

On ETRMA's track !



Annual Activity Report
2009 - 2010



EUROPEAN
TYRE & RUBBER
manufacturers'
association

ETRMA members

Tyre Corporate



National Associations



Affiliated members





The Tyre and the Rubber sector on the move !

Based in Brussels with staff from across Europe, ETRMA focuses on the following key interdependent activities: Representation, Coordination, Communication, Promotion and Technical Liaison.

Representation

ETRMA is the sole interlocutor of the tyre and rubber manufacturers to represent and defend their initiatives and interests towards the European Union institutions and any other relevant organisation on a pan-European or international level.

Coordination

ETRMA acts as the coordinator for the European tyre and rubber industry so as to ensure the efficient, organised and effective representation of all its members.

Communications

Successful representation and coordination activities require clear and effective communications, both with our members and with external institutions. ETRMA is fully committed to defining and communicating the common positions of our members to the relevant authorities and to ensuring that our members are always consulted clearly and efficiently on any policy or regulatory issue that might affect the sector.

Promotion

ETRMA endeavours to further enhance the image of the tyre and rubber industry by better informing authorities and raising public awareness as to our policies and the significant advances we have achieved in areas relating to the general economy, health, safety, environmental protection, transport and access to third markets.

Technical Coordination

ETRMA works closely with the European Tyre and Rim Technical Organisation (ETRTO), which issues internationally referred tyre Standards and Recommendations on tyre use & maintenance.

Message from the President

An increasingly competitive global market for the European tyre and rubber industry

The global financial crisis has wiped out mid-term growth prospects; there is now an absolute need to strengthen the conditions in place to allow Europe to get to where it belongs, as the most technologically advanced producer of tyre and rubber products, in a scenario of increasing environmental, social and industrial sustainability.

ETRMA has delivered some notable successes over the past couple of years, including:

- the fruitful dialogue established through CARS21¹, which has enabled us to raise awareness of the importance of having a competitive and innovative tyre industry in Europe and of introducing a series of tyre-related measures that will benefit the European Union by reducing road transport emissions and improving road safety;
- the important role in facilitating members' implementation of REACH;
- the understanding by EU authorities of the impact of energy policy on an industry such as ours, at serious risk of carbon leakage; and
- the promotion of dialogue with key stakeholders, such as European and national Institutions, policy-makers and industry actors, about important new challenges such as effective market compliance.

All of these initiatives are particularly important as the tyre and rubber industry must address the challenges and opportunities that climate change and scarce raw materials present us with.

The Europe 2020 strategy provides an opportunity to build a long-term vision for a sustainable and competitive economy.

Smart industrial policy should help to maintain Europe as an attractive area for **innovation** and manufacturing.

Innovation capacity and advanced sustainability will be keys to successfully exiting the crisis. The regulatory environment in which our industry is seeking to innovate is highly influential; EU decision-makers need to design policies that remove potential or actual barriers to innovation, like e.g. excessive administrative burdens and taxation regimes while improving financing, education and coordination practices to enlarge the European industry's global **competitiveness**.

I wish to thank all the members of ETRMA for their commitment to our Association and I am pleased to know that we as an Industry can rely on the support of a dynamic team in Brussels, made up of highly competent, dedicated and hard working people.



Francesco GORI
President

“Tyre safety and environmental performance requirements are set at unprecedented levels; the implementation of the law will be challenging, but the tyre industry is ready to meet the challenge in light of the consumers and citizens interest.”

Francesco Gori

The Secretary General reports

Commitments in spite of unprecedented demands

Commitment to the European authorities. Despite the fact that sales of tyres and of technical rubber products dropped significantly in 2009, despite the fact that industry had to adapt overheads to business volumes and to exceptional costs due to under-utilisation of capacity and despite the fact that companies cut capital spending by a factor of five, the ETRMA members stood by their CO₂ reduction commitments and road safety objectives. The European tyre industry agreed to unprecedented mandatory requirements for its tyres!

Commitment to the European consumer. Despite the strenuous demands put on the industry R&D and Quality teams who are working to ensure product conformity with new legislation (such as the REACH requirements and PAH content reduction in tyre compounds), the industry has continued investing in innovation to continue giving consumers the highest quality products with greater performance levels, at affordable prices!

A level playing field is very much needed! Despite the exceptionally difficult economic conditions and market pressures on manufacturers and their employees, the tyre and rubber industry has deployed special measures to conserve jobs, even as some plants operated at as little as 38% of capacity in 2009. Our tyres sold in the EU market cannot compete with cheap tyre brands offering inferior quality products; it is important that better performing, technologically advanced products are not undermined by very low level products which will ultimately harm European competitiveness.

The European tyre and rubber industry is still leader on the technology and innovation side when compared with competitors from emerging markets, but this advantage could be very quickly eaten-up by free access to new materials and technologies. Also the know-how transfer from all business areas, be it tyre technology or quality management, will soon reduce the gap. Advanced material improvement is a key element of European competitiveness and must be kept in our hands. In order to further strengthen its position, the European tyre and rubber industry will have to intensify its efforts, in particular with the development of technologies which improve safety characteristics and deliver the highest level of environmental protection. The recent creation of the Rubber and Polymers competitiveness cluster in Spain, just a couple of years after Elastoplôle was launched in France, is a further sign of continued dynamism demonstrated by the sector.

It will also be our role to contribute to and participate actively in turning the EUROPE 2020 vision into reality. To achieve this, we will need the full backing of EU policymakers, the consistent and generous commitment of our members and the strategic direction and support of the ETRMA Board of Directors.

Thank you all.



Fazilet Cinaralp
Secretary General



“As long as the authorities have no way of checking or imposing sanctions, the whole thing is not as effective as it might sound.”

Fazilet Cinaralp

Section I

ETRMA for health and environment



Available from www.etrma.org

- REACH General guidance documents:
 - REACH Manual - Rubber Industry
 - REACH FAQ - Rubber Industry
- Natural Rubber and latex:
 - Guidance Document Natural Rubber within REACH
 - Information Notice "Dry Natural Rubber (DNR) and Natural Rubber Latex (NRL) registration requirements"
- Use descriptors: Identification of uses of chemicals in tyre and rubber manufacturing (use descriptors)
 - Identification of Uses for the Rubber Sector - Tyre (version 1.1)
 - Identification of Uses for the Rubber Sector - General Rubber Goods (version 1.1)
- Generic exposure scenario: description of chemical exposure to human health and environment during manufacturing of tyres and general rubber goods.
 - Excel workbook "ETRMA GES Template – Tyre"
 - Excel workbook "ETRMA GES Template – GRG"
- Addition guidance documents supporting the development of exposure scenario for tyres, including tyre service life and end of life tyre:
 - Emission Factor Guidance for Formulation and Industrial Use
 - Tyre Production Rate
 - Scaling Equation
 - Tyre Service Life
 - End of Life Tyre
- Recovered rubber
 - Guidelines for Recovered Rubber

The European Tyre and Rubber Manufacturers share the objectives of the European Commission to improve the protection of human health and the environment. ETRMA has therefore deployed substantial resources to both the **REACH** implementation and the **Emission Trading Scheme (ETS)** policy. A lot of work has also been done on **End of Life Tyres (ELT)** and on contributing to reduce greenhouse gas emissions in the **transport sector**.

