



Journal Title: ITU News

Journal Issue: no. 4 (2013)

Article Title: World Telecommunication and Information Society Award 2013: Meet the Laureates

Page number(s): pp. 7-19

This electronic version (PDF) was scanned by the International Telecommunication Union (ITU) Library & Archives Service from an original paper document in the ITU Library & Archives collections.

La présente version électronique (PDF) a été numérisée par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'un document papier original des collections de ce service.

Esta versión electrónica (PDF) ha sido escaneada por el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un documento impreso original de las colecciones del Servicio de Biblioteca y Archivos de la UIT.

(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجراه الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلاً

此电子版（PDF版本）由国际电信联盟（ITU）图书馆和档案室利用存于该处的纸质文件扫描提供。

Настоящий электронный вариант (PDF) был подготовлен в библиотечно-архивной службе Международного союза электросвязи путем сканирования исходного документа в бумажной форме из библиотечно-архивной службы МСЭ.

Meet the laureates

ITU Award goes to President Ueli Maurer of Switzerland, Volkmar Denner, Chairman of the Board of Management of Robert Bosch and Jean Todt, President of the International Automobile Federation



Ueli Maurer

Volkmar Denner

Jean Todt

Ueli Maurer



Ueli Maurer, President of the Swiss Confederation hails from Hinwil, where his political career began in 1978 with his election as member of the Communal Council. Hinwil is a centre of the Swiss motorsports industry and is home to the Sauber Formula 1 racing team.

Mr Maurer has shown personal commitment to sports, health, social security and civil protection. In 2008, he was elected as a member of the Federal Council and has been in charge of the Federal Department of Defence, Civil Protection and Sport. From 1995 to 2003, he was a member of the Environment, Spatial Planning and Energy Committee. After 2003, he was engaged as member of the Finance Committee, and after 2007, as member of the Social Security and Health Committee. From 1996 to 2008, he was Chairman of the Swiss People's Party.

Switzerland

Switzerland is among the safest countries for road users in the world and recorded a significant decrease in road traffic mortality in the period 2001–2010. The Swiss Council for Accident Prevention has been actively involved with ITU in developing standards for driver assistance systems and intelligent systems for accident prevention in road traffic.



■ **Switzerland's programme to reduce road deaths**

Ambassador Alexandre Fasel

Representing President Ueli Maurer of the Swiss Confederation

President Ueli Maurer of the Swiss Confederation, a winner of the World Telecommunication and Information Society Award 2013, was represented at the award ceremony at ITU headquarters on 17 May by Ambassador Alexandre Fasel, Permanent Representative of Switzerland to the Office of the United Nations and other international organizations in Geneva.

Speaking on behalf of Mr Maurer, Ambassador Fasel conveyed the President's thanks for the award conferred on him — an award, which he said, also honours Switzerland as a whole. He recalled that the period 2011–2020 had

“Information and communication technologies are now heralding the emergence of innovative solutions in the area of road safety which were unimaginable not very long ago. I am thinking, in particular, of communication between vehicles, between vehicles and infrastructure and also the so-called ‘intelligent’ car, which can drive itself entirely safely, and which manufacturers tell us could be ready by the end of the decade.”

“In Switzerland, road safety has improved over the last 40 years. In 1971 — our darkest year — 1773 people were killed on our roads. This figure has since been cut by 80 per cent. In comparison with other countries, Switzerland comes in a (healthy) seventh position behind the United Kingdom, the Netherlands, Sweden, Norway, Iceland and Denmark.”

been declared *Decade of Action for Road Safety* by the United Nations General Assembly and congratulated ITU on having selected the theme “ICTs and Improving Road Safety” to mark this year’s World Telecommunication and Information Society Day and paid tribute to the work the Union is accomplishing.

“Information and communication technologies are now heralding the emergence of innovative solutions in the area of road safety which were unimaginable not very long ago. I am thinking, in particular, of communication between vehicles, between vehicles and infrastructure and also the so-called ‘intelligent’ car, which can drive itself entirely safely, and which manufacturers tell us could be ready by the end of the decade,” said Ambassador Fasel. But he also acknowledged that there are instances where the use of ICT may impair road safety. This is the case, for example, when people make telephone calls, consult their smartphones or send each other SMS messages while driving.

