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Expert Group 2: Vehicle Classification

Addendum

**RESPONSE TO REQUEST FROM SPAIN FOR
INCLUSION OF DUAL TYRES**

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**Working on DGTREN,
European Commission**

Document change control

Version number	Changes
1a	draft for comment
1b	Version incorporating comments from Spain

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1. Introduction

Expert Group on Vehicle Classification submitted its report to the European Commission in January 2005. It was presented to the EFC Expert Group on 27th January and comments invited. The Expert Group responded to the comments received and prepared a new version which was circulated to the June meeting of the Expert Group.

Spain submitted a formal response asking for Dual Tyres to be included. The letter from the Spanish Ministry is provided as Annex A.

Mr Philippe Hamet of DGTREN asked Ken Perrett to meet with the Spanish Authorities to seek a solution. This paper provides the proposed solution and should be treated as an addendum to the Expert group 2 report.

The work of the Expert group 2 had been completed and so it was not considered appropriate to reconvene the group to consider this issue. Consequently, Ken Perrett, the leader of Expert Group 2 has the responsibility for this paper. Nevertheless, members of expert Group 2 provided informal input to the proposals.

Ken Perrett met with the Spanish Authorities and came to a mutually acceptable solution. This is described below.

2. The problem

Expert Group 2 reviewed all the vehicle characteristics which are currently in use in Europe and which are required to be declared during the charging transaction.

Spain includes the use of the vehicle characteristic "Dual tyres", offering a cheaper toll to such vehicles on the basis of the fact that they cause less road damage. This characteristic is currently measured at each toll plaza. Expert Group 2 were aware of the use of this characteristics. It was excluded from the final list of selected vehicle characteristics on the basis that:-

- it is only used by Spain
- it is not currently required to be declared
- it is extremely difficult to measure in a free-flow environment
- it is not a characteristic which can be found in all vehicle registration documents and therefore is very difficult to assure by contract issuers

Spain formally complained that Expert Group 2 had omitted the "dual tyre" characteristic.

3. The Solution

Philippe asked Ken Perrett to meet with the Spanish delegation at the June Expert Group meeting. There was a fruitful discussion, leading to the following proposal.

3.1 Expert Group view of the "dual tyres" characteristic

The members of Expert Group 2 were consulted and were of the view that the reasons for the rejection of the "dual tyres" parameter are still valid.

3.2 Spanish position

The Spanish Authorities have expressed their intention to move towards free-flow charging in which the vehicle characteristics will be declared.

They recognise that a contract issuer offering an OBU cannot feasibly verify the "dual tyres" characteristic. They accept therefore that the user would need to be responsible for the correct coding of such an attribute.

They recognise that Contract Issuers need a simple administrative rule which can be used to ensure that the user correctly provides the vehicle characteristic.

The Spanish Authorities intend to take responsibility for the correct declaration and enforcement of the "dual tyre" characteristic within Spain. They will have some (monolane) enforcement stations which will verify that the declaration from the OBU matches the tyre configuration.

3.3 The proposed solution

The solution is as follows:-

- (a) Contract Issuers will be provided with a simple administrative rule which enables a user to provide the necessary information required by Spain on "dual tyres".
- (b) Contract Issuers will not be required to guarantee the validity of this information.
- (c) Spain will provide provide a simple rule for inclusion by the Contract Issuer
- (d) The contract issuer need only apply this if the vehicle is intended for use in Spain
- (e) The Spanish Authorities will be responsible for the compliance and enforcement associated with the use of the "dual tyre" characteristic. In particular, an impact on revenue will be dealt with as a national matter.

3.4 The proposed rule

The rule offered by Spain is as follows:-

"The customer shall state by his own responsibility if the vehicle is equipped with a dual tyre configuration. In such case the contract issuer will set the corresponding parameter to the value 1 (one). Otherwise this parameter will be coded as 0 (zero)."