A/ REACH – full speed

2009 was the year to prepare for the implementation of REACH. In December, ETRMA published a **set of exposure scenarios covering the use of chemicals in the rubber industry** to support members' REACH registration obligations. This approach provides a good example of how to attain early and efficient cooperation between downstream users and chemical manufacturers. It is an innovative approach in the use of chemical categories to collect and develop information on the hundreds of substances used in the rubber industry. The generic exposure scenario documents including use descriptors, emission factors for formulation and industrial use and other guidances such as tyre production rate, scaling equation, tyre service life and end of life tyre are posted on the ETRMA website.

The publication of the exposure scenarios is not the end of the process: the cooperation between ETRMA members and EU chemical manufacturers' representatives, consortia and lead registrants, will continue during the entire REACH registration process. It is worth highlighting that at the very beginning of the exposure scenario definition, manufacturers and importers were pursuing a top down approach to communicate exposure controls resulting from chemical safety assessments, but have recently realised the value of first listening to their customers, in particular through downstream user associations, such as ours. From this perspective, ETRMA has achieved an **effective and fruitful supply chain communication**, with a focus on cooperation between EU actors. Such cooperation is essential to ensure that correct information and data, both generated and collected, is used by registrants when preparing chemical safety assessments. In addition, if this is not done properly, unnecessary restrictions on specific chemical uses or inappropriate or inconsistent risk management measures might be imposed by suppliers to rubber industry companies.

ETRMA has been particularly proactive in identifying and addressing the key expectations that REACH has created with respect to roles and responsibilities of downstream users.

During the next year, attention will mostly focus on those chemicals that are to be registered in 2010. For some cases, it may be necessary to refine exposure scenario assumptions or to gather additional specific information or data.

ETRMA is committed to playing an active role in helping its member companies to successfully meet REACH challenges and is getting ready to actively contribute to the revision of the REACH legal text foreseen in 2012.

Rubber substances monitoring programme

With the entry into force of the European Regulation 1907/2006/EC (REACH), besides the introduction of new restrictions, existing chemicals could be subject, in the future, to authorisation increasing the number of cases which could lead in the long-term to substitution. In addition, there is still the risk of low-volume manufactured chemicals disappearing from the European market due to high registration costs.

In anticipation of such scenario, ETRMA has launched a project with 3 main steps:

- i) **proactive identification of rubber chemicals** which may be potentially subjected to substitution;
- ii) **analysis and prioritisation of the identified chemicals**; and
- iii) **creation of a substitution European network of laboratories and research centres** to react and cooperate in case of future substitution needs.

This activity is primarily aimed at providing support to the General Rubber Goods sector, whose companies, consisting mainly of SMEs, might have more difficulties in allocating resources independently for R&D activities.

Classification and labelling (CLP Regulation)

In December 2008 the European Parliament and the Council of Ministers adopted the new Regulation 1272/2008 on Classification, Labelling and Packaging of substances and mixtures ("CLP"), which aligned existing EU legislation with the United Nations Globally Harmonised System (GHS). This new Regulation contributes to the GHS aim that the same hazards be described and labelled in an identical way, all around the world. Using internationally agreed classification criteria and labelling elements will facilitate trade and contribute towards global efforts to protect people and the environment from the hazardous effects of chemicals.

ETRMA has focused its activities on **analysing the legal text and providing support to the rubber industry** to properly implement the requirements. Specific attention is now dedicated to the potential implications of the classification "translation" deadlines for substances (1 December 2010) and mixtures (1 June 2015).

Sophisticated IT reporting tools with vehicle manufacturers

In 2000 an internet reporting tool known as the International Material Data System (IMDS) was launched and now it has become a global standard used by almost all of the global original equipment manufacturers (OEMs). The system was designed to collect, maintain, analyse and archive information on materials used for automotive components. Over time it has also been adapted to meet the obligations placed on automobile manufacturers, and thus on their suppliers, by national and international standards, laws and regulations, according to the Global Automotive Declarable Substance List (GADSL), developed by a specific working group joined by ETRMA in 2004. In this framework, **the tyre and rubber industry has been actively involved** in discussions with automotive manufacturers to ensure that the IMDS system remains workable and that GADSL is properly updated.

B/ Emissions Trading Scheme - Tyre sector at risk of carbon leakage!

On 23 January 2008, the Commission adopted a proposal designed to amend the current EU Emissions Trading Scheme Directive (Directive 2003/87/EC). The major change, besides the introduction of a unique European ceiling instead of 27 different Member States ceilings and the introduction of a linear emissions reduction factor, is that the emissions allowances will no longer be allocated for free. By means of a progressive allowance plan, allowances will gradually be subject to auctioning.

ETRMA performed an **impact assessment specifically for its tyre industry**. The main costs related to the new ETS proposal can be summarised as the following:

- direct costs associated with CO₂ emissions (steam production);
- indirect costs when purchasing electricity; and
- indirect costs when purchasing steam.

The first report, submitted to the Commission on August 2008, showed that the total ETS costs, corresponding to approximately 1.5% of production costs, will **absorb approximately 23% of the tyre companies' net profit**.

ETRMA's analysis has led to the recognition that the tyre sector is exposed to a significant risk of carbon leakage (Commission Decision 2010/12) and therefore entitled to receive free allowances based on fully harmonised rules for free allocation of CO₂ allowances, which should be based – to the extent feasible – on ex-ante benchmarks.

Being one of the most important measures needing to be defined by the European Commission in 2010, **ETRMA is actively cooperating by addressing tyre-specific concerns**, such as cross-boundary heat flows and proper compensation for the high impact of indirect ETS costs associated with electricity consumption.



What is REACH?

REACH is a new EU Regulation on chemicals and their safe use (EC 1907/2006). It deals with the **Registration, Evaluation, Authorisation and Restriction of Chemical substances**. The new law entered into force on 1 June 2007.

The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.

"We must stop industry and jobs fleeing Europe to go and add to pollution elsewhere, a phenomenon known as "carbon leakage". To avoid this, the Commission will be working to implement the ETS (Emissions Trading System) Directive and to prepare a list of industrial sectors that could receive, free of charge, a larger share of the emission allocations."

Antonio Tajani Vice President of the European Commission

C/ Management of end-of-life tyres:
European Producer Responsibility leads the way

Country specific implementation and ELT management companies



In Europe, around 3.2 million metric tons of used tyres are generated annually. The Landfill Directive (1999/31/EC) has banned the landfilling of certain end-of-life tyres (ELT) since 16 July 2006. In planning for the implementation of the Landfill Directive, the tyre industry initiated a strategic programme based on producer responsibility which was developed by the European tyre manufacturers member of ETRMA. This has led to the **gradual creation of national end-of-life tyres management companies** backed by a proper statutory regime. Currently, the network includes 14 countries, including Turkey, and other EU Member States are set to follow in the near future.

The recovery routes of used tyres

The sustainability criteria for selecting the recovery route are the following:

- the intrinsic technical properties of the tyre;
- the full respecting of environmental and health requirements;
- the contribution to saving natural resources and protecting the environment; and
- the economical viability.

• **Second hand tyres or retreaded tyres:** 19%.

Retreading significantly extends the life of a tyre and accordingly delays end-of-life status; it also saves the energy and resources necessary to producing a new tyre.

Unmatched progress... in the face of growing volumes

Over 1 billion tyres are sold worldwide each year and subsequently just as many fall into the category of end-of-life tyres. Despite an increase in the service life of tyres these volumes are constantly on the increase because of the growing number of vehicles and increasing traffic worldwide.