Ambassador Fasel then went on to briefly outline the priorities that Swiss authorities are currently pursuing in their road-safety policy. As Switzerland does not produce cars, he focused on how the Swiss authorities plan to effectively apply *intelligent solutions* for road safety, based among other things on ICT.

In Switzerland, road safety has improved over the last 40 years. In 1971 — our darkest year — 1773 people were killed on our roads. This figure has since been cut by 80 per cent. In comparison with other countries, Switzerland comes in a (healthy) seventh position behind the United Kingdom, the Netherlands, Sweden, Norway, Iceland and Denmark.

The “Via Secura” programme

In 2010, the Federal Council set the target of cutting the number of deaths by a further 25 per cent within 10 years, through the “Via Secura” programme, adopting a broader approach than hitherto. “Via Secura” focuses primarily on actions in awareness-raising among the population, road user behaviour

“However amazing the breakthroughs made by ICT in relation to driving-assistance systems, I believe that nothing can replace education, training and awareness-raising for drivers — and pedestrians — to ensure they behave as responsible citizens when on the roads and behind the wheel.”



A device equipped with a sensor for testing drunk driving

and safety of vehicles and road infrastructure. The programme does not introduce any new prescriptions. It focuses on more effective application of the rules and standards already in force. In this regard, there are five categories of measures to be implemented in several stages by 2015.

First are preventive measures. Second are measures to ensure more effective enforcement of the existing rules. This will include, for example, allowing repeat drink-driving offenders (as from 2015) to drive only vehicles equipped with an alcohol lock, and prohibiting the supply of commercial or public traffic speed-check detection and warning services.

Third are enforcement measures targeted in particular at reckless drivers, who will be obliged to equip their vehicle with a black box which records data that can then be used by the authorities. Fourth are measures

to improve the road infrastructure. And finally, fifth are measures aimed at optimizing road-accident statistics through the introduction of a multipurpose information system. These are the main features of the “Via Secura” programme.

The information society is making it possible for the automobile sector to make immense and fast progress in the area of road safety. As part of this process, States have to be prepared to modernize their road infrastructure to keep up with technological development. Switzerland, for one, has taken up this challenge.

Finally, however amazing the breakthroughs made by ICT in relation to driving-assistance systems, I believe that nothing can replace education, training and awareness-raising for drivers — and pedestrians — to ensure they behave as responsible citizens when on the roads and behind the wheel.

Volkmar Denner



Volkmar Denner is Chairman of the Board of Management of Robert Bosch GmbH. He is also chief technical officer, and has corporate responsibility for research and advance engineering, engineering coordination, corporate strategy and corporate communications. His responsibilities also include the Bosch Software Innovations and Healthcare Telemedicine units.

Mr Denner received his undergraduate degree in physics from the University of Stuttgart in 1981. After a period spent conducting research in the United States, he was awarded a PhD in physics by the University of Stuttgart in 1985.

About Robert Bosch GmbH

Robert Bosch GmbH was among the first signatories of the European Road Safety Charter. Founded in 1886, Bosch is a multinational engineering and electronics company headquartered near Stuttgart, Germany. It is one of the leading suppliers of automotive components, including fuel-injection systems for internal combustion engines. Bosch is also responsible for pioneering innovations in the areas of vehicle safety systems, in-car information and communication

systems, as well as driver-assistance and other guidance functions.

For more than 30 years, active safety systems developed by Bosch have significantly contributed to reducing the number of road crashes. The company's innovations include the antilock braking system (ABS), traction control system (TCS), and electronic stability programme (ESP®), all of which intervene before a crash occurs.



■ Delivering innovative solutions for safer driving

Volkmar Denner

Chairman, Board of Management of Robert Bosch GmbH

Accepting the ITU World Telecommunication and Information Society Award 2013, Volkmar Denner, Chairman of the Board of Management of Robert Bosch GmbH, paid tribute to the more than 5000 Bosch engineers throughout the world working in the field of traffic safety and driver assistance.

