

Tyre labelling for energy-efficient and quieter road transport

Response to the consultation document to support the European Commission workshop on outline proposals for energy labelling of tyres

May 2008



**European Federation for
TRANSPORT and ENVIRONMENT**

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Contents

Summary	3
Responses to consultation questions.....	4
T&E concept for environmental tyre labelling	14
References	17

Summary

T&E strongly welcomes the intention to propose legislation on energy labeling of tyres in 2008, as announced in the Energy Efficiency Action Plan (COM 2006 545). A mandatory grading and labeling scheme is recommended for all motor vehicle tyres, with the aim to accelerate market development towards more environmentally responsible tyres.

An ambitious labeling scheme is clearly necessary in light of the Commission proposal for a regulation on advanced safety features for motor vehicles and tyres, where limit values on rolling resistance and noise lack the necessary ambition. (COM 2008 316)

T&E's primary demand is that, as well as energy efficiency, the legislation includes a mandatory requirement to include tyre rolling noise emissions in the labeling scheme. This should include marking of the measured noise emission level per family according to the type approval test, as well as indicating to consumers those tyres which are substantially quieter than the limit value by awarding a 'low noise' symbol. (Please see response to Q5 below).

An effective energy labeling scheme offers great potential to reduce vehicle fuel consumption and CO₂ emissions. For example, a 30% reduction in rolling resistance from the current market average for car tyres (approx. 10kg/t) to the current level of best practice (approx. 7kg/t) would bring a 5% fuel saving across the fleet. With oil prices now rising beyond US\$130 per barrel, this is in Europe's economic as well as environmental interest.

It is clear that consumers benefit from easily understandable information on products to inform purchase decisions. At present, there is no objective information available to interested consumers or even to tyre retailers about rolling resistance or noise (with the exception of tests carried out by consumer magazines). This problem is also noted by tyre experts:

"for European tyres there is generally no objective quality-related information; despite their substantial influence on us personally and on our global environment. From a quality point of view, the consumer goes blindfolded through the tyre shop." (VTI, 2008, p.1 [1])

The Commission working document correctly identifies this lack of information as a market failure that must be addressed. Europe as a whole currently picks up the bill for the external costs caused by this failure (excessive fuel consumption, CO₂ emissions, road traffic noise, accidents). In the absence of objective information to indicate the quality, safety or environmental performance of tyres, the sales price is a major factor in purchase decisions, which could lead to dangerous and unsustainable

market trends. The tendency is therefore towards competition based on price, rather than quality.

A mandatory labeling scheme would provide a solid, objective basis for some manufacturers to demonstrate superior quality of their products. The influence of tyres on vehicle fuel economy will generate substantial consumer interest. There is some evidence to show that consumers are also interested in tyre rolling noise emissions. Noise performance is often cited in tyre marketing and measured in consumer tests. The public has a right to know about the (comparative) environmental performance of tyres, in the same way that information on CO₂ emissions from new cars must now be provided.

Please see T&E position papers on tyres submitted to the recent DG Enterprise consultation (10/2007) for detailed recommendations on limit values:

http://www.transportenvironment.org/tag/cars_and_co2/publications/ (LRRT)
<http://www.transportenvironment.org/Pages/transport-noise/> (tyre rolling noise)

Responses to consultation questions

1. Do you agree that a grading on rolling resistance, for C1, C2 and C3 tyres, being made available to end users and retailers, would be effective in fostering market transformation towards LRRT? What conditions would need to be met (e.g. simplicity of markings, transparency of data)?

The proposed limit values on rolling resistance and rolling noise emissions are far short of the currently available best practice on the market in Europe. T&E therefore strongly supports a grading and labelling scheme with the aim to stimulate the market for energy-efficient *and low-noise* tyres (C1, C2 and C3) beyond the proposed limit values.

T&E emphasizes the particular importance of inclusion of C3 tyres, as road transport represents the major source of CO₂ emissions from the sector. Emissions from heavy goods vehicles continue to grow at an alarming rate of 2% per year, and are undermining climate targets. Trucks represent an increasing share of the vehicle fleet, and thus have a major influence on overall road traffic noise levels.

T&E insists that the grading scheme is communicated via:

- A fuel efficiency and noise label (sticker and sidewall marking, with recognizable bands and symbols to be used alongside promotional material, see below)
- A publicly available database of measured type approval values
- A leaflet with supporting information for consumers, available from retailers and via internet, for example including explanation of how to estimate fuel savings, based on rolling resistance class or measured value.

The label (with grading/symbols) must be attached to the tyre at the time of manufacture until sale, as a sticker, supported by corresponding sidewall information. The label should be presented at all sales and marketing points, including internet sites, catalogues, advertising and promotional material, car show rooms, tyre

retailers, garages, etc. The early success of the scheme will depend on how well this is respected, and consumer recognition of the label, so enforcement will be crucial.