Recovery rates for 2008 in major tyre markets:

EU 27
 3,281,000 tons, global recovery rate 95%

Japan
 935,000 tons, global recovery rate 89%

US (2007)
 4,596,000 tons, global recovery rate 89,3%

• **ELT derived products, as material:** 39%.

- Tyres' draining capacities and mechanical properties are used in many civil engineering applications (e.g. fills and embankments; backfill for walls and bridges and as insulation for roads). A recent study has shown tyres' good water retention qualities;
- The carbon and steel content of tyres are used in steel plants; tyres have a substitution rate of 1.7kg to 1kg of anthracite. Environmental impact assessments confirm the usefulness of developing this route;
- Tyres have a wide range of use in the form of powders and granulates: in combination with thermoplastic (e.g. shock absorbing mats for schools, paving blocks or tiles for patios and swimming pool surrounds and roofing materials); tyres can be integrated into the construction of artificial turf or used as rubber modified asphalt which reduces noise emissions and aquaplaning risks. A very recent study on artificial turf found health and environmental performance rates comparable to the alternatives.

• **ELT derived products, as alternative fuel:** 37%.

The first and the most important use of the calorific power of ELT happens in the cement kilns: a ton of tyres is equivalent to a ton of good quality coal or 750kg of fuel; end-of-life tyres can substitute as much as 20% of traditional fuel. The air emissions are well regulated, monitored and fully respected. The end-of-life tyre is a serious alternative to coal and petroleum coke: it has lower heavy metals and sulphur content, not to mention CO₂ savings. In effect, 20% of tyre weight is composed of latex (hevea). One ton of tyre generates 647 kg of CO₂ from biomass.

Annually, the European tyre industry finances R&D programmes with industry, laboratories and environmental agencies in order to find new recovery routes for end-of-life tyre products which are sustainable in terms of usage, environmental performance and economically viability.

Growing demand for tyre-derived products

Tyre-derived products are existing, ready-to-use resources. Using them instead of new raw materials **reduces both environmental impacts and economic costs:**

- no mining, drilling or processing required, unlike fossil fuels;
- little or no processing requirements for many applications, particularly when used whole or shredded as an energy source or for construction;
- processing requirements can often have less environmental impact than production of virgin materials; and
- reduced transportation requirements (as tyres are usually plentiful everywhere).

End of waste status for tyre-derived products

The current definition of waste for all end-of-life (derived) products leads to serious administrative and financial burdens (collecting, transporting, etc) which are slowing down the development of further routes of recovery. This approach contrasts with the European Union's Strategy aiming to make Europe a recycling society and to encourage sustainable use of natural resources.

The recognition of end-of-life tyre-derived products as secondary raw material and as alternative fuel would help to persuade more industry partners to invest in R&D programmes which will develop new recovery routes, be they material or energy solutions.

The next CHALLENGE: Treatment of existing stockpiles

Existing abandoned stockpiles should be treated in parallel with the annual generation of ELT, within a specific management system, and markets should be created for stockpiles. **Stakeholder communication is key to gaining trust and credibility.**

By way of illustration, although the French Law on ELT management does not foresee anything regarding the treatment of the abandoned ELT stockpiles (200,000 tons), Aliapur has engaged and financed since 2005 an abatement programme which deals with 30,000t per annum. An important agreement was signed in February 2008 between the manufacturers, the distributors and the French authorities in order to treat all abandoned stockpiles over the next 10 years.

The decision regarding who is responsible depends on the local context, but the government nearly always makes the first move. Stockpile abatement should be government-sponsored (if funded through taxes), or, if not, coordinated as a joint effort.



Reasons for Europe's strong performance in ELT management:

- *the management organizations created in each market collect up to 100% of the used tyres placed on the market by the members and the entire quantity of collected tyres are treated in line with the national legislative framework;*
- *through the managed system, the industry is able to steer, ensure full traceability and full reporting, both for the industry's use and for the national authorities' use;*
- *ETRMA actively supports the development of product standards for end-of-life derived products; a brand new standard has just been adopted at CEN² level; these product standards help to improve the reliability of the supply chain, which is very important for the recycling and recovery operators; and*
- *used tyres keep the intrinsic properties of all the useful compounds from which they are made, because of that, they offer numerous possibilities for treatment and valorisation - the current and emerging capacities of recovery are much bigger than the annual growth of used tyres.*



² CEN is the European Committee for Standardization and it draws up voluntary technical specifications to help achieve the Single Market in Europe (reference: CEN/TS14243:2010)

D/ Road transport under pressure to cut emissions and improve interoperability

Transport is a key factor in modern economies and is an essential component of the European economy. The transport industry at large accounts for about 7% of GDP and for over 5% of total employment in the EU³.

Transport accounts for 25% of all greenhouse gas emissions (GHG). Emissions from transport are growing while other sectors have managed to reduce their emissions in recent years. The main challenge for transport sector actors will thus be to drastically and rapidly reduce emissions while maintaining high levels of service and continuing to play a vital role in the European economy. All other policy measures and tools should be geared towards meeting these targets.

Towards more environmentally sustainable transport

Through the recently adopted Vehicles Safety Regulation 661/2009⁴ and Tyre Labelling Regulation 1222/2009⁵ the tyre industry clearly contributes to these environmental, qualitative and economic objectives. Environmental benefits of the proposed regulations are that these combined measures enhance the fuel efficiency of the vehicles.

The policy initiative started with the publication in February 2007 of two Communications: a Communication on the revised CO₂ and cars strategy⁶ and a Communication on a Competitive Automotive Regulatory Framework for the 21st Century (CARS 21)⁷. On the basis of these Communications, the Commission proposed an integrated approach to achieve the EU objective of 120 g CO₂/km from new passenger cars by 2012. Under this approach, legislative proposals would focus on mandatory reductions of CO₂ emissions to reach an average objective of 130 g CO₂/km for new passenger cars by means of improvements in vehicle motor technology. A further reduction equivalent to 10 g CO₂/km would be achieved by other technological improvements and increased use of bio-fuels.

A conclusion recognised by EU leaders: *"The European Council stresses the necessity of an efficient, safe and sustainable European transport policy. In this context, it is important to proceed with actions to increase the environmental performance of the European transport system"*.⁸

Quality transport that is safe, efficient and environmentally sustainable must remain a top priority for the coming years. A White Paper⁹ outlining European transport policy through to 2010 was issued by the European Commission in 2001. At its mid-term, in 2006, the programme was updated¹⁰.

The European Commission now has to adjust its future policies which will be developed after 2010¹¹ to allow sustainable transport development.

In order to achieve this, a pragmatic transport policy is needed. This policy should put citizens and mobility at the heart of its concerns by taking into account lifestyle changes. **This represents a challenge both for the European authorities and industry. There is an increasing necessity for the transport sector to mitigate its negative impact on the environment.**

Today, road transport represents the second largest source of CO₂ emissions in the European Union, second only to power generation. CO₂ emissions are mainly generated by cars when burning fossil fuels such as petrol, diesel or gas, therefore, fuel efficiency is key to reducing them.

The tyre industry supports the view that by using interoperable transport systems it will be possible in the future to combine successfully the use of various and balanced transport modes.

The European Union needs an ambitious transport policy that can respond to the expected increase in population and the European vehicle car park, while at the same time reduce negative impacts on the environment and increase safety.

