



## Welcome to Issue 50 of our eNewsletter

Dear Leo,

Preparations for the gTKP/IRF/TARA Convention on Rural Roads, to be held on 26 and 27 November 2009 in Arusha, Tanzania, are well underway. A first preliminary programme will be published shortly.

We would like to encourage you to attend this important Convention, which will be preceded by a gTKP workshop on Governance. [Registration forms can be accessed from our website.](#)

In order to facilitate participation in both the Rural Roads Convention and the Governance Workshop, gTKP has created a **Conference Attendance Support Fund**. This fund has been set up to help delegates wishing to participate in a gTKP organised, co-organised or supported event, but who may have difficulties meeting the expenses involved.

Full guidelines on how to apply, together with an application form, can be found on the [gTKP website](#).

I would also like to take this opportunity to thank all those readers who have kindly completed and returned the recent gTKP survey. Your opinions are very important to us and will be invaluable in helping us respond ever better to evolving needs.

Please don't hesitate to send us regularly YOUR information, best practice experiences and research so that it may be considered for publication on the gTKP website. Sharing knowledge is key to progress in the transport sector.

Kind regards,



Sibylle Rupprecht  
Director General, International Road Federation  
Project Manager, global Transport Knowledge Partnership

### Free advice from technical experts

gTKP offers free expertise to transport practitioners and other interested people. You can contact us with a query by emailing [info@gtkp.com](mailto:info@gtkp.com) or by finding the most relevant theme champions and contacting them directly. Email addresses of all our theme champions are in this newsletter under each theme.

### Let us know what you think

As always we welcome your comments, questions and suggestions. You can contact us on [info@gtkp.com](mailto:info@gtkp.com) or by joining our discussion groups on [www.gtkp.com](http://www.gtkp.com).

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The emerging wave of private finance challenges policy networks in many developing countries. It also brings to question institutions that have, over many decades, defined the provision of transport in these countries. [Read more...](#)

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- Fleet Safety - World Class case studies now available.
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### Rural Transport

We report on a successful way to produce road paving quality, fired clay bricks using agricultural waste. A new web page has been created to provide access to Training and Educational Material that can be downloaded. [Read more...](#)

### Social Development

The Technical Research Centre of Finland (VTT) has developed a new VRU (Vulnerable Road User) warning system for drivers. It is probably the first roadside sensing tool that detects living objects using thermal imaging technology interfaced as part of an overall cooperative intelligent traffic safety system.

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### Urban Mobility

Following the success on the Vélib bike sharing system in Paris, Mayor Bertrand Delanoë is - according to a recent article in Business Week - planning to deploy a fleet of 2,000 electric cars that customers can pick up and drop off at rental stands around the city. [Read more...](#)

### Finance & Economics

The Asian Development Bank (ADB) and the Asian Development Bank Institute (ADBI) have been performing a flagship study on Infrastructure and Regional Cooperation that examines the key issues and challenges facing cross-border infrastructure development in Asia. [Read more...](#)

### Environment & Climate Change

gTKP has joined the UN-DESA, the ADB and other key stakeholders on the Partnership on Sustainable Low Carbon Transport. The overarching goal of the Partnership is to mobilise global support for reducing the growth of greenhouse gas (GHG) emissions generated by land transport in developing countries.

Initial focus: Asia and Latin America. [Read more...](#)

### Trade & Transport

A USD 40 million investment in a new 1.5 million TEU container terminal at Djibouti is part of a larger regional vision for linking rapidly growing markets in the Horn of Africa to the Middle East, and the development of a transshipment hub at the mouth of the Red Sea. Ethiopia's goal of trade links to Sudan and the East African Community extend the impact inland. [Read more...](#)

## Governance

### Governance in Transport: The Challenge of Private Financing of Roads

The [August and July newsletters](#) mapped out the strategy of the Governance Theme. This edition reflects on one of the biggest challenges facing transport policy arenas and institutional structures around the world, but particularly in the developing countries. The challenge is engaging private finance. Before exploring this emerging issue, an historical recap is required for context.