There is strong consumer interest in fuel efficiency, which will be further stimulated by labelling initiatives on both vehicles and tyres. For the replacement market, information on rolling resistance and noise must be targeted and easy to understand for consumers, retailers and commercial purchasers. The measured values must be supported by visual information (bands, symbols, clear indication of comparative performance). For example, rolling resistance is not a familiar concept for consumers, where as fuel efficiency or fuel economy – and the implicit money saving and environmental benefits – are widely understood.

T&E completely agrees with the International Energy Agency's conclusion on the influence of energy efficiency labelling and environmental impacts of tyres: *"If consumers had information on which to base more informed choices and reject inefficient options, the picture would change significantly."* (IEA, 2005 [2])

Car manufacturers (OE market), fleet purchasers and public authorities also represent important market segments, likely to set the pace of innovation, and with a higher degree of sophistication and understanding of performance characteristics. To ensure that the label meets the needs of all market segments, clear visual interpretation of the grading with supplementary information must be presented alongside the measured values from type approval tests.

T&E strongly advocates public availability of test data of the rolling resistance coefficient and measured noise level (dB) via a public database which is easily accessible for consumers, purchasing managers and retailers. This data could be made available via the type approval authorities in a centralised and easily usable database. Public availability of data should be a mandatory requirement in order to enable further improvements to be made in future based on evidence from a larger data sample. Such a database could for example be maintained by a central public authority, such as the European Environment Agency, as suggested by VTI (2008).

The grading and labelling scheme must be designed to take future market developments into account and include provision to regularly review the effectiveness of limit values and band widths. The review process should stimulate ongoing technological developments.

T&E recommends that the labelling scheme is made compulsory from 2010, as a basis for Member States to introduce (fiscal) incentives in order to stimulate progress before entry into force of the regulation including limit values in 2012.

T&E insists that any grading scheme must be mandatory and cites the failure of the Blue Angel labeling scheme for tyres in Germany as evidence that voluntary schemes will not be effective:

"...in some cases consumers did not have the opportunity to discover whether or not the product they were purchasing had actually earned the right to use the label. Although some automobile companies equip their vehicles with low-noise, energy-saving tyres, they still do not apply for or even use eco-symbol. "The automotive industry boycotts the Blue Angel," the jury's chairperson reports." (Billen, 2001 [3])

2. Is there a need to adopt different grading schemes on rolling resistance for winter (M+S) and summer tyres (assuming that suitable criteria to distinguish the two categories can be agreed)?

No. As reflected in the proposal for a regulation on rolling resistance limit values, there is no need for allowances in requirements for winter and summer tyres.

3. Are you in favour of a grading of both rolling resistance and wet grip for C1 and C2 tyres? If not, why not?

A grading scheme and label is recommended for all categories of tyres for road-going motor vehicles (summer/winter including mud+snow, C1, C2 and C3) for both environmental performance criteria: Rolling resistance *and* rolling noise emissions, as well as wet grip.

T&E's main interest relates to reducing the environmental impact of tyres, but we recognize that consumers demand a high level of safety from vehicle tyres. The forthcoming regulation on motor vehicle safety and tyres will reiterate minimum wet grip requirements to ensure that this is the case for all models sold in Europe. To demonstrate and reassure that there is no trade-off between safety and environmental performance (as demonstrated in numerous studies, see T&E input to previous consultation), T&E supports the inclusion of a wet grip grading in the labeling scheme.

As with many other measurement methodologies applied in EU legislation, the wet grip test can be improved. Work to improve the methodology is underway, and the scheme should be updated as new evidence becomes available. This should not be a barrier to inclusion of a wet grip grading from the outset of the scheme. Consumers should have a right to access safety information, particularly where this is gathered as a requirement of legislation.

The Commission must not allow the labelling scheme to be thrown off track by discussions over measurement methodology. We therefore strongly emphasise that the Commission must set a non-negotiable date for the entry into force for mandatory labelling. This should not be conditional on revision of the wet grip measurement methodology, which should be updated as necessary.

In relation to safety performance, the label and consumer leaflet can advise drivers that extra care should be taken regarding aquaplaning, wet grip at high speed, on worn tyres or at low temperatures.

4. Should a grading on wet grip also include C3 tyres?

Yes. This should be introduced as soon as there is an agreed methodology. See Q3.

5. Is the display of the measured noise value in a labelling scheme technically feasible and understandable for consumers? Do you think it would have any significant effect on the market below the limit values set for rolling noise?

