms and satellite tracking for the vehicles used to transport these materials.

For their part, the individual companies that have been seriously affected by this phenomenon, and first and foremost utility companies, have adopted a variety of countermeasures, also establishing contacts with the police forces of the areas where these criminal events occur most frequently.

TELECOM ITALIA S.p.A.

Seriously affected by the problem, even on sensitive targets like the lines guaranteeing communications with the infrastructures of civil and military airports, hospitals, etc, this company has activated particular

countermeasures as part of a planned strategy of corporate security<sup>78</sup>. These countermeasures include:

1. Installation of “SecurVox” equipment:
  - equipment making it possible to detect the cutting of cables in real time, with a device that sends a vocal message to the operations centre of security firms/police headquarters where the remote section of the system is located<sup>79</sup>, specifying the stretch of cable affected;
  - this system, despite the necessary callout and arrival times, has allowed numerous thefts to be prevented;
  - at the moment several hundred devices are installed on the most strategic stretches of transmission lines.
  
2. “GPS” devices on telephone cables:
  - in collaboration with a company specializing in security systems, GPS tracking and positioning devices have been produced and installed in an experimental phase;
  - this system, which tracks the position of cables after they have been removed, has failed however to give satisfactory results.
  
3. “Supervision of cables on ADSL users”:
  - together with the appropriate corporate departments, the monitoring of ADSL users has been organised;
  - the experiment involves the installation of a cable system suspended from poles;
  - the system makes it possible to send an alarm signal in real time in case of attempted thefts.

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<sup>78</sup> The company has also been targeted by episodes of cable removed with particularly drastic methods, sometimes even cutting down the poles supporting telephone lines to make it easier to remove the cables.

<sup>79</sup> Transmission of data to a system peripheral.

4. Security surveillance from fixed stations:
  - a service cable for ENAV is constantly guarded by security firm personnel;
  - this guard service became necessary to guarantee the normal continuation of operations for several important airports following several attempted thefts.
  
5. Micro-marking of electrical cables and cataloguing of the particular braids of copper wire used in installations, permitting the identification of the batch of cable stolen or the “operative” cable removed<sup>81</sup>.

The company participates in working parties organised by the police prefectures most seriously affected by the problem, at the level of Committees for Public Order and Security, so as to give greater effectiveness to the fight against thefts of copper cables carried on poles by means of patrols on the territory.

The synergy between territorial patrols by the forces of order and private security firms united with the alarms given by the SecurVox system has made it possible to interrupt numerous attempted thefts of pole-suspended copper cables<sup>82</sup>.

Here follows a summary of some of the episodes occurring in 2010 and reported by TELECOM:

ENEL S.p.A.

Equally seriously affected by copper thefts, above all in more inaccessible areas, to combat the theft of copper in actual use this company has activated alarm message systems communicating with police operators in the case of the cutting of cables and interruptions in voltage levels or video surveillance

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<sup>81</sup> Used on active lines

<sup>82</sup> Data supplied by TELECOM ITALIA S.p.A.



systems for electrical substations. In addition, to combat the theft of copper not in actual use, strategic collection points have been established, protected by suitable infrastructures, where the stored materials are gathered together before being used in the construction of new installations or for maintenance work.

Furthermore, with regard to:

1. The traceability of copper conductors:
  - The company is working on the collection information on the various types of cable used (cross-sections, external appearance, photographs), to allow stolen materials to be identified.
2. Use of aluminium conductors:
  - New installations or overhead line renewals are fitted with aluminium conductors, with steel-reinforced aluminium cables for overhead lines.
3. Copper disposal procedures:
  - Thefts mainly involve copper conductors installed on actively operating power lines;
  - Waste copper to be disposed of (deriving for example from power line replacements due to technological updates) is instead returned to the logistics platform of the company and is then sold back to its suppliers authorised for the sale of scrap and metals (prevalently scrap merchants operating in the recovery of metals).
4. Power line anti-theft system:
  - Enel has developed the RIE system (formerly RAID/AFL), which detects the absence of voltage on the power line by which it is powered, differentiating from normal accidental malfunctions. This system used experimentally on about 220 lines and already having detected 11 attempted thefts over the last six months, enables the stretch of line affected by the theft attempt to be traced within the first 10-15 minutes after the power loss. The subsequent technical times (alarm transmission, contact with the forces of order, logistics) necessary to reach the theft site (almost always in difficultly accessible areas) must be reduced to enhance the effectiveness of this countermeasure;

- greater coordination with the forces of order for the analysis of the available data and to synergistically decide the strategy for the positioning of these devices would improve the system.
5. Involvement of Enel for the identification of stolen copper:
- company technicians are normally contacted by the forces of order in case of the discovery of copper of dubious origins, and for Puglia and Sicily, the number of such contacts is estimated to be some 100-150 per year<sup>83</sup>.

#### R.F.I. - Italian Railway Network

This is the other Italian company in the utilities sector that is heavily targeted by copper thieves, with around 16,550 kilometres of electrified railway tracks and some 3 million euro of damage sustained annually, in addition to collateral damage caused by delays to services and inconvenience to passengers.

Taskforces of the POLFER Railway Police are located in the various geographical divisions of the rail network, coordinated at a central level and able to collaborate with the corporate protection functions of the rail network company. This group of forces performs the initial investigations into cases of metal theft on the rail network and carries out inspections on scrap metal collection companies that recycle materials of this type.

In addition, the investigative structure promotes forms of preventive activity that include the cataloguing of the types of metallic materials used by the Italian Railway Network, which is released to the business categories that work in the sector of scrap metal recycling, which are also give instructions on the means of identifying “railway” copper during inspection activities.

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<sup>83</sup> Data supplied by ENEL S.p.A.

The companies involved in rail transport and the railway police of 26 European countries have established “COLPOFER”<sup>84</sup>, an association that addresses security themes and problems concerning railway policing services. As part of the association, a permanent working party dedicated to copper thefts has been set up, with the aim of exchanging information so as to monitor the phenomenon and to carry out possible joint investigations at a European level.

#### Critical elements detected

### 1. THE RECOGNITION OF MATERIAL OF ILLEGAL PROVENANCE

Judicial and investigative bodies have met with problems linked to the recognition of “untreated”<sup>85</sup> material of illegal provenance (discovered during police operations) by companies that are potential victims of theft. The problem lies in distinguishing stolen material from used material that comes from disused plants, which has been handed to a third party legally. This difficulty is caused by the absence of micro-marking and of other procedures that ought to ensure traceability of discarded material until it reaches its final destination, the foundry, where it is employed once again.

Though it may seem minor, this problem actually makes it impossible for the police and for Judicial Authorities to establish the exact nature of a crime, which is essential to court proceedings. The indiscriminate circulation of discarded lots of material, including those that are lawfully handed to third parties, generates confusion when similar material of dubious provenance is discovered. This uncertainty benefits the managers of recovery plants that receive stolen goods.

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<sup>84</sup> <http://www.colpofer.org/>

<sup>85</sup> Crushed, accumulated, copper braids are undone etc.

Material that cannot be identified guarantees the impunity of the person who owns it, since at best, by devious means and false documents, they are subject to less punitive measures, compared to the harsher penalties that are applied to receivers of stolen goods.

Thus it is up to the investigative bodies and to the judicial authorities to demonstrate the illicit provenance of material that is discovered, and to establish the criminal intent of the company that owns it.

Traceability of discarded lots, especially of those handed to legitimate parties, simplification of the intermediary handling of material (through binding contracts), from the moment it is discarded to the moment it is reutilised (foundry), and micro-marking, would greatly simplify police operations at recovery plants. Under such conditions in fact, the police would be able to contact the company that owns the material (or previous owners) to establish if it is authorised to operate in the scrap metal retail and recycling sector. Moreover the police would be able to carry out further checks when deemed necessary.

Lack of identification and summary identification of material of illegal provenance, means that court proceedings lack the necessary information to charge perpetrators. This situation favours the prosecuted party as it is not possible to carry out precautionary measures on their assets, which, as already mentioned, is a determining factor in fighting the phenomenon, since punitive measures are not merely rightful, but are also a deterrent in the metal theft business.

For those who operate in the scrap metal recovery and recycling sector, non-traceability of disused lots generates on the one hand:

- worry about the seizure of copper that has been regularly purchased (especially copper from “railways”<sup>86</sup>) and the subsequent need to reconstruct and prove lawful provenance;

on the other hand:

- it favours those who pass off for legal that which is not by taking advantage of the uncertainty generated by the present situation.

However, with regard to R.F.I.<sup>87</sup>, it must be mentioned that specific procedures govern how material from disused plants is to be recycled and to whom it is assigned, when electric cables and other such metal infrastructure is replaced. Data of companies that are awarded discarded material is shared with law enforcement agencies. Thus lots of material that are deposited at scrap metal centres that are not authorised links in the process and /or recognized by the R.F.I., realistically constitute received goods that have been stolen from deposits i.e. from the Italian Railway Network itself.

During the investigation in question, sharing of the above mentioned data greatly simplified Railway Police checks at deposits.

## 2. INTERPOSITION OF A “MISSING TRADER”<sup>88</sup>

Another obstacle that is encountered by judicial investigators is the interposition of a number of companies between the first receiver of stolen metal and the final receiver. These companies, which function as “missing

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<sup>86</sup> The most recognisable kind

<sup>87</sup> Italian Railway Network

<sup>88</sup> Companies that are established for the sole purpose of issuing false tax documents. These companies are non-operational and devoid of an operational structure. They are employed to gain tax advantages and to create further obstacles in the checking activities by simulating a retail business, which in fact is non-existent.

traders”, create a sort of smoke screen for the law-breaking end user of the stolen goods. A fact that once again ensures the impunity of perpetrators.

Careful analysis of the documents employed in illegal operations has been corroborated by investigation into financial transactions, and by monitoring the transportation and international shipping of the products, which is carried out by various companies. These results should allow the detection of other unlawful elements at various levels of the scrap metal recycling process. It is no simple endeavour however, as the companies involved in the process are located all over the country, which entails significant costs for the Judicial Police in financial terms, and in the use of human resources, and of other means. Not least are the problems of area competence for the Public Prosecutor’s Offices involved.

Compiling a census of the companies involved in the phenomenon into a national database that may be consulted by the police, and making checking procedures more effective nationally, would ensure success in the fight against the metal theft phenomenon, which, as previously mentioned, occurs thanks to the complicity of dishonest entrepreneurs who hide on the fringes of the legal scrap metal recycling business.

Success Stories

Police operations:

1. "PREMIATA DITTA METALLI PREGIATI" - "RE MIDA" - "TITANO"
2. "CUPRUM NOVUM"
3. "ORO ROSSO"
4. "RED GOLD"
5. "TITANO II"

Operations: "PREMIATA DITTA METALLI PREGIATI" "RE MIDA" "TITANO"
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See ATTACHED CASE STUDY No.1

These are the names of three interconnected operations that were characterized by effective cooperation between the police forces involved, and by the multifaceted nature of the aspects that were examined. Aspects that resulted in a brilliant outcome of police activities (which is not always the case), and in the seizure of a vast number of movable goods and real estate that had been gained by the perpetrators who had been operating in metal theft and in the reception of stolen metal.

The investigation regarded a highly organised gang who commissioned the theft and reception of stolen metals (slang "gangs") (in judicial terms "criminal conspiracy").

The criminal operations, which occurred mainly in the Brescia area, were well planned and organised in every aspect, and targeted metal deposits and metal lots that were transported by articulated lorries to companies located in the above mentioned industrial area.

This particular organisation is one of the most efficient ones to have ever operated in the metal theft sector for the following reasons:

- Seriousness of the crimes carried out (due to the high level of the targets);
- The length of time for which it operated;
- Stability of relationships between the associates.

Generally speaking, this illegal organisation involved a number of people with distinct roles within the criminal structure:

- Head of the organisation:  
selected the objectives and planned when “incursions” would be carried out.
- Collaborators and organisers of single thefts and of the reception of the stolen goods:  
one “main” collaborator aided the “head” and functioned as a link between the latter and other “gang members” who had previously been selected and recruited; the latter were contacted to carry out single thefts, and to manage the removal and stocking of stolen material.
- Members who placed stolen goods on the market:  
companies with an independent legal status (“missing traders”<sup>89</sup>) would mediate in the sale of stolen goods. They would recycle the lots of material by creating false tax documents and sell them to companies that were unaware of their illegal provenance, at slightly lower prices compared to those on the market, issuing apparently regular sales invoices to validate the transactions.

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<sup>89</sup> Non-operational companies established for the sole purpose of issuing and receiving false tax documents.



The gang leaders' knowledge of the area and their integration in its social and economic fabric, allowed the gang to acquire important information from company employees, regarding the stocking of material.

Highly sophisticated techniques were employed for the deactivation of alarm systems at deposits, and/or the complicity of security guards. The gang also employed industrial means of transport which had already been involved in theft to remove huge quantities of metal. Value of the stolen goods was never below 200,000 euro.

To raid travelling merchandise, the organisation could also count on the complicity of lorry drivers to whom they promised rewards in cash, thus avoiding having to resort to threats and violence.

No links to organised crime came to light, i.e. gang members were not part of any "typical" criminal organisations that operate nationally, and which are linked to certain geographical areas.

On the other hand, contact with criminal groups of Romany origin was discovered, for the acquisition of logistical equipment and for sharing objectives in the area.

From a financial point of view, the scale of the profits that gang members gained are evident in the substantial assets (movable goods and real estate) that were acquired by the organisation members and their families, despite low or non-existent incomes.

Property investigation carried out on members of the organisation enabled law enforcement agencies to uncover and seize unlawfully gained movable goods and real estate worth about 15.4 million euro of which were deposited on current accounts.

The 37 people who were charged are all Italian and had already committed numerous crimes against property and people. Hundreds of tons of stolen metal have been estimated and include copper, brass, aluminium and stainless steel. One of the members of the organisation who was in charge of selling the stolen goods was also involved in tax swindling. He would set up and then employ companies with Italian investment capital to issue false invoices that served to “cover up” the movement of stolen material, and to evade direct and indirect taxation.

Overall the investigation in question employed a more systematic and global approach to fight the metal theft phenomenon when investigating the organisations involved. An approach that was made possible by the judicial authorities who integrated property and tax investigation techniques with technical investigative methodologies (phone tapping, etc.) and with the inspections that were carried out in the areas involved. These techniques ensured the decisive defeat of the organisation, which had up to that point operated despite the fact that some members had already been charged with offences by legal authorities.

Operation: “CUPRUM NOVUM”
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See ATTACHED CASE STUDY No. 2

This operation investigated an organisation operating in the Provinces of Asti and Alessandria, whose members at various levels (mostly those of Romany origin from the Bosnia-Herzegovina area) stole metal that they then sold to two companies operating in the scrap metal collection sector.

The organisation stole copper, aluminium, brass, steel, and iron. The copper was mostly stolen from railway lines or from local R.F.I. (Italian Railway Network) infrastructure.

The copper recycling market also received supplies from drug users and dealers who stole from infrastructure and decorations in local cemeteries.

The organisation had also recruited employees who worked for companies in the metal transformation sector. These employees would repeatedly steal barely detectable quantities of material from their employers, and sell it on the circuit that was run by the organisation's associates.

The two companies in Asti and Alessandria also acted as a catalyst for the flux of metal that was stolen by groups of Romany people living in Sardinia. Generally the metal in question was "first category"<sup>90</sup> copper from the Italian Railway Network, most likely stolen in Sardinia, where the latter group resided and operated. The Sardinian group possessed about 70 tons of copper and its members had previously been involved in stealing from metal deposits and railway lines in the Provinces of Asti, Cagliari, and Genoa.

The companies would buy large quantities of metal from previous offenders who had been charged for crimes against property. These individuals were not licensed to deal in the recovery of scrap metal and were therefore unable to prove the provenance of the material. The material would be delivered perfectly "cleaned" of identifying features, such as the jackets of copper wires, thus becoming a perfectly reusable good, and making it impossible to detect its provenance.

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<sup>90</sup> (Category of purity)

With regard to “railway” copper, its characteristics distinguish it from any other kind as it is almost always in the form of clamps, braids, wires, cable terminals, and copper adaptors, along with aluminium cables, aluminium and steel ropes etc. Such materials unmistakably come from the Italian Railway Network. Of unmistakable provenance are also some semi-finished metal products that have been stolen from company deposits as they often bear distinctive signs and metal tags. Highly suspect were also brass taps and new steel window frames that were treated as waste, rather than being placed back onto the market.

Tapped telephone calls made it clear that the individuals under investigation were perfectly able to distinguish products of illegal provenance from legal ones, and would by various means ensure that provenance could not be detected. Copper stolen from the Italian Railway Network, such as a particular consignment of a 60 kg copper spool, would be “cut” immediately to remove its distinguishing feature i.e. a specific number of wires that characterizes railway braids. Furthermore, copper stolen from railways would artfully be classed as “third” rather than “first” (category of purity of this material) and thus registered on tax documents and delivery registers, to ensure that transactions would not arouse the suspicions of inspection bodies.

The companies also attempted to elude checks by showing documents regarding metal lots that had been purchased from renowned national companies (e.g. Fiat, etc.) to inspection bodies, to justify their possession of metal of illicit provenance. They would also omit to issue documents for the purchase of received metal goods, and resort to naming unsuspecting metal salesmen as their suppliers. Consequently sales to foundries or to other middlemen would also occur by means of tax evasion or with the issuing of false documents.

Both the companies that received the stolen material were regularly authorised to operate in the “recovery of metal by-products and scrap metal for recycling” and in the “wholesale of scrap metal”.

Both the companies were of medium size<sup>91</sup>, which comprises companies that have a turnover of 1 to 10 million euro, and which make up about 22%<sup>92</sup> of the companies that operate in the scrap metal recycling and retail business nationally.

One third of the individuals involved in the investigation (total no. 62) are of Romany origin or Romanian. Analysis carried out on the foreign members under investigation showed that about half of them were owners of businesses in the scrap metal retail sector, even though they were not listed in the National Waste Management Register, while the others were almost all unemployed.

The stolen metal, especially railway material, would be handed to authorised recovery centres that were involved in the illegal business with discounts in the order of:

- a 25% discount on official LME quotations, without added taxes. This discount would be applied to deals carried out by smaller companies, such as the ones managed by Romany people who gathered and stole metal;
- a 35% discount would be applied to deals carried out by private persons who did not own a company and who only operated unlawfully.

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<sup>91</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

<sup>92</sup> See the statistical analysis in this project regarding the distribution of Italian companies that operate in the scrap metal retail and recycling sector.

Operation  
“ORO ROSSO”

See ATTACHED CASE STUDY No. 3

This operation investigated a joint-stock company in the Province of Rome. The company was an important centre for the recovery of copper, aluminium and other ferrous and non-ferrous metals.

The company mostly received stolen material which had been purloined from the Italian Railway Network, and which had first been gathered in minor deposits located in various Italian regions, and then sold to the above mentioned company in Rome.

The company had thus become an important sorting centre of stolen copper.

The investigation work pieced together a large part of the contacts, negotiations, and business deals that occurred between the individuals involved in the illicit business and the managing director of the company that received and recycled the stolen copper. The copper would be sent to foundries in the north, mostly in the Brescia area. However, the investigation did not manage to uncover any connivance on behalf of the final recipients of the products.

Tapped telephone calls show that ever more pressing checks by the police force create difficulties in gathering stolen metal and slow down the supply process.

Worry regarding possible police checks is mostly linked to the instant financial loss that occurs when the police seize a lot of received metal that has been paid for. Whereas penal consequences are not such a deterrent.

Managers of the businesses involved in illicit dealings would often name a third party as the legal representative of the company, either because the manager had previously been charged, or to avoid incurring in penal consequences. This occurred in a company that was investigated in the ORO ROSSO operation in Rome. The former manager employed a third party to avoid possible penal consequences and fines that might occur due to regular police checks, though in fact, he continued to manage the company himself.

This investigation highlights the undeniable necessity to clarify and simplify the movements of disused metal, especially that which comes from the railway and from electric companies.

During the investigation in question, the Italian Railway Network and the Railway Police shared data regarding the discarding of obsolete material and of material that needed substituting, thus facilitating police checking operations at deposits.

The investigation also highlights how resorting to the crushing of metal to make it unrecognisable if inspected was a common practice among the individuals under investigation during Operation ORO ROSSO. During tapped telephone calls, the individuals under investigation repeatedly spoke of the need to transform the received material in the shortest time possible, especially when it had been stolen from the railway network. It was also apparent that they were familiar with such material, and able to distinguish it from that of other provenance, as they often mentioned the presence of particular “clamps” and such like, which denoted a non common knowledge in railway infrastructure.

The 10 companies that were involved in this investigation were all regularly registered with the CCIAA (Chamber of Commerce for Industry, Arts and Crafts, and Agriculture) and 7 of them are also registered with the Albo Nazionale dei Gestori Ambientali (National Waste Management Register).