In the eighties and nineties, nearly all developing countries grappled with restructuring transport organisations. This restructuring sought to improve service delivery, albeit under the public sector. In Africa, for instance, the lead banner was the Road Management Initiative (RMI) of the World Bank and UN Economic Commission for Africa that was launched in 1987. This initiative sought to find solutions to poor infrastructure by remodelling public financing of roads. After ten years, the initiative would eventually culminate in the Second Generation Road Fund. This new framework was a reformulation of the First Generation Road Fund that had performed poorly in the seventies, dogged partly by poor delineation of responsibilities within the public sector. The new framework was a shift from a sole focus on finance to examining the public organisations that delivered road service.

The Second Generation Road Fund is grounded on New Public Management (NPM). The NPM philosophy was that the public sector needed greater market orientation for efficient public service delivery. This led to corporatisation of the public sector. As a result, many Ministries of Transport emerged as spin-offs of giant Ministries of Infrastructure. An implicit feature of these reforms was that

market power, with respect to road space, remained under the public sector. Only the public sector could determine fees for service.

A strand of the emerging wave of Public-Private Partnerships (PPP) changes this position. The public sector could concede market power. On the other hand, save for the boundaries of economic regulation, the private investor determines fees for service in concession contracts.

In many of the developing countries, policy and institutional reforms responding to the wave of private finance are only just emerging. Many questions linger. How will this wave change existing networks of policy actors? For instance, how could existing relationships between government departments eventually change? How can these changes be influenced, and how should we generate the requisite knowledge [sound science] to guide these changes?

This space will address these questions over the coming months. It will relay arguments contributed by professionals from different disciplines and career backgrounds. Key issues will also be considered in the forthcoming [Arusha Roundtable](#), and similar events going forward. We invite you to join the dialogue.

Contact Fred Amonya, Theme Champion for Governance, on [Fred.Amonya@gtkp.com](mailto:Fred.Amonya@gtkp.com)

## Road Safety

### African Road Safety Plan of Action

gTKP was represented among more than 100 delegates attending The African Regional Road Safety Seminar, held in Dar es Salaam, Tanzania from 9-10 July on the theme "Setting Road Safety Targets: A Way Forward for Reducing Accident Fatalities by Half by 2015".

The seminar report, which sets out a series of targets and performance indicators for achieving the stated goal of reducing fatalities by half by 2015 is available [here](#).

### World class case study provided sound evidence of success

Despite increasing interest in the potential of well managed fleet safety to improve overall road safety, a new paper - [now available through the Transportation Research Board \(TRB\)](#) - addresses a key research gap by developing and evaluating an effective process for improving fleet safety through a case study of Wolseley, one of the world's leading suppliers of heating, plumbing and building materials. Further case studies and guidance are available through [our recently updated Fleet Safety pages](#).

### UN Call for a Decade of Action for Road Safety

UN Secretary-General Ban Ki-moon has encouraged member governments to "support efforts to establish [a decade of action](#)" in a report on global road safety to the UN General Assembly.

In his [report which can be read here](#), Ban Ki-moon also encourages member states to pay attention to building lead agency capacity. He further acknowledges "the importance of the [World Bank Global Road Safety Facility](#) as a means to increase the resources needed to address road safety in low and middle income countries".

gTKP is a full member of the Road Safety Collaboration mentioned in section III of the report, and provides the road safety theme for gTKP as part of the capacity building programme.

Contact Adrian Walsh, Theme Champion for Road Safety, on [adrian.walsh@gtkp.com](mailto:adrian.walsh@gtkp.com).

## Rural Transport

### Fired Clay Brick Road Paving using Agricultural Waste

Many rural communities produce clay bricks in simple clamps or kilns for their domestic housing needs. Wood or agricultural waste is usually used for the firing process. A prime benefit is that the building materials are locally produced with no significant haulage or import component. Unfortunately, the quality is usually too low for use as durable road paving. A recent gTKP report documents the successful use of rice husk fired clay bricks in Vietnam, where high quality fired clay bricks are produced that are suitable for road surfaces. The bricks are sand-cement mortar, jointed in place to produce a durable, low-maintenance road or motor-cycle surface. These experiences suggest that other agricultural wastes could be similarly used to produce paving quality bricks with appropriate simple kiln technology. The kilns can be easily constructed by the communities themselves or by local small enterprises. The technique seems to offer a low carbon footprint solution for durable road paving, as the CO<sub>2</sub> produced in the brick firing

process is only a fraction of the greenhouse gas taken up in the cyclical growing of the staple rice crop. The gTKP report can be downloaded from the [Surfacing Options](#) webpage.