T&E maintains that energy efficiency labelling alone is insufficient to address the important environmental aspects of tyre use. Noise emission information must be included in the label, as it is for white goods. In all market segments (and for all models including light and heavy vehicle tyres, and retreaded tyres), T&E advocates

harmonised European labelling as a basis for national (fiscal) incentive schemes to promote environmentally-friendly products. The label should also serve as a basis for European or national awareness-raising campaigns on road noise.

T&E strongly supports inclusion of the measured noise value in the label, as well as a 'low noise' symbol for those models which are substantially quieter than the (proposed) limit values. We believe that such a symbol is essential to raise awareness and ensure consumer understanding of the benefits of quieter tyres, and will provide a useful addition to the measured dB level.

Road noise is recognised as one of the most widespread and severe environmental nuisances in Europe, with serious costs to public health and the economy (see T&E, 2008 [4]). Tyre rolling noise is the dominant source at speeds above 40-50km/h for cars, and therefore a major source of noise in urban areas and along main road axes.

Regrettably, the proposal for a regulation tightening the tyre rolling noise limit values will not be sufficient to lead to a substantial reduction of road noise in Europe:

Kropp and Kihlman (p.33 [5]) calculated that the limit value recommendations of the FEHRL study [6] would lead to a reduction in the maximum noise levels of car tyres of 3dB, but a reduction in equivalent noise levels, Lden, of only 1.5dB. In fact, for C1 tyres, the Commission proposal is 0.5dB weaker than the FEHRL proposal, as the recommendations on rounding and a 1dB measurement allowance have not been taken up. (assuming inclusion of retreaded tyres and ISO 10844 surface or similar)

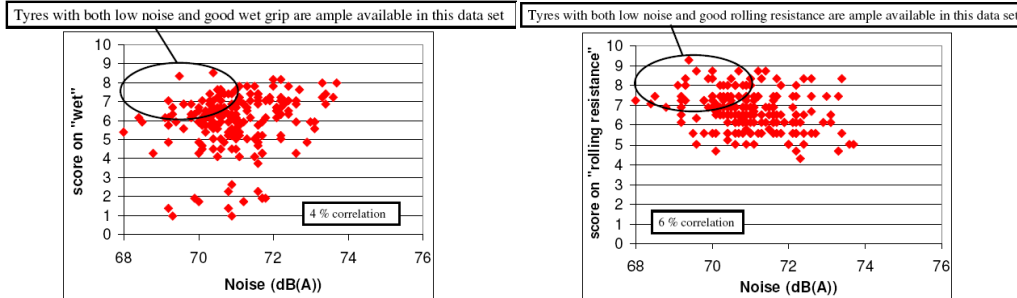
Even more disappointing is the proposal for truck tyre noise reduction: Kropp and Kihlmann calculated that the potential of following the FEHRL recommendations would be a 4dB reduction in maximum noise levels, and a 2dB reduction in equivalent noise levels from truck tyres. However, the Commission proposal recommends C3 limit values which are effectively 3.5dB weaker than the FEHRL recommendations; so the potential noise reduction will not be realised.[5]

Therefore, action to stimulate the market for quieter tyres via labelling is even more vital to achieve any noticeable result on Europe's roads, and with it an improved health protection and quality of life for millions of Europeans:

"It is extremely important for the efficiency of the low noise tyres that consumer information of noise and not only of rolling resistance is included in the future [labelling] system. In fact, the inclusion of both parameters may encourage the consumer to select tyres which shift the costs from both consumers and noise sufferers towards higher quality tyres which utilise a higher level of technical sophistication, resulting in a shift of overall transportation costs from oil, CO2 and noise annoyance to an improved product; and yet with a net benefit to the consumer himself." (VTI 2008, p.X)

To date, there has never been any effective incentive for manufacturers to optimise noise performance along with other criteria, as evidenced by the fact that tyres have progressively become louder over time. As recognised by leading researchers, "exterior noise has a minor priority in tyre development." [5, p.31] Labelling is a key opportunity to stimulate the market for quieter tyres and raise public awareness. Failure to include noise in the labelling system will mean that this critical environmental aspect will continue to be overlooked in research and development.

