

SPECIAL REPORT | 28 Sept.- 2 Oct. 2015

## TRANSPORT: MOVING AHEAD

#### **Contents**

Bulc: 'More needs to be don

on transport pricing and taxation'p.1
Volkswagen scandal throws spotlight on transport emissionsp.2
'Intelligent mobility' faces reluctance from commercial carriersp.4
Vulnerable road users key

#### Viegas

We will move differently	in the futurep.	6
--------------------------	-----------------	---

to reaching safety targets ......p.5



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#### INTERVIEW

# Bulc: 'More needs to be done on transport pricing and taxation'

Good progress has been made on transport safety and security in the last four years, according to Violeta Bulc. But more work lies ahead when it comes to pricing, taxation and modal integration relying on digitised information systems, she said.

Violeta Bulc is the EU Transport Commissioner. She responded in writing to questions from EurActiv in the context of this year's European Transport Forum.

The Commission recently closed its public consultation on the review of the 2011 White Paper on transport. What are the early conclusions that you can draw from this consultation?

The 270 contributions we received expressed overall support to the continuation of the roll-out of the 2011 White Paper. A majority of respondents called for further implementation, which we also support. A number of areas where good progress has already been made

were identified: transport safety, research and innovation, secure transport.

On the contrary, more needs to be done with regards to smart pricing and taxation, modal integration, service reliability quality, working conditions. The answers also confirmed that decarbonisation, oil-dependency, innovation infrastructure development be some of the most important challenges ahead. DG MOVE published a summary report of the consultation, where more information can be found.

The 2001 White Paper on transport emphasised the "modal shift" as a key policy objective – where transport would shift from road to rail and other transport means such as inland waterways. The 2011 White Paper then put the emphasis on "multi-modality" and "co-modality". Is this a recognition that road is going to remain a dominant form of transport, at least for freight? In other words, has the "modal shift" failed?

There is no contradiction in the Commission's efforts to promote both co-modality and a shift to the most sustainable modes of transport. What matters is to ensure that all modes can compete on equal terms, are well connected with one another, and can be used in an optimal way.

In this context, the Commission may look into new options for fairer road-charging. Yet, this is only part

of the solution. We also need to make alternative modes more attractive. I believe that digitalisation of transport for example through integrated ticket or journey planner – is a promising option. The Commission is also investing, and will continue to do so, in European infrastructure to build the missing links and remove bottlenecks, which hamper the competitiveness of sustainable modes such as rail or inland waterways.

In 2001, the EU established an objective to halve road fatalities by 2010. Although some progress was made, the target was not met and a new programme was adopted in 2010, with detailed measures proposed in seven areas. Are you satisfied with progress made so far? And where do you see the most room for improvement?

The EU's roads are the safest worldwide – an achievement all Europeans can be proud of. Between 2001 and 2010, Europe already cut the number of fatalities by 43%, and by another 18% between 2010 and 2014.

Road safety is however a neverending challenge, and every death is one too many. The 2014 figures came as a wake-up call: we cannot relax efforts. As an example, me and my team are convinced that Intelligent Transport Systems have a big role to play. The recently adopted e-call system is an excellent example of how technology can save lives on the road. We estimate it can reduce the number of fatalities by at least 4% and the number of severe injuries by 6%.

The revelations of Volkswagen's practices came as a shock. What is your reaction? What can be done?

Commissioner Bienkowska, who has the lead on this matter, discussed it in detail with member states in the Competitiveness Council last week. Her message is clear: we need full clarity of the situation through thorough investigations, and we will have zero tolerance for fraud and cheating.

The appropriate authorities in the member states are obliged to take appropriate legislative and enforcement measures, in order to make sure that defeat devices, as banned by EU law, are not put in place, and that their use is detected, eliminated and sanctioned. The policing in this area is a legal obligation of the member state authorities. We will take stock of the situation by the latest

at the next Competitiveness Concil on 30 November.

The Commission is due to present an aviation package of proposals in December. What will be your approach?

Aviation is a strong driver of economic growth, jobs and competitiveness. As such, a strong European aviation sector plays a crucial role in delivering on the priorities of the Juncker Commission. The goal of the upcoming Aviation Package will be to take a holistic approach to the aviation value network and help shape a comprehensive strategy for Europe. Europe has a unique opportunity to once again become a leading player in international aviation, and a global model for sustainable aviation, with a high level of service and ambitious EU standards.