Interoperable transport systems

*An efficient transport system is a prerequisite for the European Union's competitiveness. ETRMA agrees that the optimal functioning of the transport system requires **full integration and interoperability of individual parts of the network**, as well as **interconnection between different (modal) networks**. The role of transport will continue to grow with the growth of international trade, hence ETRMA believes that improved 'interoperability' is one of the most promising fields with which to boost efficiency and quality of Europe-wide transport systems.*

³ EC: A sustainable future for transport: Towards an integrated, technology-led and user friendly system (COM(2009)279)

⁴ Adopted in 13/06/2009

⁵ Adopted in 25/11/2009

⁶ COM(2007) 19, 07.02.2007

⁷ COM(2007) 22, 07.02.2007

⁸ Presidency conclusion 8-9 March, 2007

⁹ COM (2001)370

¹⁰ COM (2006)314

¹¹ COM (2009)279

In 2009, the European Commission published a Communication, “A sustainable future for transport: Towards an integrated, technology-led and user-friendly system,” which opened a discussion about how a long-term vision could be developed which would shape future transport policies in the EU. The European tyre industry is closely monitoring the debates in the European Parliament – which will respond with its own views to the Communication - and is actively participating in the debate which aims to respond to society’s economic, social and environmental needs.

The industry plays an important role in maintaining Europe’s industrial and technological base and its strong hold on the internal market. The tyre industry needs to remain competitive in international markets, make efficient use of energy, cope with environmental and safety needs and continue to be at the forefront of technological advancement. Tyre is one of the most technologically driven and diverse products in common use. It must have a high level of safety, quality reliability and durability with a decreasing environmental and climate impact and all at an acceptable cost. Several measures have been taken by the European Commission to progressively decrease road transport emissions of CO₂ through new technological requirements for motor vehicles, including specific provisions for tyres and dedicated tyre legislations.

Existing minimum tyre requirements extended to rolling resistance and wet braking performances

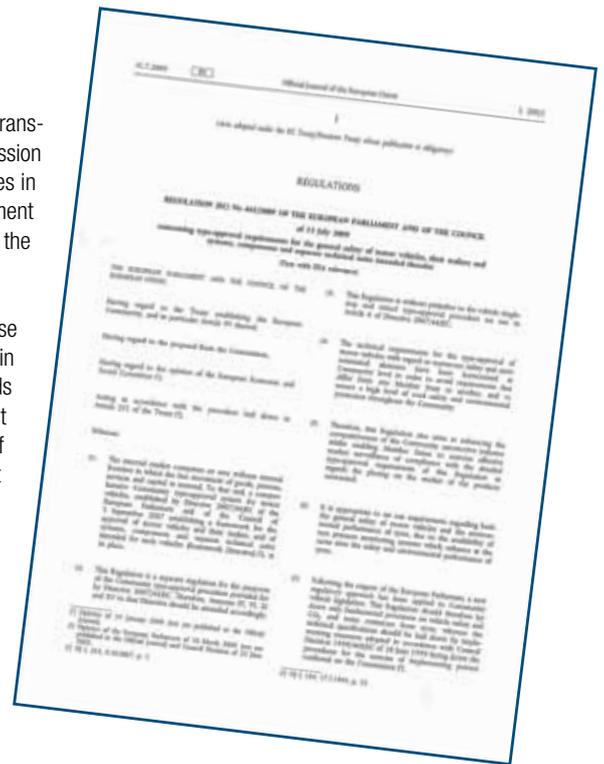
As part of the Commission’s CO₂ reduction strategy, a further 10 g CO₂/km reduction must be achieved through other technical improvements; the first series of measures were tyre related.

Through the recently adopted **Vehicles Safety Regulation 661/2009**, the law aims to enhance the safety of vehicles by requiring the mandatory fitting of advanced safety features (among which minimum wet grip levels and tyre pressure monitoring systems) and at enhancing the environmental performance of vehicles by reducing the amount of road noise and CO₂ emissions from tyres. This specific legislation also aims to contribute to the competitiveness of the automotive industry by simplifying the existing type-approval legislation (among which the Council Directive 92/23/EEC as amended by Council Directive 2001/43/EC), improving transparency and easing the administrative burden.

The regulation impacts both vehicle and tyre manufacturers.

From 2012, tyre manufacturers will need to comply with minimum values for noise, rolling resistance and wet grip.

The rolling resistance requirements for commercial vehicles are unprecedented! The replacement tyres will provide more efficiency than the vehicle technology available on our roads, at least for a couple of years.



*“The major improvements introduced within 661/2009/EC, include:
A wide recognition of the need for a balanced approach when pushing tyre performances; introduction of date of manufacturing for market compliance with new rules; mandatory fitment of accurate tyre pressure monitoring systems, combined with the very ambitious rolling resistance targets; and recognition of the technological limits for unrealistic tyre rolling noise threshold, in particular for commercial vehicles tyres. This being said, one major challenge still remains: policing by the authorities so the products after 2012 do all comply with the requirements”*

Fazilet Cinaralp



Introduction of mandatory tyre labelling¹³

"This is a typical win-win situation where consumers and fleet managers will be able to choose safer and low noise tyres and save on their fuel bills while the European Union as a whole will benefit from reduced road transport emissions,"
it is with these words that Energy Commissioner Andris Piebalgs welcomed the adoption in the European Parliament of the Regulation.

ETRMA and its members worked in partnership with the European Commission Directorate General ENER and MOVE towards the development of mandatory tyre performance information (adopted in November 2009), with respect to fuel efficiency, wet grip performance and external rolling noise.

The regulation is a world-wide première.

The Regulation will increase the safety and the economic and environmental efficiency of road transport by promoting safe and fuel-efficient tyres with low noise levels. It also establishes a framework for the provision of harmonised labelling information of tyre parameters.

All tyres produced after July 2012 and on sale in the EU from November 2012, either will bear a sticker or will be accompanied by a label to be displayed at the point-of-sale.

The European co-legislators have fully acknowledged the need for a balanced approach towards the kind of tyre performance information needed, by designing an integrated label which provides both environmental (fuel efficiency and noise levels) and safety (wet braking) information.

Such information will at all times be available to the customer through technical promotional material, including on the websites of manufacturers. The consumers will have access to objective, reliable and comparable information on tyre parameters. The expected fuel savings from the increased use of fuel efficient tyres will lead to savings of an estimated 20 million tons of CO₂ and 10 billion EUR of fuel.



Life cycle assesment of an average European passenger car tyre



Source: ETRMA (BLIC), PréConsultants 2001

Source: Consumer Label for Tyres in Europe (VTI, March 2008)



Car on exhibit in February 2008 at Brussels International Airport, advertising more (driving) pleasure and lower emissions; according to the environmentally-awarded concept EfficientDynamics ▼



¹² UN/ECE Regulation 117 : Uniform provisions concerning the approval of tyres with regard to rolling sound emissions and adhesion on wet surfaces.

¹³ EU Regulation 1222/2009 of 25 November 2009 on the labelling of tyres with respect to fuel efficiency and other essential parameters.