### Training and Educational Material

We have created a new web page for [Training and Educational material](#). The objective is to provide access to training and educational material that has been developed specifically for Rural Transport related topics relevant to developing and emerging economies.

The material may be country or project specific. However, the intention is that practitioners, trainers and educational course developers will be able to access the material posted, decide whether any of it is applicable to the intended or local use, and possibly adapt it for their specific purpose.

We welcome further contributions and documentation for posting on this web-page.

### Technical Queries

Don't forget that we have a free technical queries service. In the last 20 months, we have successfully responded to 36 technical queries on Rural Transport.

Contact Rob Petts, Theme Champion for Rural Transport, on [rob.petts@gtkp.com](mailto:rob.petts@gtkp.com).

## Social Development

### Cooperative Traffic Infrastructure - New Vulnerable Road User Detection System developed

The system detects living objects such as pedestrians, cyclists or animals in dangerous traffic environments, such as motorway exits, and sends a warning message to drivers.

The system is part of a wider cooperative traffic safety system, developed by the SAFESPOT integrated project ([www.safespot-eu.org](http://www.safespot-eu.org)), which facilitates communication between vehicles and the traffic infrastructure. It is probably the first roadside sensing tool that detects living objects using thermal imaging technology interfaced as part of an overall cooperative intelligent traffic safety system.

The advantage is that warnings of risky situations can be efficiently transmitted to drivers – without the need for expensive thermal cameras in each individual vehicle.

Identification is based on a thermal vision system that uses image analysis (speed, size, shape and temperature information) to detect humans and animals. The system is integrated into a sensor fusion module. This sends data to a local dynamic maps database modelling the driving environment. The system is currently being tested on a motorway in Turin, Italy.

For more information, please click [here](#).

Contact Nathalie Pereira, Theme Champion for Social Development, on [nathalie.pereira@gtkp.com](mailto:nathalie.pereira@gtkp.com).

## Urban Mobility

### From Velib to Autolib, Paris initiates electric car sharing

Following the success on the *Vélib* bike sharing system in Paris, Mayor Bertrand Delanoë is – according to a recent article in *Business Week* - planning to deploy a fleet of 2,000 electric cars that customers can pick up and drop off at rental stands around the city.

The scheme, dubbed *Autolib* - short for "automobile" (car) and "liberté" (freedom) - is scheduled for launch as early as the end of 2010. Advocates say the system would reduce carbon dioxide emissions by 22,000 tonnes a year while improving traffic congestion. Paris would be the first major city to offer such a service. The city hasn't yet revealed how much *Autolib* is expected to cost, but French newspaper *Le Parisien* pegs the price tag at USD 14 million to build some 1,400 self-service rental and recharging stations around Paris and adjacent suburbs.

The scheme will most likely be operated as a public-private partnership, with the winning bidder building the infrastructure and operating the programme. *Autolib* would operate on much the same basis as the city's *Vélib* bike sharing scheme. Drivers will be able to pick up a car at any rental stand by simply swiping a credit card in a reader, and without having to make a prior reservation. The car can then be similarly dropped off at any stand when it's no longer needed. The cars will probably be limited to a driving range of no more than 100 miles before needing a recharge, making them unsuitable for long trips. Although rates haven't yet been set, city officials say each half-hour is likely to cost somewhere between USD 6 to

9. Customers would have to register for the *Autolib* scheme in advance, by presenting a valid driver's license and paying a monthly subscription fee of about USD 22 -29. Companies bidding for the *Autolib* contract are banking on these fees to turn a profit.