The Commission will seek to ensure an efficient functioning of the aviation sector that will enhance connectivity and competitiveness; mobilise Europe's creativity and funding resources in order to channel them towards innovation and efficient investments in technology and infrastructure; continue to offer the highest safety and security standards, as well as high standards for environment and labour.

# Volkswagen scandal throws spotlight on transport emissions

The European Transport Forum opens on Tuesday (29 September) after a week dominated by headlines over the Volkswagen scandal.

The revelations that Volkswagen, the world's second largest car manufacturer, had routinely gamed US emissions testing has thrown the spotlight on the environmental and health impact of cars.

While EU member states, such as the UK, open or consider investigations into the beleaguered company, European Commission officials are currently reviewing the executive's 2011 White Paper for transport, its main policy roadmap for the sector.

Bringing extra impetus to their deliberation is the upcoming UN Climate Change Conference in Paris, international talks aimed at capping global warming.

#### **Decarbonisation**

Transport, which includes fuel sold for international aviation and shipping, accounts for a quarter of greenhouse gas emissions in Europe, according to the European Environment Agency.

It is the second biggest contributor after the power sector, with cars making up the single largest source of emissions.

The decarbonisation of the transport sector was cited in the EU's Energy Union blueprint, but details were scant.

In 2016, the executive is expected to launch a communication on bringing down CO<sub>2</sub>. It is possible the package will

include 2025 reduction targets for car CO<sub>3</sub> emissions.

As MEPs, industry leaders and politicians meet in Brussels for the forum, EU officials are undertaking a review of its white paper on transport that will feed into the communication.

While the forum's theme is ensuring a reliable, safe and secure transport system, the Volkswagen scandal has ensured that emissions will be very much on policymakers' minds.

Current EU vehicle emission standards are obsolete. Today's knowledge of the impact of air pollution on human health, particularly nitrogen oxides, has revealed that not all dangerous gases are controlled.

And there is no limit on methane emissions from cars, despite the fact that the greenhouse effect of the gas is 23 times stronger than that of CO<sub>2</sub>.

#### **Lorries catching up**

But cars are not the only form of transport that release CO<sub>2</sub> emissions.

Lorries are catching, up and by

2030 are predicted by NGO Transport and Environment to rival cars' share of greenhouse gases.

Projections show lorries and buses will account for 41% of road transport's climate emissions by 2030, rivalling cars' share of 47% due to EU efficiency targets for passenger vehicles.

Trucks and buses currently make up less than 5% of vehicles on the road, but emit 30% of road transport's CO<sub>2</sub> emissions, according to research by Transport & Environment, a pressure group, which based its calculations on EU figures.

2030 is a particularly relevant date. In October last year, EU leaders agreed to cut greenhouse gas emissions by at least 40% by 2030.

That commitment forms the cornerstone of the bloc's negotiating position for the UN climate talks, which aim to limit global warming to no more than two degrees above pre-industrial levels.

Britain, Belgium, the Netherlands and Slovenia told the European Commission in June that limits on lorry CO<sub>2</sub> emissions were required if the EU is to meet its 2030

climate targets.

Earlier this month, the European Parliament echoed that demand in a plenary vote, while Germany's Federal Environment Agency also called for lorry CO<sub>2</sub> reduction targets last month.

"CO<sub>2</sub> car, van and truck standards for 2025 are a logical and essential element of Europe's efforts to achieve its 2030 climate targets. A 2025 goal will also save drivers money, create jobs and reduce expenditure on imported oil – a win-win for the EU economy and environment," said a T&E spokesman.

"Half the current 2021, 95g/km goal is not being met on the road due to manipulation of laboratory tests. A 2025 goal will help to deliver the intended emissions reductions with plentiful technology available, notably hybrids and light weighting vehicles."

#### **Aviation and shipping**

But it is not only cars, trucks and buses that contribute to  $\mathrm{CO}_2$  emissions. Far more controversial and difficult to regulate is international aviation and shipping.

At present, intra-EU flights are covered by the bloc's Emissions Trading System (ETS). From next year, the ETS is supposed to 'snap back' to covering all flights to and from Europe – which will prove hugely controversial with countries outside Europe.

The EU is waiting for feedback from the aviation industry to develop a market-based mechanism that would reduce  $\mathrm{CO}_2$  from aviation. But any measure to reduce emissions from any transport sector will be heavily scrutinised.

The Volkswagen scandal has thrown the credibility of all sectors on emissions into doubt in the year of the 2015 UN Climate Change Conference.

