

Processing centres for scrapped vehicles. The Spanish case.

Ignacio Juárez

General Manager
Testing and Road Safety Centre MAPFRE
(CESVIMAP)

Ramón Aymerich

Director of Corporate Affairs
MAPFRE REASEGUROS (Spain)

“The process of decontamination and disassembly of reusable parts, which, once their functioning has been tested, can be sold on the market, is carried out in the APC (Authorised Processing Centre). The nonreusable materials and parts are sent to recycling companies which return the transformed product to the market.”



Society is becoming increasingly concerned and aware of sources of pollution that exist on this planet. Only the most serious and damaging are reported by the media and are the source of worry for governments around the world. The Kyoto protocol aims to reduce pollution and atmospheric emissions but sets its objectives in the long-term, aiming to maintain the difficult balance between economic development and environmental conservation. In addition to other sources of pollution, we are surrounded by literally millions of vehicles which, if they are not recycled at the end of their useful life, would flood the planet with scrap metal, plastics, fuels, refrigerants (both liquid and gaseous) and oils.

The European Parliament Directive 2000/53/CE of 18/09/2000 which is implemented in the Spanish legislation through Royal Decree (RD) 1383/2002 of 20/12/2002 aims to reduce the repercussions of these vehicles on the environment at the end of their useful life, and is to be implemented from the design phase right through to manufacturing and the management of final residues, also regulating their collection and decontamination. The objectives of this Royal Decree are to facilitate the reuse, the recycling and the valuation of the various elements of a vehicle in order to limit its environmental impact.

The economic importance of this Royal Decree is clear when one considers the growing number of vehicles in a country, in the case of Spain more than 25 million vehicles. The number of new vehicles, which in the last year exceeded

1.5 million just in Spain and the number which annually leave active use either due to age or due to damage. To this should also be mentioned the existence in Spain of the “PREVER Plan”¹ which in 2004 was applied to approximately one million vehicles more than 10 years old which were then scrapped. The Royal Decree establishes that the vehicles which are eligible should be cars used for personal transport and for merchandise of up to 3.5 tonnes.

With regard to the possibility to reuse spare parts, it should be noted that in Spain 3.5% of cars are scrapped in the same year that they are registered, and that this figure is 3.7% in the second year. In other words, more than 7% of new vehicles registered in one year are scrapped in the following 24 months, very probably due to accidents which result in a total loss of the asset, in accordance with the terms of the insurance policy. A good proportion of these vehicles will have parts in a perfect condition which can be reused by other vehicles. Approximately 10,000 vehicles a year are scrapped in the eight following years, and this figure increases even more due to the PREVER Plan after the 10th year to figures starting at 20,000 and reaching 80,000 vehicles a year.

The most notable aspect of this Royal Decree is that it imposes the user with the obligation to deliver the vehicle to a processing centre at the end of its useful life, and the manufacturer with the obligation of processing all the vehicles that it sells and that it additionally must guarantee adequate installations to receive them.



The delivery of the vehicle must be certified and only the issuing of the corresponding certificate allows the vehicle to be considered deregistered.

In order to avoid pollution by waste materials, the Royal Decree regulates the procedure and the operations which must be carried out, how residues must be handled and stored and the technical characteristics of the collection installations.

In order to more efficiently comply with the regulations, the Royal Decree makes provision for the possibility that the economic parties involved - amongst

which are the motor insurers - can establish agreements for the creation of integrated centres which carry out the various of obligatory procedures which have been set.

The Royal Decree does not however make provision for any negative value for the end user, in other words the possibility that the cost of deregistration, transport, decontamination and vehicle recycling may exceed the scrap value of the vehicle.

The APCs must comply with extensive regulations in order to be certified as authorised centres. They must have

receiving areas and temporary storage equipped with impermeable floor surfaces which prevent the filtration of fluids such as gasoline or oils, equipment for the treatment of the water which is used and installations for the collection of spillages. The installations should have storage areas for the components that have been disassembled with special attention paid to the storage of oils and batteries and other dangerous or polluting products.