French environmentalists argue that *Autolib* cars could worsen congestion on Paris' already-crowded streets. Environmentalists favour ride-sharing programmes or more traditional rental schemes, which discourage people from going for drives on a whim. "Encouraging the public to use any type of car instead of taking bikes or public transportation is a mistake," says Denis Baupin, a Deputy Mayor of Paris and a prominent Green Party leader.

For more information, see the full *BusinessWeek* article [here](#) ; a summary of the system [here](#); the latest announcements from the Paris Town Hall (in French) [here](#).

Contact Peter Midgley, Theme Champion for Urban Mobility on [peter.midgley@gtkp.com](mailto:peter.midgley@gtkp.com).

## Finance and Economics

### "Infrastructure for a Seamless Asia" - New book by ADB/ADB I now available

The Asian Development Bank (ADB) and the Asian Development Bank Institute (ADB I) have been performing a flagship study on **Infrastructure and Regional Cooperation** that examines the key issues and challenges facing cross-border infrastructure development in Asia. Despite some progress, the infrastructure development in Asia still lags behind its economic growth, as well as international standards in terms of quantity and quality. The most significant gaps in the region are associated with energy and transport.

The study is being undertaken in two segments and the findings will be published in a two-volume book. The first volume, "[Infrastructure for a Seamless Asia](#)", has just been released. Chapter 5 focuses on the issues and challenges of financing infrastructure.

The study examines several critical questions, including:

- What are the costs and benefits of regional infrastructure in Asia?
- What are the financing requirements for developing Asian infrastructure?
- How can Asia meet its infrastructure financing needs?
- Can Asia learn from European and Latin American experiences?

According to the new book, Asia will need to invest USD 8 trillion in overall national infrastructure and USD 290 billion in regional infrastructure between 2010 and 2020. If this investment is made, developing Asia's real income during this period and beyond could reach USD 13 trillion.

The region's vast domestic savings would be the main source of financing for Asia's massive infrastructure investment requirements. Due to the current turmoil in global financial markets, the public sector will necessarily continue to play a dominant role in financing infrastructure. Asian governments must bolster their collective efforts to mobilise a large pool of regional savings for viable regional infrastructure investments. If such "bankable" regional projects are created, then private financing could be obtained through involving public private partnerships.

The study suggests that an Asian Infrastructure Fund (AIF) should be established to help mobilise Asian and international funds, and to meet the challenges of preparing and financing "bankable" regional infrastructure projects.

The book is available [here](#).

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## Environment and Climate Change

### gTKP joins the Partnership on Sustainable Low Carbon Transport

gTKP has joined the United Nations Department of Economic and Social Affairs (UN-DESA), the Asian Development Bank (ADB) and other key stakeholders on the Partnership on Sustainable Low Carbon Transport. Focusing initially on Asia and Latin America, the work of the Partnership will target four specific objectives:

1. The integration of sustainable, low carbon transport in climate negotiations, as well as national and local climate policies and programmes,

2. The integration of climate considerations in regional, national and local transport policies,
3. To mainstream Sustainable, Low Carbon Transport in the strategies and operations of international development organisations,
4. To contribute to sustainable development and the Millennium Development Goals, especially by providing access to goods and services for lower income groups.

The Partnership will be guided by the three principles included in the Bellagio Declaration on Transportation and Climate Change ([Bellagio Declaration on Transportation and Climate Change](#)) and associated initiatives:

- Principle 1: *Effective climate action is incomplete without addressing the overall system performance of the transport sector.*
- Principle 2: *Climate action in the transport sector should recognise co-benefits*
- Principle 3: *Carbon finance mechanisms and associated procedures should catalyse sustainable transport policies, programmes and projects*

The activities of the Partnership will include policy dialogues, knowledge generation and knowledge dissemination. Attention will also focus on awareness and capacity building as well as institutional strengthening. Developing countries will only be able to make significant progress towards sustainable, low carbon transport if they themselves assume a lead role in the design and implementation of sustainable, low carbon transport policies; and if international organisations put in place appropriate instruments to complement and foster these efforts at regional, national and local levels.