Tyres are already on the market which perform well on noise, wet grip and rolling resistance, so it is possible to optimise all of these criteria. Comparison across several data sets, including data from consumer tests as well as FEHRL, IPG and ETRTO data demonstrated that good noise performance is compatible with both wet grip and rolling resistance:



Source: M+P (2008): Tyre data consumer tests [7]

Inclusion of a measured noise value for the tyre family is feasible, and at no extra cost as this will be measured in type approval and can simply be added to the label (see concept below). Testing the ‘worst’ tyre per family ensures that costs are minimised, and is acceptable (in terms of equity and noise reduction goals) as the variation of noise performance within a tyre family is limited:

Research by M+P demonstrates that there is no significant difference between noise tests with randomly selected tyres and the ‘worst in family’ as tested in type approval (ETRTO) [8]:

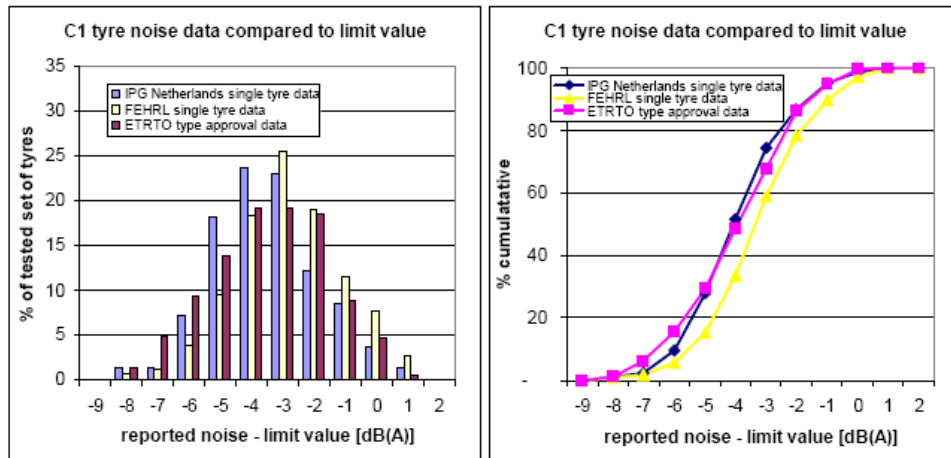


Figure 2: Distribution of tyre noise data from three different sources: 1) The IPG Netherlands with measurements on 165 single tyre sets as bought from the tyre shop 2) FEHRL with measurements on 262 single tyre sets as bought from the tyre shop 3) ETRTO with type approval data representing 536 tyre families

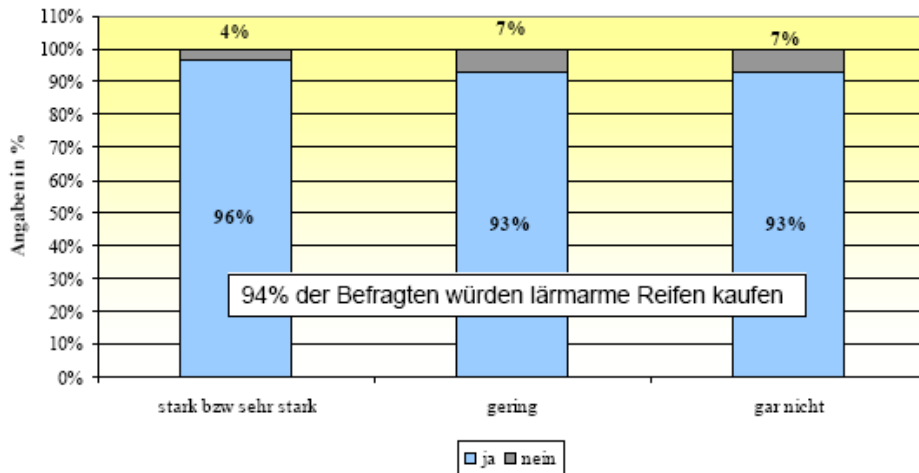
M+P also found from a test sample of 250 tyres a standard deviation of 0.5dB within tyre families. Within a family, width is the only parameter variation that is significant to structural differences in noise levels, but the Commission regulation proposal takes this into account.

There would be a marginal additional cost involved if the measured noise value and/or low-noise mark were to be moulded into the sidewall. Nevertheless this is feasible and seen as desirable by experts (VTI 2008, p.6). A comparison between

European and US mandatory tyre sidewall markings reveals that three additional quality gradings are mandatory on sidewalls of models sold in the US. This demonstrates that there is available space for moulding additional information onto European models. Sandberg (VTI, 2008, pp.9-10) concludes that even on the smallest tyre models, there is still sufficient space for new labels. Sidewall moulding could also offer a safeguard to ensure that the values in the label are directly attributable to the tyre on which it is mounted.