Given that the contract will be completed in respect of a tractor unit which may be used with various different trailer configurations, I would suggest that this rule can only be applied to the driving, or tractor unit. I therefore propose that the wording is clarified to read:-

"The "tyretype" parameter will normally not be specified. However, if the vehicle is expected to be used for the payment of tolls in Spain, then the customer shall be

asked to provide information on the tyre configuration. The contract issuer will set the "tyretype" parameter to the value as indicated in the following table.

Value	Meaning
0	Not specified
1	Single tyre per axle
2	Dual tyres per axle
3	Reserved for future use

4. Recommendation

The EFC Expert Group is asked to accept this addendum to the report of Expert Group 2.

Annex A: letter from the Spanish Authorities

Mr. Philippe Hamet
Commission Européenne
Direction Générale pour les Transports et l'Energie
Rue DeMot 28
1040 BRUXELLES - BELGIQUE

June 2, 2005

Dear Mr. Hamet,

This letter is to express the disagreement of the Spanish Ministry of Transport (Ministerio de Fomento) with the conclusion of the report "Definition of parameters to be stored in on-board equipment designed for use with the European Electronic Toll Service" version ce-v3 of April 1, 2005.

The Expert Group 2 on Vehicle Classification disregard of the comments on the HGV dual tyres parameter issued by Ministerio de Fomento together with ASETA -the Spanish Toll Motorway Concessionaire Association- makes the latest report to be plainly unacceptable for us. Our reaction concerning the report previous version ce-v2 of January 3 was sent in due course to Mr. Ken Perrett the Expert Group 2 leader, but unfortunately the group seems not have been able to find a satisfactory solution to the problem stated.

We understand that there are no technical reasons why the twin wheel parameter cannot be stored in the EOBU, in particular when other features as the vehicle suspension type or the emission level have been approved for inclusion. Not considering the twin wheel variable for vehicle classification becomes thus a matter of deep concern and disappointment for the Spanish Transport authorities. Although the motives have been thoroughly explained in our position paper to the report version 2 (please find a copy enclosed to this letter) we want nevertheless to restate that this matter should not be taken into oblivion given its importance for Spanish issuers and toll concessionaires.

We should be very much in favour of a correction of the report before it reaches the Regulatory Committee, since we would not like to be forced to adopt a dissentment attitude on the Expert Group 2 conclusion on vehicle classification at that level or even at a higher jurisdiction within the EU. We offer our sincere collaboration to find with Mr. Ken Perrett a solution to the problem and will be also willing to work with you to smooth this annoying question. Hopefully we will be able to find a way to discuss the matter during the meeting next week.

Sincerely yours,

Agustín Sánchez Rey
Deputy Director

Annex B: Spanish Case

SPANISH POSITION PAPER ON THE DOCUMENT "RECOMMENDATIONS ON PARAMETERS TO BE STORED IN THE ON-BOARD EQUIPMENT DESIGNED FOR USE WITH THE EUROPEAN ELECTRONIC TOLL SERVICE" ELABORATED BY THE EXPERT GROUP 2: VEHICLE CLASSIFICATION

As stated by the Spanish experts at the last meeting of the EFC Expert Group held in Brussels, the report from Mr. Ken Perrett (Expert Group 2 on vehicle classification) could become, if accepted, a source of significant problems for the effective operation of the European EFC Service. We think that the problems may be solved as indicated hereafter.

Obviously, at Spanish national level and for Spanish vehicles using the national road network, the problems may be easily solved via internal regulations, but at European level, if vehicles of other Member States do not incorporate in their EOBUs specific parameters used in Spain for classification (and subsequently for VAT calculation) it is not possible to guarantee a correct operation of the EFC service.

Therefore, the Spanish Ministry of Transport together with ASETA, the Spanish toll motorway concessionaire companies Association have prepared this document to express their reactions to the report prepared by the Expert Group 2 (Vehicle Classification).

Inclusion of the parameter "dual tyres" on the list of parameters accepted by the report in order to be stored in the EOBUs.