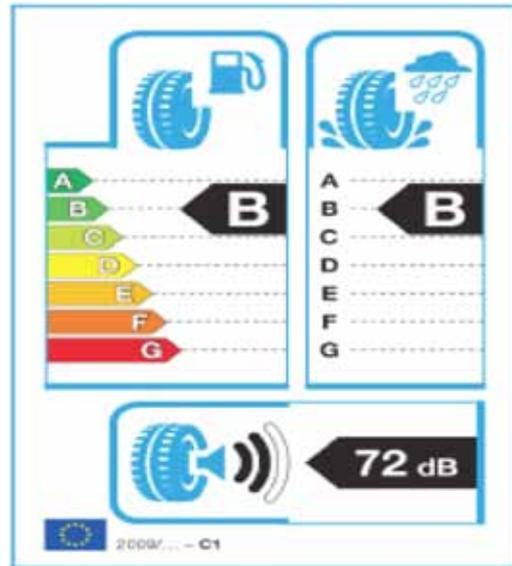
The proposed tyre labelling rules

The rules prescribe that information on certain characteristics of tyre performance will have to be communicated to consumers.

This information will relate to:

- the impact on vehicle fuel efficiency associated with the **tyre's rolling resistance**;
- the impact on vehicle safety associated to the **tyre's wet grip**; and
- the **tyre's external noise level** (given in decibels) and not any tyre noise heard inside the vehicle.

This information needs to be provided for passenger car tyres, light truck tyres and heavy duty vehicle tyres.

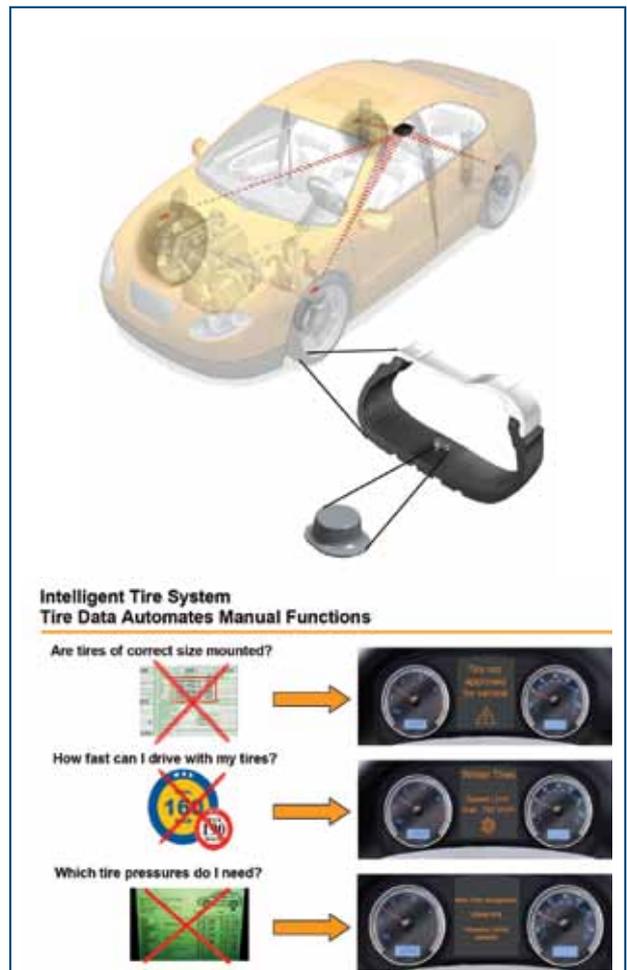


Towards intelligent transport systems

The transport sector is facing major challenges, such as congestion and emissions. The growing population (more cars and trucks are in use) results in serious problems in terms of safety and capacity, leading to huge traffic jams. The increasing congestion in our transport system (freight road transport is expected to increase by 55% and passenger road transport by 36% by 2020) and the related energy consumption and negative environmental impacts (CO₂ emissions from transport will grow a further 15% by 2020) call for an innovative response to growing transportation and mobility requirements.¹⁴

Hence, better managing traffic not only engenders safety but ensures a reduction in pollution since journeys and traffic are streamlined. Intelligent systems in transport are fundamental since they lead to considerable environmental improvements through the reduction of exhaust gases and traffic noise and they improve safety by creating infrastructure solutions which could result in increased energy independence.

ETRMA members effectively and actively contribute – through advanced tyre technologies – to the support of more efficient, environmentally friendly, safer and more secure mobility in the European Union. Projects already underway such as the Intelligent Car Initiative and research into intelligent vehicle systems and user awareness, which promote new technologies in vehicles, are welcomed by the sector.



Source: Continental

¹⁴ COM(2008) 887 final

Section II

Promoting safer road transport

“Road safety is a key issue for building a citizens’ Europe. It will be high on my agenda, starting in 2010 with a European Road Safety Action Programme for the years 2011-2020. I envisage a number of concrete actions, focusing notably on training and education, the protection of vulnerable users and the harnessing of the rapid evolution of vehicle and communication technologies.”

Commissioner Siim Kallas

Mobility of European citizens is essential in their daily life for both personal and professional purposes. National vehicle fleets are expected to continue expanding, especially in Eastern European countries, leading the share of private road transport to remain high, at around 80% of the vehicles on European roads. This high volume motivates consumer demand for enhanced vehicle technology and road infrastructure improvements.

However European roads are still dramatically affected; there are on average 115 people killed per day on the road system.

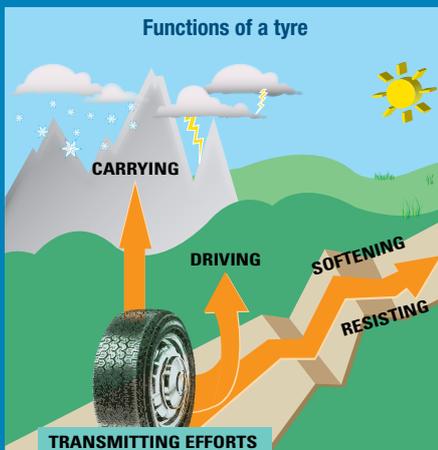
To remedy this situation, the European Union set the goal of halving the number of road deaths in 2010 compared with 2001 figures. This target needs additional efforts from authorities, industry and road users to initiate the trends which will encourage the adoption of adequate measures to significantly reduce the number of casualties and injuries.

Without the introduction of more advanced technologies for accident avoidance, the future increases in road traffic will most likely make it very difficult to meet future casualty reduction targets.

The tyre is a fundamental part of mobility and of vehicle road safety. To improve road safety, an integrated approach needs to be promoted involving the 3 fundamental areas of action:

- **vehicle technology;**
- **driver behavior; and**
- **road infrastructure.**

To this end, the European Commission launched in 2004, the European Road Safety Charter (ERSC) which provides a support tool for all stakeholders, from local through to European-level actors, based on a sharing of ideas and practices across Europe. In order to take concrete actions, assess results and further heighten awareness about the need to reduce road accident fatalities, ETRMA joined the European Road Safety Charter in 2007. The industry has made a commitment to *safety-oriented education campaigns and increased safety enhancing features for tyres*. ETRMA will renew its commitment to the charter in the course of 2010, taking into account the changing environment which will require new initiatives from the industry.



The role of tyres in traffic

Function of the tyre

Tyres, **the sole point of contact with the road**, play a crucial role in enhancing the safety of road users and of motor vehicles. **Tyres are a complex and high-tech safety product representing more than 100 years of continuous manufacturing innovation.** They are made up of materials that are among the very best that the metallurgical, textile and chemical industries are able to produce. There is no room for even the slightest defect in the production of these materials.

A tyre has multiple functions and must achieve a balance within a series of exacting parameters. These include supporting the load, resisting and hanging, supporting high and low speeds and perfect adhesion without generating too much rolling resistance. All of this is achieved regardless of whether the ground is dry, wet, clean, irregular or deformed. Tyres therefore are a crucial factor behind the ability of the driver to maintain control of his/her vehicle in all conditions.