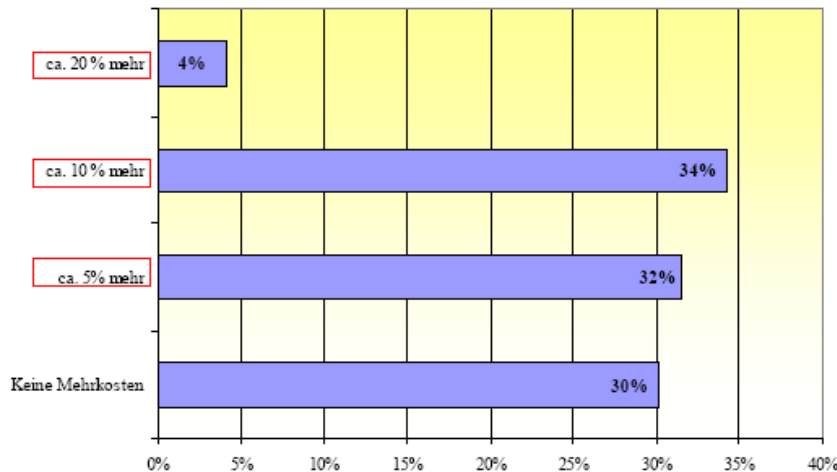
T&E is firmly convinced that consumers will demonstrate interest in tyre noise performance if the label gives ample opportunity. There is little formal research on this aspect, with the notable exception of Fallast et al [9], which shows that 94% of respondents would be willing to buy low noise tyres (regardless of their own noise sensitivity), and that 70% of them would even be willing to pay a small price premium:

Relationship between level of noise annoyance (strong/moderate/none) and willingness to buy low-noise tyres : 94% of respondents are willing to buy low noise tyres.



Source: Fallast, Dr. K. Technical University Graz (2004): Projekt Lärmarme Reifen [9]

Willingness to pay extra costs for low-noise tyres (no extra costs / 5% extra / 10% extra / 20% extra): 70% of respondents willing to pay extra



Source: Fallast, Dr. K. Technical University Graz (2004): Projekt Lärmarme Reifen [9]

In fact M+P research found little correlation between noise level and price [8]. Indeed, the most expensive tyres are often the widest on the market and therefore tend in general towards worse noise performance.

Despite the lack of formal research however, there is solid empirical evidence of widespread consumer interest in the current marketing practices of the tyre manufacturers. Low noise performance or “silence” are often key features of tyre marketing material, particularly via Internet and especially for C1 models. See for example VTI (2008): figures 15-23, and annex A [1] (or in a random search, eg. on www.kwik-fit.com/tyre-search.asp, it is notable how often even tyres >275mm diameter are promoted with “silent” or “low noise performance”). It is very clear that manufacturers also recognise that low noise performance is of interest to customers. Currently, consumers have no objective information by which to verify these claims, or compare the noise performance of different models. It is fair and transparent to give objective recognition to reward those manufacturers/models which offer substantially quieter models, and to ensure that marketing claims are well-founded.

Noise labelling would be primarily of interest to consumers in terms of driving comfort. (see also FEHRL, 2006, p.65 [6]):

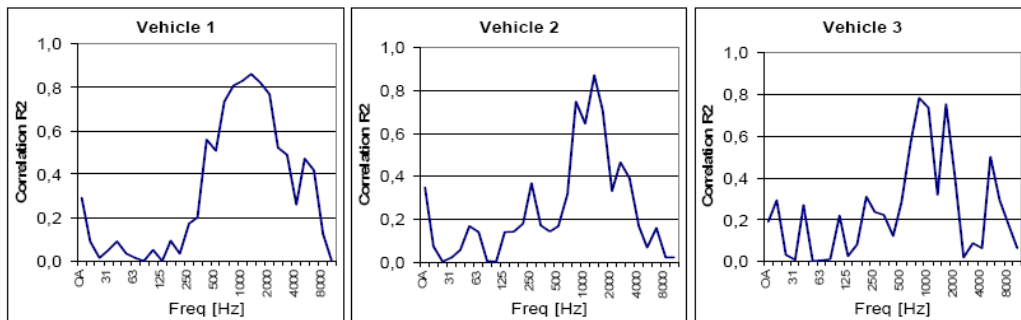


Figure 8: Correlation between the interior and exterior noise of 68 C1 tyres, as measured on 3 different vehicles.

Source: M+P, 2007 [8]

There is a good correlation between interior and exterior noise around 1000Hz, which is the most relevant frequency for human hearing. At higher and lower frequencies the poorer correlation can be explained by interference from other sources, such as power train noise (low Hz) and aerodynamic noise (high Hz). This is reassurance that customers choosing low noise tyres are very unlikely to be disappointed by the interior noise levels.

6. Do you consider that some of the issues raised in the preceding questions should be considered for retreaded tyres?

It is crucial to include retreaded tyres as well as original and replacement models as these represent 50-70% of the market for C3 tyres.

The feasibility study carried out during previous Commission consideration of an eco-label for tyres notes that:

“Retreading of tyres interesting in terms of waste minimisation and material recovery Retreading saves approximately 80% of raw materials and energy, compared to new tyre production, contributing to resource conservation by

extending the tyre life. It contributes towards a specific reduction in waste; e.g. per km of car or vehicle use.” (AEA Technology, 1999 [10])

Nevertheless, over 99% energy associated with tyre production and used during use on the vehicle. Retreading alone is insufficient to make a substantial overall contribution to energy used by tyres, and these tyres must also be subject to rolling resistance – and noise - limit values and labelling.