This week's Transport Forum is an opportunity for the industry to demonstrate it is serious about mitigating its climate impact, at a time when its commitment to that goal is very much under the microscope.



### 'Intelligent mobility' faces reluctance from commercial carriers

EU plans to digitise transport infrastructure to vehicle communication aim at a broad transformation of road, rail, air and maritime transit.

But disagreement over data sharing is keeping the commercial shipping industry from warming up to the European Commission's ambitions for the emerging technology.

The European Commission wants to step up intelligent transport systems (ITS) around the EU, essentially adding digital communication between vehicles and public authorities, as well as from vehicle to vehicle, in order to improve information sharing on traffic and vehicle conditions.

According to the executive, technology that communicates parking availability, travel routes, electronic toll collection, and other aspects of transport can cut down on congestion by five to fifteen percent.

The EU executive also touts the safety benefits expected to emerge from intelligent transport, as an estimated five to fifteen percent drop in traffic-related fatalities and five to ten percent fewer injuries.

#### **Commercial transport not ready**

But industry groups say commercial transport isn't ready to fully embrace ITS the way the Commission might hope.

"Companies with logistic interests want to have better transport management," said Lina Konstantinopoulou, head of transport



and logistics at ERTICO, an organisation made up of government officials and representatives from private firms working on intelligent mobility.

"The only hampering factor is: How do you share the information among stakeholders?" Konstantinopoulou added.

In its digital single market plans announced this May, the European Commission acknowledged that vehicle and cargo operators collect their own data and often don't share it with other companies. That means operators of one leg of a cargo shipment may not have information about the rest of the transport.

"This lack of data sharing between transport sectors and modes leads to inefficiencies in the overall transport system, particularly in areas such as cargo transport," the Commission strategy reads.

An executive-funded ERTICO pilot project set up ITS for commercial transport in Arad, Romania, Bilbao, Bordeaux, Frankfurt, Thessaloniki, Trieste and Vigo, Spain, where truck drivers receive real time information on space in parking and delivery areas, routes and truck stops, and estimated CO<sub>2</sub> emissions for shipments.

Konstantinopoulou said if ITS is used for commercial transport, it could even reduce the number of trucks on the road — if companies are willing to share their data and combine their loads onto shared trucks. But many commercial transporters are large companies that operate their own trucks and want to shield their data from other companies, she said.

"In the end, you have so many empty trucks on the road and the load factor is very low."

#### **Efficiency hype**

The European Commission's ITS plans are a balancing act between officials' professed commitment to efficiency and  ${\rm CO_2}$  reduction and the gearing up of information sharing technologies to drive business.

EU Transport Commissioner Violeta Bulc said in a statement to EurActiv that ITS "is necessary to reach essential objectives of the EU, for example for transport decarbonisation or the reduction of road fatalities. Intelligent Transport Systems will also provide plenty of opportunities to EU industry to export products and solutions at a time where transport is booming everywhere in the world".

The Commission estimates ITS will cut CO<sub>2</sub> emissions by 10-20%.

Environmental campaigners are skeptical of the hype about ITS' potential to reduce CO<sub>2</sub> emissions.

William Todts, manager of NGO Transport & Environment's commercial vehicles campaign, said the car industry claims ITS technology brings down emissions rates to give itself a free pass on making cleaner vehicles.

"If you make that part of transport more efficient, that's great. But that won't replace cars becoming more efficient," Todts said.

#### **Easing up e-documents**

Industry groups are wary of sharing too much commercial data with authorities or other vehicles. International Road Transport Union (IRU) spokesperson Stuart Colley said some commercial operators are sensitive to sharing transit routes. The IRU does not want shared electronic track and trace systems for cargo, he added.

"Let's look at the efficiencies that can be gained for safety, for the transport industry and for every road user," Colley said.

Colley also pointed out that only a few countries in the EU accept e-documents from commercial shipment operators. The European Commission has called that inefficient, since operators are otherwise forced to use several forms on paper that require the same data to be reentered in various places.

In July, the Commission set up its new Forum on Digital Transport and Logistics together with public authorities and industry groups who will advise on commercial transport policies to govern ITS. Recognition of e-documents is one of the forum's focus areas.

Dutch MEP Wim van de Camp (EPP), rapporteur on the White Paper on Transit that was presented earlier this year, is also pushing for more widespread recognition of e-documents for freight as well as management of tolls through ITS. The new technology would push Europe to "move from mechanical to digital integration", van de Camp said.

