SUSTAINABLE ROAD TRANSPORT: A KEY COMPONENT OF THE GLOBAL ECONOMY

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Abstract

Door-to-door road transport, whether as a sole mode of transport or as a partner to other modes, provides irreplaceable services, irrigating the local or global economy, while uniting people and distributing wealth more effectively, thus ensuring social and economic development. The global economy cannot function without road transport and the challenge is to make this transport compatible with sustainable development, a priority issue for the IRU and its Members. Therefore, the IRU and its Members are doing their best to achieve this goal through improved productivity and road safety, energy savings at source, reductions in emissions and other environmental impacts.

Keywords: Globalisation, harmonisation, facilitation, innovation, heavy vehicles

Résumé:

Le transport routier en porte à porte, qu'il soit utilisé seul ou combiné à d'autres modes, fournit des services irremplaçables, irrigant ainsi l'économie locale ou mondiale tout en favorisant l'unité des peuples et la répartition des richesses, ce qui assure le développement social et économique. L'économie mondiale ne peut fonctionner sans transport routier et le défi consiste donc à rendre ce transport compatible avec le développement durable, qui constitue de ce fait une problématique prioritaire pour l'IRU et ses Membres. C'est pourquoi, nous conjuguons nos efforts pour atteindre cet objectif en améliorant la productivité et la sécurité routière, les économies d'énergie à la source, les réductions d'émissions et les autres impacts sur l'environnement.

Mots-clés: Globalisation, harmonisation, facilitation innovation, poids lourds

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1 Introduction

Today, due to the opening of markets and the advent of the internet, each one of us is an actor of globalisation and each one of us is already in cooperation or in competition with everyone in the world! This is why road transport, which is all around us and always at the disposal of everyone, has become a vital production tool in all economies and the motor of economic, social and environmental progress. Moreover, road transport, with its unique door-to-door passenger and goods transport services, unites mankind and improves the distribution of wealth!

The IRU's aim in this globalised world is to interconnect all citizens, regions and businesses to all the main world markets. By doing so, road transport will irrigate all the regions of all countries, bringing prosperity and peace. Globalisation does not necessarily mean transport over long distances, but the possibility of an end to end journey, like blood in our veins, which means that free circulation of road transport is needed to permit the development of tourism and trade through the interconnection of people and businesses all along any route. With this IRU objective, no country is landlocked to road transport! Taking into account the need to develop tourism and trade, governments should recognise the vital and irreplaceable role of road transport. Priority must thus be given to further promoting, developing, facilitating and securing road transport, to drive progress!

2 Modular Concept and co-modality to promote better than more road transport

The global market is for everyone and the economic driving force seeks optimal localisation for its business activities. As a result the globalisation process has lead to a dramatic increase not only in trade and transport, but also in specific customer demand. It should be recognised that road freight transport has become a vital production tool as its demand has had an average annual growth of 2.8% during the last ten years¹. It might slightly slow down in the years to come due to the global economic situation as of autumn 2008, but until the right pace is found, road transport as a whole will always be necessary to interconnect all our needs for our daily activities.

In the most modern economies, 85% of road freight transport in tonnage is over distances of 150km or less, which means that more than 90% of goods moved by inland transport (in terms of value) go by road. This same amount represents 80% in terms of volume. As a consequence, the transport industry is facing an increased lack of capacity in freight transport. In addition, it should be taken into account that:

- Sea transport by containers today carry more than 80% of the global trade volume, by using giant container vessels, with a capacity of more than 14,000 TEU, through only 40 main ports worldwide².
- Rail transport, due to the increasing lack of adaptation to the requirements of the modern economy and of global trade, participates in a maximum of 5% of the volume of international transport of trade³.
- Road transport demand, by reason of the inexistence of Ro-Ro services or inefficiency of the rail services and in particular of the rail/road services, cannot benefit from any additional transport capacity resulting from the development of co-modality.

Therefore, following the changing production and distribution processes and above all logistics chains, to meet the requirements of globalisation, the road transport industry is currently suffering greatly from the increasing waiting times at borders, bottlenecks and dramatic driver shortages.