Six of them have independent legal status: “S.P.A.”<sup>93</sup> (Ltd) and “S.R.L.”<sup>94</sup> (Ltd) three are “SAS”<sup>95</sup> (limited partnership) and “SNC”<sup>96</sup> (general partnership) and one is a sole-proprietor company<sup>97</sup>. Two of them have a turnover that classifies them in the medium-high bracket<sup>98</sup> (companies that have a turnover between 10 and 100 million euro) which comprises about 6%<sup>99</sup> of the companies that operate in the scrap metal retail and recycling sector nationally. Three of them are in a medium category (from 1 to 10 million euro) (22% nationally), while the remaining ones have a turnover that falls in the medium to low category (from 100 thousand to 1 million euro) (35% nationally).

All the individuals under investigation are Italian.

The stolen copper and aluminium would be given to authorised recovery centres that were involved in the illegal activities with a discount of around 30% on official LME quotations and without added taxes. This was applied

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<sup>93</sup> The legal status adopted by about 1% of Italian companies that operate in the scrap metal retail and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>94</sup> The legal status adopted by about 24% of Italian companies that operate in the scrap metal trade and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>95</sup> The legal status adopted by about 6% of Italian companies that operate in the scrap metal trade and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>96</sup> The legal status adopted by about 8% of Italian companies that operate in the scrap metal trade and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>97</sup> The legal status adopted by about 59% of Italian companies that operate in the scrap metal trade and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>98</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

<sup>99</sup> See the statistical analysis in this project regarding the distribution of Italian companies that operate in the scrap metal trade and recycling sector.



to lots that had been ceded by private individuals who were not entrepreneurs or by small companies, if the material was more problematic to manage such as “railway copper”.

Operation “RED GOLD”
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See ATTACHED CASE STUDY No. 4

This operation, which was coordinated by the Public Prosecutor’s Office of the Palermo law courts, investigated a criminal organisation that was involved in the illicit collection and receiving of large quantities of copper and other metals.

The individuals involved in these criminal activities are linked by family bonds and reside in the Cruillas area of Palermo.

Family bonds are what made this organisation particularly efficient. The organisation had a vertical structure and carried out raids on copper and other metal all over Sicily. However, the investigation did not bring to light relations with local mafia organisations.

Renowned businesses in the province that deal in the recovery of various types of metal by-products collaborated with the organisation by selling the stolen material. The managers of these companies were reliable partners for the placement on the “legal” market of scrap metal that had come from numerous thefts. Thus proving to be an indispensable link to the organisation’s criminal designs.

The accomplices would also “clean” stolen copper cables to ensure that they would not be recognisable if inspected by the police. They would burn them or cut the wire jackets, which bear producers’ identification data and lot information. The metal would also be “crushed” (compressed) or “shredded”

to make it unrecognisable during transportation to the companies that were to receive the stolen goods.

The gang raided any kind of precious metal to the point of removing front doors and aluminium windows, and stealing industrial machinery, with the sole intent of recycling and selling the metal structure.

A logistical centre was created in a privately owned building, where material stolen by organisation members would be stored. The members of the organisation would travel to different areas in the region with their own means of transport and take material that was deposited in building sites, closed factory buildings, and other kinds of deposits. Once stolen, the metal would be gathered in the “logistical centre”, where it would be sorted out and prepared for delivery to the receiving companies.

The companies that received the stolen metal were “legal”, medium-sized and almost all of them were authorised to operate in the scrap metal recycling sector. A stop to these illegal activities was put by the precautionary seizure of entire companies by the judicial authorities of Palermo.

At the end of the investigation, 19 people were arrested, and 6 companies which had taken part in the criminal activities were seized.

The 7 companies that were involved in this investigation were all regularly registered with the Chamber of Commerce for Industry, Arts and Crafts and Agriculture and 4 of them were also in the National Waste Management Register, while the gathering of scrap metal was done by individuals who had no authorisation to carry out such activities.

Three of the companies have autonomous legal status (S.R.L.<sup>100</sup>), while 4 of them are sole-proprietor companies<sup>101</sup>.

Only 3 of the companies are in the scrap metal recovery and recycling sector, while two of them have a turnover that classes them in a medium category<sup>102</sup> (companies that have a turnover between 1 and 10 million euro, which comprise about 22%<sup>103</sup> of the companies that operate in the scrap metal recycling and retail sector nationally) and 1 is classed in a medium to low category (between 100 thousand and 1 million euro) (35% nationally).

All 19 individuals under investigation are Italian.

The methods employed by this investigation as well as the judicial authority's precautionary seizure of "legal" companies that repeatedly received stolen metal despite being aware of its illegal provenance, are especially significant. They are the most effective means to fight this type of crime, since the flow of stolen metal onto the market is stopped.

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<sup>100</sup> The legal status adopted by about 24% of Italian companies that operate in the scrap metal trade and recycling sector - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>101</sup> The legal status adopted by about 59% of Italian companies that operate in the scrap metal trade and recycling sector - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>102</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

<sup>103</sup> See the statistical analysis in this project regarding the distribution of Italian companies that operate in the scrap metal trade and recycling sector.

Operation:  
“TITANO II”

SEE ATTACHED CASE STUDY No. 5

This is an investigation carried out by the Tax Department of the Finance Police of Brescia, in parallel with other investigations against subjects that perpetrate and commit an indefinite series of crimes of a fiscal nature.

The investigation is different from others selected given the methods with which the criminal plan for the theft of metals was implemented; this time, not using predatory activities in the strictest sense, but sophisticated stratagems and fraudulent means with the univocal result of coming into possession of large quantities of metal to be placed on the ever flourishing illegal market for this material.

In particular, the investigations highlighted the existence of a criminal association made up of various members of a family resident in the Province of Brescia<sup>104</sup> that had come together with the purpose of damaging a well-known drawing mill in the same area by:

- supplying the same company, through fraudulent means and with the help of disloyal employees, with consignments of non-ferrous scrap materials destined for transformation in a quantity inferior to that really delivered;
- stealing, using particular stratagems and with the necessary and effective collaboration of disloyal employees and/or collaborators, non-ferrous material from the same Brescia-based drawing mill, where the

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<sup>104</sup> Owner of two enterprises operating, respectively in the field of the marketing of scrap metal and road transport of metal material in general.

business enterprise attributable to the promoters of the criminal association purchased semi-finished products (mainly brass and copper bars) that were the object of its activity.

It has been ascertained that the business enterprise used by the criminal association transferred to the drawing mill, based in the Province of Brescia, consignments of non-ferrous scrap metal for processing in quantities lower than those resulting from the weight label, measured upon entering the premises.

Furthermore, in these latter deliveries the qualitative analysis of the product was altered or omitted, thanks also to the fundamental cooperation of numerous disloyal employees of the drawing mill itself.

In fact, the content of intercepted conversations made it possible to understand that, on various occasions, the association had delivered the scrap metal:

- heavily weighed down with material of little value (for example, dead weight);
- wet so as to fraudulently increase the weight.

Fraudulently assisted by the indispensable collaboration of the employees of the drawing mill damaged, both facts made it possible for the scrap to be subsequently mixed with what was already present in the “pit” at the premises defrauded, thus adopting its own “identity” before being smelted in blast furnaces.

Another source of illegal enrichment of the promoters of the criminal association mentioned above involved the fraudulent theft of non-ferrous semi-finished products from the same Brescia-based drawing mill to which the business enterprise used by the criminal association entrusted the

transformation of consignments of scrap metal in the form of brass or copper wire bars.

The content of telephone interceptions, supported by the results of postings outside the premises, made it possible to identify the stratagem used by the criminals, assisted by the employees of the drawing mill, in order to fraudulently gain possession of the semi-finished products.

Basically, articulated vehicles were allowed to enter the premises whose trailers, separated from the cab, were used to produce false load weights that made it possible to steal a number of bundles of material whose weight (more or less) coincided with that of the cab that in fact, did not take part in the weighing operation (for example, for a cab weighing 140,000 kg about 14 bundles of brass bars weighing 10,000 kg each).

Thanks to the illegal activities mentioned above, earnings made by the criminal associations in just one year can be quantified at around € 3,000,000 a figure gathered from telephone conversations.

The two companies involved in this investigation are both regularly registered with the Chamber of Commerce, but only one is involved in activity of trading scrap is registered on the National Register of Environmental Managers and has an independent legal personality (S.R.L.<sup>105</sup>). The latter company has a turnover that means it is classified in a medium-high bracket<sup>106</sup>, which includes companies with a turnover of between 10 and 100 million euro and that represent on a national level about 6%<sup>107</sup> of companies operating in the

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<sup>105</sup> The legal status adopted by about 24% of Italian companies that operate in the scrap metal trade and recycling sectors - see the statistical analysis compiled by this project in relation to company distribution trends.

<sup>106</sup> A classification adopted in the section of this report that deals with the analysis of the size of national companies that operate in the sector of the sale and recycling of metals and scrap.

<sup>107</sup> See the statistical analysis in this project regarding the distribution of Italian companies that operate in the scrap metal trade and recycling sector.

recycling and trade of scrap metals and about 40% of these operate in the Lombardy region, where the company being investigated is based.

#### Possible amendments to legal regulations

Any proposed amendments to regulatory provisions should target improving monitoring of the relationship between the subject that confers the metal and the collection centre and introducing more incisive investigative and judicial instruments to help contrast the entire illegal chain.

#### RELATIONSHIP BETWEEN THE ASSIGNING PARTY-COLLECTION CENTRE

The following obligations should be introduced with relevant statutory penalties:

- the obligation to identify the assigning party, along with the filling in and signing by the same of a declaration, in the form of self-certification, of a deed of title or possession of the metal conferred, any sentence or proceedings that the subject is or has been subject to for having committed crimes relating to the theft, receiving or recycling of metals that already provides a specific penalty for the breach of the above mentioned obligations against both the “assignor and assignee” parties;
- the obligation for the collection centre to keep the declaration and identification details regarding the assigning party;
- the obligation to keep the metal conferred at the warehouse for at least a week before transferring it to others.

These proposed amendments to the law could discourage collection centres from indiscriminately purchasing material of dubious provenance and at the same time would safeguard them from any criminal actions, save the highlighting of fraudulent elements in the sector.

Even if normally involved in criminal activity, the assigning party would nevertheless be sanctioned for failure to communicate its criminal position in the specific sector, as well as highlighting any further cases in point of crimes committed, were the illegal provenance of the metal conferred to be proved.

For the police operator responsible for carry out checks, the transfer made by subjects with specific previous precedents of metal theft or connected crimes would in any case constitute a clear risk index.

Storing the metal conferred for a week would slow down the warehouse turnover of scrap, functional to the immediate recycling of lots of metal of illegal provenance, thus also assisting the work of controllers.

#### NEW PROPOSED AMENDMENTS TO THE LAW

New and more incisive proposed amendments to the law that consolidates repressive action against business enterprises that are part of the “illegal traffic of stolen metals chain” using new investigative instruments and effective powers to combat illegal profits should provide for:

- an increase in the sentence in the event of the systematic repetition of criminal conduct or in the event of the use of structures specially set up through organised means and activities;
- new property protection measures;
- compulsory confiscation of the means, objects, products, prices and profits from the crimes of theft, receiving and recycling of stolen metals;



- confiscation of assets corresponding to illegal profits, in the event of the impossibility to retrace the advantages deriving directly from the crimes committed;
- “disproportionate” confiscation<sup>108</sup> that can be activated in compliance with Art. 12-*sexies* of Legislative Decree no. 306/1992 (Antimafia Law), even in the event of criminal association finalised to the commission of crimes related to the theft of metals;<sup>109</sup>
- the inclusion of the offences of criminal association finalised to the commission of the crimes of theft, receiving and recycling metals amongst the competences of issues allocated to Antimafia District Public Prosecutor’s Offices;
- the introduction of specific amendments aimed at administratively sanctioning companies and bodies with legal personalities that gain advantages or have an interest in committing the crimes of receiving or recycling stolen metals.<sup>110</sup>

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<sup>108</sup> The disproportion between declared income and assets owned.

<sup>109</sup> As the crimes of receiving and recycling are already included in the proposed amendments regarding confiscation.

<sup>110</sup> Legislative Decree 231/2001 “Regulations governing the administrative responsibility of legal persons, companies and associations without legal personality”.

# Legal framework

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*Italian laws applicable to metal theft*  
*Italian laws regulating the transport and the handling of scrap metals*  
*UK metal scrap legislation*  
*Analysis on relevant scrap metal industry legislation in Bulgaria*  
*Comparison between legislation in Italy, United Kingdom and Bulgaria*

*Italian laws applicable to metal theft*

From a legal point of view, metal thefts are not classified in a different category of crime types compared to the traditional crime of theft, nor has a specific aggravating circumstance been provided for in relation to the object of the crime given that, as we will mention later, if the value of the metal stolen should be of a certain entity, the common aggravating circumstance pursuant to Art. 61 no. 7 of the Criminal Code would emerge; in other words, the circumstance, in crimes against property or that in any case damage property or in crimes determined by profit reasons, of having caused the person offended by the crime substantial property damage.

Therefore, summing up the legal framework that generically pertains to cases of crime relating to theft, we should recall the following:

Title XIII of Book II of the Criminal Code is dedicated to crimes against property, divided by the legislator into two fundamental types based on the method of aggression against the interest-property safeguarded. Theft belongs to the type of crimes committed with violence against items and not the other type of crimes that are instead committed by fraud (for example, usury, fraudulent insolvency, embezzlement).

In criminal law, theft is the crime provided for by Art. 624 of the Criminal Code in compliance with which; anyone who takes the movable property of others, stealing it from whoever possesses it, in order to profit from it, either for personal gain or for that of other parties, is sentenced with imprisonment from between six months and three years and a fine of between 154 and 526 euro. By effect of criminal law, electricity and any other form of energy that has an economic value is considered movable property. The offence falls under the jurisdiction of the monocratic Court and is punishable subject to a lawsuit being brought by the person damaged, unless one or more of the circumstances pursuant to Article 61, number 7 and Article 625 of the Criminal Code apply. In this case, the crime of theft is prosecutable *ex officio* in compliance with Article 50, paragraph 2 of the Code of Criminal Procedure.

The category of “theft” groups together: 1) common theft (Arts. 624 and 625 of the Criminal Code); 2) thefts from homes or mugging (Art. 624 *bis*); 3) so-called minor thefts (Art. 626 of the Criminal Code); 4) the theft of common items (Art. 627 of the Criminal Code).

The active subject of this crime can be anyone whilst, on the other hand, the passive subject is the owner of the movable property stolen. Furthermore, it is a crime of damage because it requires an offence in a naturalistic sense against the property protected, of mere conduct because it is carried out by simply performing the illegal action and is binding because the typical conduct is already standardised by the legislator.

In theft, the attempt is admissible and for the law applies until the item is stolen.

The term movable item belonging to others indicates any physical object or material entity susceptible to detention, subtraction and appropriation that is the property of others, in the broadest sense and not only under the strictly economic profile that has an appreciable value and whose appropriation determines a detriment to passive subject assets (in the broadest sense) and brings any utility or advantage (whether economically assessable or not) to the agent. In any case, criminal law not only protects items with an economic value, in other words with an equivalent money value, but also items that have a merely moral value (for example, theft of a letter, a collection of personal photos, postcards, etc.). In theft, the material object is represented by anything that has a value, even if particularly insubstantial, that affects the property of others, including items with a sentimental value. In the crime of theft, profit may consist in any utility or advantage, even of a non-asset nature, and it is sufficient that the active subject has operated to satisfy an interest, even a mental or moral one and therefore, even out of spite or for retaliation or vendetta. Therefore, the legal asset safeguarded in the crime of theft is the property because it is functional to the preservation, independence and development of the human being and because the Italian

Constitution, explicitly recognizing the most meaningful component, which is represented by property rights (Art. 42 of the Constitutional Charter), also appears to implicitly guarantee all property relationships that derive from this and are likewise functional to the human being.

The subjective element in the crime of theft is specific intent, which is identified in the aim of gaining profit from appropriation of the item stolen. Specific intent in this crime does not necessarily mean the realisation of an economic advantage, as it can also merely concern satisfaction of a simple moral nature or of any other kind. With regard to theft, the broader concept (of specific intent) also includes the case in which the agent appropriates another person's movable item in order to give it to a third person. On the contrary, the mere theft of an object made with a purely playful intent cannot fit in with alleged theft as, being incompatible with the aim of gaining profit; *ioci causa* intent excludes the specific intent of the aforementioned crime.

For the crime of theft to be committed it is sufficient for the item stolen to have passed under the sphere of the exclusive domain of the agent, even for just a short time, and without moving the place of theft.

With regard to the circumstances in the crime of theft, according to a certain doctrine, theft is surrounded by an intricate web of aggravating circumstances, which are often concurring, such that its commission in the simple form is very difficult. Therefore, theft is aggravated (Art. 625 of the Criminal Code): 1) "if the guilty party uses violence on the items or makes use of any kind of fraudulent means"; 2) "if the guilty party carries a weapon or drugs, without using them"; 3) "if the fact is committed with dexterity"; 4) "if the fact is committed by three or more people or by a single person who misrepresents or simulates the role of a public official or a public service agent"; 5) "if the fact is committed on the baggage of travellers of any kind of vehicles, at stations or airports or on wharfs, in hotels or other commercial activities where food and beverages are served"; 6) "if the fact is committed on items in public offices or premises or items subject to seizure or

attachment or exposed for necessity, habit or destination to public faith, or destined to public service or public utility, defence or reverence”; 7) “if the fact is committed on three or more heads of livestock in flocks or herds or on cattle and horses, even if not in herds”.

With regard to aggravated theft, dexterity applies when the conduct of the acting subject is characterized by particular agility, swiftness and especially shrewd and deceptive moves or manoeuvres such that they would elude even the vigilant attention of the average person.

As mentioned previously, in the alleged commission of the crime of theft, the crime can also be aggravated due to the existence of common aggravating circumstances as contemplated by Art. 61 of the Criminal Code. These are amongst those that occur most frequently because connected to crimes against property under no. 7 of Art. 61, which provides for the accusation of substantial damage to property. Due to the frequent connection of the crime of theft to other concurrent cases, the circumstances pursuant to 61 no. 2) of the Criminal Code can also apply:

Having committed the crime in order to commit or hide another or to obtain or guarantee for oneself or for others the product, profit or cost or impunity for another crime; 8) having aggravated or attempted to aggravate the consequences of the crime committed.

Thus the aggravating circumstances pursuant to paragraphs 5, 6 and 11 of the Criminal Code are also conjecturable:

5) for having profited from circumstances of time, place and person, even with reference to age, such as to hinder public or private defence; (1)

6) for the guilty party having committed the crime during the time in which the same voluntarily avoided the execution of a warrant or order of arrest, capture or incarceration expedited for a previous crime;

11-bis) for the guilty party having committed the fact whilst illegally on the national territory.

Common theft and aggravated theft on the other hand, are attenuated (ex Art. 625 *bis*, introduced by Italian law no. 128/2001) “whenever the guilty party, prior to sentencing, has permitted the identification of any accomplices or those who purchased, received or hid the item stolen or those who in any case, mediated so that it could be purchased, received or hidden”.

Thus in the cases in which they occur, the terms and conditions are applicable and the extenuating circumstances considered common as mentioned in Art. 62 of the Criminal Code, of which, with reference to this type of crime, those whose application could be conjecturable are the following:

4) having, in crimes against property or that in any case damage property, caused the person offended by the crime damage to property that is particularly insubstantial or in crimes determined by reasons of profit, for having acted in order to obtain or having in any case obtained profit that is particularly insubstantial when the damaging or dangerous event is also particularly insubstantial.

6) having, prior to sentencing, entirely repaired the damage by compensating the same and when possibly by returning it or for having, prior to sentencing and when the case provided for in the last paragraph of Article 56 does not apply, spontaneously and effectively made an effort to annul or attenuate the damaging or dangerous consequences of the crime.

Italian law no. 128 dated 26.3.2001 (legislative interventions regarding the protection of safety for citizens) introduced the new incriminating cases in point of theft from homes and mugging, abrogating instead the two original aggravating factors of house theft (Art. 625 no. 1) and the crime of bag-snatching (Art. 625 no. 4). These are crimes provided for and punished by Art. 624-*bis* of the Criminal Code, prosecutable *ex officio* and also under the

jurisdiction of the monocratic Court. The penalties applicable to the two new independent crimes are very severe, so much so that the fines are much higher and they are also removed from the balance mentioned in Art. 69 of the Criminal Code. The *ratio legis* that included them in the Criminal Code was precisely that of combating “diffused criminality” wherever possible as it could, due also to its inevitable repercussions on the person that do not involve property, trigger a collective sense of insecurity, negatively influencing the quality of daily life.

