

# rebalancing the transport equation

integrated thinking for sustainable networks

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# Economic arteries

The global economy is dependent on reliable transport of goods and people. Our economic and social life just would not work without it.

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Every country in the world depends on an efficient, integrated, safe transport system for its social and economic wellbeing. Transport networks are the arteries through which national and international life is nourished. Yet in many parts of the world, these arteries are becoming clogged up, inefficient and occasionally dangerous.

The trucks taking up so much of our road space are often near-empty. Commuter trains are packed at rush hour but with few passengers at other times. Airports are filled with frustrated travelers standing in long, slow-moving lines. Security is intrusive and a routine journey can be turned into a nightmare by anything from volcanic ash to a sudden blizzard to a breakdown in baggage handling to security alerts caused by terrorist threats.

Every problem is a blow, not just to the individuals and companies directly involved, but to the economic performance of the country. And let's remember that all attempts to reach ambitious new sustainability targets will always depend on making transport greener, more efficient and less wasteful. A lot depends on getting this right.

## A difficult balance

The value of products and services increases with mobility, and that includes people. And people are travelling further than ever before. As citizens of developing countries become more prosperous, they will travel more often, and pressure on resources will accelerate.

Individuals want the freedom to go where they want, when they want at an affordable price. But the number of vehicles on the roads will probably double by 2030, and they are already crowded. Car ownership is seen by many as a natural right, but national or regional governments are the only bodies with the size and strength to provide the infrastructure that everyone must use.

Millions of people have become used to low-cost air travel, and use it not just for holidays but even for commuting. But a combination of air passenger volumes growing at an average rate of 5-6%, increased levels of pollution and security concerns are making an "easy" activity increasingly difficult.

In many countries consumers are now dependent on goods made or grown around the globe, many thousands of kilometers distance. But as the volume of long-distant trade continues to rise, from 20 trillion tons to an estimated 30 trillion in 2030, so does the prospect of disruption through unforeseen events, environmental impact and costs linked to a long supply chain.

**The trends and numbers underline the fact that transportation is the single biggest challenge the world faces when it comes to ensuring sustainable growth in the future.**



## An integrated vision

The transport sector is facing extraordinary new challenges. The megatrends of urbanization and demographic change are causing irreversible global changes: 60% of the world's population is expected to live in cities by 2030, for example, and this has huge implications for all aspects of our infrastructure.

- ▶ In transport management, attention is directed at how the three-dimensional, physical network operates, but each part of this infrastructure is mirrored by corresponding information flows, virtual systems and IT transactions
- ▶ User satisfaction depends on accurate, timely information, simple and fool-proof ticketing and non-obtrusive security, backed by efficient baggage handling
- ▶ Road management is driven by real-time monitoring of traffic flows, potential road-charging and public transport management to encourage a good balance between different forms of transport

- ▶ Security is intelligence-driven and requires both excellent service levels and meticulous process management
- ▶ Everything to do with the physical supply chain is managed by real-time monitoring, track and trace technology, scheduling that minimizes cost and certified compliance with all regulatory regimes.

Information, and information management is the essential foundation for an effective transport system, and that's where Atos has the power to make the difference.

The new Atos delivers efficient IT solutions for passenger and freight transport that form the basis for integrated transport systems, with seamless transport chains reliably serving cities, regions and countries. Our intelligent, integrated solutions enable more efficient utilization of transportation networks, which is vital for long-term economic growth.

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**The world economy has become more interconnected, year on year. Without an effective global transport network many of the products we buy would become unavailable or much more expensive, and many companies could not survive.**



# An Olympic champion

Millions of extra journeys... Unparalleled security concerns... Cities full to bursting with visitors from around the world: it's the ultimate test for expert transport management.