Check monthly tyre pressure

Driving with tyres at the right pressure is the most important tyre feature since only a properly inflated tyre holds the load, adheres to the road, consumes less fuel and produces less noise.

Analysis of recent test results conducted by an ETRMA member company, show that¹⁵:

- 81% of motorists are driving on under-inflated tyres;
- **26.5%** of motorists are driving on **seriously under-inflated tyres (at least 0.5 bar below vehicle constructor recommended pressure)** and **7.5%** are putting their **safety at high risk** by driving on severely under-inflated tyres (at least 0.75 bar below recommended pressure); and
- that this habit is leading to the annual equivalent of 4 billion litres of wasted fuel, worth 5.2 billion EUR, and 9.3 million tons of additional and unnecessary CO₂ emissions - the equivalent of 3.47 g CO₂/km per year for every car on Europe's roads.

Control of tyre tread depth

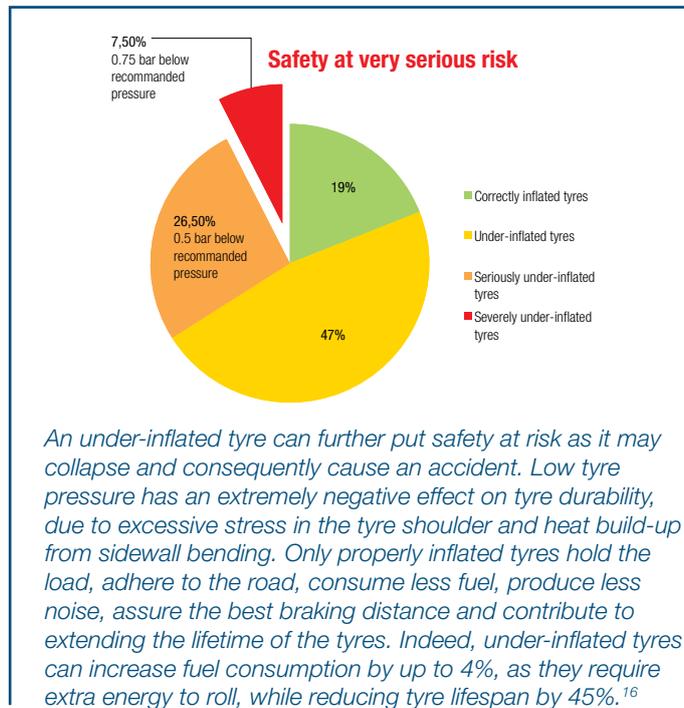
The depth of tread is crucial for tyres.

Therefore, compliance with the minimum tread depth for passenger tyres, **1.6 mm**¹⁷ should be better controlled. **Stronger enforcement action is needed so that consumers are made aware of serious safety risks driving with tyres below this threshold.**

Industry surveys in the UK show that about 3.5 million motorists are driving on illegal tyres with a tenth of cars having tyres below the legal minimum tread depth of 1.6 mm in a continuous band throughout the central three-quarters of the tread width and the whole of the circumference.

Misaligned suspension, under-inflated tyres and damage caused by pot-holes or riding over kerbs are the major sources of premature tyre wear and failure, and they are avoidable.

From the same survey (above), almost **17% of tyres** on the road are also worn down **below the E.U. legal minimum** of 1.6 mm tread depth. Around **9%** of inspected tyres are both **severely worn and severely under inflated**. Tyres worn down below the legal tread-depth limit represent an immediate safety risk. For a car travelling on tyres with a tread depth below 1.6 mm, the risk of hydroplaning is dangerously increased.



Driving with proper tread depth is crucial to ensure safety of the vehicle and its passengers especially with regards to wet braking and aquaplaning performance. A recent survey shows that 1 in 3 drivers fail to check tyre tread depth, leading to serious potential repercussions for vehicle and passenger safety.

Key
 Green: In good condition
 Yellow: Inspect monthly
 Orange: Will not last long
 Red: Legal Limit



Source: dunleasofkilkullen.com

¹⁵ Bridgestone Europe, 14.04.2009

¹⁶ European Commission, Staff working Document, SEC(2008)1908 (23.05.2008.) Annex to the Regulation of the European Parliament and of the Council concerning Type-approval requirements for the general safety of motor vehicles; Impact Assessment

¹⁷ Council Directive 89/459/ECC of July 1989 on the approximation of the laws of the Member States relating to the tread depth of tyres of certain categories of motor vehicles and their trailers

Check that the vehicle is fitted with proper tyres for winter conditions

Weather conditions in general, but especially in winter time, could affect the overall safety of the vehicle. For that reason, adequate tyre choices are extremely important for safety. Indeed, at far lower temperatures (less than 7 degrees) and in vastly differing road conditions, (snow, ice and wet roads) the road surface always gives relatively less grip than in summer conditions, which inevitably affects vehicle safety.

The European tyre industry therefore calls upon the Member States **to acknowledge the importance of winter tyres for safety and make its use mandatory as appropriate, while at the same time make further efforts to increase the awareness of road users about the safety benefits of suitable tyre fitment and proper tyre maintenance.** These measures are crucial to improving road safety on European roads, as they will contribute to the reduction of road traffic fatalities and injuries.

What are the winter tyre characteristics?

A winter tyre is a tyre specifically designed for use in icy and snowy conditions, at temperatures far lower than generally used for tyres (less than 7 degrees) and for vastly differing road conditions.

Summer tyres are never an alternative to winter tyres ! The rubber composition of summer tyres performs best at temperatures higher than 7 degrees Celsius. At lower temperatures the flexibility and elasticity of the rubber decreases, reducing the tyre performance.

A designed and sophisticated tread pattern. The major difference between summer and winter tyres is the tread pattern. A winter tyre has various notches in the tread blocks that are called lamellas. When in contact with the road surface, they are transformed into a kind of "saw-like teeth", increasing the grip and considerably reducing the braking distance on snow and ice.



Winter tyre tread



Summer tyre tread

A road is always less predictable in winter than in hot weather. Under snowy, icy and wet conditions the surface always gives relatively less grip than in summer and that consequently inevitably affects road safety.

Under real winter season conditions, it is recommended to equip vehicles with winter tyres because:

- 1- they allow **better adherence/grip on snow**, reduce **fuel consumption** and provide **excellent traction**, due to a specially designed tread;
- 2- they **reduce the risk of aquaplaning** thanks to their specific form, which is designed to displace the water passing under the tyre;
- 3- they significantly **reduce braking distances** compared with summer tyres; and
- 4- they guarantee **better driving conditions** and **increased safety** than summer tyres or tyres with chains.

Harmonised Car Inspection

The Directive 96/96/EC of 20 December 1996, most recently amended in 2003, outlines the roadworthiness tests to be carried out for motor vehicles and their trailers.

Amongst them, tyres are cited (Annex II 5.2) but without detailing specific checks to be performed.