Currently the major aim of the road transport industry, to satisfy the increasing goods mobility demands of its clients, is to increase its freight transport capacity. This important goal cannot be obtained only by creating new infrastructure but especially by facilitating and promoting in an effective manner the rail/road and Ro-Ro co-modality, which are exactly the current objectives of the EU.

In this framework, the road transport industry fully supports the initiative drawn up by the European Commission calling for further development of the <u>Modular Concept</u>⁴. The road transport industry also fully supports the 2006 EU Commission Communication on Freight Transport Logistics⁵, indicating that the topics of <u>weights and dimensions of vehicles</u> should be re-examined and might create new opportunities of cheaper economical development and even a more environmentally friendly balance.

However, despite the fact that the European Commission agreed on this solution, up until now, due to a strong and aggressive opposition of the European railways, nothing has been done on a harmonising level by the EU bodies to re-examine the weight and dimensions of vehicles, and in particular of the vehicles which should be integrated in the development of the Modular Concept. Any country interested in the concept can now apply for a trial in Europe.

In this framework, the results of several Modular Concept practical tests in eight EU countries demonstrate, in addition to the efficient promotion of co-modality, that the Modular Concept also presents numerous advantages, permitting: a 32% reduction in number of trips; a 23% reduction of transport costs; a 15% reduction of fuel consumption; a 15% reduction of CO_2 as well as less road wear; and more road space benefits leading to a significant longevity of roads.

The European Modular Concept, due to the fact that it permits, on each road stretch to and from intermodal terminals, the road transport of two swap-bodies or two ISO containers, contributes effectively to diminishing the transport costs of any co-modality transport, such as rail/road or Ro-Ro transport.

In fact, as demonstrated by the abovementioned numerous tests and by more than ten years of experience in Scandinavia, the Modular Concept contributes significantly to the promotion of rail/road and Ro-Ro services not only on long distances of over 500 km, but also over medium distances of between 200 and 500 km. This is exactly the distance for which road transport is currently the market leader. In fact the greater part of all transport in the years to come will be concentrated over the 200-500 km transport segment⁶.

This is why, to ensure the success of co-modality in the rail/road and Ro-Ro services, all freight transport modes, and not only road transport, should undertake major efforts to increase the reliability and efficiency of their services, rather than to protect their privileges by requiring new restrictive and coercive measures on their competitors' transport modes.

The Modular Concept, which is the best tool to promote co-modality, offers BETTER TRANSPORT rather than MORE TRANSPORT and thus represents an answer from the road transport industry to better absorb the foreseen growth of freight transport in Europe.

The European Commission is therefore requested to issue without delay an EU Directive providing a <u>harmonisation</u> and <u>standardisation</u> of the various combinations of the Modular Concept, allowing the <u>intra-</u> and <u>inter-modal</u> exchangeability of vehicles and transport units, which is essential to promote in the various countries the development of co-modality in all freight transport relations with worldwide trading partners.

The EU Commission should base the harmonisation and standardisation work not only on the Scandinavian experience but also on the recent test results on existing combinations done in other countries in the world, to define the best harmonised standardisation of the weight and dimensions of the Modular Concept vehicles to be used to promote co-modality worldwide.

This perspective fully complies with the IRU challenge to make road transport compatible with sustainable development. Indeed, the road transport sector is also the only transport mode that has publicly committed itself to this goal. In this regard, the IRU has adopted what is called the 3 "i" strategy as the most cost-effective way to achieve sustainable development, based on innovation, incentives and infrastructure.

2.1. Innovation

<u>Improving road safety</u>: according to international statistics, professionally driven trucks are involved in fewer road accidents per kilometre travelled than other vehicles. However, when these are involved in crashes the results may be more serious on account of their greater weight and larger dimensions. Therefore, truck drivers need to drive in a responsible manner at all times and have adequate training, for instance on how to secure loads.

<u>Improving emissions</u>: the road transport sector has always defended the reduction of emissions at source through improved infrastructure, technology and professionalism. The reinforcement of environmental regulations represents a major global challenge. This is why, if CO_2 taxes were to be truly effective in reducing CO_2 emissions, taking into account that the oil market is global, and that CO_2 emissions are a global challenge, CO_2 tax should be collected at source in oil-producing countries where each barrel of oil is produced and not, as it is the case, in oil-consuming countries where diesel fuel is already heavily taxed.

