

safety for road users

efficiency for road management authorities
with the Atos traffic offence processing centre



Safety for road users

Each year an estimated 1.3 million people die on the world's roads, and the death toll is highest among the most vulnerable people.

Over 3,500 people are killed on the world's roads every day, one every 6 seconds. 90% of these deaths happen in lower income countries, which possess only 48% of the roads. Predictions made by UN bodies suggest that 2.4 million people a year will die on the roads by 2030 unless the trends are reversed.

Road traffic accidents are now the 9th largest cause of deaths across the world, and if nothing happens to change current trends, it will become the 5th largest by 2030. It is not just the 1.3 million deaths that matter: anything up to 50 million people are injured, as well, and the financial damage is also enormous, with 1 to 3% of a nation's GDP being spent on managing road traffic and dealing with the results of accidents.

Launching a decade of action

The United Nations-sponsored Decade of Action for Road Safety was launched in 2011 with the backing of more than 100 countries. Its aim is to focus attention on a challenge that is uniquely damaging to society in general, with millions of lives at stake over the next 10 years. But without a fundamental change in the way drivers behave, positive change will be limited.

The Atos Offence Processing Centre (OPC) solution is proven to systematically process offences within a few days, with full legal

compliance. This results in a virtuous circle in which acceptance and compliance with a highly efficient enforcement scheme, creates a psychological impact onto the drivers to change their behaviour for the better.

Its high automation also generates revenues that could be re-invested in other traffic safety projects.

That is the way Atos drives better outcomes within this framework, enabling Governments to achieve their national road safety objectives, contributing to:

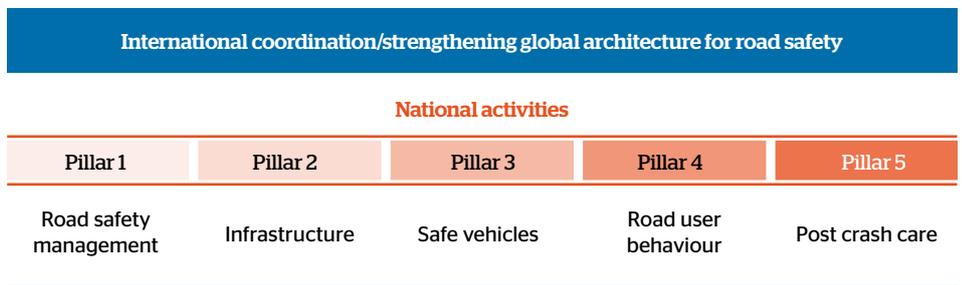
- ▶ Improve the performance of road safety management (pillar 1)
- ▶ Foster a change for the better in road user behaviour (pillar 4)

In addition to the UN-led initiatives, several countries have adopted their own Vision Zero strategy to reduce the number of deaths on their roads. As governments seek to transform a difficult situation, they need effective, expert help from partners with the experience and know-how to make a measurable difference.



46% of road traffic deaths are pedestrian, cyclists and motorized two-wheels riders and passengers.

The globally agreed-upon architecture for road safety improvement consists of five main pillars.



Changing behaviour

Changing drivers' attitudes for the better is perhaps the greatest single factor in improved road safety.

Success story

Atos has a strong track record for Traffic OPC solutions in Argentina (Buenos Aires), France, Germany (Berlin) and Spain with more than 30 million processed cases and 19 million issued fines on average each year. For instance, we have also reduced the average processing time for fines in these countries, dropping from 50 days to 7 in one country. In every country in which we operate Traffic OPC solutions - over 4,300 fixed or mobile traffic control devices - the rate of fatalities has dropped. In one country, this rate has decreased by 66%.

The Atos Traffic Offence Processing Centre (Traffic OPC) solution has been designed to provide an efficient, reliable, flexible and customized solution for local or central governments and public organisations, enabling them to deliver an effective and truly reliable end-to-end offence processing service.