### **World Development Report 2010: Development and Climate Change**

The [World Development Report 2010](#), published in September 2009 by the World Bank, explores how changes in public policy will be needed to help people cope better with new or worsened risks; how land and water management should be adapted to improve protection of a threatened natural environment; and how energy systems will need to be transformed. The authors examine strategies to integrate development realities into climate policy, reflected in international agreements and instruments to generate carbon finance, as well as in measures to promote innovation and the diffusion of new technologies.

The report highlights that developing countries will bear the brunt of the damage and resultant costs provoked by climate change. Already, policymakers in some developing nations observe that an ever increasing percentage of their development budgets is being diverted to cope with weather-related emergencies.

Creating new technologies, and ensuring better distribution of the proven ones that exist, will play a major part in achieving a "climate-smart" world, concludes the report. Investment in research and development needs to be drastically increased, from prevailing levels of around USD 53-73 billion to several hundreds of billions of dollars per year. Incentives also need to be created to encourage dynamic pursuit of innovative solutions by both the public and private sectors. The report further stresses that low-carbon technology transfer to developing countries has been exceedingly modest to date, and should be boosted accordingly to ensure that developing countries can be part of the innovation process.

Developing countries, whose average per capita emissions are a fraction of those in high-income countries, will require massive expansions in energy sufficiency, transport, urban systems and agricultural production. This process - if it involves undue access to energy and other services using high-carbon technologies - risks escalating greenhouse emissions and further exacerbating climate change.

The report, however, finds that existing low-carbon technologies and best practices could reduce energy consumption significantly, thereby both limiting emissions and making economies. For example, the report notes that it is possible to cut energy consumption in industry and the power sector by 20%, thereby helping to reduce carbon footprints without sacrificing growth.

The main thrust of the report is that if developed countries act now, a climate-smart world is feasible, and while the costs for getting there will be high they are manageable and constitute a critical investment towards determining the climate of tomorrow and the choices that shape our future.

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## **Trade and Transport**

### **Developing a Regional Transport Hub**

Many countries are seeking to establish their main port as a hub and transshipment port. Djibouti is an interesting example. It is a small country, with a population of approximately 600,000, that nevertheless sits at the entrance to the Red Sea on one of the major global shipping lanes. Like Salalah Port in Oman, it seeks to attract cargo from the maritime superhighway connecting the Americas, Europe and Asia for reconsolidation and transshipment to ships serving the East Coast of Africa and potentially the Arabian Peninsula and Gulf States.

Based on this vision, a new container terminal on an artificial island across from the old terminal was opened in March 2009 at a cost of USD 400 million. Phase 1 of the Doraleh Container Terminal is built to handle 1.5 million twenty-foot equivalent units (TEUs) per year and will have a total capacity of 3 million TEUs when Phase 2 is built. The terminal offers 18 metre depths, large modern cranes, reputed to be achieving 35 moves per hour, and the latest terminal information systems.

Djibouti has set a national goal of being a bridge between Africa and the Middle East, particularly the Gulf States. It is rapidly developing the infrastructure to support this vision. Its terminal operator and key investor, DP World, manager of the country's port and airport, has committed to the construction of a major international hotel and the joint development with the Government of Djibouti of a Free Trade Zone. Emirates National Oil Company has constructed and operates a new jetty oil terminal serving the surrounding countries. To build visibility for this link, Djibouti is hosting the Infrastructure Sector Meetings for COMESA this October as well as a Joint Trade Forum between COMESA and the Gulf Economic Council countries.

The backbone of current Port operations is Ethiopian transit traffic. Before the Eritrean conflict, Djibouti handled 1.2 to 1.7 million tones per year. The Port of Djibouti now handles most Ethiopian overseas trade. In 2007, port traffic reached 7.5 million tonnes and in 2008 over 10 million tonnes, which includes 356,462 TEUs. Ethiopia's development goals include expansion of its transport infrastructure to better link internal development centers with Djibouti, Sudan, Kenya and the rest of the East African Community. Therefore, there is a convergence of goals that lead to the strengthening of the Ethiopia Djibouti Corridor and its intermodal connections at both ends to rapidly growing African markets, to the Middle East and beyond. Both countries are currently planning investment in their road and rail networks to realise the economic development potential of their geographic locations.

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