**Every four years one event illustrates the multi-dimensional working of integrated transport policy at its most extreme: the Olympic Games. In 2012, for the fifth Olympics in a row, Atos will take control of all the management and information systems needed to handle the massive burden of this unique global event.**

In London 2012, the number of journeys is likely to triple during the Olympics, security concerns will be at the highest level, and the burden on information systems and communication systems will be unprecedented, as our team supports delivery of multi-channel, multi-lingual real-time communications to over 200 countries and territories, worldwide.

There is nothing quite like the Olympics: Atos is the trusted partner delivering the result for London, just as we did in Beijing, Athens, Turin and Vancouver.

## In the air

The new Atos brings together the expertise of Atos Origin and Siemens IT Solutions and Services, with its deep, long-term links to Siemens AG, one of the world's most powerful engineering companies, which provides products and services to over 1,400 airports.

By combining all of our capabilities, we can deliver the most complex turnkey solutions, including complete airports, with all the systems needed to make them work at their best.

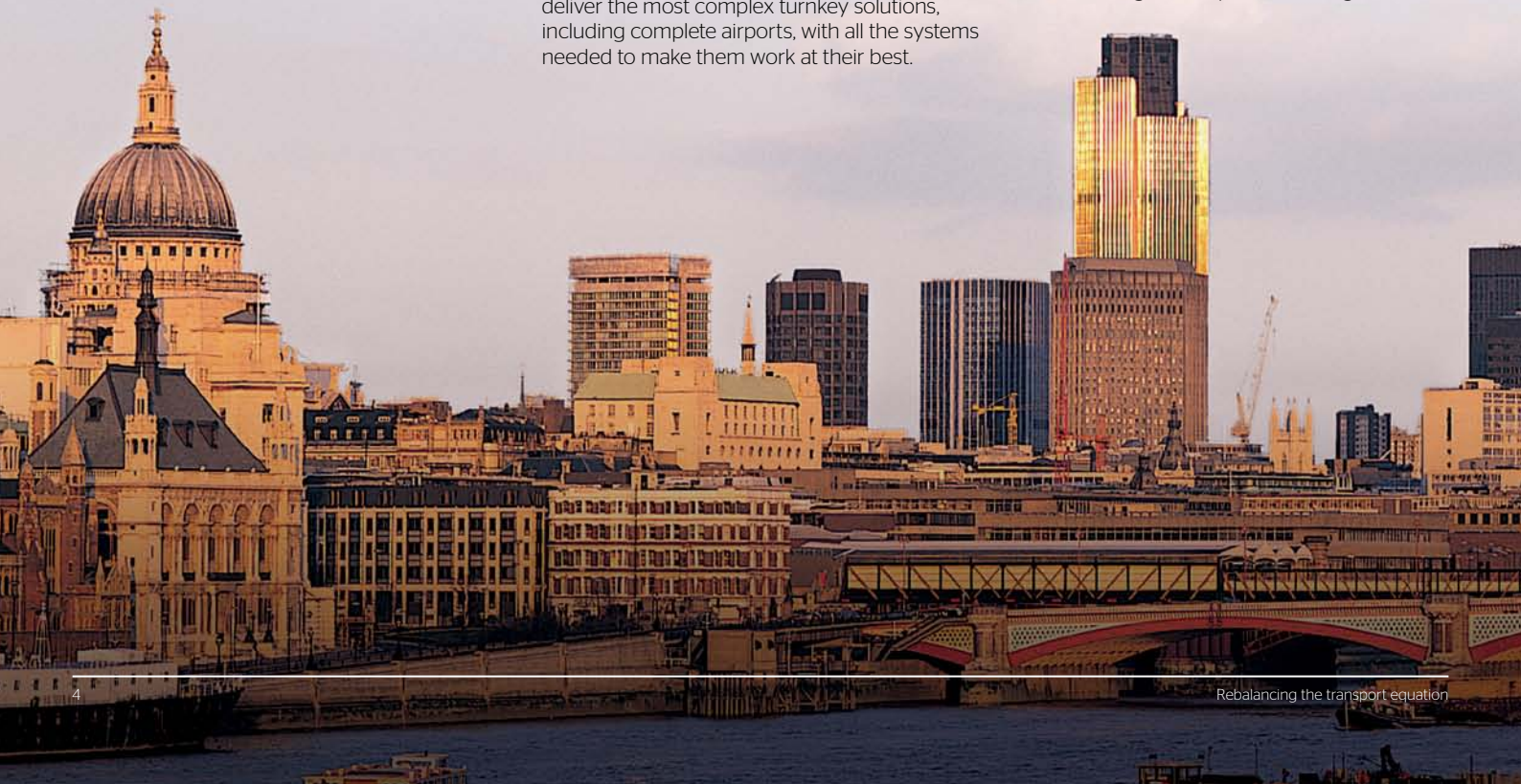
One such example is Bangalore airport, India's busiest transport hub, providing the global gateway for the thriving Indian IT services industry. It was designed, built and is now maintained by a consortium led by Siemens. Bangalore airport has been given three awards since operations began in 2008.