With regard to aggravated theft in the home the law has specified that, in compliance with Art. 625, paragraph 1, no. 1 of the Criminal Code, a “building or any other place destined for use as a residence” should include not only the area strictly used as a residence, but also any other place that comprises the building complex and destined to the implementation of the exigencies of residential life such as the courtyard, garden, etc., whilst the presence of people inside the building is not necessary for the aggravating factor to apply as the aggravating factor itself is applicable even for buildings only occasionally used a residences.

Finally, we need to deal with another incriminating case in point provided for and punished by Art. 626 of the Criminal Code. This is the so-called theft of use that applies when the guilty party has acted for the sole purpose of making temporary use of the item stolen and that this item, after temporary use, is immediately returned. From an objective point of view, as well as the requisites typical of common theft, for this type of crime the immediacy and momentary nature of use - that should occur straight after the theft and be of a short duration - must also apply. The ratio of privileged treatment consists in the momentary theft of the item (e.g. a car), which is then returned. For the crime of theft of use to apply, the property of the other party must not have deteriorated and must also be totally fungible in terms of material and moral instrumentality (e.g. sums of cash, petrol).



From an initial analysis of the methods of committing the crime of metal theft and in this particular case copper theft, from a juridical point of view, the concrete fact often leads to the same being considered as falling within the framework of several criminal cases in point and thus, the concurrence of crimes can apply, because either through a single action or omission or through several actions and/or omissions committed in the same temporal context several incriminating provisions are violated at the same time.

One of the typical allegations that concur with that of theft in the cases of copper theft and/or other metals too is that of damage as, in order to commit the theft and for it to be successful, it becomes necessary to damage property; a typical case is thefts from railway networks, but also from cemeteries and often also thefts that take place in companies or private premises as sometimes, even only just to gain access to the place where the relevant material is situated, it is necessary to damage entrance systems too.

The offence of damage is contemplated by Art. 635 of the Criminal Code hereby recalled:

Art. 635.

Damage.

Anyone who destroys, disperses, deteriorates or renders useless, either totally or in part, movable or immovable items belonging to others is sentenced, subject to a lawsuit being brought by the person damaged, with imprisonment for up to a year and with a fine of up to 309 euro.

The sentence is imprisonment for between six months and three years and is prosecutable *ex officio* if the fact is committed:

- 1) with violence against the person or with threats;
- 2) by employers during lockouts or by employees during strikes or during any one of the crimes provided for by Articles 330, 331 and 333;

3) against public buildings or buildings destined for public use or the exercising of a cult or on things of historical or artistic interest wherever they may be located or on buildings included within the perimeter of old town centres or against buildings where construction, reconstruction, refurbishment or restructuring work is being carried out or has been completed (1) or on any other item indicated under Article 625, no. 7;

4) against irrigation works;

5) against vines, fruit trees and bushes or woods or forests or on forest nurseries destined to reforestation;

5-bis) against sports facilities or centres with the aim of preventing or interrupting a sports event.

For the crimes provided for in the second paragraph, the conditional suspension of the penalty is dependent on the elimination of the damaging or dangerous consequences of the crime or, providing the convicted party does not object, the provision of non-remunerated activities in favour of the common good for a set time that is not however, more than the duration of the suspended sentence, based on the methods indicated by the judge in the sentence. (2).

Obviously, in these cases, assignment of the historical fact to the incriminating cases in point will lead to the investigating organ challenging the concurring crimes of theft and aggravated damage, the aggravating factor indicated under 61 no.2 of the Criminal Code for having committed the crime in order to carry out or hide another or in order to obtain or ensure, either personally or for others, the product, profit or cost or impunity for another crime and Article 81 of the Criminal Code: formal concurrence. Repeated offence.

Anyone who through a single action or omission violates various legal dispositions or commits several violations of the same legal disposition is

sentenced with up to triple the penalty that should be inflicted for the more serious violation.

Those who through several actions or omissions, part of a single criminal plan, commit even at different times several violations of the same or different legal dispositions are subject to the same penalty. In the cases provided for by this article, the penalty cannot be more than what would be applicable in accordance with the previous articles.

The limits indicated in the third paragraph being understood, if the crimes in formal or repeated concurrence with the more serious one are committed with subjects to whom the recidivism provided for in Article 99, paragraph 4 applies, the increase in the penalty cannot in any case be less than a third of the penalty established for the more serious crime. (1).

Another alleged crime that often presents itself with regard to the phenomenology of copper theft is that of rail disaster that is assumed to be a crime concurring with the main crime of theft and even, in the event, the crime of damage, in the above mentioned terms of concurrence of offences, in compliance with Art. 430 of the Criminal Code below:

Art. 430.

Rail disaster.

Anyone who causes a rail disaster is sentenced with imprisonment of between five and fifteen years.

It is clear that in the case in question, for the crime of rail disaster to concur with that of metal theft verification of the disaster itself is obviously necessary, in order to integrate the above mentioned juridical case in point.

Art. 431.

Danger of a rail disaster caused by damage.

Anyone who, with the sole purpose of damaging a railway line or machinery, vehicles, instruments, appliances or other objects necessary for the operating of the same, destroys them in total or in part, deteriorates or makes them in any way either totally or partially useless is sentenced, if the danger of a railway disaster derives from the same, with imprisonment of between two and six years. If a disaster derives from the fact, the penalty is imprisonment of between three and ten years.

As well as ordinary railways, by the term railway, criminal law also intends any other road with metal tracks on which vehicles moved by steam, electricity or any other mechanical traction vehicle circulate.

Art. 432.

Attacks to transport safety.

Other than in the cases provided for by the previous article, anyone who endangers the safety of public transport on land, water or in the air is sentenced with imprisonment of between one and five years.

Imprisonment of between three months and two years applies to anyone who throws blunt objects or shoots bullets against vehicles destined for public transport on land, water or in the air whilst in motion.

If the fact causes a disaster, imprisonment is between ten and twelve years.

## Chapter II

For crimes against devotion to the dead.

### Art. 407.

Profanation of graves.

Anyone who profanes a tomb, grave or urn is sentenced with imprisonment of between one and five years.

### Art. 408.

Desecration of tombs.

Anyone who, in a cemetery or any other place of burial, desecrates a tomb, sepulchre or urn or items destined to the cult of the deceased or designed to defend or ornate cemeteries, is sentenced with imprisonment from between six months and three years.

### *Italian laws regulating the transport and the handling of scrap metals*

Activities involving the transport and the collection of scrap metal (commonly called “scrap iron”) and, among this, by analogy, also stolen metals, are regulated by the laws on wastes<sup>111</sup>.

Stolen metal, like that of legal origin, except in sporadic cases of direct use in commercial activities (when it consists of finished and semi-finished objects, such as gutters, drainpipes, etc., susceptible to sale without

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<sup>111</sup> Legislative Decree no. 152 dated 3 April 2006, “**Environmental laws**” and subsequent amendments and supplements.

<sup>112</sup> Although it is unlikely such a product would be placed directly on the market in order to prevent ascertainment of its illegal origin.

<sup>113</sup> The European Community, with Directive no. 2008/98/EC dated 19 November 2008 (Official European Gazette L312 dated 22 November 2008) refers to them as *by-products*, and, in particular, *any substance or object thrown away by the possessor or which the possessor intends or is forced to throw away*.

<sup>114</sup> <http://www.albogestoririfiuti.it/Home.aspx>

<sup>115</sup> The National Committee and the regional and provincial sections are linked by the Chamber of Commerce computer network.

transformation)<sup>112</sup>, is considered as “waste”, meaning by this everything that is thrown away or which remains as a result of a range of human activities<sup>113</sup> and which, in order to be reused, requires chemical and physical processing.

#### NATIONAL REGISTER OF ENVIRONMENTAL MANAGERS

By means of Legislative Decree no. 152/06 the National Register of Environmental Managers was established<sup>114</sup>. This succeeds the National Register of Waste Managers governed by Legislative Decree no. 22/97. It is established at the Ministry of the Environment and Land and Sea Protection and consists of a National Committee, with offices in the same Ministry, and in regional and provincial sections, based in the Chambers of Commerce of the regional capitals and in the autonomous Provinces of Trento and Bolzano<sup>115</sup>.

Pursuant to Legislative Decree no. 22/97, the following companies must be entered in the Register:

- companies engaged in collecting and transporting non-hazardous wastes produced by third parties and companies which collect and transport hazardous wastes (originally excluded was the transport of hazardous wastes not exceeding 30 kg per day or 30 litres per day carried out by the producers themselves; then, as we shall see, these too have become subject to the laws on wastes);
- companies engaged in cleaning up sites, cleaning up of property containing asbestos, engaged in the marketing and brokerage of wastes, managing waste disposal and recycling plants belonging to third parties and the management of mobile waste disposal and recycling plants.

Legislative Decree no. 152/06 also extended the registration obligation to:

- companies which collect and transport their non-hazardous wastes as normal and regular business activity and companies which transport their hazardous wastes in quantities not exceeding 30 kg or 30 litres per day;
- companies which carry out waste recycling operations according to simplified procedures, more about which will be said later.

The only entities which do not require authorisations therefore are those which transport their own non-hazardous wastes in quantities not exceeding 30 kg or 30 litres per day.

The institution called "Simplified Procedure"<sup>116</sup>, is the result of the need both to monitor the huge production of waste materials in the European Union and avoid causing serious enforcement problems, considering the burdensome bureaucratic documentation and procedure required to obtain authorisations.

The spirit of the regulation stems from the need of substantially monitoring the wastes produced and their points of destination, while at the same time stimulating collection and recycling, activities deemed virtuous, to be promoted and favoured in the global management system, without excessively burdening the obliged operators<sup>117</sup>.

The simplified procedure is a silence/consent procedure. This means, the company sends a notice to the province indicating its intention to begin a

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<sup>116</sup> Based on Directive no. 442 of the Council of European Communities dated 15 July 1975, relating to wastes, published in the Official Journal of the European Union no. L 194 dated 25 July 1975.

<sup>117</sup> Companies can avail themselves of the simplified procedures as long as the type of wastes, the waste codes, the recycling activity and the raw materials and/or the products obtained are in full compliance with the provisions of Ministerial Decree dated 5 February 1998 as amended by Ministerial Decree dated 5 April 2006, no. 186 (attached form TAM-ECO-121).

waste collection activity, which can start if no express prohibition is received from the province itself **within 90 (ninety) days**.

As regards “simplified” authorisations and exemptions from compliance with laws on the collection and transport of wastes, exempt from any obligation pursuant to a Legislative Decree dated 2006 are waste collection and transport activities performed by parties authorised to perform such activities on an itinerant basis, but only as regards the wastes forming the subject of their trade.

This latter point has been stressed because the above facilitations have in fact produced a proliferation of economic operators, more often than not with scarce qualifications, dedicated to collecting iron and non-ferrous scrap using their own means of transport, thus as likely as not contributing to the phenomenon of illegality which distinguishes this sector which also conceals the threat of metal thefts and recycling, including by persons in the side lines or fully inserted in the waste collection and disposal system.

The authorisations to perform collection and recycling activities, where necessary, are issued by the competent regional and provincial authorities. There has been a tendency for the management of authorisation provisions to be decentralised to the provinces which, by means of a specific ordinance, regulate the performance of the authorised activity, enforcing limits and prescriptions as regards waste treatment according to types and quantity treated, restricting areas and precisely identifying authorised structures, while at the same time imposing the issuing of bank guarantees to ensure compliance with the imposed prescriptions.

Finally, the Register, which includes a large number of companies engaged in major waste management activities, plays a lead role in the complex system that regulates the management of the wastes themselves. It represents an instrument of qualification for companies in the sector, and a point of reference and guarantee for all the entities involved in the complex waste management system:



- the companies which produce wastes and have to entrust them to qualified entities
- the public administrations;
- controlling bodies and the public.

#### SCRAP METAL COLLECTION AND TRANSPORT ACTIVITY

With regard to waste collection, transport, sale and brokerage (which as we said includes scrap metal), being entered in the Register represents authorisation to perform such activities. For other activities, registration permits the management of authorised systems.

The same waste management laws require the creation and keeping of registers<sup>118</sup>, by the authorised companies, for the annotation of incoming and outgoing quantities and those disposed of and/or reused.

The registers, after being numbered and stamped<sup>119</sup>, are kept:

- at each waste production, storage, recycling and disposal plant;
- by the companies engaged in collection and transport activities;
- in the offices of traders and brokers.

The annotations must be made:

- by persons engaged in collection and transport, at least within ten workdays from when transport is made;

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<sup>118</sup> Art. 190 (charge/discharge registers) Legislative Decree no. no. 152 dated 3 April 2006.

<sup>119</sup> Starting on 13 February 2008, the waste charge/discharge register no longer need to be numbered and stamped by the Inland Revenue Office, but only by the local Chamber of Commerce (where the registered offices are located, i.e., a local unit). This is the result of the amendment to Art. 190, sub-section 6 of Legislative Decree no. 152/2006 (Environmental Code), by Art. 2, sub-section 24-bis of Legislative Decree no. 4/2008 (amendment to the Environmental Code).

- by traders, brokers and consortiums, at least within ten workdays from the relative transaction;
- by those engaged in recycling and disposal operations, within two days from the delivery of the wastes.

The registers must show:

- a) origin, quantity, characteristics and specific destination of the wastes;
- b) the charge/discharge date of the waste and the means of transport used;
- c) the treatment method used.

To transport the scrap, the F.I.R.<sup>120</sup> (Waste Identification Form) is used.

The form acts as a link with respect to the other environmental obligations and ensures the traceability of the information flow relating to the waste among the various entities involved in its management (producer, carrier, final recipient). In many cases, it represents the documentary base for the annotations in the waste charge/discharge register.

Completing the form is mandatory when transporting scrap, including scrap devoid of impurities.

The identification form must contain at least the following details:

- a) name and address of the producer and the holder;
- b) origin, type and quantity of waste;
- c) plant of destination;
- d) date and transit route;
- e) name and address of recipient.

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<sup>120</sup> Art. 193 (waste transport) Legislative Decree no. 152 dated 3 April 2006.

The form must be drawn up in four copies, completed, dated and signed by the waste producer or holder and also signed by the representative of the haulage company. A copy of the form must remain with the producer or holder and the other three, signed and dated upon arrival by the recipient, remain one with the recipient and two with the carrier, which sends one to the holder. These copies must be filed and kept for five years.

#### CROSS-BORDER SHIPMENTS<sup>121</sup>

Cross-border waste shipments are regulated by Legislative Decree no. 152/06 which makes reference to relevant community regulations, bilateral agreements and ministerial decrees establishing specific procedures to be followed in the case of the cross-border transit of wastes between member States, within the Community or with transit through third countries, the shipment of wastes imported into the Community from third countries, and the shipment of wastes exported from the Community towards third countries or transiting in the community itself.

The above shipments are subject to the following procedural obligations:

- existence of a contract between the parties involved, which acquires effectiveness when the shipment starts and must contain various elements such as:
  - identification of wastes with waste CER Code-OECD Code-Basel Convention;
  - price;
  - quantity of material or waste being exported;
  - period of contract validity;
  - indication of itinerary;
  - date, signature and stamp;

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<sup>121</sup> Art. 194 (Cross-border shipments) Legislative Decree no. 152 dated 3 April 2006.

statement from the person organising the shipment expressly approving the obligation to take back the wastes in the event of the shipment not being successfully concluded.

- Production of the following documents:

Photos of wastes during container filling;

Short description of waste and origin of same;

Waste analysis;

Technical sheet of end plant production process;

Short description of recycling operations and technologies used;

Certified translation.

As regards exports to the People's Republic of China, the following documents are required:

- AQSIQ<sup>122</sup>82 certificate
- Pre-shipment Inspection
- S.E.P.A. Import License<sup>123</sup>
- Certificate of membership of the Italian-Chinese Chamber of Commerce.

For cross-border waste transport, the waste form is replaced by the document called "ATTACHMENT VII" which essentially must show the same details as the other form and:

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<sup>122</sup> Acronym of "Administration of Quality Supervision Inspection and Quarantine" - This document certifies that the goods have been inspected and that import has been authorised. This must be requested from the importer at: AQSIQ General Administration for Quality Supervision Inspection and Quarantine 9 Ma Dian East Rd., Hai Dian District, CN-100088 BEIJING

Tel. +86 10 82262114, Fax +861082260011

<sup>123</sup> Import licence.

- the details of the person organising the shipment, importer, waste generator and recycling plant;
- the signature of the person organising the shipment;
- the number of the container seal;
- the details and signature of the carrier.

Attachment VII must be returned, like the form, to the person organising the shipment with the signatures of the recipient - upon receipt of the waste - and of the recycling plant. In fact, the shipment procedure will be deemed successfully completed only once the Attachment VII has been returned complete with the signatures of the waste recipient and of the recycling plant or laboratory.

Finally, the EU Environment Commission, by means of an act dated 22.10.2010<sup>124</sup>, presented a “Council Regulation” proposal, whereby it aims at identifying and introducing common criteria directed towards determining when the scrap metal obtained from wastes stops being considered as waste, having assessed that the scrap metal recycling markets, given the large flows of wastes, would obtain benefits from the introduction of such regulations. The proposal concerns iron, steel and aluminium scrap, and intended for use as raw material in steelworks, foundries and aluminium refineries for the production of metals.

The proposal, albeit with the noble intent of facilitating scrap metal flows and, at the same time, ensuring a high level of environmental protection, could indirectly facilitate the indiscriminate movement of scrap of illegal origin inasmuch as such scrap would no longer be subject (at least as regards iron, steel and aluminium, for now contemplated in the proposal) to the tracking

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<sup>124</sup> COM (2010) 576 definitive - 2010/0294 (NLE) showing “*criteria determining when some types of scrap metal stop being considered wastes pursuant to directive 2008/98/EC of the European Parliament and Council*”

envisaged by the law on wastes which, despite being stringent, has not in any case thus far made it possible to curtail the movement of stolen metals.

*Normative comparison between Italian, UK and Bulgaria legislation*

The analysis, although not detailed, on the legislation (with regard to the regulation of trade, transportation, storage, and/or sale of scrap metal) adopted by the three Countries mentioned above, shows that Bulgaria and United Kingdom, albeit in different ways, perceived need for specific regulation and these measures certainly can support to control illegal activities aimed at the commission of theft and recycling and/or receiving any type of metal. Instead Italy didn't produce a legislation specifically referring to this type of waste, therefore the so-called stuff of scrap metal is considered garbage, the differentiations exist only in relation to the high and/or low toxicity of the waste, which is proportional to the potential environmental damage. This obstructs, or makes it extremely difficult, operate any check on illegal activities of metal laundering and receiving stolen metals.

# B2 United Kingdom

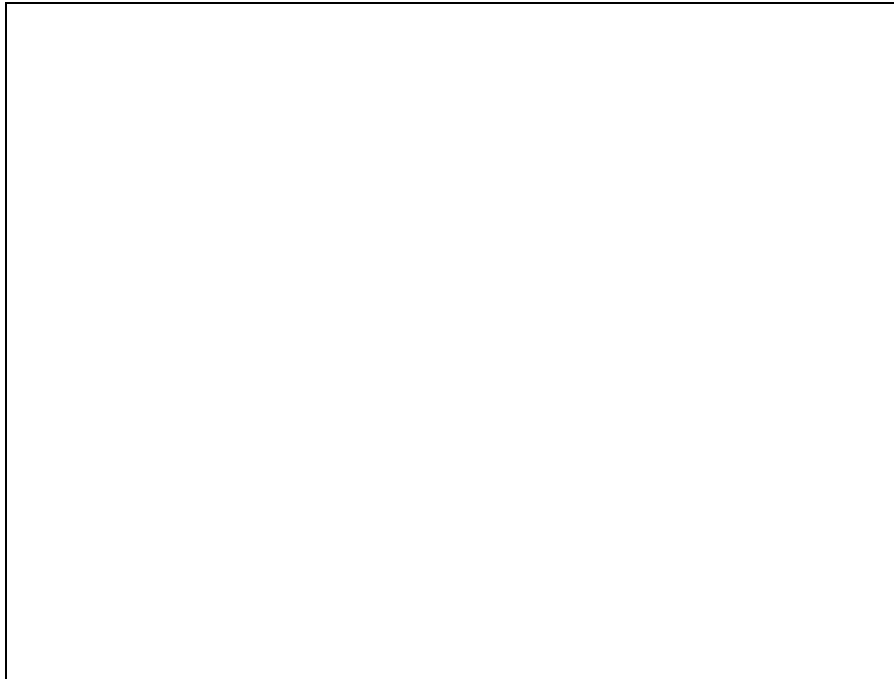
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*Country assessment  
United Kingdom Offender Profile  
UK Legal Framework*

## Metal theft in the United Kingdom

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Metal theft has been continuously on the rise in UK since 2004 – 2005. The frequency of the crime increased constantly as the price of metals on global commodities markets has grown and this trend doesn't seem to slow or to show signs of reverting. In UK it affects basically all public spaces where metal is used to deliver transport or communication services, or just it is used for urban ornament. Metal theft crimes include theft from churches, war memorial, utilities companies, railway, and telecommunications. Particularly severe is cable theft from railways since it produces growing costs in reparation and compensation<sup>83</sup> as well as disruption of a fundamental public transport service.