7. Do you think that a grading scheme could be used by car manufacturers to offer better performing tyres to their consumers? Do you think that car manufacturers can take advantage in their marketing strategy from a tyre labelling scheme?

OE tyres represent around a quarter of the tyre market, but it is important to note the influence of carmakers on the tyre industry. This segment drives research & development and largely sets the pace for the replacement market to follow.

Yes, the grading scheme could be used by carmakers. For communication to consumers, it will be crucial to include information on fuel economy (savings) as well as CO₂ reduction. For example, by demonstrating how the selected tyre compares to the ‘average’ Band D tyre carmakers should make clear in promotional material how this complements vehicle fuel efficiency, in terms of CO₂ and fuel savings.

8. Should the grading of OE tyres (tyres originally fitted to new vehicles) be made available on catalogues and advertising tools on cars?

Yes, this will enable drivers to make a direct comparison when buying replacement tyres and support that the replacement market models are (at least) as fuel efficient and quiet as OE models.

A study for the Commission by TÜV Automotive [11], emphasized the lack of information available to the consumer replacing OE tyres and wanting a guarantee of (at least) the same quality and performance from the replacement model.

Similarly, the National Highway Traffic Safety Administration (NHTSA) in the USA noted in the early 1990s a discrepancy in fuel efficiency between OE and replacement tyres, and proposed a fuel economy label for passenger vehicles tyres to address it. In October of 2003, California adopted the world’s first fuel-efficient replacement tire law, AB 844, which also directed the California Energy Commission (CEC) to develop an Efficient Tire Program. Specifically, AB 844 requires the CEC to: develop a consumer education program, secondly require that retailers provide labelling information to consumers at the point of sale, and finally to promulgate through a rule development process a minimum standard for the fuel efficiency of replacement tires sold. As of 2007, California has passed a framework regulation on minimum permissible tyre rolling resistance levels and is in the process of developing the technical specifications prior to its full implementation.

The Russian delegation to UN-ECE Working Party 29 has also initiated a procedure on tyres. These examples from California and Russia demonstrate that the EU scheme is likely to generate interest further afield and has the opportunity and set the pace for more actions globally.

9. What will be the likely impact of the worst tyre principle defined for emissions measurement, on average rolling resistance of OE tyres? Is there a need to encourage car manufacturers to offer tyres with improved RR compared with the 'worst case' tyre used for the mandatory type approval measurement?

The worst tyre principle (as outlined in the implementing measures to the EURO 5 legislation) is likely to promote LRRT to carmakers, and possibly accelerate the phasing-out of the most fuel inefficient models. This principle is a positive development compared to the previous situation, where cars could be tested on slick tyres. The test performance is therefore now more likely to reflect real world driving. It is important to note that an increasing number of CO₂-based tax schemes across Europe will support this. The labelling scheme under consideration should be designed also with consideration for the OE segment, and help carmakers by identifying efficient models and inspiring further innovation.

10. How do you suggest the information on tyres should be provided? (how, to whom, and when)?

T&E insists that the grading scheme is communicated via:

- A fuel efficiency and noise label (sticker and sidewall marking, with recognizable bands and symbols to be used alongside promotional material, see below)
- A publicly available database of measured type approval values
- A leaflet with supporting information for consumers, available from retailers and via internet, for example including explanation of how to estimate fuel savings, based on rolling resistance class or measured value.

See response to Q1.

11. What should be the role of retailers?

The label should be proactively presented to potential buyers, at the very latest along with the price, e.g. at all points of sale, showrooms, workshops, garages, catalogues, web sites, promotional material, advertising, etc. Retailers should be obliged to show the label / grading for all models offered or recommended to consumers along with price information, to enable consumers to make a direct comparison. This obligation to show the label with the product and price must also apply to online retailers and manufacturers' websites.

Retailers and sales representatives should be in a position to advise customers on availability of energy-efficient and low noise models. This should be supported by publicly available data on type approval values. Retailers and sales representatives should proactively provide further information, providing explanatory leaflets or making reference to online information for example, to demonstrate benefits of low rolling resistance and low noise models (fuel savings, CO₂ and noise reduction).

12. Do you think that the labelling scheme should be associated with other types of measures designed to accelerate the market take up of LRRT (eg. Specific criteria or guidelines for public procurement of replacement tyres, fiscal incentives...)?