2.2. Incentives

In order to satisfy the increase in transport volumes with clean and safe vehicles, governments should implement efficient business incentives without delay to encourage transport operators to adopt the best available technologies and practices and, by doing so, decouple road transport from its environmental impact.

2.3. Infrastructure

Each mode of transport should cover its own costs. Revenues collected from road users should be put back into the improvement of road infrastructure, its maintenance and amortisation, since adapting road infrastructure is essential in order to meet the increasing demand for mobility of persons and goods, as requested by citizens day after day, while simultaneously improving road safety, fuel savings and environmental protection.

3 Emission standards to ensure greener road transport

The new directive for Euro VI norms in Europe strives towards globalisation of emission standards and requires reliable technologies and adequate infrastructures in order to meet the new framework proposal. Unfortunately, it missed the opportunity to harmonise it at once.

IR	IJ		NOx	emis	ssion	is by	v veh	icles	;
NOx (g/kW	h)								
15 -									
1980	1985	1990	1995	2000	20 05	2010	2015	2020	

The main challenge for the road transport sector is to make its business compatible with environmental energy and imperatives. With regards to this challenge, the sector has reduced already its toxic emissions (nitrogen oxides. hydrocarbons, carbon particulate monoxide and matter) by up to 97% and fuel consumption by commercial vehicles has fallen by 36% since 1970.

Within the next years, the new Euro VI limits might lead to a slight increase in fuel consumption of 2-3% and hence to higher CO_2 emission, but it aims at reducing emissions



from heavy duty vehicles of nitrogen oxides by 80% and particulate matter by 66% compared to the Euro V norm.

The proposed Euro VI standards show NOx 0.4 g/kWh and PM 0.01 g/kWh, whereas the US EPA 2010 limits demonstrated NOx 0.27 g/kWH; PM 0.013 g/kWh.

(IRU sources based on EU Directive emission (CMT(2008) 741/1 by MVEG 23 February 2009)

The manufacturers will have to verify the conformity of production, durability of pollution control devices by using the On-Board Diagnostic (OBD) and in-use conformity (IUC) throughout the normal life

of vehicles under normal conditions of use. They will also be obliged to give unrestricted and standardised access to OBD information and vehicle repair and maintenance information to independent operators.

The Euro VI norms should enter into force for new type vehicles as of 1 October 2013 and for new type engines one year later. The new directive seeks a policy aimed at harmonising anti-pollution standards over a slightly longer time-frame via Euro VI standards. This would aim to guarantee the availability of infrastructure and technology from the arrival of new engine systems onto the market.

The Worldwide Heavy-Duty Cycle (WHDC) framework of the global UNECE harmonisation of the certification procedure for Euro VI will be introduced at a later stage into Annex X, once the correlation factors with respect to current cycles have been established.



The road transport industry can only regret that the approach of Euro VI did not consider immediate alignment of European Limits to the US limits.

This objective, as proposed by the IRU, would have marked a second step towards the harmonisation of antipollution standards in the world, based on the WHDC (global UNECE harmonisation



of the certification procedure).

Currently there are three major emission standards for heavy commercial vehicles: the EU Euro standard, the US EPA standards and the Japanese standards. Apart from this variety of standards there are also different stages of implementing the standards.

The Euro VI levels by 31st December 2013 will be at a level close to US EPA 2010, and it appears that manufacturers would need a combination of EGR and SCR to meet the requirements.

However as the NOx levels are slightly higher than US EPA 2010, it might be possible to obtain this by using either SCR or EGR. Choosing either technology will have consequences on road transport operators and will have a real effect on some infrastructures.

All engines should use SCR technology on at least some applications, if not all of them. The manufacturers that will be relying solely on SCR should be working with authorities to get a urea distribution system put in place prior to 2013. These will include the companies' parts and service centres and truck stop chains, as requested by the United States Environmental Protection Agency (EPA) which has issued guidance on emission certification procedures for on-road diesel vehicles that use SCR technology.