► **Prestigious 'Best Airport India' award at the Skytrax World Airport Awards in Copenhagen, Denmark (March 31, 2011)**

► **Best Emerging Airport in the Indian sub-continent by Emerging Markets Airports Awards (EMAA) for twice in a row (2010, 2011).**

Aircraft utilization is the key to profitability and Atos has created an innovative maintenance solution for Iberia Mantenimiento: the 6th largest aircraft maintenance service in the world. Providing real-time, two-way information access for engineers as they work has cut administration time dramatically, improved productivity and also reduced errors.

At Frankfurt airport, one of Europe's busiest transport centers, Atos has provided the new baggage handling monitoring and management system for Lufthansa. To date, this has succeeded in reducing problems due to mislaid bags, improving customer satisfaction significantly and reducing costs.



## On the ground

Atos is heavily involved in passenger transportation from train route, resource and time table management to ticketing, billing and back-office sales and customer management systems for a large number of train and bus operators across Europe around the world.

Through our Hi-Tech Transactional Services (HTTS), Atos manages industrial-strength transaction requirements across many different sectors, including transport. In fact, in London, one of the world's busiest cities, 85% of all rail tickets sold are handled by Atos systems.

We make sure that bills are correct, customer information is constantly updated, and there is full integration across channels and devices. In a market where fares are often complex and subject to restrictions and contingencies, it is essential to get information management absolutely correct, with no excuses. That's the way to keep margins at the right level and avoid upsetting customers.

Atos delivers exactly this kind of competitive advantage to First Group, the UK's largest bus and train operator, to RENFE in Spain, a leader in mobile ticketing, to motorway toll systems in France, Germany and Italy, and to many other national transport operators.

Atos helps transport providers deliver the right resources to the right place and time, at the right price: the key to resource optimization. We do this through supply planning, rostering and real-time control room systems for rail and bus operators.

Atos systems have also transformed service levels in public transport management. For the Vehicle & Operator Services Agency (VOSA) in the UK, Atos provides the online systems for vehicle testing and licensing. Since the service was developed, Atos has succeeded in almost entirely eliminating fraud and theft of paper licenses, has improved convenience to customers, reduced admin costs, returned money to the government and cut down the number of illegal vehicles on the road.

## For the customer

We never forget that transport, public or private, is ultimately about delivering convenience and quality to the travelling public. Atos is heavily involved in developing and managing systems for improving relationships between operators and passengers and in raising service quality at the same time.

Atos has set up customer loyalty programs for a range of large airlines, managing the service portals for some on a long-term, turnkey basis. For our largest customer, which has 4 million cardholders, we currently answer 750,000 calls a year, collect information for service points 18 million times each year, and deliver services with 114 major partners.

Atos makes it easy for customers to tailor the service they receive and reduce time spent waiting at airports, train terminals and bus stations. Through effective use of mobile technology and real-time information, passengers receive better quality service and an improved experience. We do this in ways that also protect client margins and drive efficiency across the entire transport network.