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<sup>83</sup> According to the House of Commons Transport Committee Report on metal theft on the railway, Compensation costs accounted to almost two thirds of the Total Direct Costs in the last three years.



In order to track metal theft episodes/incidents occurring in UK, the Security Incident Reporting System (SIRS) was launched on 3<sup>rd</sup> November 2008; from that date until 30<sup>th</sup> April 2010, there were a total of 1.603 Metal Theft reports received. This system has links to 26 Police Forces including BTP, as well as 11 private companies. However, if within BTP there are codes for Metal Theft and Live Metal Theft; most Police Forces do not have such codes at this time.

Commonly, the following list are targeted by offenders: building sites, builders merchants, cemeteries, churches, depots, electricity pylons, substations, farms, hospitals, licensed premises, metallic pavement covers, railway lines, residential properties, safety railings, schools, scrap yards, stately homes, statues, storage facilities, telecoms systems, vehicles, and water treatment works. Basically, all operational assets are exposed to the problem, and increased physical hardening/electronic security of one asset would force the criminal element to travel to the next unprotected site.

From a geo-references point of view, metal theft is a UK wide problem, but the South East of the Country is the worst hit.

There are indications that the methodologies and level of skill required to conduct metal theft across the industry is adapting on a 'theft by theft basis,' in line with the potential rewards on offer. Methods have ranged from forced entry to sites, use of violence during an attack in order to facilitate an escape, to impersonating legitimate employees carrying out maintenance work. In order to get around the protective measure that potential victims have put in place in order to help secure their network, thieves are now using increasingly powerful tools such as petrol disc cutters. Deception is also used; where individuals wear luminous clothing to help give the impression that they are genuine and carrying out bona fide work.

The most common way to dispose of metal is through a Scrap Metal Dealer. This method of disposal offers very little risk to the offender, with transactions often being carried out using cash. Another way of disposing of the metal is

directly to the UK buyer, through means such as over the internet, or by disposing of it directly for export, as this way the material can often leave the UK under the guise of other products. There are also some illegal smelters in use in the UK who tend to be used to smelt aluminium kegs. A recent development has seen third party involvement. The thieves will sell the goods onto a drug dealer who will then go to a Scrap Metal Dealer to sell it on.

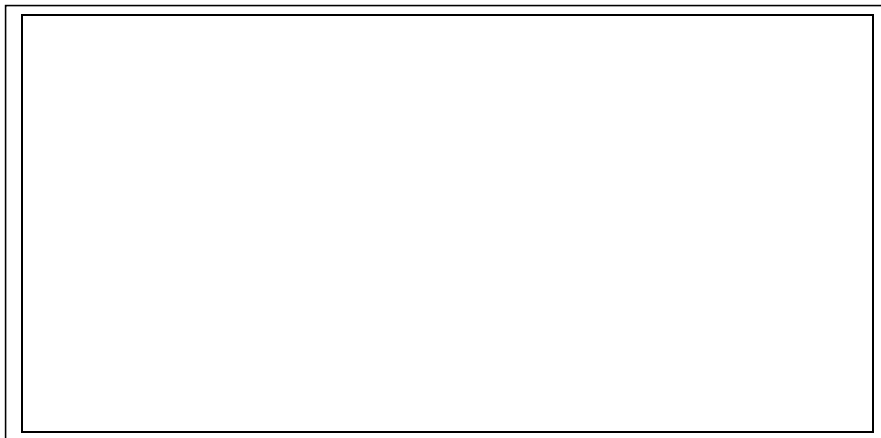
The largest existing problem is information gaps, such as the extent of organised crime groups' involvement, sentencing of offenders for metal theft offences, etc. Legislation governing the scrap metal dealer industry, the Scrap Metal Dealers Act, dates to 1964. Recent changes to environment regulation have taken place, with the Environmental Permitting Regulations being re-issued in 2010. No any other drafts of new/current legislation is in discussion in the Parliament to improve the fight against metal theft, and some companies believe that most of the problem relies, on one hand, on such situation of very little legislation for the scrap metal dealerships, and, on the other, on not enough police resources detached to control sufficiently such industry. Also a normative focused on the need to have "cashless" transaction procedures in place where the seller has to have their gains deposited into a traceable bank account should be implemented, according to them. The need that border agencies, police and the private sector would work together more to tackle the shipment of stolen metal has also been stressed.

The Home Office are responsible for the policy to tackle metal theft, but other departments such as the Department for Transport, Defra and DECC all contribute to aspects of the prevention and enforcement. The operational delivery of police enforcement is delivered through independent police forces under the command of their Chief Constables; the British Transport Police are the ACPO lead force.

Some companies believe there is a need to implement an effective reporting system to provide the opportunity to analyse data and identify trends. However this would require a dedicated staff resource. The biggest of them

have: established some forms of private intelligence units; established some direct links with Police Forces about the impact of metal theft in communities; developed a media strategy to tackle metal theft, collecting an increased interest from the press following this; and/or produced reference booklets for the police to use when visiting scrap metal dealers or when investigating an instance of metal theft.

As for the rest of Europe, the increase of the metal theft phenomena is linked with the spectacular changes in the international price of metals. Metal theft is considered to be a “market driven” offence and the forecast of a continuous rise in the price of metal for the next two – three years indicates that the peak of the phenomena is, very likely, still to come. The elasticity of the phenomena with the change of the price is shown in the following table.



Source: Report on the metal theft on the railway, UK House of Commons Transport Committee, Volume 2, January 2012

### National Strategy

United Kingdom is one of the countries mostly affected by the phenomena in Europe and its LEAs, jointly with the mostly damaged companies, have started to produce adequate countermeasures. The Association of Chief Police Officers has started to publish in 2010 the first national strategy to

contain the phenomena, identifying four short, medium and long term measures. Four key areas of action have been identified:

1. Increase the effort required to steal metal by improving the security of metal through better practice on the part of industry by reducing vulnerability.
2. To increase the risk to offenders by ensuring that the theft of metal is no longer seen to be low risk to the criminal by supporting the use of targeted enforcement action.
3. To reduce the ease and reward to offenders of selling stolen metal—To provide dealers with the tools to identify stolen metals and discourage the thieves from stealing metal by reducing the cash benefits and increasing risk.
4. Increasing the risk to dealers handling stolen metals—place a greater responsibility on scrap metal dealers to take all reasonable steps to ensure they are not unintentionally supporting criminal activity.

There is a shared consensus in UK that the Scrap Metal Dealers Act is no longer suitable to regulate the industry, especially because it doesn't include enough measures to ensure that the audit trail for metal purchases is kept by scrap yards, and that the identity of the sellers is proved. As in other European countries, the metal scrap trade is mostly a cash trade, and this makes more difficult to track the illegal metal traders. There is a growing request from LEAs to introduce cashless regulations in the trading in the scrap metal industry.

The metal Theft prevention Bill has been drafted in order to introduce some of these suggestions. In particular it aims to: introduce a licensing scheme for scrap metal dealers; to enable magistrates' courts to add restrictions to licences to deal in scrap metal; to require that financial transactions in trade in scrap metals be restricted to cashless payments; to give police officers

powers to search properties owned by scrap metal dealerships; to provide that scrap metal proven to have been obtained through theft may be classified as criminal assets; to introduce criminal charges for theft of scrap metal which take into account aspects of the crime other than the value of the scrap metal stolen; and for connected purposes.

The main characteristic of this bill are:

to provide for the appointment of at least one local authority inspector per local authority area (the “local authority inspectorate”), authorised in writing to carry out inspections of scrap metal stores on their behalf;

provide for at least two periodic inspections per annum to be carried out at each scrap metal store registered in any local authority area;

to transform in an offence to make payment in cash for any part of a scrap metal transaction punishable on summary conviction by a fine not exceeding level 5 on the standard scale.

To maintain a full record of all non-cash payments in relation to scrap metal transactions by a scrap metal dealer for a minimum of four years.

To impose additional requirements upon the dealers in order to verify the identity of the persons from whom the scrap metal is received and to verify the origin or provenance of the scrap metal received

## Offender Profile – UK

*UK metal thieves tend to fall into one of two categories, defined by the level of organisation and scale of their criminality:*

- Level 1 – Local, small scale criminality: at this level offending is usually driven by the need to generate cash, with areas that are suffering with relatively high levels of unemployment/social deprivation being impacted by higher volumes of this form of crime. Areas where such conditions prevail can offer rich pickings for metal thieves, and it is not unusual to find communities where metal theft is considered almost ‘normal’, where the relative skills associated are encouraged by the belief that the crime is relatively low risk, and that even if apprehended, it does not carry a substantial penalty. Knowing that they have a buyer for their product, many offenders will show great determination when carrying out such thefts, a problem that is exacerbated by the willingness of Scrap Metal Dealers (SMD) to pay cash. Offenders at this level tend not to be forensically aware, and take few precautions, taking with them a variety of tools in order to perpetrate the crime. Items include hacksaws, Stanley knives, battery operated angle grinders and even accelerant if they intend burning off the outer casing of the cables in situ. The majority of thefts, especially theft of lead, are committed by local offenders, with a number of Home Office Forces reporting that their Prolific Priority Offenders (PPO’s) being involved. On the rail network there tends to be a mixture of first time offenders and prolific offenders. Usually, offenders tend to be: white British males; often from areas with history of heavy industry; coupled with high levels of unemployment (current); aged from teens to 50’s; and often from a travelling community or rail industry background. They: offend locally to where they live (up to approximately 7 miles from their home address); work as individuals, or in small groups (up to approximately 5 members) with minimum planning; are usually driven by need to generate cash (often to

support alcohol/substance habit); and have often history of being involved with other volume acquisitive crime. On the rail network such offenders tend to steal relatively small amounts of live cable (i.e. earthing, signal, heater points cable, overheads etc.), usually targeting areas of the network where their activities aren't likely to be interrupted (i.e. rural / quiet locations). Once the cable has been harvested, the offenders usually deal with it by: taking it away unchanged; stripping and/or burning it (in order to destroy any identification marks in situ; taking it to a "safe" area in order to strip and/or burn it; or hiding it in situ for later collection and disposal. Once the cable has been removed from the scene, the thief will usually try to dispose it as soon as possible, not only to put distance between him and the stolen material, but also to realise its value in a timely fashion as possible. A further concern for the metal thief is identification. Such thieves will tend to favour disposal options that will enable them to remain anonymous; this usually means that they will use a local SMD that is both ambivalent as to the materials source, and less than thorough in any methods it uses to identify its customers. The vast majority of such transactions are cash based. Having found a suitable SMD, the thief needs to transport the material to the location. The methods employed for this are varied, and have included walking, private car, taxi, shopping trolley, wheelie bins and bikes. Some offenders prefer to take it direct to the dealers themselves, whilst others use an intermediary. The intermediary is usually a more respectable looking individual, often female, and can be anyone, from the offender's drug dealer, if they have one, to someone associated with the original offence (i.e. the organiser).

- Level 2 – Mobile, often highly organised large scale criminality: offending at this level tends to be highly organised and on a grander scale than that seen at Level 1. Those involved tend to work as groups, which themselves can be split into two distinct sub groups: A) Travellers; B) Industry. (a) Traveller groups involved in metal theft tend

to be highly organised with an in depth knowledge of the scrap metal industry. They are predominantly of White British or Irish descent, and have a long history of association with the scrap metal industry. Similarly, travellers have a history of involvement in serious and organised crimes. Travellers are willing to travel large distances, in excess of 200 miles in order to commit offences and dispose of product. They have been known to use cover stories when offending and are willing to either use and/or threaten violence if they deem it necessary. Travellers are both forensically aware and knowledgeable on police tactics. By adopting a confident and professional demeanour these highly organised groups have been known steal large volumes of material by day or night. Prior to any theft, they have been known to research their targets by physically visiting locations, as well as carrying out research on the internet. The groups normally target copper based equipment (i.e. cables and overheads), often employing equipment such as transit vans and/or vehicles with a Hi-ab capability for lifting drums of cables. They appear to both willing and able to take such material from depots or any other location where there is sufficient quantities to attract their attention. The travelling community in the UK has had a long association with the scrap metal industry. It is thought that any stolen metal is disposed of using industry contacts.

(b) Industry based groups, for their parts, tend to use their intimate knowledge of the rail network to acquire and dispose of materials for their own personal gain. These groups are highly organised, with involvement being largely dictated by the individual's role and/or position within the organisation. Industry based groups are predominantly composed of White British males (although not exclusively so) who, through their roles/positions, have an insider knowledge of vulnerable and/or accessible material (the material favoured by such groups tends to be rail or 'non-energised' cables) and to have ready access to official equipment including vehicles, which allows them to acquire, manipulate and dispose of materials



with relative ease. The groups tend to comprise, at least in part, of members with a history of theft from the rail industry. Amongst them there is a widely held perception of there being a low risk of investigation and/or arrest resulting from such criminality and many of those concerned see little if anything wrong with the thefts themselves. Such a culture can lead to greed which in turn leads to increased volumes of stolen material. The groups utilise preferred scrap metal dealers and routinely “skim off the top” taking a quantity for themselves when an official comes to collect) from illegal sales of stolen material. Such offenders exploit their insider knowledge and access to target areas of the network where the theft of such material is likely to be relatively straightforward (i.e. area where cable/rail replacement and /or upgrades are taking place). Materials targeted by these groups tend to favour rail or non-energised cables that have already been laid. Such groups generally carry out their criminality at night, and will often involve the use of company assets to commit offences (i.e. using company vehicles to move material from trackside to an SMD). In order to keep any planned/on-going theft activity going ahead as planned, it is known that these groups will make cash payments to relevant staff. The staff concerned will occupy a position whereby they will either need to know about such activity, or their role is key for the thefts to keep happening (i.e. night shift supervisors that are trackside). The SMDs used by these groups tend to be sourced by said group’s members. In practice this usually means they will re-use dealers that have proven their worth in the past, or failing that they may ask local staff involved in the corruption to source an SMD nearby.

## **SCRAP METAL DEALERS ACT 1964**

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An Act to amend the law relating to dealers in scrap metal and similar goods and to dealers in marine stores, and for purposes connected therewith.

## **Scrap Metal Dealer Waste Management Licensing Requirements**

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On May first 1994 a new waste control licensing act became law which needed any operator who deposited, recovered or dumped waste needed a waste control licence or exemption. If you operated without either of these then you might be fined and sent to jail. A WML can be asked for and issued by the pertinent regulatory authority typically SEPA or the EA.

When getting a licence, you are required to be a 'fit and proper person' along with being technically competent to accomplish the job. A 'fit and proper person' is somebody without any environmental convictions, are technically competent and have taken all reasonable cares to meet their licence wants. Metal recyclers don't face the full burden of waste legislation following heavy lobbying of government during the last ten years. Over the last 2 years, and with the support of the metal recycling trade associations, the Environment Agency has been clamping down on unauthorized and non-exempt sites. Licences issued under the Act are referred to as 'Metal Recycling Site Licences'. Licence conditions include security fencing, covered storage needs, road and storage surfacing and drainage, sign and notice boards and other conditions.

A key component of the licensing and control system is Duty of Care. This is the 'Duty of Care' and it is applicable to anyone that produces, imports, carries, keeps, treats or disposes of controlled waste from business or industry or acts as a waste broker in this respect.

This involves the waste producer transferring a document to the waste disposer containing all applicable details about the waste. But the practicalities of always getting this document and the undeniable fact that some providers might decide to go to merchants who didn't enforce the guidelines rigorously inspired a change of heart on the part of the governing body in accord with the Environment Agency which enforces the guidelines

**CASE STUDY:**

**SCRAP METAL DEALERS REGISTRATION WITH LOCAL AUTHORITY**

No person can carry on a business as a scrap metal dealer unless they are registered with their local authority

Under the Act a person is deemed to be carrying on a scrap metal business if:

- A place in Bournemouth is occupied by him as a scrap metal store
- A scrap metal store is not located within Bournemouth but Bournemouth is the usual place of residence
- A scrap metal store is not located in Bournemouth but the premises in within Bournemouth are occupied wholly or partly for the purpose of dealing in scrap metal

Registration as a scrap metal dealer shall last for three years and must be renewed on or before the expiry date if the registered person wishes to continue the business as a scrap metal dealer.

Scrap metal dealers will be entered onto a register containing information concerning the dealer including their business and home addresses.

**Registration**

Before Bournemouth Borough Council will register a person as a scrap metal dealer the following information will be required :

- The full name of the dealer
- The address of the dealer or in the case of a body corporate the registered or

principal office

- The address of each place in Bournemouth that is or will be used as a scrap metal store.
- If the business is carried on from the applicant's place or residence, notice of that fact.
- If the premises are used for a scrap metal business but not as a scrap metal store notice of that fact and the address of the premises
- The Council must be notified within 28 days of any alterations to a registered person's or business' particulars, or if the business ceases to operate.

## **Records**

The following records must be kept by scrap metal dealers :

- The description and weight of the metal
- The date and time of receipt of the metal
- If the metal is received from another person, the name and address of that person
- The price of the metal if it has been ascertained at the time the entry is made in the book
- If no price has been ascertained, the estimated value of the scrap metal
- The registration mark of any mechanically propelled vehicle used to deliver the scrap metal

The following records must be kept of scrap metal processed or dispatched :

- The description and weight of the metal
- The date of processing or dispatch, and in the case of processing, the process applied.
- Where scrap metal is dispatched for sale or exchange, the name and address of the person to whom it is sold or with whom it is exchanged and the consideration for which it is sold or exchanged.
- Where scrap metal is dispatched or processed other than for sale or exchange,

its estimated value before being dispatched or exchanged.

Entries must be made immediately upon receipt, processing or despatch and books containing records must be kept for two years following the last entry.

[http://www.bournemouth.gov.uk/business/Public\\_Protection/Licensing/Scrap\\_Metal\\_Dealers.asp](http://www.bournemouth.gov.uk/business/Public_Protection/Licensing/Scrap_Metal_Dealers.asp)

- #

Where a person satisfies the Council that the business is part of the business itinerant scrap metal collector, the Council after consultation with the Chief of Police may make an order requiring that on the sale of any scrap metal he shall obtain from the purchaser a receipt showing the weight of the metal and the aggregate price at which it was sold. These receipts must be kept for two years and must be produced on demand to anybody authorised to require their production.

Where a scrap metal dealer does not occupy a scrap metal store and is not registered as an itinerant then the reference to keeping a book at a scrap metal store shall be construed as a reference to keeping a book either at the dealers usual place of residence or at any other place occupied for the purpose of the scrap metal business. The references to the receipt, processing or despatch of scrap metal at or from a place shall be construed as the receipt, processing or despatch of scrap metal during the course of business. Particulars must be entered in the book as soon as is practicably possible.

Where a dealer occupies a scrap metal store and is not registered as an itinerant and scrap metal is received and disposed of other than at registered premises then entries in the required books must be made as soon as is practicable at the business' nearest registered store.

### **Rights of Entry**

Any constable has a right at any reasonable time to inspect registered premises, records kept on those premises and scrap metal kept on the premises.

The Council has powers of entry to ascertain if the premises are being used as a scrap metal store.

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## **Offences and penalties**

- Any person found guilty of failing to register a scrap metal business or to notify the local authority of alterations in the appropriate particulars shall be liable on conviction to a fine not exceeding £1000
- Any person found guilty of failing to notify a local authority that a business has ceased shall be liable on conviction to a fine not exceeding £200
- Any person found guilty of failing to keep the proper prescribed records shall be liable on conviction to a fine not exceeding £1000
- Any person found guilty of acquiring scrap metal from a person under the age of 16 shall on conviction be liable to a fine not exceeding £200
- Any person who obstructs the entry of an authorised inspector or fails to produce any book or document which the officer has a right to inspect shall on conviction be liable to a fine not exceeding £200

Where a person is convicted of failing to register and/or failing to keep records of dealings the Court may make an order imposing restrictions on the dealer for a period not exceeding two years.

## **Fee**

There is no fee to register as a Scrap Metal Dealer.

## **Application Form**

[Scrap Metal Dealers application form.](#)

## **Identification**

Please ensure that your application is accompanied in person by two means of identification e.g. Passport, Photo Driving Licence, Birth Certificate to our offices noted below.

## B3 - Bulgaria

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*Description of the problem in Bulgaria*  
*Offender profile*  
*Legislative framework*

## Metal theft in Bulgaria

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Available data shows that for the first nine months of 2010, the six largest police departments in Bulgaria reported 1641 scrap metal theft acts in total (covered by both Sections 195 and 196 of the Crimes Act). In contrast, the number of scrap metal thefts in 2009 was much lower, i.e. 564. National statistics present a problem, however. While metal theft is registered as a crime in the Bulgarian Crimes Act, it is not explicitly addressed in a separate section. Instead, Section 195 gives a general definition of theft and defines the act of theft without making any distinction between different kinds of theft in terms of the nature of the property stolen. Section 196 regulates the cases of aggravated theft that is defined as a socially dangerous offense. This type of offense encompasses cases that concern the theft of property of higher value and/or that has been committed by two or more persons who have agreed in advance on its fulfilment; and/or in cases where a specialised technical device or methods have been employed in the act, and so forth. This section sets a penalty of 1 to 10 years of imprisonment.