Competent national authorities should now take the necessary measures to guarantee the wide-scale availability of urea (AdBlue) distribution, which now appears indispensable to ensure the proper functioning of vehicles equipped with SCR technology and their appropriate environmental performances, to meet the needs of the future Euro VI standards. But we should consider that truck demand is expected to be weak in the years to come, along with the overall economy, the cost is not economically justified for most truck stops to invest in AdBlue infrastructures. So at the moment most trucks stops offer AdBlue in portable containers until demand increases to justify a switch over to the availability of AdBlue at the filling station pumps.

Incorrect operation of the engine system with respect to emission control, such as the lack of any required reagent, incorrect Exhaust Gas Recycling (EGR) flow or deactivation of EGR will be brought to the attention of the driver by activation of the flashing Malfunction Indicator Light (MIL) on the dashboard and the cumulated time operated under this condition will be recorded and identified under a non-erasable fault code. Another non-erasable fault code will identify the reason why the element exceeds the limit level and will be stored for a minimum of 400 days or 9600 hours of engine operation. In addition, a torque engine limiter will be activated when vehicles (as of 1st October 2007) become stationary for the first time after the malfunction has occurred. The torque limiter will reduce the performance of the engine in a manner that can be clearly perceived by the driver of the vehicle. The torque limiter will be deactivated if the conditions for its activation have ceased to exist.

Access to On-Board Diagnostic (OBD) information for all independent operators will make the proper maintenance of a vehicle easier, and would be a win-win solution for the transport sector; when vehicles have to go through road-side checks or periodical inspection.

The In-Use Compliance (IUC) Program is a key strategy to aid in meeting ambient air quality standards. The goal of this requirement is to ensure that manufacturers' vehicles meet emissions standards throughout their useful lives. To accomplish this task, manufacturers will need to seek a limited sample of vehicles from a given engine family and duplicate the manufacturers' vehicle emissions certification tests. The vehicles are procured, restored to the manufacturers' specifications and tested in accordance with the emission directives. Should a non-compliance situation occur within a given engine family, the manufacturers will work to correct the problem on all affected vehicles. The corrective action is usually in the form of a recall in which the manufacturer will notify all affected vehicle owners and state when and where to seek the recall repair. The IRU recommendation is that transport operators participating in this programme should receive a free of charge repair, service and replacement of vehicles from the manufacturers, during the requested time for the laboratory analysis.

It is true that globalisation has also led to an increase in transport and thus CO_2 emissions, which remain a challenge for the transport sector. Bearing this in mind, road transport industry has proactively adopted during the last IRU General Assembly the so called 30-by-30 Resolution (*on www.iru.org*) which includes a voluntary commitment by the road transport industry to reduce CO_2 emissions by 30% by 2030.

In this resolution the road transport sector commits itself to specific measures, but also calls on Governments to stop suggesting new legislation aiming at the reduction of toxic emissions but rather to focus on legislation aiming at reducing fuel consumption so that the sector can achieve the full potential of its ambitious CO₂ emission reduction target.

In order to tackle the issue correctly, governments should make a priority to fully harmonise the emission standards in the three main economic regions (USA, Europe and Japan). A good start was already done by the new proposal on emission norms like Euro VI strives towards globalisation of emission standards and requires reliable technologies and adequate infrastructures in order to meet the new standards. In the meanwhile it is also crucial to bring the new emerging countries at the levels of the harmonised emission standards. However, in commercial vehicle sector, none of the above emission norms includes CO_2 levels.

This is due to the fact that there is a trade off between NO_x emissions and fuel consumption / CO_2 production as lower combustion temperature gives lower NO_x emissions but increases fuel consumption and CO_2 emissions.

All the current emission standards look at the relative reduction of emission and not the absolute reduction of emissions. An absolute reduction can only be achieved by reducing considerably the fuel consumption.

Considering the direct link between fuel consumption and CO_2 emissions and the fact that road transport has no economically viable alternative to fossil fuel, it becomes clear that CO_2 emissions are the last remaining emission challenge for the road transport industry.

This is the reason why the IRU and its members call on governments to stop suggestion new legislation aiming at the reduction of toxic emissions, which are clearly clean but rather to focus on legislation with the aim to reduce fuel consumption.