Finally, Atos is unique in being the only large IT services company to be active in the B2C world for transport. Through our "redspottedhanky" subsidiary in the UK, we are breaking new ground in delivering superior service at lower prices for train and bus passengers. This gives Atos unique insights to consumer attitudes and priorities: insights that we are feeding into solution design elsewhere.

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**Transport is at its heart a customer-focused business. Everything we do is focused at delivering a better experience for the travelling public and better service to consumers.**



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# The power to deliver

Transport is in our DNA: our heritage is rooted in road management, train manufacture and complete airport delivery and we also work closely with local and national authorities to improve mobility and address congestion challenges. No technology company knows more about transport than us. The new Atos transportation division offers a broad portfolio of efficient, reliable information and communication technology solutions, making us one of the world's few providers of comprehensive solutions for passenger and freight transportation and logistics.

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The new Atos builds on the joint heritage of Atos Origin and Siemens IT Solutions and Services. We have over 25 years' experience of successfully delivering transportation services worldwide, with 16,000 skilled business technologists, two industry-leading research facilities and world-class capabilities in everything from pure innovation to industrial-strength delivery. We're ready to go, right here and right now.

- ▶ The new Atos is not a work in progress: all of our capabilities are in place, fully integrated and ready to work with you today
- ▶ Our scale and financial strength offers complete peace of mind that we can give you the stability and risk mitigation you need for even the most demanding projects
- ▶ We are collaborative by nature, so clients have guaranteed access to the best thinking, innovations, know-how and expertise we have gathered in all sectors, countries and disciplines
- ▶ We share everything we do, between ourselves, with our partners and with our clients. We have a global network for ideas and knowledge sharing, backed by seamless processes to ensure rapid access and interactive working.

We are at home everywhere. Ours is a unique structure and culture: we are French and German, Dutch and British, American and Indian and more. We are one community but we are true citizens of the world.

## Building a better future

Atos has exceptional experience in every aspect of transport systems, from loyalty cards to aircraft maintenance; from baggage handling to biometrics for security; from online ticketing to real-time logistics, and from daily life to special events. Not only is Atos the Olympic systems partner, we were also responsible for transport management at the most successful, smooth-running football World Cup of recent memory, in Germany 2006.

The future for transport is going to bring challenges on an extraordinary scale.

- ▶ **Urbanization will bring more and more of us into crowded cities, where the infrastructure is already under strain**
- ▶ **Globalization will lead to growing dependence on rapid, efficient movement of goods, at a time when both security concerns and fuel costs are rising relentlessly**
- ▶ **Our economic model is based on the assumption of fast and easy travel, at a time when climate change is becoming a top government priority and reducing carbon emissions is a mandatory requirement for most industries.**

To achieve strategic goals and improve quality of life, transport management will be an issue of the greatest strategic concern.

Atos is already driving new ideas and solutions from its centers of excellence in Spain, Germany and Singapore, with mobile solutions giving citizens a better commuting experience and maintaining economic competitiveness, protecting the natural environment by making more efficient use of transport networks.

Atos will continue to partner with public and private bodies to deliver the economic and social benefits of efficient, secure transport networks.

- ▶ Improving customer safety, comfort and convenience
- ▶ Reusing best ideas from around the world to speed up learning and improve efficiency
- ▶ Enabling seamless integration both between different elements of the transport infrastructure and the information systems that manage them.

From hands-on consumer service delivery to design and build of complete airports to managing systems for the Olympic Games: no company understands transport from the inside in quite the same way as Atos: your partner for a faster, safer, more integrated future.

Your business technologists.

Powering progress. Atos.



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# About Atos

Atos is an international information technology services company with annual revenues of EUR 8.7 billion and 78,500 employees in 42 countries. Serving a global client base, it delivers hi-tech transactional services, consulting, systems integration and managed services. 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 Games and is quoted on the Paris Eurolist Market. Atos operates under the brands Atos, Atos Consulting, Atos Worldline and Atos WorldGrid.

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