On a first reading, the report seems not to include the parameter "dual tyres" on the list of accepted parameters to be recorded on the EOBUs.

Neither the Ministry nor the Spanish private toll companies can accept a proposal that implies changes to their classification parameters ("number of axles" and "dual tires") established on the concession contracts signed with the Spanish Authorities. The acceptance of such changes would require to modify the economic and financial balance of the concession contracts which cannot be accepted by any part (Public Authorities and private toll company).

Moreover, on page 13, the report states the acceptance of the "number of axles" as a parameter to be stored in the EOBUs. As it is confirmed on the Annex B, in the definition of "number of axles", **the ISO 14906 also integrates the presence of "dual tires"** and, in addition, its inclusion does not involve an increase on the number of bytes required.

In this sense in Spain we think that the report should respect the current standards and include the definition of the "number of axles" as it is defined on the ISO 14906. Subsequently, **a correction should be made on the Annex C (page 25) underlining the acceptance of "dual tyres"**.

Proposal: The presence of dual tyres is currently measured by toll systems in Spain. The introduction of the EOBUs will have no impact on the ability of toll operators to continue to measure this parameter.

Problems of Spanish issuers in storing vehicle data on the EOBUS.

In Spain we are aware of the advantages of including data vehicles in the EOBUs, specially on a Free-Flow context.

Even though the Spanish financial issuers are not currently committed to storing vehicle data on the EOBUs, the Toll motorway sector is aware of the need to record those data in the EOBUs and we will undertake the pertinent actions in order to deal with that issue. In any case we think this is an internal problem that will be solved at

national level by the Spanish toll concessionaire sector in cooperation with the financial and commercial issuers without disturbing the European Toll Service.

Parameters selection and Enforcement procedures

Parameters selected by the report to be stored in the EOBUs have important implications on the Enforcement system to be implemented on the toll network.

On a Free-flow context the declared classification becomes a very relevant tool for toll operators: The measured classification is checked with the declared classification and Enforcement procedures (images for example) are only activated when both categories do not match. This has strong advantages for toll operators because it reduces the volume of incidences and allows a well dimensioned (and not expensive) Enforcement system, specially focused to **each** transaction.

If this match between declared and measurable classification cannot be carried out, toll operators have to trust the declared classification. This implies to implement an over-sized and expensive parallel Enforcement system based on verifications at random and there is no guarantee of processing 100% of the class violations, which is unacceptable for traditional toll concessionaire countries (most of ASECAP countries).

In addition to this, it is important to underline that currently the technology of the on lane Enforcement equipment (scanner laser) is only able to process physical measurable data of the vehicle.

In Spain we think that the report proposes a set of parameters to be recorded on the EOBUs that are not measurable and so it does not allow the match between declared and measured classification: The classification according to UNECE (based on number of seats and vehicle weight), the number of axles and the license plate are based on **administrative parameters that cannot be measurable by the on lane equipment**.

The report also gives the user the opportunity to select the classification of his vehicle by entering manually data in the EOBUs and it does not establish any method in order to fix the EOBUs on the vehicle. We believe this solution will contribute to increase the level of fraud and this should be removed from the report.

Moreover, at the present time there is only one OBU manufacturer that supplies this kind of EOBUs and we strongly believe this is against the interests of the whole toll sector.

For all these reasons, from Spain we propose to include in the EOBUs measurable parameters as "height", "length" and "width" which can be used for on lane detection and classification. We think this solution would not only satisfy the ASECAP countries but any country where Free-flow systems are planned to be implemented.

Expert Group response: It is for the reasons stated here that the Expert Group considered that "Dual tyres" should not be included – this parameter is very difficult to measure in a free-flow environment. Any change towards free-flow systems in Spain will almost certainly mean that this parameter will no longer be used.

Measurable parameters, such as height, length and width are widely used as a means of enforcement – the plausibility of the declared parameters can be checked against such measurements. However, these parameters are not used to determine tariffs in most of the systems reviewed. One exception is for use of ferries, but we understand that length is always measured by ferry operators.