The Atos Traffic OPC supports multiple types of traffic law violations: instant speed, average speed on highway sections, tunnels and any dangerous sections, red light crossing, lane crossing, unpaid toll, forbidden parking as examples of offences detected by automatic devices. But Atos Traffic OPC also supports tickets created by police authorities (electronic

tickets, paper tickets). All these offences are processed within a few days, accurately and with clear proof that the real offenders have been targeted and dealt with fairly. All available evidence suggest that the Traffic OPC approach is highly effective in changing drivers' attitudes for the better. Already, several countries that once had a poor record for road accidents and driver behaviour have now seen real and measurable performance improvements. These are directly proportional to the introduction of effective road management and offence processing solutions.

Key building blocks for a successful traffic offence system include:

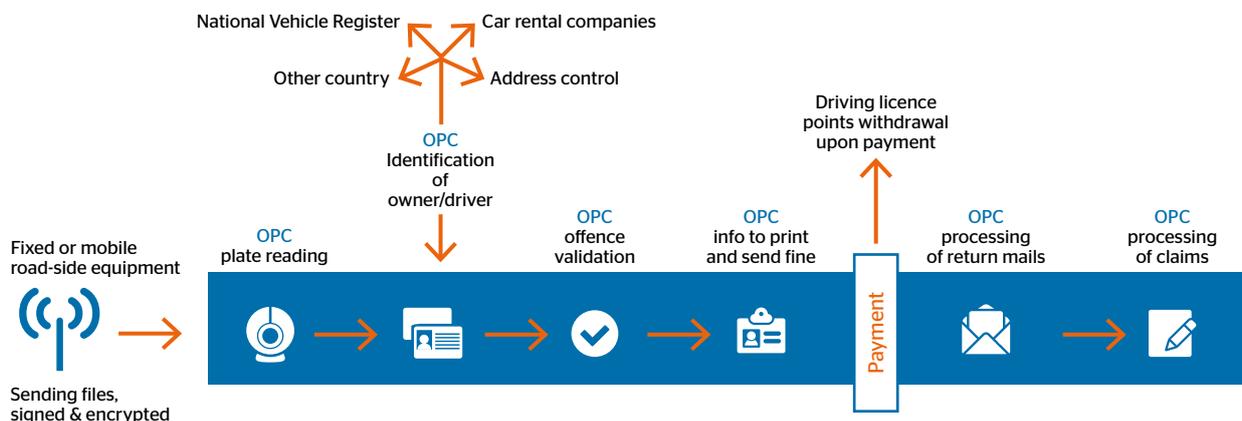
- ▶ Road-side equipment - fixed or mobile - to identify and record all offences, producing photographic records as proof.
- ▶ Ability to record licence plates in order to identify offenders.
- ▶ Connectivity to national vehicle registers, with links to rental and lease companies, backed by rapid interaction with foreign countries where necessary.
- ▶ Automated printing and mailing of offence notices.
- ▶ Secure payment facilities for fines collection.
- ▶ Automated processes for any exceptions, including appeals, undelivered mail, non-payments and possible court appearances.



When this kind of solution is handled entirely in-house, it is normally a major burden for the government bodies concerned.

- ▶ Costs are significant: the complexity of this value chain generally requires a high level of upfront capital investment in the basic infrastructure, and then significant long-term costs for operating and maintaining the system.
- ▶ Achieving full efficiency and reliability is a challenge considering the complexity of the whole chain. If the required performance level is not reached, your operation team will be flooded by offence cases and complaints from citizens.

Building a traffic offence management solution from a range of components.



The example shows speeding offences, while other offence cases are managed with similar processing principles (red light crossings, lane infractions, parking offences as well as other automatically or manually reported offences, with or without photographic evidence)



The Atos Traffic Offence Processing Centre (Traffic OPC) makes an appealing value proposition for national or local authorities.

- ▶ It provides a seamless end-to-end service, with smooth interface points between all other relevant stakeholders: from police to courts and licensing authorities, making it the cheapest and quickest way to collect and deliver a fine.
- ▶ It is flexible and scalable: we tailor it to the specific needs of any government bodies and scale it to the right size and scope, which enables our customers not to waste resources to reach the expected level of reliability.
- ▶ It is cost efficient due to flexible pricing, which is based, to a certain extent, on a payment-per-transaction model. Not only does it reduce costs for the local or central authorities, but also for citizens: in fact the money collected smoothly and quickly can be reinvested into road safety management or public transportation.