In this perspective, the IRU proposes to:

- Ask Governments to draft a new regulation in order to keep what has been achieved regarding toxic emissions norms and strive for a global harmonisation of the standards.
- Draft legislation that fixes an average CO₂ emission limit applicable to commercial vehicles manufacturers ensuring that average emission of newly registered commercial vehicles do not exceed 750 CO₂ g/km (~28l/100km) from 2030 onwards. The CO₂ emission levels are measured in accordance with UN Regulation 49. The emission limit value does not apply to each vehicle individually but to the average of all vehicles built and registered by the manufacturer in one calendar year.
- Implement into all emerging countries, during the same time frame (as of 2030), global harmonisation of toxic emission.

4 Intelligent Transport System (ITS) applications to increase road transport efficiency and safety

At a large scale, ITS provide an increasingly wide range of applications through hardware, software and telecommunication systems. As a whole, ITS applications can offer new opportunities for transport operators under the prerequisite that the application in the vehicles is user friendly. Road transport companies can then also be a logistic control centre for their fleet of vehicles. They would be able to interconnect their activities with other modes of transport in order to deliver goods or passengers at the right time and in the right place.

ITS also enable transport companies to track, trace down and monitor their truck, trailer or container electronically all over the world with real-time information. As such, they can improve the relationship between consignor, carrier, consignee and customer, who can monitor the status of goods transported. Vehicle manufacturers are working to connect all vehicles worldwide. Many vehicles already have their own personal computer connected to a mobile phone, which is then connected to other devices. The chain is endless. Manufacturers intend to make ITS the core of the connected vehicles, so that the navigation system could be seen as a service product, which would also give more "reliability" when selling a vehicle.

However, ITS applications are not only intended for the driver, for the consignor, the carrier and the consignee, but also for enforcement Authorities, since they can provide safety, security, monitoring of vehicle health and remote diagnostic services, speed control, guidance systems, mobilisation of emergency services, tracking of goods carried by multimodal transport, and can be a dangerous device in the hands of Authorities to monitor the flow of traffic and, in some circumstances, impose a particular mode against another etc. Enforcement Authorities also see the value of "knowing where you are going" and "how you use the vehicles". A vehicle equipped with ITS offers sophisticated, location-based options never before available, which means that ITS can become a challenging issue if governments make certain applications mandatory and misuse the data for discriminatory and costly policy decisions. A recent example is the development of the tracking and tracing of dangerous goods.

Indeed, the current political intention is to even monitor the flow of dangerous goods and then impose certain routes and transport modes upon operators as indicated in the harmonised inland transport of dangerous goods Directive 2008/68/EC.

In the future, the fault codes stored in the Engine Control Unit (ECU) of a motor vehicle should not become a tool for penalising a transport operator and a driver, but for informing the transport operator in due time on the status of a vehicle in order to act accordingly and to repair/maintain a function in due time, even if it will take some time before we reach this situation. The information stored in the ECU should never be a barrier for transport operators. All stored information in the ECU should be at the disposal of the transport operator while doing his daily maintenance in order to detect a failure or misuse in advance.

Nevertheless, ITS, under the supervision of enforcement authorities, can only see the light of day if all transport contracts, transport documents, driving licenses and vehicle documents are made available in electronic form. ITS, under the supervision of Authorities will not reduce accidents, but could lead to a major discrimination against other modes and will create a wireless fence which will be a penalty for the road sector industry.

Several bodies, such as insurance companies, may also have a strong interest in ITS. These types of applications will enable them to collect driver data, monitor vehicle location and speed and

driving times, or to collect data relating to specific issues, such as hard braking. These data will enable the insurers to price risks more accurately and roll out new types of products.

ITS also flag up the increased risk that companies could move their operations abroad to avoid the restrictions imposed by Authorities, a process often referred to as 'wire walls'. There is also a fear that in the absence of a comprehensive international agreement, additional compliance costs could add to the process.

The Governments consider transport business as a potential major market for ITS applications such as fleet management, road and rail traffic monitoring, route searching, speed control, guidance systems, mobilisation of emergency services, tracking of goods carried by multimodal transport, role to play in the greening of transport, etc.