A labelling scheme including rolling resistance and noise will fulfil the needs of the many national, regional and city authorities interested in environmentally sound procurement for public fleets, notably including public transport vehicles, waste collection, as well as all other fleets where public authorities can set environmental standards for tenders, eg. taxi fleets, delivery fleets, public service vehicles, personnel vehicles. The IEA also recognises this potential in relation to LRRT:

“Savings from low rolling resistance tyres may justify a procurement specification by government agencies. Government procurement specifications can have an enormous impact on the market because the government is typically the largest customer in a country. Furthermore, the impact may be amplified because the national specifications are often adopted by local governments.” (IEA, 2005)

It is desirable to support authorities wanting to introduce incentive schemes for low noise products, including those Sweden, Denmark, Finland, Norway, Iceland (Nordic Swan), Germany (Blue Angel) and the Netherlands (trial scheme for a quiet tyre Kovenant). Fiscal incentive schemes could be introduced at the national level. Many cities also have noise reduction programmes, and are likely to be interested in quiet public procurement, such as London, Amsterdam, Barcelona, Copenhagen, Graz, Gothenburg and Stockholm. Fuel-efficiency and low noise procurement standards could make a dramatic difference in urban areas, and have the potential to save public spending on very costly but localised solutions such as noise barriers, insulation and quiet road surfaces (See EEB and T&E, 2007 [12]). These standards could also be used in conjunction with the growing number of Low Emission / Environmental Zones in European cities.

Similarly, a growing number of companies are taking transport into account in their corporate social responsibility and environmental plans. A transparent labelling scheme would highlight the most energy-efficient and environmentally sound models to fleet managers and their clients. Such a label could be used in company purchasing recommendations and to show social and environmental responsibility. (For example, see the Whisper Truck at www.piek.org and Tesco UK's plans for “zero-emission” delivery vehicles: <http://www.tescocorporate.com/>)

T&E concept for an environmental label for tyres

In line with the priorities as outlined above, T&E has developed a concept for an EU tyre label together with an information design professional. The labeling requirement should be mandatory for **C1, C2 and C3, including retreaded** tyres from **2010**, in order to stimulate market development ahead of entry into force of the regulation.

The concept includes **fuel efficiency, wet grip and a ‘low noise’ symbol**. The concept builds on existing EU energy labels and incorporates the recommendation of the FEHRL report that the measured dB level should be stamped on the tyre wall together with;

“a threshold could be set for a tyre to be considered “low noise”, eg. 3dB(A) below the limit value. If the noise level measured in the test equalled or was below the threshold, the manufacturer would be entitled to stamp the words “low noise” on the tyre, and use this in advertising materials.” (FEHRL, 2006, p.65)

For the energy / fuel efficiency / CO₂ section of the label, T&E advocates a 7 band scheme, as is recognisable to the public from white goods labelling. We also believe that the sidewall and label should be marked with the actually measured rolling resistance coefficient. T&E is campaigning for more ambitious limit values than proposed, but working on the basis of the proposed regulation, the grading could be as follows:

Thresholds kg/t	C1 2010	C1 2014	C2 2010	C3 2010
G	<12	10.5	10.5	8
F	<11	9.5	9.5	7
E	<10	8.5	8.5	6
D	<9	7.5	7.5	5
C	<8	6.5	6.5	4
B	<7	5.5	5.5	3
A	<6	4.5	4.5	2

This corresponds to the recommendation for future-proofing the scheme, that no tyre should currently meet the Band A requirements. The 1kg/t bands are logical to consumers, and provide a better incentive to tyre makers to strive for incremental improvements. Wider bands do not make sense: the current market spread is between 7-14kg/t, and it should be the aim to reduce this spread over time, as well as the limit values. There should be provision in the proposal to regularly review the band limits, as necessary in view of market developments.

In relation to noise emissions, T&E has advocated a flat 71dB standard for all tyres, however the concept for a low noise symbol also lends itself to the scheme as recently proposed. We support the FEHRL recommendation of a marking 3dB below the limit value, as this represents a halving of the sound pressure and therefore a substantial and notable reduction across the fleet on a busy road (equivalent to halving the traffic).