Metal theft crimes are mostly committed by individual perpetrators or non-organised small groups, and the infrastructural sectors involved as victims are mainly related to railway companies; electricity suppliers; plumbing suppliers; and telecommunication companies. Despite the funds invested in preventive actions, which were undertaken by the companies operating in such sectors, to reduce the damages of thefts, the majority of them had substantial economic losses. Some of these companies reported reduced losses to certain extent due to the fact that they insured the feedstock and the finished products against theft and got compensations from the insurance companies/providers. The consequences of cargo insurance affect the economy of the companies because once they get compensations, insurance companies increase their requirements for freight



security. Based on non-official records, approximately 10% of secondary raw materials that are shipped and transported to be handled in metallurgy get stolen during their transportation route. In the metallurgy companies themselves, the percentage rate is low because in the majority of cases there is increased surveillance and permanent video monitoring. Especially in the energy industry, which is a strategic sector, the economy progress is directly affected. In 2010 alone, the losses incurred as a result of theft of energy equipment in one of the three electrical supply companies escalated by 228% compared to 2009. In 2010, approximately 150.000 customers on the territory serviced by this company were adversely affected by interrupted electric power supply as a consequence of stolen metal cables, rekordomans, gears/turnoffs, ammeters, etc. In 2010, about 120 electric supply network incidents were recorded due to thefts, or approximately 226 hours customers were badly affected by interrupted electricity supply. In 2010, 10 power transformers, 5 power engines and pumps, input cables and others, containing non-ferrous metals (copper, aluminium) and heavy metals (crude steel and others) were stolen and destroyed.

According to data coming from Bulgarian Ministry of Interior metal theft is a phenomena that remained at high level in the course of the last decade, with a big drop in 2009 as effect of the fall of metal price due to the economic crisis:

Reporting period years	Number of thefts registered	Revealed robberies in % of crime rate
2004	1972	70,79 %
2005	1437	70,11%
2006	1555	60,65%
2007	1323	59,57%
2008	1111	56,40
2009	564	55,01
2010	1634	

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*Source. Bulgarian Ministry of Interior. Metal Thefts reported from 2004 to 2010*

No information is available about the total economic losses from metal theft, but, at any rate, National data shows that this phenomena has increased a lot in the last years. A lot of other occurring damages makes difficult to calculate the total losses, and they may be summarized in:

- costs for restoring the damaged equipment – materials, transportation costs, labour costs;
- losses from undelivered energy;
- costs on clients compensation as a result of damages caused by theft of facilities;
- reducing the continuity of power supply;
- deterioration in quality of electricity;
- power cuts of important administrative, economic and industrial sites;
- negative impact on the company image.

There is a combination of factors leading to the increase of such a crime, among which increased metal prices, the financial crises, very quick and easy cross-border communication among criminals, and very slow and time consuming communication between the official authorities within the EU and others.

Scrap dealers are the usual receivers of metal thieves, but a large amount of them may also consider working towards small, illegal foundry. Indeed, metal stolen is known to be imported or used in Bulgarian metallurgy industry. Also scrap dealers are sometimes hit by metal theft. In this case, most of the crimes place outside the company during transportation, but the extent of successful cases could not be considered as threat to the security of these companies.

Main police methods used to tackle the metal theft include constant administrative control on metal dealers, telephone tapping and electronic eavesdropping, and monitoring of locations and movements using GPS

systems linked to an information system by which as soon the company's central managing office gets informed about property attacks, the police authorities too are interested by the offence. Often, however, reactions appear to be late, since one of the problems is that most of the trucks are not equipped with GPS systems.

Companies, for their part, have introduced security measures like prevention measures related to fraud (e.g. advising procedures in advance for trucks with names and registration plates of the expected trucks and drivers, cargo photographing in the trucks, changing of routes and time schedules, trucks instructed to stop only in parking areas with a high level of organised surveillance, trains instructed to move without stopping and speed decreasing, or to stop only at secure stations) on one hand, and increased surveillance inside the plants, for the transportation by train, and for transportation of cathodes by trucks on the other. About the latter, in particular, such measures encompass armed guards, video surveillance, metal detectors, and special security means, like locking electrical panels, boards and transformers in the stations by a special secret closing system, or putting transformers high on the electric platforms. In some of the most risky areas (Roma suburbs or holiday areas of seasonal use), which are related to thefts, guards are appointed in monitoring energy facilities round the clock. However, in the past 15 years, the amount of measures applied for metal theft reduction have been still not effective enough and the threat of thieves is not reduced

Broader measures that can be considered useful are related to cooperation among different administrative units, society and scrap dealers. Such partnerships exist but there is still a big room for improvement, especially for the insufficient control measures that are carried out for the collecting "ring of the chain". The main problem indeed comes in public law governing the purchase of non-ferrous metals as scrap.

At the political level, the Government and the Parliament are the key players involved in combating metal theft. Municipalities have only certain

implementation responsibilities. In the past decade, professional associations were involved in discussing national strategies or draft laws, but combating metal theft is still not appeared as a priority for both political and civil society. No parliamentary enquiries on metal theft have been lodged in recent years, and *no* party affiliations are known for having put the matter on their agenda. At present, there is a brand new draft law lodged, which in reality restricts the activity of sites and therefore provokes the resentment of professionals in this industry. Consultations with MPs of different party affiliations have just started in recent months.

The main changes proposed in the new project law are as follows:

- ban for individuals to sell waste of ferrous and non-ferrous metals, which are not of domestic character;
- permission to trade with waste of ferrous and non-ferrous metals of non-domestic nature, including risk nomenclature (cables and electric cables of all types and sizes, of elements and parts of rolling stock, track, security systems and any installations to them, of all elements and parts of the road infrastructure, such as road signs, crash barriers, metal lids from shafts, parts of street lighting or irrigation systems and equipment, and metal-containing monuments or parts or components of such) shall be allowed if there is:
  - o Availability of certificate of origin;
  - o Formation of a written contract;
- no cash purchase of scrap;
- bank guarantee of BGN 100 000 (50 000 euro) for companies; and BGN 50 000 (25 000 euro) per site to operate;
- reducing the number of sites for trading waste of ferrous and non-ferrous metals, by placing them in areas defined by the structural plans for production and storage activities;
- separating storage for ferrous and non-ferrous metal wastes, from other waste containing metal;

- Introduction of 24-hour surveillance on sites (ordinance for the procedures of trade activities with ferrous and non-ferrous metal waste);
- increasing in penalties for committed 3 types of crimes under the Penal Code

Permanent 24 hours video surveillance has been introduced on sites, scrap yards and disposal area for scrap and metal scrap collection and sorting. The deadline for supplying the sites with the necessary equipment and for sending the information back to the Ministry of Economy was 15/02/2012. Unfortunately, no details regarding the specific characteristics of the equipment as well as the specificity of the surveillance methods were given by the Ministry. The firms were only obliged to preserve their recordings for one year. According to latest information, the Ministry of Economy up to now, does not dispose of data from the firms. In order to receive data on fined or sanctioned firms or information about developed video surveillance requirements the deadline should be prorogated.

At the media level, the public awareness about the problem is not increasing. Although, more than ten articles and two interviews were published in three daily newspapers and in a single weekly, Bulgarian media operators point out that the topic is not on the agenda of the society and is not considered an important issue at national level. As far as the European level is concerned, brief news is published, but not systematically, and they think it would be appropriate to take measures to raise the awareness of the international dimensions of metal theft and of the need to enhance the European cooperation in this area.

### **Offender Profile**

The Bulgarian offender involved in metal theft is not usually 30 years older. 88 % of such offenders are males, while 12 % are females. In the

overwhelming most of cases, the offenders are uneducated, unemployed, Bulgarian citizens that may travel up to 30 km in order to carry out the thefts. In some cases such thefts have been committed as well by employees and ex-employees in railway companies, electricity suppliers and telecommunication companies, but the majority belongs to the poorest part of the society, quite often living below the threshold of poverty. Furthermore, these people are living in the poorest urban areas, isolated from the rest of the society and reluctant to live by the established societal norms and values. Moreover, for them collecting and stealing metal scrap is the only source of income. Such a crime strongly depends on metal price, but, given the “low” profile of the offenders, even if metal prices continue to grow there is little chance that organised crime groups could take control of metal stolen business.

A serious concern is related with the high relapse crime rate. More specifically, official statistics show that 73% of all metal theft crime convicts have been previously involved two or more times in such criminal acts; such amount rises to 5 or more times in 12 % of the cases.

Usually the thefts are carried out at night, by using several kind of vehicles (trucks, wheelbarrows and carts) and specific tools. Such acts are perpetrated by more than one criminal.

The items most interested by such thefts are fabricated (or have some percentage) in both ferrous and non-ferrous metals, like: metal elements from train carriages and railway infrastructure; plumbing fixtures; any copper wiring/cables; air conditioners; utilities, electric substations; vehicle parts/catalytic converters; aluminium siding/gutters/roofs; bronze plaques/statues; building iron.

The timeframe between the metal being stolen to it being sold usually is up to 2 days. In the legislative regulations in Bulgaria, scrap metal trade of ferrous and non-ferrous metals is an activity that requires licensing; so it is quite common that scrap metal dealers are fully aware that the metal is stolen. Nevertheless, usually the price they pay is at the market value, and it is

through scrap metal dealers that the stolen metal enters the legal section of the metal industry.

*Normative analysis on relevant scrap metal industry legislation in  
Bulgaria*

Bulgaria has provided a clearly defined rules and legislative regulations concerning the trade activity in scrap metals.

Following the Ordinance for licensing trade with waste and scrap of ferrous and nonferrous metals and their alloys, adopted with Decree №286 at the end of 1994, for the first time, the legal frameworks governing such activities were defined. The specific conditions of the transition to market economy and the particular importance of these materials for the metallurgy in **Bulgaria** imposed several changes to be made for better regulation.

In 1997 a new Ordinance regulating the trade in scrap metal was adopted by Decree 363 of 1997, with this ordinance is obtained the sensitive increase in the number of required documents, necessary for receiving a license and the increasing amount of penalties/sanctions for violations, the growing number of hypothesis, failing to comply with them- the license is revoked. Of nearly 1000 issued licenses in 1996, at the end of 2000 their number was reduced to 240. Meanwhile it was reported that many companies and individuals- not registered as commercial entities engage in the collection and trade of secondary metals, without making any steps towards acquiring a license, and thus their activity remains uncontrolled, which by the end of 2001 led to an increased number of attacks on metal structures and parts of the energy and rail infrastructure. The stolen quantities are handed over, i.e. 'legalised' in sites that have foundry capacity, which also do not have the relevant documents and work permits. This situation has simplified such laundering activities. The aim of the Decree №19/26.01.2001 was for temporary restrictions to be introduced on purchase and implementation of separate nomenclatures, which in turn leads to a collapse in the rhythmic assurance of raw material. However the subsequent legislative production has seen the adoption of legislation that reflected contrasting trends. on the one hand the need to regulate in the most specific and rigid as possible trade and

processing of scrap metal, with the inclusion of restrictive conditions in the granting of licenses, and on the other side has been made a step backwards in order to promote wider development of entrepreneurship in general. Indeed the temporary measure (Decree №19/26.01.2001) was revoked by Decree № 113, which entered into force on 01.06.2001. As a matter of fact, in compliance with the Decision № 392 of the Council of Ministers of 07.06.2002, an organisation to improve the business environment was created, by facilitating the licensing, the permits and registration regimes. Moreover a law on waste management, Law on Waste Management Act (WMA), was adopted on 17.09.2003 by the XXXIX National Assembly of Bulgaria. It regulates the procedures for granting (and revoking) licenses and regulates the cases in which no license is required. The Decree № 316 of 22.11.2004 signs the requirements for traders in the purchase, and respectively the sale of scrap metal and in each ground/base the relevant records are kept, in which each transaction is described by type, quantity, partners in the transaction, as well as the relevant document (certificate or certificate of origin). This allows for tracking the chain (source, dealer/dealers, and the end user) and determining the waste origin, to limit the violations on the reusable metal products and equipment, which are regularly delivered at the scrap points.

- The Bulgarian Penal Code deals with criminal acts in this area- out in Articles 195,216a, 234b, 234v.

In 2010 new procedures were introduced for amending the Law on Waste Management, these procedures include: Joint Working Group (MoI, MEET, MEW, MoC for proposals for amendments in the WMA and the Penal Code) and Public and Parliamentary consultation.

The main changes proposed are as follows:

- Prohibition for individuals to give waste from ferrous and non-ferrous metals, which are not from domestic character



- Permission for trading waste of ferrous and non-ferrous metals from non-household nature or primarily on the risk nomenclature is issued when there is certificate of origin and after signing a written contract
- Reducing the number of sites for trading with waste from ferrous and non-ferrous metals
- Separate storage for ferrous and non-ferrous metal waste
- Introduction of 24-hour video surveillance of sites
- Increasing the penalties for crimes under the Penal Code.

*Specific measures adopted to fight metal Theft in Bulgaria*

Among the different proposed measures to fight metal theft in Bulgaria it has been recently introduced a permanent 24 hours video surveillance on sites, scrap yards and disposal area for scrap and metal scrap collection and sorting. The deadline for supplying the sites with the necessary equipment and for sending the information back to the Ministry of Economy was 15/02/2012. Unfortunately, no details regarding the specific characteristics of the equipment as well as the specificity of the surveillance methods were given by the Ministry. According to this law, the firms were only obliged to preserve their recordings for one year.

Conclusions: It's clear that in Bulgaria to provide specific regulations on the activities of trade, transformation and movement concerning the scrap metal waste, it was perceived necessary to differentiate the legislative framework with regard to the waste and scrap of metal, compared to the general field of waste and the environment. Obviously, the provision of specific offenses (concerning the infringement of the regulations on trade transportation, storage, and/or sale of scrap metal) and the provision of procedures for granting licenses allow a better monitoring of potential illegal activity of metal laundering and the subsequent receiving stolen metal material that is subject to theft.

## B4. Spain

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*Description of the problem*  
*Offender profile*

## Metal theft in Spain

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Our researchers polled a certain number of Spanish stakeholders from the Ministry of Home Affairs, the most affected industries and the press.

According to an official from the Spanish Ministry of Home Affairs, there are on average 40 cases of major metal theft crimes per year in Spain, mainly linked to big criminal organisations. From a legal standpoint, in Spain metal thefts are classified as crimes against property, which can affect general interests when perpetrated on Government facilities or public utilities. They can be punished with sentences ranging from 6 months to 3 years of imprisonment, with criminal and associated civilian liabilities to pay. The economic and environmental consequences of these crimes are generating relevant inputs to investigators.

The Spanish law enforcement agencies are entitled to use against the perpetrators of metal thefts many of the tools available against generic crime, including tapping, electronic eavesdropping, monitoring of personal movements through GPS, and telephonic intercepts. According to the Spanish authorities, however the fight against metal theft could greatly benefit from new legal provisions introducing the tracking of metal origins.

An official from the Port Authority of Valencia, which is responsible also for the ports of Sagunto and Gandia, affirmed that the metal theft related incidents number in the dozens each year, ranging from 30 to 40 in Sagunto only. Most of the crimes refer to metal thefts perpetrated by small groups of Romanian and Spanish people, with low social status, even if the actual involvement of major criminal organisations is not ruled out. That perfectly fits with the already described offender profile.

A manager from a company partner of the Valencia Association of Irrigation Wells and Groundwater Users recognized they suffer a daily multitude of thefts, mainly on copper from processing facilities. The damage inflicted to the firms are usually larger than the profit extracted by the

perpetrators. Recidivism leads on occasion also to the closure of the wells. A single company suffered some 6,000 thefts in 2010 only, when attacks mounted in quantity and the violence they involved. Companies had been forced by insurance firms to hire security systems connected to a central alarm. But that measure is deemed insufficient. As in Greece, some provisions to keep the perpetrators under custody until the trial, and other legal arrangements to exert a more effective control over the metal dealers, appear all the more necessary and it is then warmly recommended.

Railways are also in Spain a big target of opportunity for metal theft perpetrators. Signal, communication and energy cables of the lines are the most appreciated items. Metal thefts affect the continuity of the railways service, to the detriment of both the company and the costumers. The historical record shows a marked increase of these thefts along 2006 and 2007, down to 2009, and a new spike in 2010, still under way in 2011. The railways company reacted dispatching patrols across the railways network. There have been also specific operations carried out together with law enforcement agencies, namely *Fida* in Cadiz, along with other “sparks” ones in Madrid.

Energy industry seems in a better position, since metal theft has not yet been recognized as a serious threat to the survival of the companies. The historical pattern is the same recorded into the railways sector, and has been explained mainly referring to the evolution of the price of copper worldwide. The recent worsening of the situation has been tackled in 2010 by a renewed pressure from State enforcement agencies. Companies installed perimeter security barriers, and there is use of controls associated to CCTV. However, there is a complaint about the behaviour of the judicial, which seems not enough cooperative, and too much permissive.

Metal theft is considered only a negligible threat by the steel industry, which sees that crime just as an attritional loss, which does not deserve specific countermeasures.

People from the media published articles on metal theft in 2010, but the attention paid to the phenomenon is held as barely sufficient. The local

press is at the forefront, but no one major operation against the perpetrators has been covered. The actual concern of public opinion is controversial. We got alternative views. According to one of the persons surveyed, people would be not so interested in the issue, while in the views of another they are.

### **Offender profile**

The most common offender in Spain is a Romanian national, of male gender and Roma ethnicity, in his 30s, with a low education, and unemployed. It is people with a sound criminal record made of frauds, misappropriations, and other offenses against property.

Their favourite targets are cable installation, whom they usually attack at night. Stolen metal is sold in an average timeframe of three days, to licensed dealer aware of the illicit origins of the commodity, at market price. Stolen metal enters the legal section of the industry only after it has been conveniently processed.

The perpetrators have access to basic cutting tools and make use of vans and private trucks, allowing them to operate into a 100 km radius large area. A 15% of the offenders have some kind of links to the firms put under attack. Copper is the most appreciated commodity, but aluminium and iron are also of some interest to the perpetrators. Each criminal operation grants an average quantity of metal ranging from 2,000 to 3,000 kg.

According to the Spanish authorities, however, most of the information above should be referred to petty thefts, which are only a part of the picture, along with the big organisations which are responsible for larger scale thefts of copper, perform some kind of clandestine transformation, and vaunt an international reach, having the Asian markets as their ultimate costumers.

## Legislative Framework

First by way of introduction, should be explained some general issues concerning the implementation of the rules in Spain, on any matter concerned.

The whole legal regulation is based on the Spanish Constitution (1978), within which it is determined a different distribution of powers between the existing public administrations (Central Government – State, Autonomous Administration - Autonomous Communities, and finally Local Government-Municipalities). Apart from the Community Standards issued by the legislative bodies of the European Union and which is directly applicable to all administrations. In this sense, there are exclusive powers of various government and others that are exercised on a shared basis. It should be clear here the general principle of implementation of the rules of our legal system. The State always reserves the power to dictate the basic legislation, which sets out the general issues and the minimum requirements to regulate a specific subject (in this case the management of the metals used). Thus, the Autonomous Communities with competence in the matter, in accordance with their respective statutes of autonomy, may adopt implementing rules respecting the basic principles issued by the State. Therefore the regional regulations may be more restrictive as to the regulatory conditions to this matter, but not more permissive and lax than the state legislation which will have a character of "minimum". On the other side there are the local authorities (municipalities) that are credited with legislative autonomy to manage their own interests (which is implemented through the Municipal Ordinances).

It is therefore possible that on the same subject are combined state, regional and local regulations. This makes it necessary to apply some principles for their interpretation. First, there is the principle of hierarchy of norms, according to which norms prevail on each other depending on their range (1<sup>st</sup> Laws and 2<sup>nd</sup> Regulations). Another of the principles applicable to the implementation of norms is the "Principle of Speciality", according to

which the most concrete and specific standards shall be applied as a priority and over the more general that will have a subsidiary nature. And in this brief review about general principles of implementation of the rules should also be related the Principle of Territoriality of the rules, according to which the rules apply only in the territory of the administration which issued them.

However, sometimes conflicts arise regarding the application of the rules that must be resolved in the administrative courts by system of appeals (that is resorting to the courts administrative decisions).

## **ADMINISTRATIVE RULES APPLICABLE TO TRADE IN**

### **METALS:**

Here are the rules applicable (one way or another) to the matter at hand, differentiated by their scope and highlighting in bold those that are most important.