Our integrated, end-to-end solution is backed by guaranteed quality standards, with minimal need for input from government bodies. This makes the Atos Traffic OPC relevant for regions and countries where investment in very large-scale infrastructure is not practically possible as well as places where a strong nation-wide solution is required. No matter what the need or scale, Atos Traffic OPC delivers the right results.

The Atos Traffic OPC covers the full spectrum of requirements for effective traffic offence processing, and interfaces with all players.



A promise of outcome

Our world-class Traffic OPC solution is built on a range of standards-based modules that can be combined to deliver precisely targeted and customized outcomes. The building blocks of Traffic OPC are:

- ▶ **Your business process in motion.** The electronic offence cases go through your business process as you decided they must. Thanks to the high performance orchestration, every time a step is finished, the offence case is immediately available for the next steps.
- ▶ **Vehicle owner/driver identification.** Thanks to high performance Automatic Number Plate Recognition software, the vehicles are identified, and then vehicle owners. Features are also supported to identify the drivers of rented cars.
- ▶ **Operator Interface** for photo processing, offence validation, signatures, offence processing including requests, claims and dispute management. We provide support

for various types of infractions, captured by fixed/mobile radars, red light crossing detectors, manual offence reporting via hand-held devices, or any type of automated traffic enforcement equipment.

- ▶ **Deployment & Maintenance Interface** for efficient project management of large-scale deployment and long-term maintenance, as well as monitoring and management of fixed or mobile devices included in the operations.
- ▶ **Administration Interface** for managing user access rights and setting operational parameters, such as changes to speed limits.
- ▶ **Connections with external Government IT systems** for sending information to the law, to the Treasury for payment management, or to the Driving Licence system for penalty management.
- ▶ **Citizen Relationship Interfaces**, with access to general information as well as features for the payment of fines. These functionalities are provided via a web portal and a call centre for citizens, mobile applications for smartphones and an application for multimedia kiosks.

- ▶ **Statistics & Reporting**, related to the specialised requirements for the operations, including performance statistics for fixed or mobile devices (speed cameras, etc.) and monitoring of Key Performance Indicators.
- ▶ **Security & legal compliance** with strong authentication, digital signatures, audit trails and electronic archiving, is a major stake for the legal sustainability of a traffic law enforcement scheme. All user access in Traffic OPC centres is restricted by smart card based protection.

Right across the value chain, and from initial design to long-term management, the Atos Traffic OPC solution delivers the right results which every customer needs, and that is our promise.



Quality of service, peace of mind

Effective road management is a win for every part of society, reducing social and road management costs, which enables further long-term improvements.

Atos conforms with all the requirements for compliance, data security and national sovereignty, and all the traffic OPC data are always stored within the territory of the country concerned. We have experience and metrics to calculate the optimal size of your system. We build on existing best practice and never “re-invent the wheel” for each new solution. Finally, we provide a proven Automated Number Plate Recognition system, which delivers optimum results at a competitive price.

The Atos Traffic OPC is designed to focus on customer needs at all times, reducing the operational burden on government bodies, while ensuring full compliance and security. Atos manages the entire process from start to finish, and handles all aspect of offence management, from initial design to long-term management. The design and implementation process for Atos Traffic OPC is mature and well-proven in action:

- ▶ Analysis and design, working with the customer to define the scope of traffic offence management process, covering geographical territory, range of offences and agreed service levels. This leads to the creation of a framework solution design.
- ▶ Implementation, setting up the basic infrastructure required to ensure effective performance. This will cover everything from the positioning of cameras and radar systems to the supporting IT environments.
- ▶ Long-term management, within the scope of a fixed-term contract that defines quality of service, financial performance, reporting, responsibilities and interface points with other agencies.

In addition, Atos manages Service Level Agreements (SLAs), delivering guaranteed quality of service and detailed reporting. We will improve key performance levels by processing fines more rapidly and collecting a higher proportion of the money due, compared with “normal” government-operated systems. This provides faster and higher Return on Investment for government bodies, while also proving to road users that laws will be enforced meticulously and efficiently.

As one of the world’s leading IT Services companies, Atos builds on existing investments, works with best of breed equipment providers and maximizes the skills and experience we have developed in delivering industrial-strength services to clients in different sectors around the world.