The Royal Decree thus sets a system which allows for the decontamination, the recycling and the reuse of a vehicle's components. It remains to be seen how all this process may work in practice from an insurance company's point of view.

In the case of a total loss, the remains of the damaged vehicle belong to the policyholder who, except in certain circumstances, will have no interest in retaining them. The insurer should take over responsibility for the remains, whose value will depend on various factors: make and model of the car, characteristics of the accident - vehicles which are not damaged in the frontal portion, which is where the most valuable components are located, will have a higher value - state of the engine, demand for spare parts, cost of transport and decontamination, the amount the car has been used and its general state. Once the handling of the damaged car has been taken over by the insurer, the latter should take the necessary steps in order to legally deregister it and transport it to an Authorised Processing Centre.

The process of decontamination and disassembly of reusable parts, which, once their functioning has been tested, can be sold on the market, is carried out in the APC. The nonreusable materials and parts are sent to recycling companies

Main obligations of manufacturers and users of vehicles in order to comply with the royal decree 1383/2002

MANUFACTURERS OBLIGATIONS		
PHASE 1: Vehicles design	PHASE 2: vehicles production	PHASE 3: vehicles brought to market
They must design cars whose components can be recycled or reused in ever greater percentages; these should reach 85% of the vehicle's weight in 2006 and 95% in 2015.	Products should be produced in such a way that makes their disassembly easier and new models should be designed which can incorporate recycled materials and parts. They should also use cataloguing procedures which allow each and every one of the parts and components to be identified.	The manufacturers and their distributors are obliged to take responsibility for the vehicles that they have manufactured or brought to market and must guarantee the adequacy of the installations to be used for this purpose.

USERS OBLIGATIONS		
FIRST	SECOND	THIRD
They must deliver the vehicle at the end of its useful life to an Authorised Processing Centre (APC) in order for it to be disassembled and decontaminated.	They should obtain the appropriate certificate of delivery and deregistration.	They must consider the use of recycled parts.

which return the transformed product to the market. Examples of this would be tyres which are transformed into asphalt surfaces for roads or metal which is melted down to form new bodywork.

CESVI RECAMBIOS, a SISTEMA MAPFRE company, was set up under this Royal Decree in order to act as an Authorised Processing Centre within this process. In order to do this it has been provided with very modern and automated installations with a large storage capacity and completely computerised management which allows verified and guaranteed specific parts to be classified, found and supplied to the market at a

reasonable price. It is not the objective of this article to detail the laborious industrial process which, in accordance with the regulations, is carried out in the installations of CESVI RECAMBIOS. It is however possible to pay a virtual visit to the installations from anywhere in the world through its web site www.cesvirecambios.com where the section titled "quiénes somos" includes a presentation video.

In order to create this APC, CESVI RECAMBIOS made an investment of near to EUR 10 million and has a vehicle reception area of approximately 5000 m², a storage capacity for parts in

classified containers in a building of 60,000 m³ and is able to process more than 3500 vehicles a year. CESVI RECAMBIOS is forecast to the amortise this investment in three years and has returned a profit since its first year of operation; this goes to show that taking care of the environment can also be a source of business.

Lastly, mention should be made of the benefits of these authorised processing centres to certain countries since they allow for the reuse of parts that have already been imported and paid for in foreign currencies, thus avoiding the importation of new spare parts and therefore making a saving. ■

Table 1: Number of vehicles in Spain

	2000	2001	2002	2003	2004
Total number	21.8	22.7	23.5	24,3	25.0(e)
Registrations	1.4	1.4	1.3	1.4	1.5
Deregistrations	0.9	1.1	1.0	1.1	ND

Millions of units

Table 2: Ratio of vehicle deregistrations over registrations in 2003

	2000	2001	2002	2003
Registrations	1.400	1.400	1.300	1.400
Deregistrations in 2003 by year of registration	0.010	0.015	0.050	0.049
Percentage of deregistrations in 2003/registrations	0.7%	1.1%	3.8%	3.5%

Millions of units

Table 3: Deregistrations of vehicles in 2003 with regard to their year of registration.