Noting that a lot had already been achieved, he gave the example of Germany, where the number of fatalities caused by traffic accidents had declined from 15 000 in 1980 to less than 4000 in 2012. Improved crash

“I share this prestigious award with more than 5000 Bosch engineers throughout the world, who work in the field of traffic safety and driver assistance, and who have accomplished amazing results in making driving safer and less stressful. They are the true champions of road safety.”

“In Germany, the number of fatalities caused by traffic accidents has declined significantly from 15 000 in 1980 to less than 4000 in 2012.”

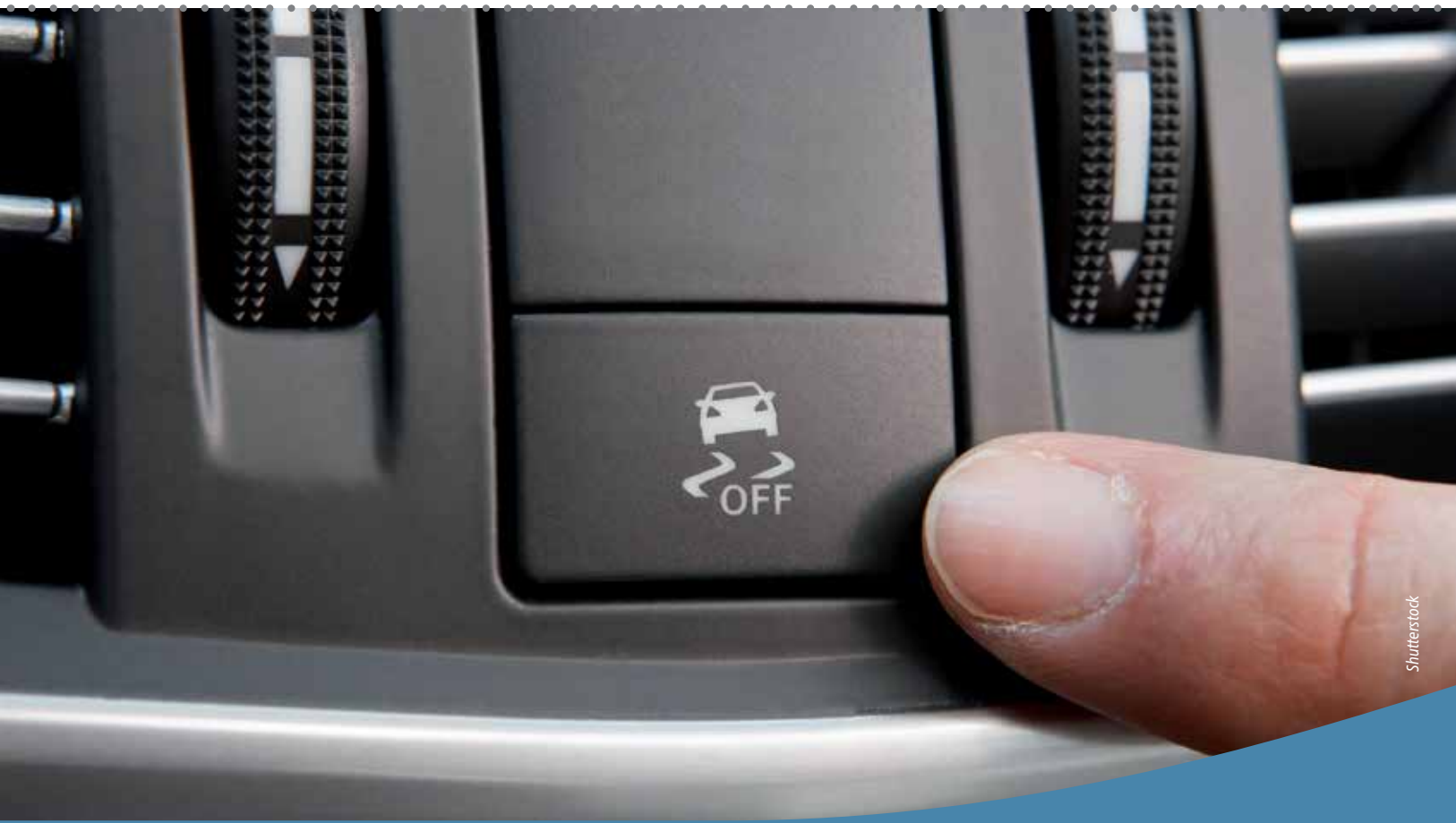
behaviour of vehicles has certainly contributed to this reduction, the more rigid bodywork in particular. Just as certainly, lives have been saved by active and passive safety systems. International studies demonstrate that at least 40 per cent of all fatal traffic accidents are caused by skidding. Electronic stability control could prevent up to 80 per cent of all skidding accidents. Bosch developed the ESP® electronic stability programme and was the first company to put it on the market in 1995. Since then, Bosch has delivered more than 75 million ESP® systems. Today, every second vehicle sold worldwide is equipped with such a system.