Threshold values for low noise symbol:

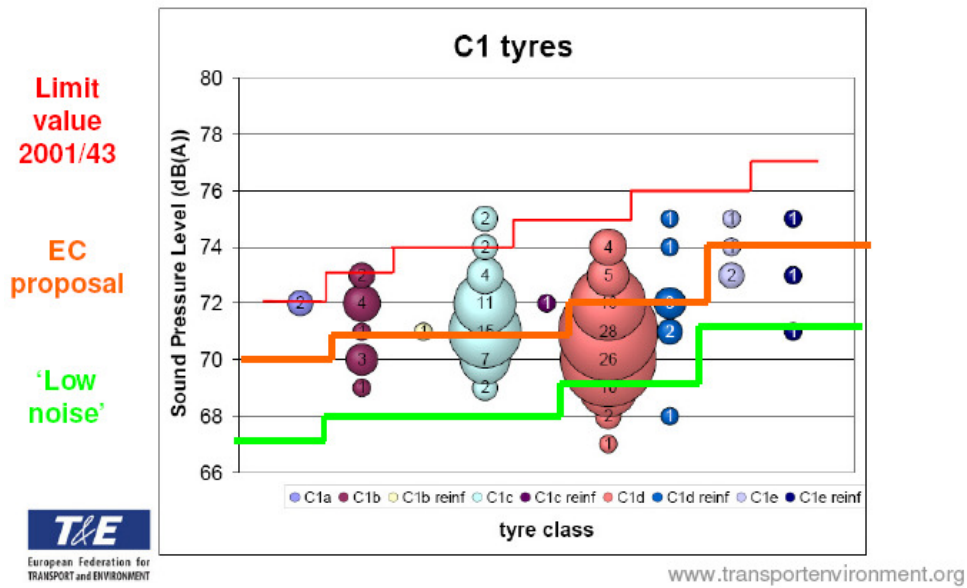


Figure adapted from VTI, 2008, based on measurements from de Graaff and van Blokland, 2007.

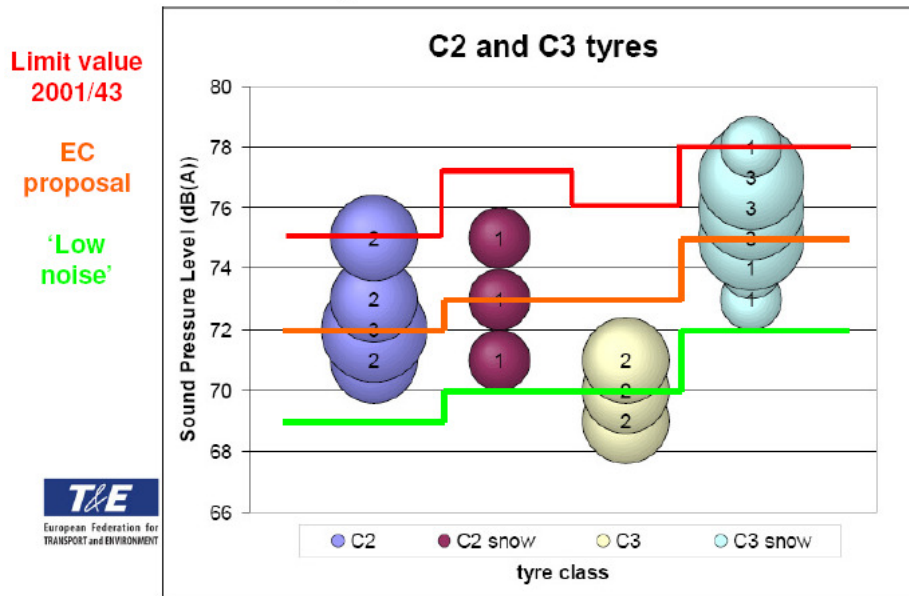


Figure adapted from VTI, 2008, based on measurements from de Graaff and van Blokland, 2007.

The low noise mark should be presented in a way which is easily understandable to consumers, and supported in the label by written messages communicating the benefits of the low noise tyre and making the link to the measured dB value.



A multi-criteria label can be presented simply to the general public, without causing confusion and with ample opportunity to provide supplementary information, for example in brief text on the label and with access to an additional information leaflet and online. The measured values, grading and the low noise symbol should be incorporated into a clearly understandable and recognizable label, as envisaged below, and the Bands and low noise mark communicated in all other promotional and information material.

NOTE: Numerical values are for visualisation purposes only

BRAND

BRAND

MAKE / MODEL

» Check the size and specification

205/60 R 16

92 H

» Compare performance results

Savings, safety and comfort

Your choice of tyre can benefit you and the environment

Fuel economy	Wet grip
<div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <p>A</p><p>B</p><p>C</p><p>D</p><p>E</p><p>F</p><p>G</p> </div> <div style="width: 10%; font-size: 2em; font-weight: bold;">A</div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="width: 10%; font-size: 2em; font-weight: bold;">B</div> <div style="width: 40%;"> <p>A</p><p>B</p><p>C</p><p>D</p><p>E</p><p>F</p><p>G</p> </div> </div>
<p>12 kg/t</p>	<p>45 m</p>

Noise

72 dB

Low Noise

» For more information and tyre care tips

Ask your tyre dealer for an information leaflet

EU smallprint odolare diti inisprum velti acelit, qui et autput, quamet adidant laper in vullute.

References

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