Additional service applications foreseen at a later stage for improving road safety are so-called Driver Assistance Systems consisting of e.g. advanced driving assistance systems (ADAS), Electronic Stability Control (ESC), Adaptive Cruise Control (ACC), Advanced Emergency Braking System (AEBS), Lane Departure Warning System (LDWS), eCall (emergency call) and road charging, fleet and supply chain management, electronic fee collection and pay as you drive insurance.

4. 1. IRU Observations on ITS

The proposal for a Directive on a framework for the coordination of the deployment of ITS and action plan proposed indicates that the European Commission is pushing to have a fast, and at the same time coordinated, deployment of ITS across Europe. Therefore, to ensure the success of ITS deployment, all transport modes, not only road transport, should undertake major efforts to increase the reliability and efficiency of their services, rather than to protect their privileges by requiring new restrictive and coercive measures on their competitors' transport modes.

4.1.1. Negative sides of ITS applications

Competent authorities need to guarantee that any future ITS system will not be misused for unnecessary surveillance and control before and after a transport operation. Indeed, the deployment of ITS can create some negative issues concerning the processing of personal data and the protection of privacy, which need to be prominently highlighted, and solutions to this proposed in the ITS Action Plan. It is clear that there are many open issues regarding the liability and lack of feasible business cases.

Data protection and integrity are of key concern. In case an operation centre is involved when running an ITS application, it should not be allowed unless clearly specified and necessary for specific enforcement purposes to keep transport operations data as they could be misused e.g. by both enforcement authorities, but also by potential competitors to analyse journeys of a vehicle, goods that the vehicle was carrying etc. In case an enforcement is done on the basis of an ITS application it must be defined under which criteria this has occurred and during which time this will be possible in order to avoid unfair treatment. This is relevant not least for transport of live animals and in the future for dangerous goods.

In case ITS applications make use of satellite positioning, this should not be limited to using Galileo, but instead the most cost effective and functional solution should be selected. Finding a positive business case for Galileo should not be misused when applying ITS applications to the

road transport sector, as the Commission today is spending billions of taxpayers' money on a satellite system without any realistic assessment of its costs and benefits.

4.1.2. Positive sides of ITS applications

The benefits of ITS systems are obvious, but it is now a challenge for the ITS industry to effectively inform and convince the consumers on their added value – this is something lacking in the ITS Action Plan. The industry should keep in mind the users when developing new features and offering new options. The trend for more electronics across all areas with increasing sensors monitoring and increasing parameters would require a high level of training for transport operators, drivers and enforcement authorities in order to understand the functionality and make correct use of these new tools.

ITS can also bring many new opportunities to enhance not only safety and security but also efficiency and environmental performance for all road users. However, there is a need to find a consensus and a voluntary framework to ensure safe on-board Human-Machine Interface (HMI), which should include nomadic or portable devices used in the vehicle.

ITS can also be used to improve driver fuel consumption or the logistic chain, or even reduce the idle times of the engine. Transports companies have already for some time used freight and fleet management systems (ITS) in order to more effectively manage their fleets and drivers. They will thus in the future become even less reliant on the driver to ensure an optimised operation.

4. 2. IRU recommendations and position on ITS

Manufacturers should harmonise all codifications in order for a transport operator to be able to check his whole fleet of vehicles with a unique diagnostic tool. The aim would be one, and only one, electronic system in order to avoid too many different tools for inspecting the condition of vehicles. The electronic system should be able to read all information stored in the ECU concerning active safety systems and the engine environment system.

The trend for more electronics across all areas with increased sensors monitoring and increased parameters, such as air temperature, exhaust temperatures, back pressure for keeping emissions level and the engine lifespan under control, would require that transport operators be trained in order to have access to these data and to interpret it correctly. Therefore, periodical training for transport operators should be implemented by manufacturers, because today transport companies carry out most of their maintenance on their premises. A harmonised practice would make the proper maintenance of a vehicle easier, and would be a win-win solution for the transport sector; even if these issues make system installations complicated for manufacturers.

The IRU is in favour of ITS applications for the road transport sector as long as they provide significant measurable safety, environmental and economic benefits.