Following a survey to compare how tyres are controlled in the periodical compulsory technical checking of automobiles and commercial vehicles at national level, the results indicated that the control of tyres varies at national level, especially regarding two essential criteria:

- (1) **presence of EU mandatory legal type-approval marking ("E")**. Type-approval of a tyre is a confirmation and an endorsement that the product is suitable for the purpose intended and has conformed to European Regulations with respect to performance, dimensions and marking requirements. Any tyre to be placed on the European market should permanently bear the type-approval marking ("E") on one sidewall to evidence that it has been subjected to appropriate tests and is in compliance with the requirements; and
- (2) **tyre pressure.**

Hence ETRMA welcomes the European Commission proposal adapting to technical progress Directive 2009/40/EC on roadworthiness tests for motor vehicles and their trailers, which contains more specifications on tyres than previously, and which the Council has indicated that they will not oppose its adoption.¹⁸

To implement this requirement, the tyre industry is ready to jointly develop, with the European Commission, guidelines for the attention of national vehicle control authorities about the fundamental and necessary tyre checking as part of any compulsory technical control of a vehicle.

Tyre Safety Tips

Remember, tyres are the only contact between your vehicle and the road!



Do not forget to

1. Check your overall tyre condition, including
 - inner and outer sidewalls;
 - tread depth;
 - pressure once per month; and
 - irregular wear, i.e. alignment.
2. Check your spare tyre.
3. Fit your car with winter tyres when the temperature is below 7°C



Two third of motorists are unaware that a tyre naturally loses pressure over time, just like a balloon does. About 10kPa can be lost each month in cool weather and even more in warmer weather, entailing a loss of handling control and a sharp increase in vehicle drift.

¹⁸ Transport, Telecommunications and Energy Council decision, 11-12 March 2010

Section III

Promoting industry competitiveness on the global market

“My first priority will be to boost the competitiveness of Europe’s industrial base, in line with the EU 2020 strategy. The challenge is to help the economy to recover by identifying needs and facilitating the restructuring of European industry. This will call for a new approach to European industrial policy.”

Antonio Tajani Vice President of the European Commission

A/ Regulatory compliance and market surveillance

With the introduction of environmental and safety standards, both at international and EU level, the industry is continuously responding to the need to adapt products and production processes. Over the last few years alone, the EU regulatory landscape for tyres has changed significantly, introducing more stringent requirements for safety, health and environmental purposes, and enhancing information transparency towards consumers.

EU legislation is in certain areas more stringent than on other continents. Test procedures to check the compliance of tyres have got more specific, require highly specialised test machines, take time to obtain results and are expensive. Conformity checks only examining tyre dimensions and markings are no longer sufficient.

The volume of goods entering into Europe is increasing and customs authorities have limited resources for customs checking (it is estimated that no more than about 5% of the total EU imports are checked visually). On the other hand, global over-production may encourage unscrupulous producers or exporters to get rid of stocks by any means to generate cash. Commercial decisions compromising quality and conformity may oblige producers or exporters to focus on new markets. The risk of non compliance for consumers exists in terms of vehicle safety and for industry as it may lead to competition distortion. ETRMA members will make all efforts necessary to fully comply with current and pending legislation. They wish to see credible guarantees that all other economic actors in the EU market are equally compliant. National and EU authorities need to make serious efforts to build and maintain a level playing field in the EU tyre market. ETRMA is therefore pleading for a robust compliance programme for tyre-related legislation.

There is an opportunity for an integrated approach, e.g. inclusion of several tyre-related issues within an overall compliance programme. The recently adopted Directive 765/2008 provides a new opportunity setting out the requirements for accreditation and market surveillance relating to the marketing of products, which came into force on 1 January 2010.



ECHA to act on enforcing rules on labelled oils in tyres

End of May, the national enforcement bodies meeting under the European Chemicals Agency FORUM agreed their first coordinated REACH enforcement project, to be launched in the second half of 2010. It will focus on the restriction in Annex XVII which came into force on 1 January 2010 on the use of extender oils containing PAHs in tyres and treads (Reach 1907/2006, Annex XVII, entry #50). The restriction applies both to those placing extender oils on the EU market and manufacturers and importers of tyres that use them.

The phasing out high aromatic oils and the implementation of low aromatic oils (a difference made upon the legally acceptable upper limit) in tyre manufacturing is a complex process. Extender oils are in correlation to several tyre performance characteristics, most notably tyre adherence on wet roads (wet grip), which is an important factor for road safety. Given the fact that a simple replacement of one type of oil by another is not possible, all the major tyre companies have engaged in significant material development and tyre testing at considerable expense to ensure that the switch to compliant oils will be made with no compromise to the whole performance envelope of the new tyres.

B/ Better access to third markets

The external dimension of EU competitiveness is confronted by the new challenges and opportunities presented by **Brazil, Russia, India and China** (BRIC countries). These countries have recently increased their role in world trade and bilateral trade with the EU.

Opportunities for trade and investment in the large and rapidly expanding BRIC markets are evident, and companies from the EU are already positioned there. Major challenges include cost competition in product markets, changing patterns in global commodity flows (and hence access to raw materials) and, in particular, an ever growing number of non-tariff barriers, regulatory deficiencies (e.g. concerns regarding intellectual property rights) and various administrative hurdles to foreign trade and investment.

One of the key issues of the global trade agenda will be reconciling international trade rules with renewed global regulatory appetite. The key challenges for the EU include stepping up Europe's commercial presence in the most dynamic and evolving but highly protected markets, such as in Asia, while safeguarding and promoting European collective preferences and values, including the rule-based international trading system.

*“Free trade must be a tool to generate prosperity, stability and development. When supported by the right rules and institutions, free trade delivers win-win outcomes. When part of a wider set of measures, it is a potent lever promoting European values abroad, like sustainable development and human rights. In addition, the openness of our own market fosters innovation and creativity at home and is the best way to ensure, thanks to our weight in global trade, similar openness abroad. The EU must lead by example. However, that does not mean we should accept unfair trade practices or protectionism by others!”-
Commissioner Karel de Gucht*

ETRMA supports the EU trade liberalisation efforts

To encourage greater access to third markets, ETRMA welcomed the European Commission's decision to complement multilateral negotiations with bilateral and regional trade agreements, as introduced in the 'Global Europe' Communication.

This approach has become of utmost importance when an increased number of countries are taking protectionist measures as a response to the financial and economic downturn. The tyre and rubber sector having already being hit significantly by the international slowdown, is facing increasingly numerous technical barriers to trade.

Better trade conditions and improved access to markets are essential conditions. EU's multilateral approach to trade must be complemented, when appropriate, by bilateral approaches that seek to eliminate non-tariff barriers!

India and ASEAN countries are examples of markets with which the European Commission has started or will open negotiations on free trade agreements (FTAs).

ETRMA believes that the FTAs should be beneficial for all parties in full consistency with the World Trade Organisation (WTO) rules. To this end, it should allow deeper economic integration between the two countries/regions through progressive elimination of all forms of barriers to trade in goods, services and investments, including tariffs and non-tariff measures.