### **EUROPEAN LEGISLATION**

**DIRECTIVE 2008/98/EC of the European Parliament and of the Council, of November 19<sup>th</sup> 2008, on waste and repealing certain Directives.**

REGULATION (EC) No 1013/2006 of the European Parliament and of the Council of June 14<sup>th</sup> 2006 on shipments of waste.

Council DIRECTIVE 75/439/EEC of June 16<sup>th</sup> 1975 on the disposal of waste oils (OJ 194 25.7.95).

Council DIRECTIVE 91/156/EEC of March 18<sup>th</sup> 1991 amending Directive 75/442/EEC on waste. (OJ L 78, 26.3.91).

Council DIRECTIVE 91/689/EEC of December 12<sup>th</sup> 1991 on hazardous waste. (OJ L 377, 03.12.91).

Council DIRECTIVE 91/157/EEC of March 18<sup>th</sup> 1991 on batteries and accumulators containing certain dangerous substances (OJ L78, 26.3.91).

DIRECTIVE 94/62/EC of the European Parliament of December 20<sup>th</sup> 1994 on packaging and packaging waste (OJ L 365, 31.12.97).

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Council DIRECTIVE 96/59/EEC of September 16<sup>th</sup> 1996 on the disposal of PCBs / PCTs (OJ 243, 24.9.96).

Council DIRECTIVE 99/31/EEC of April 26<sup>th</sup> on the landfill of waste (OJ L 182 16.7.99).

DIRECTIVE 2000/53/EC of the European Parliament and of the Council, of September 18<sup>th</sup> 2000 on end-of-life vehicles (OJ no. L 269 of October 21st 2000).

Commission DECISION 94/3/EEC of December 20<sup>th</sup> 1993 adopting the European Waste List (EWL) (OJ L 5 / 15 07/01/94).

DECISION 96/350/EC, of the Commission, of May 24<sup>th</sup> 1996 adapting Annexes II A and II B of Directive 75/442/EEC of the Council, on waste (OJ No. L 135 of June 6th 1996).

DECISION 2001/118/EC of the Commission, of January 16<sup>th</sup> 2001 amending the Decision 2000/532/EC as regards the list of wastes (OJ no. L 47 of February 16th 2001).

Council DECISION of December 19<sup>th</sup> 2002 establishing criteria and procedures for acceptance of waste at landfills pursuant to Article 16 and to Annex II of Directive 1999/31 / EEC (2003/33 / EC).

REGULATION (EC) No 2150/2002 of the European Parliament and of the Council, of November 25<sup>th</sup> 2002 on waste statistics (OJ L 332, 09.12.02).

### **NATIONAL LEGISLATION**

**LAW 22/2011, of July 28<sup>th</sup>**, on Waste and Contaminated Soils (Official State Gazette BOE no. 181 of 28.07.2011).

LAW 11/1997, of April 24<sup>th</sup>, on Packaging and Packaging Waste (BOE no. 99 of 25.4.97).

ROYAL DECREE 833/1988 of July 20<sup>th</sup>, which approves the Regulations for the implementation of the Law 20/1986, Basic on Toxic and Hazardous Waste. (BOE no. 182 of 30.07.88).

ROYAL DECREE 45/1996, of January 19<sup>th</sup> regulating various aspects related to batteries and accumulators containing certain dangerous substances. (BOE no. 48 of 24.02.96).



ROYAL DECREE 952/1997, of June 20<sup>th</sup>, amending the Regulations for the implementation of the Law 20/1986, of May 14<sup>th</sup>, Basic on Toxic and Hazardous Waste, approved by Royal Decree 833/1988, of July 20<sup>th</sup>. (BOE no. 160, of 05.07.97).

ROYAL DECREE 1217/1997, of July 18<sup>th</sup>, on incineration of hazardous waste and amending the Royal Decree 1088/92 of September 11<sup>th</sup>, concerning incineration facilities for municipal waste (BOE no. 189, of 08.08.97).

ROYAL DECREE 782/1998, of April 30<sup>th</sup>, Regulation of Law 11/1997 (BOE no. 104, of 01.05.98).

ROYAL DECREE 1254/1999, of July 16<sup>th</sup>, approving measures to control the risks inherent in major accidents involving hazardous substances (BOE no. 172, of 20.7.99).

ROYAL DECREE 1378/1999, of August 27<sup>th</sup>, establishing measures for the removal and disposal of polychlorinated biphenyls (PCBs) and terphenyls (PCTs), and equipment containing them (PCBs/PCTs) (BOE no. 206, of 28.8.99).

ORDER of April 27<sup>th</sup> 1998, establishing individualised amounts receivable by way of deposit and the identifying symbol of the containers placed on the market through the deposit and return systems.

Corrigendum to the Order of April 27<sup>th</sup> 1998, establishing individualised amounts receivable by way of deposit and the identifying symbol of the containers placed on the market through the deposit system.

RESOLUTION of January 13<sup>th</sup> 2000, of the General Secretariat of the Environment, providing for the publication of the Agreement of the Council of Ministers, of January 7<sup>th</sup> 2000, approving the National Urban Waste Plan. (BOE no. 28, of 2002).

ROYAL DECREE 1416/2001, of December 14<sup>th</sup>. CONTAINERS. Packaging of plant protection products (BOE no. 311/2001 [p. 50002], December 28<sup>th</sup> 2001).

ROYAL DECREE 1481/2001, of December 27<sup>th</sup> regulating the disposal of waste by landfill (BOE no. 25/2002 [p. 3507], January 29<sup>th</sup> 2002).

ORDER MAM/304/2002, of February 8<sup>th</sup>, for the publication of recovery and disposal operations of waste and of the European Waste List (BOE no. 43, of February 19<sup>th</sup> 2002).

Corrigendum to the Order MAM/304/2002 of February 8<sup>th</sup>, by which are published recovery and disposal operations of waste and the European Waste List (BOE no. 61, of March 12<sup>th</sup> 2002).

ROYAL DECREE 1383/ 2002, of December 20<sup>th</sup>, on management of end-of-life vehicles (BOE no. 3-01-2003).

ORDER INT/249/2004, of February 5<sup>th</sup>, regulating the final de-registration of depolluted end-of-life vehicles (BOE no.37 12-02-2004).

ROYAL DECREE 9/2005, of January 14<sup>th</sup>, establishing the relation between potentially soil-polluting activities and the criteria and standards for the declaration of contaminated soil.

## **VALENCIAN COMMUNITY LEGISLATION**

**LAW 10/2000, of December 12<sup>th</sup>**, on Waste of the Valencian Community (DOGV – Official Journal of the “Generalitat Valenciana” 15/12/2000).

DECREE 218/1996, of November 26<sup>th</sup>, of the Valencian Government, appointing the competent body in the Valencian Community area to carry out the functions referred to in the Regulation (EEC) 259/93, of February 1<sup>st</sup>.

DECREE 202/1997, of July 1<sup>st</sup>, of the Valencian Government, regulating the processing and approval of the Integral Plan of the Valencian Community Waste (DOGV 3031, of 9.07.97).

DECREE 317/1997, of December 24<sup>th</sup>, of the Valencian Government, approving the Integral Plan of the Valencian Community Waste (DOGV. 3160, of 13.01.98).

DECREE 132/1998, of September 8<sup>th</sup>, of the Valencian Government, approving the Special Plan of the Valencian Community before the Risk of Accidents in the Transport of Dangerous Goods by Road and Rail. [1998/Q8183].

DECREE 32/1999, of March 2<sup>nd</sup>, of the Valencian Government, approving the amendment of the Integral Plan of the Valencian Community Waste. (DOGV no. 3449, of 08.03.99).

ORDER of July 6<sup>th</sup> 1994, of the Regional Minister for the Environment, regulating the control and monitoring documents about toxic and hazardous waste to be employed only by small waste producers (DOGV 2314, of 20.07.94).

ORDER of July 14<sup>th</sup> 1997, of the Regional Minister for the Environment, developing the Decree 240/1994 of November 22<sup>nd</sup>, of the Valencian Government, which approves the Regulation of Waste Management.

ORDER of October 15<sup>th</sup> 1997, of the Regional Minister for the Environment, amending the Order of July 6<sup>th</sup> 1994, of the Regional Minister for the Environment, regulating the control and monitoring documents about toxic and hazardous waste to be employed only by small waste producers.

ORDER of March 12<sup>th</sup> 1998, of the Regional Minister for the Environment, establishing and regulating the Register of Small Producers of Toxic and Hazardous Waste in the Valencian Community (DOGV. 3224, of 17.04.98).

RESOLUTION of July 14<sup>th</sup> 1997, of the Regional Minister for the Environment, initially approving the draft of Integral Waste Plan of the Valencian Community.

DECREE 2/2003, of January 7<sup>th</sup>, of the Generalitat Council, approving the Regulation of Production, Possession and Management of disused tyres in the Valencian Community.

To this list of all legislation applicable to the matter at hand, we should add the Municipal Ordinances of the various municipalities, such as those on Uses and Activities, on Environment, on Cleaning, on Police and Good Governance, of Citizen Coexistence or on Wastes, which will not be addressed in the study because of their breadth and specificity.

## **POLICE STANDARDS FOR THE CONTROL OF METAL TRADE**

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**ORDER, INT/1920/2011, of July 1<sup>st</sup>**, strengthening the control over the trade of copper for metal waste management centres and establishments of wholesale trade of scrap and waste products (BOE no. 165, of 12.07.2011).

The Order of the Minister of Interior of November 2<sup>nd</sup> 1989 («BOE» of November 24<sup>th</sup> 1989), regulating the procedure for developing registry books and other monitoring documents required for certain establishments, includes in its Annex IV the registry book model for the metal waste management and wholesale trade of scrap and waste products, such as used goods. Moreover, these establishments are required to keep the registry book following the provision of Article 12 of Organic Law 1 / 1992, of February 21<sup>st</sup>, on Protection of Public Safety, and of paragraph one of the Royal Order of January 19<sup>th</sup> 1924, rule remaining in force with respect thereto.

Subject to compliance with their obligations in this matter by the holders of metal waste management centres and, in general, establishments of wholesale of waste and scrap, and with the controls of the registry books that current regulations provide by Police Headquarters, Police Stations and Civil Guard Stations, the growth of copper theft, that has been occurring as a result of increased price of it, requires completing the control strengthening the communication in a more immediate and effective way, with the use of telematics.

Thus, in accordance with this Order, the metal waste management centres and, in general, establishments of wholesale of waste and scrap, shall notify daily the supplies of copper material by electronic means to Police headquarters, Police stations and Civil Guard stations, according to their territorial demarcation and simultaneously with their registration in the logbook, specifying the quantity, origin and characteristics contained in Annex IV of the Order of the Minister of Interior of November 2<sup>nd</sup> 1989. It is accepted any transmission system for the data that ensures immediate and safe communication.

This system is already being applied for industrial/commercial activities sensitive in terms of public safety, such as gun shops, jewellery, stores buying and selling gold, precious metals and used items.

## 2.4. PENAL RULES APPLICABLE TO METAL THEFT.

The criminal standard par excellence in Spanish legal system is the Penal Code. It reflects the different types of crimes/offenses and penalties and/or security measures to apply.

One of the principles of criminal law enforcement in Spain is that there is no analogical interpretation of crime or of penalties. That is, only will be deemed crimes the actions/omissions listed in Penal Code.

In relation to the topic of the project "metal theft," we have selected in the PC those crimes that in one way or another may be applicable to this behaviour, although the charge, even police, of a penal or other type, will be highly variable since they are circumstantial crimes.

When mentioning these crimes, as it is not a closed list but of those which are most common, it should be told the difference between:

### DIRECT CRIMES:

- THEFT: Defined by our legal system as any conduct of removal of a movable property, carried out for profit and using violence/intimidation against persons or with the use of force. Currently it is punishable by imprisonment which may range from 1 to 5 years depending on the circumstances.

- MISAPPROPRIATION: In many cases when police intercepts a load of metals their provenance cannot be established: the suspects' state that they found it somewhere unattended and so they have appropriate it. Well, in these cases the penal code provides penalties of fines of 3 to 6 months (at a daily fee that can range between 2 and 400 € and that will be fixed by the judge depending on the author/s' personal circumstances), for those who, for profit, appropriates items lost or of unknown owner, as long as the value of

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what appropriated exceed 400 € (if its value is lower, it would be punished as a minor offence and the penalty would be much lower). Now, the suspects say they have picked it up off a landfill or a garbage dump and thus try to refute our evidence that the transported goods have a practical owner.

RELATED OFFENCES:

- DAMAGES: In parallel with the criminal liability for the above offenses

it is also required the corresponding for the damage committed in the facilities object of the crime. The PC provides penalties ranging from fines of 6 months for the basic type of damage (always exceeding the € 400 for loss of value as being less the amount of damage it would constitute a lack punished with a lower penalty) to 3 years of imprisonment and fine of up to 24 months (2 years) in the event of damages to public or communal goods and services. When they concern means or resources used by the armed forces or Police and they put them out of action for the service, the prison sentence will be raised to 4 years. Obviously in these crimes, the profit motive of the active subject is not required, being irrespective of the driving force of these crimes.

- RECEIVING: It is also punishable, this time with a prison sentence

ranging from 6 months to 2 years, the one that, for profit and with knowledge of the commission of a crime against property in which has not been involved either as author or as accomplice, assists those responsible to take advantage of the products thereof, or receives, acquires or hides such goods. If they have been received in a facility or industrial/commercial premises for trafficking with them, it will constitute an aggravated form of this crime and it will also entail a fine of twelve to twenty four months. In these cases the judges or courts, considering the gravity of the offense and the personal circumstances of the offender, may also impose the penalty of special disqualification for the exercise of his profession

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or industry, for a period of two to five years, and agree the measure of temporary or permanent closure of the establishments or premises.

- COVER-UP: It will be punished by imprisonment from six months to three years the one that, with knowledge of the commission of a crime and without having participated in the same as author or accomplice, takes part in it after its execution assisting the authors/accomplices to benefit of the profit, product or earnings of the crime without profit for him, or hiding the goods of a crime, to prevent their detection.

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## THE NEW STATE LAW FOR WASTE

(LAW 22/2011, of July 28th, on Waste and Contaminated Soil).

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### FOUNDATION.

In a European context where waste production is continuously increasing and where economic activity linked to the waste reaches more and more importance, both for its significance as for its direct impact on the sustainability of the European economic model, the Sixth Community Action Programme for the Environment called for the revision of waste legislation, the clear distinction between waste and non-waste, and the development of measures for waste prevention and management, including the targets setting. In the same vein, the Communication from the Commission on May 27<sup>th</sup> 2003, "Towards a thematic strategy for the prevention and recycling of waste", urged progress in their review.

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All of this led to the replacement of the former Community legal regime on waste and to the enactment of Directive 2008/98/EC of the European Parliament and of the Council of November 19<sup>th</sup> 2008 on waste, repealing certain Directives by integrating them on a single standard ("Waste Framework Directive" hereinafter). This new Directive sets the legal framework of the EU for the waste management and provides the tools necessary to dissociate the link between economic growth and waste

production, putting special emphasis on prevention, understood as the set of measures taken before a product becomes waste, to reduce both the quantity and content of hazardous substances such as the adverse impacts on human health and the environment of the wastes generated. Thus it incorporates the principle of hierarchy in the waste production and management that must focus on prevention, preparation for reuse, recycling or other forms of recovery, including energy recovery and aims to transform the EU into a "recycling society" and contribute to the fight against climate change.

The transposition of this Directive into our domestic legal order is carried out through this Act that replaces the previously existing Law 10/1998, of April 21<sup>st</sup>, on Waste.

The necessary modification of our domestic legislative framework on waste to adapt to changes of Community law is also an opportunity to update and improve the system previously in force under the Law 10/1998, of April 21<sup>st</sup>. This law established at the time the first regulation in general terms on waste in our legal system. In the twelve years of application of this rule, the public administrations, the waste producers and managers have acquired an experience and training in this field much greater than that at the time of approval of the previous standard.

Therefore, the transposition of the Waste Framework Directive and the replacement of the previous Waste Act require the updating of the legal regime in waste production and management in light of the acquired experience, the identified gaps, and the evolution and modernisation of waste policy. This Act directs the waste policy on the principle of hierarchy in their production and management, maximizing the use of resources and minimizing the impacts of waste production and management. The new law promotes the implementation of prevention, reuse and recycling of waste. It also plans to increase transparency and environmental and economic efficiency of waste management activities. Finally, part of the spirit of the law is to promote innovation in waste prevention and management, to facilitate the development of greater value solutions for society at all times.



This is in brief the spirit of the law. See next its contents in more detail.

## CONTENTS

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Title I of the Act contains the provisions and the general principles and is divided into two chapters.

The first chapter deals with the general provisions and includes the purpose, definitions, as well as reference to the classification and the European Waste List.

The purpose of this Act is to establish the legal regime of production and waste management, including appropriate measures to prevent their generation.

An article is included about definitions among which are reflected key concepts such as “waste”, “reuse”, “recycling”, “recovery” and “disposal”. In addition it also introduces the definitions of "household", "commercial" and "industrial" waste, in order to clarify the management responsibilities for the different types of waste. It incorporates the Directive definitions of “dealer” and “agent” as waste managers, distinguishing these two figures, as the dealer acts on its own while the agent acts on behalf of third.

Following the guidelines of the Waste Framework Directive specific articles are introduced concerning the concepts of "by-product" and "end of waste status", and establishing the conditions a waste must meet to be considered a by-product or to lose its waste status.

Chapter II is devoted to the principles of waste policy and to administrative skills.

A new feature from the new Directive sets out a new waste hierarchy making explicit the order of priority actions in waste policy:

prevention (in the generation of waste), preparing for reuse, recycling, other recovery (including energy) and, finally, disposal of waste. Applying the “polluter pays” principle, it is included an article on the costs of waste management that will be borne by the producer thereof, or by the producer of the stock that with the use becomes waste, in the cases where it is

established, pursuant to the rules of extended producer of the product responsibility.

Since there are several public administrations involved in waste management, it is necessary an article that defines the administrative responsibilities of each of them. It is clarified the existing distribution of powers of the previous law, especially with regard to local entities which may establish by ordinance the conditions for the delivery of waste, whose management they have assumed.

In order to set up a forum of competent administrative authorities in this matter, the Act includes the creation of a Coordination Commission on waste, as a body of technical cooperation and collaboration among the various administrations, composed of representatives from the General State Administration (ministerial departments with responsibilities in this matter), the Communities and Autonomous Cities, and local entities. The Commission may create specialised working groups to be attended by experts in the field concerned, from public or private sector.

TITLE II is devoted to instruments of waste policy. Following the guidelines set by the Framework Directive, the plans and program for waste management and the programs for waste prevention are collected as planning tools. It is also established the possibility of adopting economic measures and instruments, among which charges for waste disposal in landfill and incineration of household waste.

The planning of waste management is another essential tool of waste policy. Therefore, this Act develops national, regional and local plans: the National Master Plan for Waste Management defines the general strategy of waste management as well as minimum goals, the Autonomous Communities developing their own regional plans for waste management, and enables local entities to perform, separately or jointly waste management programs.

Given the importance attributed to prevention in generation of waste, the Directive includes a specific tool: waste prevention programs that set prevention objectives and measures. These programs may be integrated into

the waste management plans and programs, in other environmental policy programs, or established as separate programs.

The Title III of the Act is under the heading “Production, possession and management of waste” and develops the obligations for producers and waste managers. In this title (perhaps the most significant from “Pol-Primett” viewpoint) the aim has been to achieve greater clarity and systematisation of the obligations for the parties involved in waste production and management, as well as simplification of administrative burdens on operators, replacing part of the existing authorisations in the previous Act with communications. This evolution of authorisations replacement with communications is part of the overall substitution process of a priori control of the administration for an afterwards check, that does not slow the onset of economic activities, and that in any case does not involve a loss of control by the administration, but a change at the time it takes place.

This Title III is organised into three chapters devoted to the obligations for producers or other initial holders of waste, the obligations for waste managers and, finally, the third chapter establishes the system of communications and authorisations regarding waste.

In the first chapter are listed the obligations for producers or other initial holders of waste related to waste management, as well as concerning the storage, blending, packaging and labelling of their scrap. The producer or holder must ensure proper treatment of waste, for which various options are set (treating it themselves or delivering to a third party, public or private); in any case the operations performed must be documented. It is also established the scope of responsibility for producers and initial holders of waste, imposing certain obligations concerning the delivery of household waste and commercial waste, and specific features are collected on hazardous waste.

Chapter II regarding the obligations managers is divided into four sections; the first regulates the general obligations for managers, in relation to the requirements of storage and guarantees or insurance underwriting, as well as specific obligations for waste managers depending on their activity.

The second section sets out the objectives and measures in the waste management. These are intended to promote the preparation for reuse and recycling by setting specific objectives to implement separate collection of materials. It also defines specific objectives of preparing for reuse and recycling of household waste, and preparing for reuse, recycling and recovery of construction and demolition waste.