ITS applications must be standardised, harmonised and interoperable in order to improve effectiveness and reliability of transport as a whole. They must also, to the widest extend possible, be on a voluntary basis. It is imperative that ITS applications should not hinder all stakeholders in the transport chain to maintain freedom of choice for the means of transport they use. Road Transport operators shall also maintain freedom of choice when selecting ITS equipment and application suppliers.

The introduction of any ITS Application must ensure that the appropriate level of confidentiality of commercial data exist also when used in multimodal transport chains. These applications

should also be used to ensure that all transport documents are made available in electronic form for usage in the operation but also for potential enforcement. Any future proposed ITS Plan should focus on deployment of proven solutions. It should not be used to initiate further basic R&D.

Any deployment of ITS should include the necessary training of all stakeholders and a solid business cases, proving to all stakeholders what benefits exist and the costs involved. In this respect incentives for take up by the users should be included in the business plan.

5 Striving for freedom of choice to ensure optimal and safe road transport: the example of the dangerous goods transport

5. 1. EU Directive on the harmonisation of rules for dangerous goods

The total amount of dangerous goods transport in the Union is about 110 billion tonne-kms / year, of which 58% is by road, 25% by rail and 17% by inland waterway. The trend for road and inland waterway transport has been increasing, but decreasing for rail transport. The share of dangerous goods transport in total freight transport is about 8%.

The objective for the European Commission is to create uniform rules in the territory of the Union for all dangerous goods transport operations which cannot be achieved without the Community's intervention. The latest Directive on the harmonisation of the rules for dangerous goods would give Member States the possibility to impose not only the use of prescribed routes, but also to prescribe modes of transport for dangerous goods.

In this framework, the IRU recalls that the purpose of the ADR regulations on the carriage of dangerous goods is to authorise their transport in both total and optimal safety conditions. Therefore, for all ADR transport in the world, it is imperative that the consignor, carrier and consignee, maintain freedom of choice for the means of transport. Demanding the transfer from one means of transport to another, as does the European Commission, only increases non controllable risks.

Indeed all available statistics show that 80% of dangerous goods accidents do not occur during their transport but in the ports and marshalling yards, during their transfer from one mode to another. Moreover, these activities on a daily basis also show that dangerous goods transported by rail, are not only trans-shipped in stations, but the trains transporting these dangerous goods mostly pass through stations which are in town centres where the population density is generally the strongest.

This is not the case of road transport of goods managed according to the ADR by professionals who can choose, in so far as the legislation allows, the surest and most suitable routes. In short, enforcing the carriage of dangerous goods from road to rail or other modes for political reasons, and without preliminary scientific analyses of the risks, does nothing but seriously increase the risk of accidents, which cannot be controlled neither by the authorities nor of course by the railway companies.

5.2. IRU Position on this Directive

The IRU Secretariat General can welcome this initiative from the European Commission only if the directive simplifies equally all modes of transport and gives a harmonised approach for all modes of dangerous goods transport. The IRU is firmly against imposing modes of transport. This, besides being uncompetitive and therefore questionable vis-à-vis European law, will gravely penalise dangerous goods industries, their competitiveness and in particular carriers of dangerous goods. There is a strong possibility of seeing the chemical industry abandoning their European production plants and to produce in countries outside the EU. The whole dangerous goods environment will suffer which will penalise the end customer and damage Europe's productivity.

As long as no new infrastructures, such as connections to terminals, are developed no authorities should be authorised to impose transport modes and routes.

6 Conclusion

Road transport in a globalised economy has become an efficient and unique production tool. As such, its progress goes hand in hand with new technologies, tools, methods and systems to make it the most flexible and accessible transport mode available to everyone everywhere. In this framework, the difficulty is thus to prevent misusing these tools and keep their use voluntary to all road transport stakeholders.

Competent authorities, either at a national or international level, often use – or intend to use - these new systems or methods as ways to get additional incomes by penalising road transport. However, we all know that any penalty imposed on road transport is an even bigger penalty on trade and the economy as a whole. Therefore, we – the IRU – with all carriers around the world, must strive to keep road transport running efficiently to take on the challenges of sustainable development while at the same time contributing to global economic development.

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