"That way our transport sector can become a truly multi-modal system which we need to deliver economic growth, jobs and a sustainable business model for the future," van de Camp told EurActiv.

The European Commission has a public consultation running until November on real time information services and ITS, though the inquiry doesn't explicitly affect commercial vehicles. A number of industry groups are now contributing to the executive's policy work on commercial transport policy: The IRU and other organisations, despite their reservations about data sharing, are members in the Commission's new Forum on Digital Transport and Logistics.

"Intelligent transport systems are here to stay," said Stuart Colley. "They're going to become increasingly more important."

# Vulnerable road users key to reaching safety targets

Road safety is one of the areas in which the EU can claim progress. Since the first targets were agreed on in 2000, the number of road deaths in the bloc has been cut by 53%.



"Our target of halving deaths by 2020 is still possible to reach," an optimistic Commissioner for Transport, Violeta Bulc, told the European Transport

Forum on Tuesday (29 September).

However, with fatalities rising in countries such as France over the last year, progress in halting road deaths appears to be slowing.

According to OECD figures, 25,845 people were killed in the EU as a consequence of road collisions in 2014, compared to 26,009 in 2013. This represents a decrease of only 0.6%, compared with the -6.7% that is needed to reach the target for 2020 by equal annual reductions.

And at a global level, the statistics are alarming. Road deaths across the world amounted to the equivalent of 40 Airbus A380 passenger planes crashing every week. Just in Europe, the European Commission estimates that road accidents represent €130 billion a year in cost.

#### **Pedestrians and motorcyclists**

In order to continue reducing road casualties, the Commission is calling on member states to redouble their efforts to protect the most vulnerable road users, such as pedestrians, cyclists and

motorcyclists.

Although we have made "considerable progress" in road safety, an evaluation of the EU strategy shows that "we must refocus our efforts and actions on protecting vulnerable users", especially in urban areas, Bulc said.

José Viegas, Secretary-General at the International Transport Forum, an OECD organisation, agreed. The protection of vulnerable road users should be a "priority", he stressed, saying groups like pedestrians are often "neglected" in government statistics, urban planning and policy development.

"Walking should be the safest way of mobility," yet pedestrians represent nearly 40% of all road fatalities in some OECD member countries, Viegas pointed out.

In his view, a more integrated mobility and urban planning should be maintained when designing a common space for all city users.

The situation is not better for motorcyclists. Although they represent only 8% of the fleet, they suffer an

average of 17% of fatalities. The risk of an accident is 30 times higher for them than for a car occupant. Motorcyclists have benefited less from safety improvements over the recent decades.

Viegas recommended a licensing system by degrees, in connection with riders' experience and maturity, enforcing rules for the compulsory use of helmets and more "forgiving" roads to avoid fatal accidents when riders slide.

#### Not business as usual

Yves Crozet, Professor of Economics at the University of Lyon, pointed out that more than 40% of deaths affect pedestrians, cyclists and motorcyclists. Crozet called for a policy change to

reach the 'vision zero' by focusing more on specific targets for particular groups. "We cannot continue with business as usual," he said.

In a report published last March, the European Parliament stressed the need for a "new focus on pedestrians, cyclists, motorcyclists and vulnerable road users" to reach the 'vision zero' goal.

This is one of the elements of the broader package the Commission announced in 2010 to halve the number of road deaths. The EU executive also proposed to improve safety measures for trucks and cars; building safer infrastructure; developing intelligent vehicles and a more intense use of technology; strengthening licensing and training of drivers; a better enforcement of the rules in place; and a set of targets

for injuries.

According to Commission figures, for every death on European roads, there are an estimated four permanently disabling injuries, such as damage to the brain or spinal cord, ten serious injuries, and 40 minor injuries.

For Commissioner Bulc, the EU needs to embrace a holistic approach. In this regard, Jan Gurander, Acting President and CEO of Volvo, emphasised that "the most important point" is the cooperation between the industry, politicians and researchers.

No matter what transport or what affected group is at stake, Gurander said, "we must act together" as "there is no single solution for safe and sustainable mobility". And here, the Commission has "an important role to play".

#### INTERVIEW

### Viegas: We will move differently in the future

Data has become the raw material for effective policy making, particularly in areas such as mobility and transport. José Viegas helps to provide this information to governments, who he sees as the key element to progress on the "vision zero" target for highway fatalities.



José Viegas is the Secretary-General of the International Transport Forum, an organisation under the OECD umbrella. Before joining the ITF, he was professor of Transport at the Technical University of Lisbon and worked as consultant. Viegas was a speaker at this year's European Transport Forum. He spoke to EurActiv's Jorge Valero.