A third section expressly refers to bio waste, having nothing to do with the object of this project.

The fourth section of this Chapter II regulates the shipment of waste, defined as the transport for the removal and recovery. It provides, first, the legal regime of shipments within the State, considering environmental reasons listed in Regulation (EC) No. 1013/2006 and in framework directive itself as the only possibility of opposition thereto. The entry and exit of waste in the national territory are regulated under the said Community Regulation, introducing in this law as innovation an obligation for those who organise the transfer to submit information on non-hazardous waste, for statistical and control purposes.

In Chapter III of Title III, communications and authorisations for waste production and management are regulated. Companies producing hazardous waste and non-hazardous waste in amounts greater than 1,000 t/year are subjected to prior communication requirement in the Autonomous Community where they are located; This will give the Autonomous Communities the information needed to facilitate the monitoring and control of waste production, and simplify administrative procedures to companies producing hazardous waste, replacing the previous system of authorisation with the current communication.

In addition this standard affects the legal regime applicable to waste management in the broadest sense of waste buying and selling (negotiation), intermediation, collection, transportation and treatment, setting for those companies, whose activities are not linked to an installation, a system of communication only in the Autonomous Community where they have the

domicile, avoiding duplication of administrative procedures in the rest of the regions where are intended to operate.

The regime applicable to waste management activities that take place in a particular installation is the authorisation, both for the company that will develop the activity as for the facility where it is developed.

It should be stressed that there is no specific legal regime for all waste disposal operations, but, when it is a treatment operation, the facility shall require prior authorisation. Furthermore, when the waste producers store their own waste at the place of production and are required to submit communication, they must include in it the terms of this storage.

Finally it is noteworthy that the legislator includes a more effective tool (for its agility) to carry out the immediate closure by the administrations responsible for the control of establishments engaged in the management (recovery) of metals that do not have permits or authorisations. Notwithstanding, it must be mentioned its limited practical impact, despite the insistence and interest of recycling professionals, and the existence of many complaints by the Security Forces in charge of inspections of these activities.

Title IV of the Act is devoted to the "Extended producer responsibility". For the first time it is established a systematic and coherent legal framework, under which producers of goods that use convert into waste are involved in the prevention and management organisation of them, promoting the reuse, recycling and recovery of waste, in accordance with the principles inspiring the new legislation.

The Act defines the scope of this responsibility, establishing the obligations to which, by the appropriate regulatory development (when it occurs), producers may be subjected, both in the design and production phase of their products as in the management of waste resulting from their use. Nothing is said about plans for making difficult and therefore preventing the perpetration of theft of metals.

As regards the way to meet these obligations, the law allows for both individually or collective systems. In this latter case, the producers have to

set up a legally independent and non-profit entity, ensuring access to all producers on the basis of objective criteria. For this assumption is expected a licensing system with the participation of the Coordination Commission on waste, which ensures homogeneous action of the collective systems throughout the national territory.

Individual systems, on the contrary, are not subjected to this administrative authorisation system, but to that of prior communication at the beginning of the activity, in line with the principle, also inspiring Act, to provide citizens and companies with access and exercise of service activities.

TITLE V contains the regulation of contaminated soil, aspect of the law that will not be addressed, for it is not relevant to the project at hand.

As mentioned above, one of the aims of this Act is to enhance transparency in the management of waste and enable its traceability, and to this end responds TITLE VI, devoted the Registry and information on waste.

The Act regulates the production and waste management Registry that incorporates information from the records of the Autonomous Communities and such information may be used by other public administration in order to reduce administrative burdens (also by the police to know legal network data about management of metals, authorized waste managers and type of activities). This Registry will be further developed in the future in accordance with the law.

In order to facilitate monitoring and inspection functions that this Act attributes to public administrations (including the Security Forces and Bodies), it is established the obligation, for the registered entities or companies, to keep a chronological archive where to record information on the operations of waste production and management, providing waste traceability from production to final treatment (what until now has been referred to as “Registry-book of movements”).

The annual submission of information to the Autonomous Communities by entities or waste treatment companies will enhance the information concerning waste production and management and will provide accurate and

reliable information, which is crucial to the development of waste policy and to comply with European and international reporting requirements.

Finally Title VII regulates the responsibility, monitoring, inspection and control, and the sanctions system.

In line with the elimination of certain administrative authorisations and replacing them with a prior communication at the start of activities, the Act strengthens the powers of public authorities for inspection, monitoring and control of movements related to the waste.

The sanctions system provides an update of content of the Law 10/1998, of April 21<sup>st</sup>. To this end, taking into account the experience acquired, certain offenses and sanctions have been defined more precisely, making them more consistent and effective in relation to the purpose to be pursued.

With regard to sanctions, the amount has been revised according to the gravity of the conduct, and the obligation to repair the damage caused to natural resources has been introduced in terms of the Law 26/2007, of October 23<sup>rd</sup>, on Environmental Responsibility.

As for the sanctioning power it has been extended to the holders of local entities and, in order to strengthen the preventive nature of the Law, the possibility has been included for the appropriate body to take interim measures necessary before the start of the procedure, in cases of emergency and for temporary protection of the interests involved.

As far as ADDITIONAL PROVISIONS of the Act, it is noteworthy that the sixth additional provision of the Act provides the control of waste management activities relevant to public safety. And the eighth establishes a period of three years to adapt to this law the provisions of development relating to waste, so that different regional laws regarding this matter shall conform to this state standard within that period. The ninth additional provision allows the procedures processing and the sending of information by electronic means in accordance with Law 11/2007 of June 22<sup>nd</sup>, on citizens' electronic access to Public Services. The twelfth requires the Government to promote technical cooperation and collaboration between public

administration and private enterprise. Finally, the thirteenth additional provision promotes a boost for research on waste prevention and management.

In the TRANSITIONAL PROVISIONS, transitional arrangements are established in relation to certain issues differently addressed by the previous law, as by-products, local entities' ordinances, local authorities' contracts in force for commercial waste management, systems of extended producer responsibility, the current financial guarantees, the Registry of waste production and management and for authorisations and communications. In addition, the competencies that under this Act belong to the Coordination Commission on waste will be temporarily carried out by the bodies to which they were allocated before the Law.

By means of the DEROGATING PROVISION, it highlights the express repeal of Law 10/1998 of April 21<sup>st</sup> (former State Law on Waste), and generically, in accordance with the principle of the hierarchy of norms, all the lower rank standards that oppose the provisions of this Act. Even though, those not opposing will remain in force.

The FINAL PROVISIONS, finally, are dedicated to the definition of the competence degrees; they make explicit the work of transposition of Community law carried out by the Act; allow the Government to undertake the regulatory development and set as entry into force of the Act, the day following its publication in the "Official State Gazette" (July, 29<sup>th</sup> 2011).

As for the ANNEXES, the I and the II list, respectively, disposal and waste recovery operations. The III describes the characteristics of the waste to render it as dangerous. Annex IV contains examples of waste prevention measures. The V specifies the content of regional plans for waste management.

Annex VI describes the contents of the application for authorisation for the treatment of waste, the VII specifies the content of the authorisation for the treatment of waste and the VIII the contents of communications regulated by Law.



Annexes IX and X define the content of the communication and of the authorisation, respectively, of individual and collective systems of extended producer responsibility.

Lastly, Annex XI contains the reporting requirements on contaminated soils, and the XII the reporting requirements of the companies on waste treatment.

## **SANCTIONS SYSTEM**

PERSONS RESPONSIBLE: May be sanctioned for the facts constituting administrative offenses contained in this Act, natural or legal persons who commit them, without prejudice to the respective civil, penal and environmental responsibilities.

Where compliance corresponds to several persons jointly, they will be jointly liable. The liability shall be jointly, in any case, under the following circumstances:

a) When the producer, initial holder or manager of waste, deliver it to natural or legal person other than those specified in this Act.

b) When there are several responsible and it is not possible to determine the degree of participation of each one in the commission of the offense.

OFFENCES are classified as Very serious, serious and Minor. By way of example, the following should be noted:

### **VERY SERIOUS**

a) Performing an activity described in this Act without the written communication or authorisation, or with them expired or suspended, as well as the breach of the obligations imposed in the authorisation or of the information incorporated in the communication, of course whenever there is serious danger or damage to the health of people, when there has been a serious damage or deterioration to the environment, or when the activity takes place in protected areas.

b) Acting contrary to the provisions of this Act and in its implementing rules, of course whenever there is serious danger or damage to the health of

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people, when there has been a serious damage or deterioration to the environment, or when the activity takes place in protected areas.

c) The abandonment, dumping or uncontrolled disposal of hazardous waste.

d) The abandonment, dumping or uncontrolled disposal of any other type of waste, as long as it jeopardises the health of people or there has been a serious damage or deterioration to the environment.

e) The breach of the obligations arising from the imposed provisional measures.

f) The intentional concealment or alteration of data submitted to administrative records to obtain authorisations, permits or licenses, or of data contained in communications related to the performance of the activities regulated under this Act.

#### SERIOUS

a) Performing an activity described in this Act without the written communication or authorisation, or with them expired or suspended, as well as the breach of the obligations imposed in the authorisation or of the information incorporated in the communication, without any serious danger or damage to the health of people or any serious damage or deterioration to the environment.

b) Acting contrary to the provisions of this Act and in its implementing rules, without any serious danger or damage to the health of people or any serious damage or deterioration to the environment.

c) The abandonment, dumping or uncontrolled disposal of any non-hazardous waste without serious threats to the health of people or serious damage or deterioration to the environment.

d) The breach of the obligation to provide documentation, the concealment or falsification of data required by applicable legislation or by the stipulations contained in the authorisation, as well as the breach of the obligation of custody and keeping of such documentation.

e) The lack of any sureties or guarantees, or their renewal, when compulsory.

g) The entry into the national territory of waste coming from another Member State of the European Union or from a third country, as well as the exit of waste to the said places, without obtaining the permits and authorisations required by Community legislation or international treaties or conventions to which Spain is party, or without complying with the obligation under Article 26.5 of this Act.

h) In the case of intra-Community shipment and of waste imports from third countries, the breach of the obligation of issuance of the certificate for recovery or interim as well as non-interim disposal operation of waste, within the time limit and the terms established in Articles 15 and 16 of Regulation 1013/2006, of the European Parliament and of the Council of June 14<sup>th</sup> 2006.

i) The obstruction of monitoring, inspection and control activities of public authorities, as well as the breach of the obligation to cooperate with public administrations.

l) The delivery, sale or transfer of non-hazardous waste to natural or legal persons other than those specified in this Act, as well as acceptance of them in conditions other than those appearing in the corresponding permits or in the standards established in this Act.

#### MINOR

a) The delay in providing the necessary documentation to the administration, in accordance with the provisions of the applicable regulations, the stipulations contained in the authorisations or, where appropriate, accompanying the communication.

b) The commission of any offense referred to in the previous paragraphs when, for its minor nature or entity, it do not deserve the rating of very serious or serious.

c) Any infringement of the provisions of this Act and of its implementing rules, of the provisions contained in the authorisations or the content of communication, when it is not classified as very serious or serious.

The SANCTIONS entailed by the previous offenses are the following:

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In the case of VERY SERIOUS infringements:

1 - A fine from 45,001 euros to 1,750,000 euros, except if they are hazardous wastes, in which case the fine may be from 300,001 euros to 1,750,000 euros.

2 - Disqualification from any of the activities under this Act for a period of not less than one year and not more than ten.

3 - In certain cases, additional penalties may be imposed such as the temporary or permanent closure of all or part of the facilities or equipment, for a maximum period of 5 years, while safeguarding the rights of workers in accordance with the provisions of labour legislation. Or even the revocation of the authorisation (definitive measure) or suspension of it for not less than one year and not more than ten.

In the case of SERIOUS infringements:

1 - A fine from 901 euros to 45,000 euros except if they are hazardous wastes in which case the fine will be from 9,001 euros to 300,000 euros.

2 - Disqualification from any of the activities under this Act for a period of less than one year.

3 - Revocation of authorisation (definitive measure) or suspension thereof for a period of up to one year.

In the case of MINOR infringements:

They will be sanctioned by a fine of up to 900 euros. If it is hazardous waste it will be up to 9,000 euros.

The body exercising sanctioning power may also resolve the confiscation of the goods, in which case it shall determine their final destination.

RANKING OF PENALTY: The public administrations must consider the proper suitability between the sanction and the act constituting the infringement, giving particular attention to its impact, its significance, the circumstances of the person responsible, its degree of intention, participation and benefits obtained, recidivism (for commission within one year of more

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than one offense of the same nature), as well as the irreversibility of damage or deterioration caused.

It is noteworthy that in our legal system there can be an accumulation of penalties (Penal Order/Administrative Order) for the same acts even for the same subjects, being rules (on one side the Spanish Penal Code and on another the sectoral legislation regulating waste management) with a different legal basis. Thus, in most cases of metal theft, the PC protects the patrimony of the individuals, while the Waste Act protects the environment and the health of people.

## PROBLEMS FOR POLICING

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At this stage of the analysis of the current situation in Spain regarding the metals theft, it should be pointed out which are the main obstacles faced by the Security Forces at the time of acting in relation to this matter.

- First, and as self-criticism of the Spanish police organisation, two aspects should be mentioned. On one side the plurality of police corps interacting in the Spanish territory, with responsibility in many cases coinciding; this requires the necessary (not always easy) coordination between them to tackle the problem. And on the other side, the limited specialisation within the police organisations of groups devoted exclusively and permanently to the prevention/investigation of these crimes.

- Secondly, in the preventive arm of police actions focused on the inspection of activities, facilities and means of transport for trade in metals; this work becomes difficult, given the existing regulatory dispersion. Since all administrations (European, national, regional and local) have got legislative powers on this matter, there are many rules that must be taken into account by the inspector, that many times are not consistent between them. So it is necessary to establish clear action protocols in this respect to facilitate the work to agents.

- Following the line of preventive action and as a reflection, there is the difficulty to identify the material inspected and match it up with the declared in

the corresponding registers, because usually the stored material does not bear marks or signs that allow relating it to that declared. And if it does, these are not shown in the documents. This regardless of the difficulties to quantify the material inspected.

- Poor knowledge and involvement of some recycling professionals in the compliance with legal obligations. This facilitates the laundering of illegal metals.

- High profitability of criminal activities, as taking a low risk and with limited means to commit crimes, it is possible to achieve a great profit because of the high selling price of these metals (which are a raw material becoming more and more scarce). Moreover it is not necessary to use the black market of metals to place the result of criminal actions, as it is an easily “launderable” product.

- To this must be added the shortage in the penal order of this type of actions and the difficulty to enforce the collection of penalties imposed by the administrative order (as most of the time they are insolvent persons and it is not possible to exchange the financial sanction for other obligations, without the consent of the offender). The latter means that in practice some facts remain unpunished involving serious damage to the affected.

Despite all this, we can say without fear of error that the level of success of the Spanish Police (in general) in the fight against the theft of metals, has reached very high levels.

## POSSIBLE SOLUTIONS PROPOSED

Once analysed the applicable legislation and thinking about the problems we face in policing, it only remains to suggest some solutions to curb this growing phenomenon that is metal theft.

The solutions listed below should be implemented on one side by the industrial sector of metals recycling and on the other by the police

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organisation itself, so that joint efforts are required beforehand in the same direction, as the intended purpose is the same: “stopping metal theft”.

On the part of industry devoted to the recycling of metals, it is necessary:

- The dissemination and enforcement of manuals of best practices between industries, together with an appropriate training for workers responsible for their implementation in the companies.

- Providing full cooperation with the authorities and the Security forces and bodies responsible for administrative control. To this end, flexible systems should be set up to supply details of the goods received or even before their receiving.

- Introduction of systems for the traceability of metals at any time of their life, in order to verify their origin and provenance.

- Providing companies with advanced passive safety systems to better protect their facilities.

- Finally it is necessary, for putting a stop to the current problem of metal theft, a greater involvement of the authorities responsible for administrative control of metals management, in order to proceed to the immediate closure of the activity and of the premises which do not have permits and legal requirements for their functioning.

On the part of police organisation, it is necessary:

- Establishing clear action protocols to facilitate the checking procedures.

- Creation of specialised units for the fight (national and transnational) against metal theft within the different European Police organisations, setting up flexible systems for information exchange between them, as well as the access to databases information of the administrations involved in this matter.

- Specifying in police reports and administrative complaints drawn up for this purpose, not only the value of goods stolen and of the damage to the facilities objects of the crime, but also the risk or damage caused by the criminal actions and that sometimes are very important as affecting a large number of people (for example in the case of wiring theft in public infrastructure or services essential to the community such as hospitals, roads, lighting systems, telecommunications, transport, etc.). This would increase the responsibility for the actions and thus the penalty (as for example to indemnify directly those affected or indirectly all citizens with compulsory social benefits).

Finally, we assess the transferability and applicability of what has emerged as a successful practice to combat metal theft in other European countries:

Commercial solutions are offered by companies such as Smartwater or SelectaDNA, involving the impregnation with indelible and coded fluid in the infrastructure to be protected against possible attacks. The impregnation of the author of the attack allows linking him with the crime *a posteriori* and thus facilitates its allegation.

We have considered in this study different legal requirements that may pose an obstacle to the implementation of these solutions in Spain. In our opinion, and without case law precedents, there are no legal impediments to their implementation within the framework of our legal system.

This conclusion lies in the following points:

- These solutions are registered in the Spanish Registry of Patents.
- We understand that their use does not entail any health risk.
- We believe that obtaining samples of the alleged perpetrator of the crime does not entail aggression to his privacy or his physical integrity because it can be done in a strictly superficial way.



- The documentation and trading between the installation company and the client company and the testimonies of individuals acting, may constitute sufficient evidence to accredit the link between the identity code of a facility and the criminal act of the alleged perpetrator.

## B5. Greece

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*Description of the problem*  
*Offender profile*

## Metal theft in Greece

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Questionnaires have been filled by a certain amount of stakeholders: Members of the Parliament, Law experts, journalists, company managers. The results confirm most of the pattern emerged in other Countries, and especially in Italy.

There is in Greece a growing political concern relating the metal theft, as witnessed by the number of questions filed by the Members of the Greek Parliament in recent years. If in 2007 only a question was filed, in 2009 their number had already increased to 3 and in 2010 was up to 8. Concern has been expressed by all the political sides, even if the opposition was clearly playing a more active role in the process.

Anyway, no new law has been approved to tackle the phenomenon, and none appears to be in the pipe, even if the Government was active in enhancing measures and launch a pilot program to face this emerging crime.

A consistent pattern has emerged from the company managers interviewed, operating in the field of pump irrigation, energy, and railway transports.

Metal theft has been described dramatically on the rise relating to the irrigation industry, with accumulated losses in the tens of thousand dollars. The damage is always higher of the perpetrators profit. The effects of the economic downturn, the lack of effective border controls, inefficient judicial and poor control on the metal dealers have been quoted among the causes of the increase. Prevention appears extremely difficult, due to the territorial dispersion of the infrastructures required to irrigate fields. However, a public aid for the installation of security GSM-based systems has been suggested, as well as an improved surveillance of the international border with Bulgaria, some provisions to keep the perpetrators under custody until the trial, and other legal arrangements to exert a more effective control over the metal dealers.

The Public Power Corporation has lamented the loss of 1.817 transformers in the 2010-July 2011 period, amounting to some 10 million euro of damage. Most of the targeted transformers were located in rural areas and PPC is developing a new alarm system to protect them, based as well on GSM technology, and a real time transmission of SMS to the Police when a transformer is attacked.

Railways suffer from the theft of electric cables, rail tools and materials. Numbers are as well on the rise: theft of cable related incidents were 35 in 2007, 74 in 2008, 10 in 2009, 107 in 2010 and 85 in the first three quarters of 2011. The total economic damage is estimated 25 million euro worthy. Prevention is now carried out resorting to a large and comprehensive group of countermeasures, including small wagons patrolling the most concerned areas of the railway network. More human resources has been devoted to the protection of the lanes and main facilities. There is outsourcing to private security companies, and a remarkable cooperation with State police.

Last, but not least, the press has reported dozens of thefts, mainly off Athens, over the years. The coverage has however remained negligible and mostly confined to the local press or the web. On occasion, there are reports concerning operations carried out by the Hellenic Police, but there is not an actual effort to eradicate this kind of crime from Greece, even if the Greek public is well aware of the dangers metal theft pose to property and human life, may be because everybody knows the Enforcement agencies are understaffed. Roma appeared to be the main perpetrators also to the press, but in recent times a growing percentage of immigrants among them has been detected.

### **Offender profile**

According to the findings of our research, the most common metal theft perpetrators in Greece are men of Roma ethnicity, or foreign nationals coming from Albania, Bulgaria, Rumania and Pakistan. Anyway there are also Greek nationals involved in that criminal business. Their age ranges

from 16 to 50, minors being almost represented by young Roma. Their level of education is basic, when none existing altogether. They result also almost unemployed.