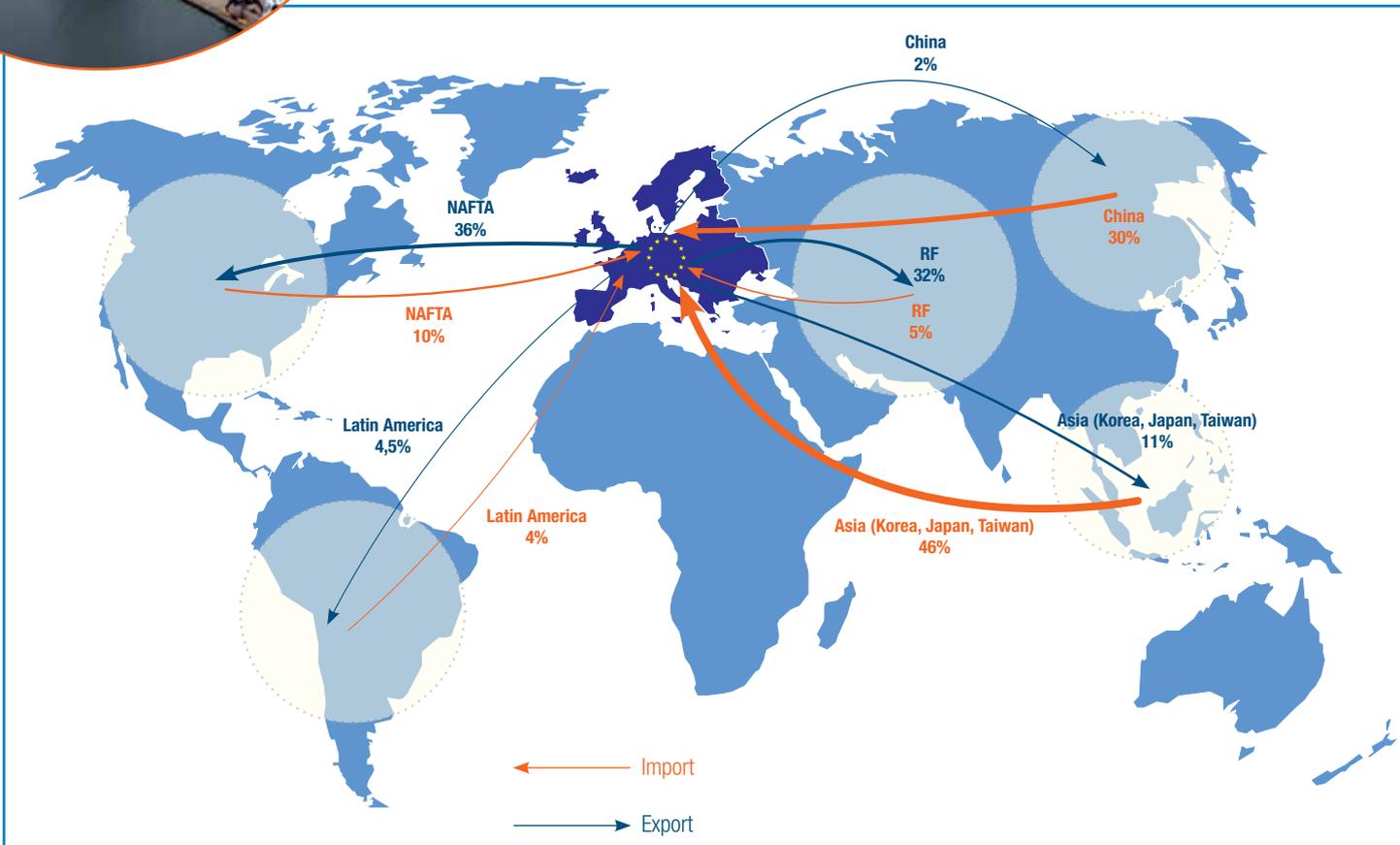
While the EU is discussing free trade agreements with India and ASEAN countries, ETRMA, representative of a global industry, wishes to reiterate that as for any EU trade negotiation, the primary objective should be to establish a reliable level playing field between both entities under fair, adapted and reciprocal conditions.

C/ International Harmonisation

International harmonisation of technical rules is an important step to achieve a more level playing field - in particular for global players, such as tyre manufacturers. Therefore, a global dialogue on options to harmonise the measurement methods, standards and performance requirements, as well as a mechanism for establishing effective cooperation in practice, must be actively promoted. The UNECE 1958 Agreement plays a key role in attaining this objective since it allows manufacturers to operate to a common set of type-approval standards, in the knowledge that the product will be recognised by the contracting parties as being in conformity with their national legislation(s).

ETRMA recognises that appropriate efforts are being made to encourage emerging economies' interest in the 1958 Agreement, particularly those with a significant automotive manufacturing capability (like India and China). This should further help to bring about acceptance by the world's major economies that the UNECE standards are truly global standards for the automotive industry.

That is why ETRMA has strongly pleaded for a dedicated Chapter on NTBs¹⁹ as part of the negotiations for an FTA so as to secure a level regulatory playing field with the industry's partners. This should particularly be the case in the ongoing FTAs with India and specific ASEAN countries.



¹⁹ NTBs = non tariff barrier

D/ Access to raw materials under non-discriminatory conditions

Trade in natural resources (such as energy, minerals, rubber, etc) provides an important and growing share of world trade. In light of the raw materials boom since 2003 (interrupted during 2008-2009) and noting demographic and economic developments, a doubling of global raw materials consumption can be expected in the coming 30 years.

European industry is concerned that countries are pursuing strategic policies to secure access to raw materials stocks worldwide, while at the same time restricting access to their domestic raw material markets at the expense of raw material importers.

Typical measures which distort the global market include:

- export duties and quotas;
- strategic raw materials sourcing through state owned enterprises; and
- discriminatory taxation systems to lower prices for domestic industry.

One such example of a critical raw material for the tyre industry is "natural rubber" (NR). The tyre industry is by far the largest end-use market for natural rubber, consuming around 70% of the NR produced worldwide. Natural rubber prices have increased by nearly 400% - driven by lower production at rubber plantations in South East Asia and higher demand from China. Natural rubber, alone, accounts for 25% of tyre companies' raw materials costs.

EU is the second biggest consumer (1.3 million tonnes in 2007) of NR, after China (2.5 million tonnes).

The European Commission Raw Materials Initiative adopted in November 2008 is proposing an ambitious framework to help guarantee a sustainable supply of raw materials to industry.

In anticipation of its 2010-2014 implementation, the European tyre and rubber manufacturers wish to reiterate the key importance of one major raw material, natural rubber, whose stable and secure supply is fundamental to the competitiveness of the sector and its continuous ability to produce tyres.

ETRMA supports the efforts to set provisions on access to and sustainable management of raw materials, in all bilateral and multilateral agreements. The challenge of proper supply should be addressed bilaterally by the European Commission, especially when negotiating FTAs.



The strategy for defining critical raw materials should be conceived in an evolutionary manner in order to enable capturing market and technology developments and adjusting the strategy accordingly.

The industrial growth in the emerging economies, especially in China, has resulted in an unprecedented increase in demand for raw materials since 2002.

Beyond EU jargon

CARS21 is meant to deliver a Competitive Automotive Regulatory System for the 21st century. The following objectives have been identified as being of particular relevance to the productivity and competitiveness of European industry:

- ensuring an open and competitive Single Market, including competition;
- knowledge, such as research, innovation, and skills;
- better regulation;
- ensuring synergies between competitiveness, energy and environmental policies;
- ensuring full and fair participation in global markets; and
- facilitating social and economic cohesion.

The policy was launched in 2005 and should be re-launched (during 2010-2011) with a revised mandate and extended stakeholder involvement to address, in particular, the barriers to market uptake of alternative technologies.

EU2020

The Europe 2020 strategy put forward by the Commission sets out a vision of Europe's social market economy for the 21st century. It shows how, in response to the financial crisis, the EU can recover and become stronger and how it can be turned into a smart, sustainable and inclusive economy delivering high levels of employment, productivity and social cohesion. To deliver rapid and lasting results, stronger economic governance will be required.



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