How far are we from 'vision zero', the project which aims to achieve a highway system with no fatalities or serious injuries? Progress has been made, but experts warn there is a tough road ahead.

As the name says this is a vision. It must become a common goal that is acceptable by all, and achievable. But as it happens with any successful vision, it requires shorter term targets. So the 'vision zero' and the reduction of 50% of the people killed on the roads, in the UN decade of action [for road safety], are totally compatible.

What countries are best-equipped to progress?

It depends on how you interpret

this sentence. Already, when the decade of action started, there were some countries which clearly had much safer roads than others, like the United Kingdom, the Netherlands and Sweden. They didn't make great progress. They have improved, but not as dramatically as some others. There are relatively quick wins if you do a number of things right.

Which countries have shown more progress?

Between 2000 and 2010, the two countries with strongest gains are Spain and Portugal, with around 60% each [in the reduction of number of deaths].

Do they share a common recipe for their success?

There are similar things, but with slightly different adaptation(s), which is always necessary. In both cases, there was a significant improvement in the quality of infrastructure, very aggressive education campaigns, and active enforcement of some measures,

Continued on Page 7

instead of enforcing everything. Some rules were particularly targeted, and this focused enforcement led to a change of behaviour.

The target of halving the number of deaths on the roads was reached in the past decade, and it is on track for 2020. But what is missing to guarantee our success?

To some extent, in many countries it is the quality of the data. In countries that you have good data, you can see not only how much progress has been made, but also in which areas progress has not been so good. When you have patchy data, all of this is much more difficult. Making policy decisions on the basis of poor data is impossible.

Regarding driverless cars, will it be more risky sharing the space with standard cars, as they would adapt to human behavior with more difficulty?

It is something that has not yet been studied in great depth, but this is my intuition. It is certain that the driverless car by itself will be a lot safer than human-driven cars, as many studies have proved. This is clear because you can programme for systematically defensive behavior, instead of aggressive behaviour.

Driverless and human-driven cars sharing space will create new types of risks. But I believe even then, unless human drivers do it on purpose, driverless cars will be able to detect strange behavior by the neighbouring human-driven car, and possibly adapt its own driving [in response]. This is something that can be managed.

How dangerous will the transition be when a human driver takes control of a driverless car?

Today, manufacturers like BMW and Mercedes are introducing automatic driving in the motorways, while in complicated [situations], they will hand over [control] to the human driver. That is a predictable thing, because they know they are approaching a complicated

section, as they have all the maps on board.

But in a situation where you have a 99.9% computer-driven car, including in urban areas, and you only call the human driver for the more ambiguous situations, this can be a problem, because the the attention of the human driver is not as high as it should be, to allow an intervention in less than half a second. This is something that requires the program to put the human driver in a state of pre-alert, with some anticipation.

How different will the mobility model be in the years to come?

It's clear that [it will be different]. Today we have three vectors of change: automation, electrification and sharing. They are opening very new possibilities, and we don't know yet what will come. Too many things are changing at the same time.

But over the last 30 years, our mobility model has not changed much. Are you suggesting that changes to come will be exponential?

Yes. We had incremental changes. Now we have three major vectors of change at the same time. One thing we know in most our cities is that congestion is getting worse every year. Traditional public transport is not sufficiently attractive that most people will move from their cars to public transport.

This may change with the new concept of sharing mobility, something which we have done a lot of work on. If you do it with driverless vehicles, it becomes much cheaper, with good, flexible and comfortable service. This will open gigantic areas of public space, because you will need maybe 10%, at the most, of the parking space of today.

Will these three vectors increase our quality of life?

I hope so. They will certainly make the problem of emissions coming from the transport sector in urban areas largely solved. We will dramatically reduce the amount of people killed or seriously injured on the roads. These two alone are major gains. I hope that because this element of sharing, especially if combined with the element of automation, we can also solve the problem of congestion. Our own mobility agenda will be different. We will move differently.

The number of deaths on the road has increased recently in countries like France, because of cheap oil. Could electric cars bring also this negative side effect?

Not only in France, [but] also in several other countries. The operating cost per kilometer of the electric car is much lower than the gasoline car at the low prices of today, something around one fifth of the price. In that respect, if we take into account only electrification, it could be even more dangerous, because there will be more vehicles on the roads. You really have to look at the three things together.

EurActiv.com by Jorge Valero

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