A certain number of offenders have been previously convicted on theft or burglary allegations.

The most common offense is perpetrated against the electric grid and the railway property. Roma acting against the electric grid operate in groups of four, especially in rural or under-populated areas, but usually not far from industrial areas, since the perpetrators need easy access to high voltage electricity to treat the metal they steal. They target mainly the transformers. Attacks on the railways are performed at night.

In both cases, offenders use cars or pick-ups, and specialised tools for cutting metal, including oxygen supported devices.

The metal stolen is sold quickly, mainly to licensed metal dealers aware of the illegal origins of the commodity. The price the latter paid is below its market level. The stolen metal enters the legal market only once it has been melted, or exported as elaborated product, in the shape of bars, for instance. The perpetrators operative range could even have a 100km radius, which is quite remarkable for a Country of the size of Greece.

Some form of cooperation between the offenders and employees of the targeted firms is suspected, especially information leaks.

### **Metal Theft Legislation**

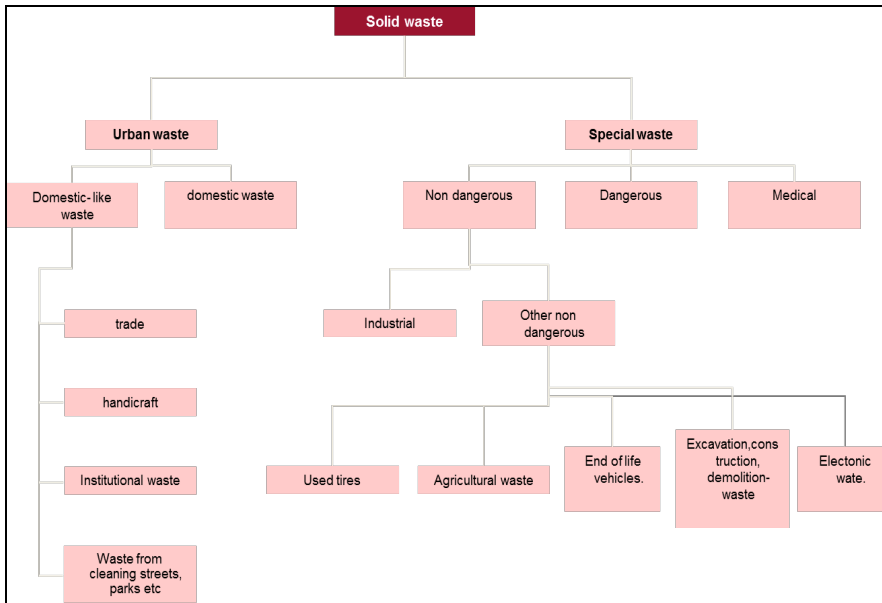
Before 2001 Greece had no proper legislation for the viable management and recycle of waste. At 2001 in compliance with the EU directives for waste management the law 2939/2001 was voted.

Key pillars of political management of solid urban waste in Greece, as formulated in compliance with European legislation are:

- Prevention of waste production.
- Reuse materials wherever possible.

- Recycling of materials and production of secondary materials and recovery of waste for energy production.
- Safe disposal in organised landfills.

Transaction of scrap metal is considered a waste and is regulated as the rest of the wastes under the Law 2939/2001, Government Gazette A 179 / 06.08.2001 "Alternative Management of Packaging and Other Products" which sets the terms and conditions for the alternative management of packaging waste and define the basic pillars for the management of a range of other products after use, such as used tires, vehicle end-of-life waste electrical and electronic equipment, spent batteries and accumulators, used lubricating oils, debris, etc. are defined including the responsibilities of managers and other packaging products, and the terms and conditions for the organisation of alternative management of packaging and released as early prevention, reuse, recycle and energy recovery.



The application of this law relates to:

- Industries - industries that produce or materials (primary or secondary) for the manufacture of packaging and other products
- Producers and converters of packaging or other products (manufacturers)
- Importers (suppliers)
- Those who bring the products into packaging (wrappers, fillers, formulators)
- Those who have products on the market (importers, smugglers)
- Consumers
- Public authorities
- Local authorities (OTA)
- Waste Managers

Levy

- Participation in collective alternative management is accompanied by payment to the scheme by the principal manager and financial capital, which is intertwined with the principle "the polluter pays".
- The amount of the levy specified in the contract system and entitles the participant liable administrator to identify the products with a special label as proof of participation in the system, relieving thus the principal administrator contracted by the responsibility to fulfil its obligations it.

Validity of approval

- The approval of schemes by EOEDSAP (National Organisation of Alternative Management of Packaging and Other Products) is valid for 6 years and may be renewed by amendment or revision of an operational plan under the then existing data. Proceedings of this provision allows the

supervisory authorities to assess the systems and their effectiveness, incorporate any revisions to national and EU legislation arising as a result of technological advances, economic conditions and changes in political alternative waste management.

- Transmission of packaging and other products are required to prepare detailed annual report on the implementation of individual or collective alternative management which EOEDSAP submitted in January each year.



**C. Metal theft comparative matrices for  
United Kingdom, Italy, Spain, Greece and Bulgaria**

**C a. OFFENDERS' PROFILE**

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**C a1. SOCIAL PROFILE OF THE OFFENDER**

<b>ITALY</b>	<b>UNITED KINGDOM</b>	<b>BULGARIA</b>	<b>SPAIN</b>	<b>GREECE</b>
<p>Direct offender aged between 20 and 40, with a quota of minors involved. Majority of the offenders are of foreign nationality (around 80%). The most convicted nationality for MTC is Romanian, with a relevant quota of Roma ethnic group within. Significant number of Bulgarian and Albanian as well. In the Centre – South of Italy the percentage of Italians as direct offenders increases; Usually Commissioner, Purchaser, Receivers of stolen metal are Italians. Small numbers of perpetrators drug addicted.</p>	<p>White unemployed British male, aged between teen's and 30. (Up to 50 in some areas). Often with a background of rail industry. Sometimes belonging to travel community.</p> <p>Two level categories of Metal thieves according to organisational structure and operational procedures.</p> <p>Presence of organised groups capable of carrying on more valuable attacks carefully planned on the whole national territory.</p>	<p>Almost 90% males, Bulgarian nationality, up to 30 years old, uneducated and unemployed; the offender profile is not apparently not related to drug addiction crimes.</p>	<p>Male, average 30 years old, strong presence of Romanian nationality and Roma ethnic groups (or other eastern Europeans). Usually unemployed and with primary education only.</p> <p>Differentiation between simple gangs that commit small value petty thefts (targeting more metals) and organised criminal organisation (who work mostly on copper exclusively). Organised groups seem to be capable of organising themselves the laundering of stolen metal and its distribution in the international</p>	<p>Male between 16 and 50. Less than 18 years old offenders are usually Roma. Offenders are Greek citizens but also Albanian, Bulgarian, Rumanian and Pakistan nationalities. Uneducated and unemployed;</p>

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**C A2. Criminal profile of the offender**

ITALY	UNITED KINGDOM	BULGARIA	SPAIN	GREECE
Previous convictions for minor property thefts for the direct offender; a relevant quota of purchaser of the stolen metal are first offenders;	Relevance of drug users as first level offenders.  Often have an history of being involved with other volume acquisitive crime	90% of the offenders have been previously already condemned for similar crimes	Most of the convicted people have previous criminal records such as Crimes against property (thefts and stealing), frauds and misappropriation. Almost 15% of the offenders are employees of the target companies.	Most of the offenders have previous convictions for metal theft crimes but also thefts and burglary. Access to specialised tools for metal cutting and advanced know-how.

**C a3. Location of the crime**

ITALY	UNITED KINGDOM	BULGARIA	SPAIN	GREECE
<p>Different according to geographic area. Railway copper; telecommunication lines, street and urban furniture; construction sites; factories; metal deposits. Geographically two crime focus: North of Italy regions more industrialised and where metal production/processing companies are concentrated; agriculture and isolated areas of South of Italy cemeteries. Sicily and Puglia special hot cases mostly for national energy company ENEL</p>	<p>Railways are one of the most targeted sites. Other targets include: telecoms systems, building sites, builder's merchants, cemeteries, churches, electricity pylons, substations, farms, hospital, residential properties, safety railings, scrap yards, statues, vehicles, water treatment works.</p>	<p>Mostly Electricity suppliers and Telecommunication companies.</p> <p>Towns, houses, factories, construction sites.</p> <p>Highways during transportation (estimation is that 10% of the secondary row material directed to metallurgy factories get stolen).</p>	<p>Railway, Electricity transportation network, public utilities, agriculture irrigating networks, construction sites, abandoned buildings, port facilities (around 40 episodes of metal theft in the area of Valencia Port Authority).</p>	<p>The main location for PPC incidents is the area of Thiva especially the winter period. The main regions for railway incident have the railway network in region of Peloponnesus, after 2008 when the operation in this area was seized.</p>

### C a4. Target metals

ITALY	UNITED KINGDOM	BULGARIA	SPAIN	GREECE
Railway copper is the most stolen; telephone and electric lines follows.	Mostly copper especially from organised groups; every ferrous and non-ferrous metal target by the first level offenders.	Ferrous and non-ferrous metal; Copper (any kind); building iron, plumbing fixtures, vehicle parts/catalytic converters, statues/bronze plaques aluminium roofs	Copper mostly stolen metal. Aluminium and iron to a less extent.	The main metals are: 1) <u>copper</u> – copper electrical wires, transformers, and pipes And 2) <u>Iron</u> : sewer lids, monuments, etc.

**C a5. Methodology of the criminal activity**

ITALY	UNITED KINGDOM	BULGARIA	SPAIN	GREECE
<p>Typical night crime; Traditional breaking-in methods but also more sophisticated methods to disable alarm /video surveillance system. Increasing level of violence in the crime; usually associated with the stealing of vehicles for transportation.</p>	<p>Methodology includes forced entry into sites, dissimulation impersonating legitimate employees carrying out maintenance work</p> <p>Acting in groups from 1 to 5 persons. Except from travelling communities the operational area is very localised (usually up to approximately 7 miles from residence).</p> <p>Different approaches and methodologies adapting to a “theft by theft basis”.</p>	<p>Usually committed in small groups, at night by using vehicles and technical devices; crimes usually committed in an area of 30km from the residence of the offender; stolen metal sold to scrap dealers in maximum 2 days;</p>	<p>Usually committed at night violating cable installations. Gangs of 3 – 4 persons. Transported by van and trucks privately owned or stolen) to temporary deposits to extract the metal, usually within 3 days from the theft. Sold to recycling and metal processing companies. The operational area of the offender is around 100 km. the average quantity of stolen metal in a single criminal action is around 2/3000 kg. Use of camouflage for committing thefts.</p>	<p>Different for the main kind of attacks.</p> <p>Against electricity lines: Teams of 4 persons use of trucks to tear down the electricity column, and remove the transformer. The copper is removed later in a safe place.</p> <p>Against railway lines: Two teams, one for cutting and one for collecting the cables. Cars used also.</p> <p>Offenders use specialised cutting tools (oxygen supported metal cutters, metal saw) and advanced know how (for cutting cables in high voltage lines).</p> <p>Operational area is usually 100 km from residence of the offenders</p>

**C a6. Metal Theft chain**

ITALY	UNITED KINGDOM	BULGARIA	SPAIN	GREECE
<p>Offender, Receiver/Recycler/Legal trade/export.</p> <p>Role of sole proprietor scrap dealers with simplified authorisations;</p> <p>Role of the “missing trader” to produce fake invoices.</p> <p>Absence of organised crime from the metal theft (except in areas with high presence of organised crime in the local economy).</p>	<p>Diversified chains: Offender/scrap dealer.</p> <p>Sometimes with the role of the intermediary (with a different social profile, often female or drug dealer)</p> <p>Offender/consumer (i.e. through internet)</p> <p>Offender / export (disguised with other products)</p>	<p>Offender/scrap dealer/legal market</p> <p>Offender / small illegal foundry</p> <p>Offender / metallurgy industry</p> <p>Increasing trend of direct export of stolen scrap cables.</p>	<p>Offender/SMD</p> <p>Reports of complete illegal chain managed by organised crime groups that control the process from the stealing to the export.</p>	<p>Offender/scrap dealer/metal processing companies.</p> <p>The stolen metal is exported not as scrap but melted in bars.</p>

**C b. Review of metal theft phenomena and countermeasures**

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**C b1. Extension of metal theft phenomena**

United Kingdom	Italy	Spain	Greece	Bulgaria
<p>From November 2008 to June 2011 there have been a total of 9963 metal theft reports</p>	<p>Increasing in 2011.</p> <p>Some regional data for 2011 indicates a worsening of the situation:</p> <p>Province of Bari, First semester 2011 1466 metal related criminal metal acts (in 2010 were 1919)</p>	<p>Increasing in 2011</p>	<p>2010 was a year of high incidents on railway and electricity network.</p> <p>In 2009 the National Railway OSE suffers 10 incidents, 107 in 2010. (35 in 2007 and 74 in 2008)</p> <p>In the region of Thiva, the most affected from MT, PPC (Electric company) suffered 471 stolen transformers in 2011, 252 in 2010 and 17 in 2009. (14 in 2008, 6 in 2007, 5 in 2006).</p>	<p>No national wide data. But data from the 6 biggest police regional departments shows that in the first 10 months of 2010 (564 in 2009).</p>

**C b2. Parliamentary and legislative activity**

United Kingdom	Italy	Spain	Greece	Bulgaria
<p>Legislation governing scrap metal dealer industry dates to 1964 (Scrap Metal Dealers Act).</p> <p>In 2010 Changes were made to the environment regulation with the “Environmental Permitting Regulations”</p> <p>Intense parliamentary activity in order to prepare the Metal Theft Prevention Bill.</p> <p>House of Commons Transport Committee report on Cable Theft presented</p> <p>2 MP private members bill; Briefing from Home Office Minister and Transport Committee evidence. Political parties round tables. Cross Ministerial / department</p>	<p>XV legislature (2006 – 2008) 7 parliamentary enquiry-</p> <p>XVI (2008 – march 2010) 2 parliamentary enquiries.</p> <p>No new bill in the parliament pending</p>	<p>In July 2011 legislation passed forces haulers to obtain a license to transport non-hazardous waste and pay €300 a month into the social security system as self-employed workers.</p> <p>Approved a new law on waste treatment LAW 22/2011, of July 28th, on Waste and Contaminated Soil).</p>	<p>Parliamentary enquiry lodged in the Greek parliament:</p> <p>1 in 2007 0 in 2008 0 in 2009 3 in 2010 8 in 2011</p> <p>Political Parties involved in the activities: Nea Dimokratia, Laos, Dimokratiki Aristera, Dimokratiki Summaxia, PASOK</p> <p>No new Laws concerning metal theft adopted by Greek Parliament. by Greek parliament, <del>no</del></p> <p>New legislation in order to be compliance of the Greek legislation with the EU directive 2008/99/EC on the protection of the environment through criminal law - and the framework for waste management.</p>	<p>No parliamentary enquires submitted in the last years last 5 years.</p> <p><u>New waste management act</u></p> <p><u>Possible amendment to the criminal code.</u></p>

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<p>session. (Home Office, HM Treasury, DefRA, DfT, CPS.</p> <p>A Metal Theft Prevention Bill introduced in the House of Commons October 2011, calling for a tougher licensing scheme and more powers for the police and courts to close scrap yards and shut down dealers who do not operate within the law.</p>				
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### Cb3. Media and public awareness

United Kingdom	Italy	Spain	Greece	Bulgaria
<p>BT has developed a media strategy to tackle metal theft and registered a growing interest in following the issue;</p> <p>BMRA and BT Organisation of National day of action against metal theft.</p>	<p>Increase of the media coverage, not only on the local press but also in the national press and TV with a more insight and analysis. Increasing public awareness of the phenomena</p>	<p>Increase of media coverage in the last 2 years.</p> <p>More local newspapers cover the issue, generally in a proportionate way compared to the phenomena.</p> <p>Not too much interest in the general public but also niche audience</p> <p>Coverage more oriented to the damage / service disruption than to cover major police investigative operations</p>	<p>Increase of media coverage of the phenomena in the last two years, especially in the local media outside the capital. Still the coverage is inferior to the real dimension of the phenomena.</p>	<p>Perception of a smaller phenomenon compared to the nineties.</p> <p>According to the media the number of articles dedicated to the phenomena is not increasing. The issues are considered to be not too much interesting for the public opinion for the security concerns of the society.</p>

**C b4. Economic threat for strategic corporations**

<b>Economic threat for strategic corporations</b>	<b>United Kingdom</b>	<b>Italy</b>	<b>Spain</b>	<b>Greece</b>	<b>Bulgaria</b>
<b>TELECOMUNICATION</b>	<p>British Telecom suffers 130 attacks per month</p> <p>Metal theft costs are almost 7 million euro per year</p>	<p>Telecom</p> <p>Data for thefts in South of Italy</p> <p>2009: 598 2010: 1686</p> <p>Damage</p> <p>2009: 1,5 mil. 2010: 3,1 mil.</p>		<p>OSE (National Railways) suffered 25 million euro damage in the period 2008 – 2011</p> <p>PPC (public power cooperation) estimates more than 10 million)</p>	
<b>PUBLIC UTILITIES / ENERGY COMPANIES</b>	<p>United Utilities reports approximately from 8 to 15 incidents of metal theft per month.</p> <p>An estimation of the yearly costs can be put to several millions euro (up to 7 Million euro).</p> <p>Accurate data collected only since 2011. From January to May 25 attacks registered with damage 256.000 worth.</p> <p>UU pays regulatory fines for lack of service caused by metal theft.</p>	<p>ENEL:</p> <p>Number of incidents:</p> <p>2008: 1750 2009: 1150 2010: 2150</p> <p>Direct impact:</p> <p>2008: 9 mil 2009: 7 mil 2010: 15 mil</p> <p>88% concentrated in 2 agricultural region (Sicily and Puglia).</p>	<p>Public Utility Red Electrical calculates in 6 Million euro since 2006</p>	<p>Increasing dangerous phenomena.</p> <p>Transformers are the top target. 1819 stolen in the year 2010-2011.</p> <p>Damage costs estimated in around 10.000.000 euros</p>	<p>EVN Bulgaria (one of the 3 electric company) Indicates the following number of attacks for metal theft on companies assets:</p> <p>2008, 159 2009, 126 2010, 518</p> <p>Value of reconstruction cost: 2008: 155000 2009: 295000 2010: 342000 1<sup>st</sup> quarter 2011: 140.000</p>

RAILWAY	01/11/2008 to 31/10/2009 There have been a total of 1794 railway related metal thefts.	<p>Trenitalia:</p> <p>Theft on the lines. 2008: 805 2009: 349 2010: 1226</p> <p>Theft in warehouses  2008: 125 2009: 33 2010: 113</p>		<p>The threat started to become strategic since 2008 and remained such in the next years. No. attacks:</p> <p>2007, 35 2008, 74 2009, 10 2010, 107 2011, 85 (until September).</p> <p>Damage value : 1 Million euro in 2011</p>	

**C b5. Public and private security strategy adopted**

United Kingdom	Italy	Spain	Greece	Bulgaria
BT has invested 1,7 million euro in an intelligence cell for covert surveillance (almost 25% value of the year damage).	In Rome province judiciary district one prosecutor specialised/trained in metal theft is appointed in every attorney's office.	Use of barriers infrared / microwave associated with CCTV for important electrical substations.	Some agriculture companies have tried to task local farmers to improve intelligence along isolated pumping networks.	Shifting from truck to train transportation.
Involvement of charities like Crimestoppers in providing intelligence	Aggregation of small private victims of metal theft per sector: in some regions were agriculture sector is badly damaged by metal theft there have been created public/private "regional centres to fight crimes against agriculture (ORSA) LEAs + Judiciary + Agriculture association		Concentration of metal material in few guarded deposits.	Police guard to expensive energy facilities in risky suburbs.
Media campaign Production of reference booklet for the police to use when visiting scrap metal dealers or during investigations.			Use of small wagons to patrol vulnerable areas	Increase of administrative control on metal dealer
Adoption of Security Incident Reporting System (November 2008) SIRS (date base connecting 26 police forces, BTP, and 12 private companies).	In 2010 and 2011 high increase of investigative action and special police operations (5 in 2010)		Removal of illegal immigrants from railway property.	Pilot project Green point in Athens
Creation of metal theft team in the local police units.	Use of aluminium conductors in repaired lines.		Development of an alarm system connected to transformers that send sms to police and to the utility companies when removal attempts are under way.	
	ENEL developed RIE system that detects absence of voltage in the			

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<p>BTP created dedicated investigative teams for metal theft for crimes involving organised groups and high value thefts.</p> <p>Creation of Metal Theft Forum in different UK regions to create private/public partnerships to tackle metal theft.</p>	<p>power line distinguishing between accidental malfunctions and theft attempts. (Experimental).</p> <p>Adoption of a no buy list from the Italian Railway.</p>			
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