Unfortunately however, the worldwide road fatality rate is still rising year by year. “Every life lost is one too many, and Bosch’s strategic imperative is ‘Invented for life’. All over the world — and this includes the emerging markets in particular — our focus is on systems for environmental protection, energy efficiency, and safety. At the end of the day, our automotive technology engineers are not only working for Bosch and its customers. After all, the two main objectives of their development work — making cars safer and more eco-friendly — are clearly also for the good of society. Reducing the number of road deaths is urgent. We are providing technical solutions for a number of political programmes, whether devised by the European Union, emerging countries, or the United Nations,” said Mr Denner.

More powerful safety and driver assistance systems, especially predictive safety systems, are the next technological steps to further improving road safety, according to Mr Denner. Bosch already has a predictive emergency braking system in the market that reacts to preceding cars. The system is based on the company’s 77 GHz sensors and works with a cascade of increasing system reaction. First it warns the driver that a crash is imminent. If the driver reacts, it supports the driver by adjusting the brake pressure so that the vehicle stops in front of the target. If the driver does not react, automated braking minimizes collision impact. In a similar way, Bosch plans to bring an automated braking system to the market in 2014 that will protect pedestrians and further help to save lives on our streets.

All these systems depend on information technology. “This is one of the many areas where ITU plays a crucial role for road safety,” said Mr Denner, giving the example of predictive safety systems, which rely on high-resolution vehicular radar in order to detect obstacles, pedestrians and other vehicles.

“International studies demonstrate that at least 40 per cent of all fatal traffic accidents are caused by skidding. Electronic stability control could prevent up to 80 per cent of all skidding accidents.”



Shutterstock

“The frequency range of 76–81 GHz needs to be allocated for automotive safety-related applications on a primary basis. This important topic is on the agenda of ITU’s World Radiocommunication Conference in 2015 and is one of the many areas where Bosch is active as an ITU Sector Member.”

“The allocation of harmonized, globally available frequency ranges for automotive radar applications is essential. For obvious reasons, emergency braking systems must not be disturbed by radio-frequency devices operating in the same frequency range. Imagine an emergency braking system being deactivated in a critical situation because of interference caused by, for instance, traffic infrastructure or intrusion detection systems,” he explained. In order to avoid this, he considered that the frequency range of 76–81 GHz needs to be allocated for automotive safety-related applications on a primary basis. This important topic is on the agenda of ITU’s World Radiocommunication Conference in 2015 and is one of the many areas where Bosch is active as an ITU Sector Member.

Jean Todt



Jean Todt is President of the International Automobile Federation (Fédération Internationale de l'Automobile, FIA). He is well known in the area of motorsports where, under his leadership as CEO of Ferrari, Scuderia Ferrari won 14 Formula-1 World titles – including five consecutive titles with Michael Schumacher – and 106 Grand Prix.

Since his election as President of FIA in October 2009, Mr Todt has made global road safety a priority of the Federation. In April 2009, Mr Todt became President of the “eSafetyAware” campaign.

Jean Todt is also Vice-President of the Foundation known as Institut du cerveau et de moelle épinière (Brain and Spine Institute – a research centre which brings together patients, physicians and researchers under one roof for the rapid treatment of lesions affecting the nervous system).

About the International Automobile Federation

FIA is the governing body for world motor sport and the federation of the world's leading motoring organizations. Founded in 1904, with headquarters in Paris, the FIA is a non-profit making association.

It brings together more than 230 national motoring and sporting organizations from over 135 countries on five continents. Its member clubs represent millions of motorists and their families.