Delivering the benefits

Effective traffic offence processing systems drive transformational benefits at all levels of society. In existing projects, Atos has ensured:

Reduction in instant and average speeds:

The deployment of instant and average speed cameras combined with “seamless digital processes” leads to an immediate, consistent decrease in traffic speeds. This reduces the number of accidents and also helps lower pollution and fuel use.

Lower impact of road accidents:

Cutting the number of accidents reduces the burden on emergency, health and other support services. There is a proven causal link between effective road management schemes and the number of accidents, and the benefits of this change for the better are very clear for the whole society.

More reliable processing chain:

The Atos approach brings industrial-strength automation into the entire offence processing system, and this ensures fewer errors along with much greater consistency across the entire value chain. Consistent operation increases public confidence and further helps ensure compliance with the rules.

Single point of contact:

Atos provides a complete Traffic OPC solution, delivering and integrating all modules with a minimum complexity and customer investment. The Atos Traffic OPC continues evolving as technology does. We can already deliver service to the public through smart devices and web portals, and also via Interactive Voice Response (IVR).

International service:

Our solution also deals with the offences committed by foreign drivers and provides effective connections to other national systems, while also having multi-lingual and multi-timezone capabilities.

Low total cost of ownership:

Everything about the Atos approach is designed to ensure maximum efficiency for customers. work-intensive processes are fully automated, and management on a turnkey basis reduces investment levels still further. Payment per transaction ensures maximum efficiency and connects costs to receipts in the most direct way.



Your trusted partner to achieve your goals

Atos serves central and local government customers across Europe, the Americas and Asia Pacific. With 11,000 business technologists working full time on delivering public sector projects and solutions, 40 years' experience in public sector projects which account for around 30% of all Atos business, we have outstanding depth of experience to share. Together, we already manage the European Commission communications infrastructure, handling 600 million secure messages a year. We provide the IT for the German Ministry of Labour, which is the biggest and most consistently successful labour exchange in Europe. We are program leaders for STORK, the EU project that enables citizens and companies from 16 countries to open for business and access services by using any one of 110 different ID systems for open access in any participating country.

With our own Research Institute (ARI), which is one of the world's leading dedicated Public Sector R&D units, Atos develops a growing range of new concepts. Our MyCity program is a key innovation, bringing together an integrated range of key services and solutions to address the complete needs of cities around the world. This demonstrates how city and regional government priorities connect to Atos capability.

Atos has also a proven track record in enabling better performance in all aspects of road management, and is one of the very few companies in the world with the ability to deliver a complete service right across the value chain.

The time has come to stop accepting that a heavy death toll on the roads is a way of life. It is time to start your journey towards a better future, with our Traffic Offence Processing Centre solution.

Make the first move by joining us on atos.net and take the road to success!

An exceptional track record:

Atos has designed, has built and operates four of the largest, most advanced offence processing centres in the world, several of these on a national scale. Many years of partnership have enabled us to convert our operational efficiency into access, guaranteeing shorter times to post fines which are currently 3 working days under normal circumstances. In another country, where fines may be distributed via e-mail, these times are even shorter: two working days between the offence and the reception of the fine by citizen.

Speed and efficiency:

Atos moves fast to ensure that complete Traffic OPC solutions go live after the minimum time to deploy such a system. Not only do we make a positive difference, we do so fast.

Reliability:

Everything we do is designed to combine efficiency with guaranteed security and compliance. There is no compromise when it comes to meeting all regulations with regard to data security and legal standards.

Service and self financing:

Atos Traffic OPC ensures that road management pays for itself rapidly and effectively. Costs are reduced for taxpayers while service quality improves. The result is a virtuous circle in which confidence in the system causes compliance with the law, which manifests itself by the reduction of speed by 6% in one country.

About Atos

Atos is an international information technology services company with annual 2011 pro forma revenue of EUR 8.5 billion and 74,000 employees in 48 countries. Serving a global client base, it delivers hi-tech transactional services, consulting and technology services, systems integration and managed services. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail, Services; Public, Health & Transports; Financial Services; Telecoms, Media & Technology; Energy & Utilities.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic and Paralympic Games and is quoted on the Paris Eurolist Market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Atos Worldline and Atos Worldgrid.

To find out more about the full range of road management solutions from Atos, contact us on TrafficOPCdialogue@atos.net