FIA will collaborate with ITU over the next seven years to contribute towards achieving the goals of the UN “Decade of Action for Road Safety”.



ITU/R. Farrel

■ Invest more to save lives on our roads

Jean Todt

President of the International Automobile Federation

Accepting the World Telecommunication and Information Society Award, Jean Todt, President of the International Automobile Federation (FIA), commended the work of ITU in the field of information and communication technologies (ICT) and road safety.

Mr Todt pointed out that with an estimated 1.3 million deaths each year, road accidents kill twice as many people as malaria, as many as tuberculosis and almost as many as AIDS. He warned that “If nothing is done, 2 million people will die on the world’s roads each year by 2020, which means more than any of these major pandemics. And this does not take

“With an estimated 1.3 million deaths each year, road accidents kill already twice as many people as malaria, as many as tuberculosis and almost as many as AIDS. If nothing is done, 2 million people will die on the world’s roads each year by 2020, which means more than any of these major pandemics. And this does not take into account the 50 million people severely injured every year...”

“An estimated 90 per cent of road accidents happen in emerging and developing countries. And we estimate that they already cost to developing countries 100 billion dollars a year, which equals the amount these countries receive in international aid.”

into account the 50 million people severely injured every year. This will rise to 80 million by 2020 if no action is taken.”

Mr Todt went on to underline that road safety is not only a human issue, but also a challenge for economic development. “An estimated 90 per cent of road accidents happen in emerging and developing countries. And we estimate that they already cost to developing countries 100 billion dollars a year, which equals the amount these countries receive in international aid,” he said.

Unfortunately, these dramatic figures are still largely ignored. “Road safety remains widely seen as a national issue, while instead it has become a genuine global challenge. And so the international community must mobilize more purposefully. The United Nations has paved the way by launching, two years ago, the Decade of Action for Road Safety. But we need to go further and we need to go faster. Road safety must be given the place it deserves on the international agenda: one

of major priority,” said Mr Todt, suggesting that road safety should be integrated into the post-2015 Sustainable Development Goals that will follow on from the Millennium Development Goals.

He stressed the need to find additional resources to battle against road accidents, which he categorized as one of the greatest — and one of the fastest growing — problems of our time. “The international community rightly spends billions of dollars to take up major issues such as the environment, pandemics, food crisis, and so on. But still, far too little money is pledged by the international community for this battle — in no way less vital. This must change.” His strong belief that ICT can make an incredible difference in road safety was based on improved vehicle safety over the past 10–15 years, thanks to enhanced crash test standards, crumple zones, air bags and so on.

“Now a new generation of safety systems, often based on ICT, can even prevent accidents from happening in the first place. Intelligent vehicle technologies are making cars safer than ever before. Applications such as electronic stability control, warning and

“In the European Union alone, it is estimated that if all cars used electronic stability control, at least 4000 lives a year could be saved and 100 000 injuries avoided. These 4000 lives represent 10 per cent of the 40 000 deaths on European roads every year.”



Shutterstock

emergency braking systems, lane support systems, blind spot monitoring, adaptive headlights and of course speed alerts can help avoid thousands and thousands of accidents, and save thousands and thousands of lives”, he said. In the European Union alone, it is estimated that if all cars used electronic stability control, at least 4000 lives a year could be saved and 100 000 injuries avoided.

Mr Todt highlighted the problem of the lack of awareness among policy-makers and car users, not only about the possibility of using ICT to improve road safety, but also about the danger of using electronic items — cellphones, smartphones, and so on — behind the wheel. He cited a recent American study showing that texting while driving has now replaced drunk driving as the primary cause of teenage road deaths in the

United States. He was pleased that ITU in partnership with FIA would be launching a global campaign specifically about the dangers of texting and driving.

“Raising awareness is a first step, but we also have to imagine ways to make these electronic items as less intrusive as possible. For example, why not work with the phone manufacturers on a ‘car mode’, the same way we already have a ‘fly mode’? This would be a first step for responsible drivers who don’t want to be tempted while driving, to decide to not receive calls and not be able to text, for example, while behind the wheel. The next step is also to make progress on man-machine interfaces to make these electronic items as little intrusive as possible. This, as well as surveillance of the drivers’ state of attention, are important developments for the future,” said Mr Todt.