

Mega events

- pacemaker of sustainable urban transport concepts

Issues / Recommendations / Reading List

The document has been prepared as part of the project 'Climate-friendly mobility in Ukrainian cities'. The project is part of the International Climate Protection Initiative. The German Federal Ministry for Environment, Nature Conservation and Nuclear Safety supports this initiative based on a decision of the German Bundestag.









Issues

Climate-friendly mobility cannot be separated and limited exclusively to the period of a special event – be it a sports event, a concert or a religious celebration. Rather, concepts and measures should kick-start a move towards long-term climate-friendly conditions and behaviour.

The transport milestones developed during the 2010 FIFA World Cup form part of the lasting legacy that will be enjoyed by generations of South Africans for many decades, long after the World Cup has come and gone. (South African Minister of Transport SIBUSISO NDEBELE) Mega events have been steadily on the rise as part of the globalisation process. Sports events stand out in general for the impact they have on the economic, ecological and social situation. In times of tight budgetary restrictions, in particular, they are subject to ever growing pressure for justification. Great emphasis is also attached to the **principle of sustainability**, given the growing importance of mega events.

These should not only focus attention on the host country or host city in the short term – there must also be recognisable long-term benefits.

The 'Green Games' of **Sydney 2000** were the first in which a host city implemented a broad-based environmental concept as part of the Olympic Games. The concept objective was to organise a mega event that maximised environmental compatibility. The lessons learned would also be of use for future improvements in the regional or national context. Sydney 2000 was the first 'car-free' Olympic Games (new direct railway links to the Olympic Park and airport, a general 5km 'no-drive zone' for private vehicles around the Olympic Centre, etc).



1 – The majority of EURO2008-spectators used public transport in Austria and Switzerland (Picture: amp, Andreas Maatz)

Prior to the 2006 FIFA World Cup GermanyTM, sustainability and the environment had played virtually no part in major football events. However, projects and programmes established in Germany laid down a benchmark for future events which was adopted in the staging of UEFA EURO 2008TM in Austria and Switzerland and explicitly acknowledged by the event organiser, UEFA.

With its 'Green Goal' programme, the organising committee of the **2006 FIFA World Cup Germany**TM was the first to implement an environmental concept with quantifiable targets. In four core areas – of which mobility was one – measures were decided that would help sustainably

improve the environmental situation both locally and across Germany as a whole. In addition, reduction and compensation measures made a contribution to global climate protection. The environmental programme was embedded in a long-term campaign accompanying the **2006 FIFA World CupTM** and linked with specific programmes for target groups and regional special activities.

Key objectives in the field of 'mobility' were:

- to reduce environmental impact in the vicinity of the stadium
- · to increase the proportion of local public transport used for travel to and from games





to create environmentally friendly transport services specific to target groups

Measures aimed at addressing these objectives included:

- · infrastructure improvements to the public transport network in all host cities
- · additional services to stadiums and big screen locations on match days
- · combi-tickets for use on local public transport by stadium visitors
- special offers from DB AG (German rail) and individual joint public transport associations for travel to and from host cities
- · free travel pass for accredited journalists for use on the DB AG network during the tournament
- · uniform guidance and information system at the station and approaches to the stadium
- · development of Park&Ride parking spaces, traffic guidance systems along major thoroughfares
- use of hydrogen-powered shuttle buses (Berlin)

Austria and Switzerland developed and implemented a joint sustainability concept for **UEFA EURO 2008**TM. The following objectives were set for the 'transport' module:

- · reduction of traffic-induced environmental pollution
- proportion of public transport greater than 60 per cent for long-distance travel, greater than 80 per cent for local travel
- proportion of pedestrian and cycle traffic greater than 5 per cent

Measures aimed at addressing these objectives included:

· combi-tickets incl. for long-distance travel within the rail network



2 - Information provided to visitors on access to stadium in Vienna (with focus on public transport) (EURO2008) (Picture: amp, Andreas Maatz)

- \cdot $\,$ accreditation accepted as a valid ticket for journalists, UEFA staff and volunteers
- 'defensive' (Park & Ride) car parking facilities
- fuel-saving training for drivers
- \cdot use of alternative engine systems and fuels for the official transport fleet
- · information campaign for those travelling to host country by train and bus from abroad

Financing by the two federal governments and Euro 2008, SA made it possible to create a unique offer in the form of the combi-ticket. Along with their ticket, match ticket holders also received a General Abonnement travelcard, which was valid for up to 36 hours on the entire public transport network in Switzerland and on the rail routes operated by ÖBB (Austrian railway) and in host cities in Austria.

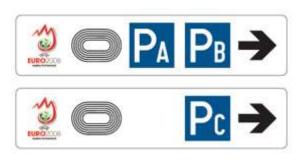
The combi-ticket played a significant part in the high frequency of public transport use. One survey found that 86 per cent of public transport passengers made a conscious decision to use the combi-

ticket and almost 60 per cent were influenced by it in their choice of transport. Attractive travel



offers were created by ÖBB (Austrian railway), the host cities and regional transport companies for fans without tickets.

A visitor survey found that although the modal split objectives could not be achieved on all match days on account of the visitor structure, measures taken and heavy promotion resulted in considerable improvement and awareness-raising. Taking all match days into account, it was calculated that approx. 50 per cent of visitors opted to travel to the venue using environment-friendly public transport (long-distance transport). For journeys to the stadium the figure was approx. 70 per cent, and for matches in Vienna approx. 80 per cent (incl. pedestrians and cycle users). In addition, the proportion of taxi users sometimes reached 5 per cent or more.



3 - Traffic signs for dedicated parking facilities

(Picture: amp, Andreas Maatz)

Extra parking for visitors was limited. Most venues in Switzerland provided decentralised, pay-and-display car parks combined with a shuttle service to the city centre and stadium. In Austria, findings showed that car parks, in particular those designated for use by fans, were not utilised to anything approaching full capacity.

The frequency of services in both local and longdistance transport was increased significantly during EURO 2008 thanks to the involvement of

the host cities and the SBB and ÖBB (Swiss and Austrian railways respectively), so that all visitors could reach their destination on time and were able to return to their home or temporary accommodation after the match. Switzerland and several of the Austrian host cities, for example, set up an all-night network for regional rail travel.

Specially marked cycle paths, additional cycle parks and pedestrian walkways to and from fan zones and stadiums were set up to promote pedestrian and cycle traffic.

Recommendations

The following insights can be drawn from past experience and trends to help with future mega events:

- · it is possible to actively influence attitudes to more climate-friendly mobility behaviour;
- · a coordinated sustainability programme that takes into account the issue of 'mobility' is highly recommended;
- it makes sense to identify and establish common objectives with partners in other venues; 'competition' plays a facilitating role in this respect (c.f. Austria-Switzerland and in the years ahead Poland-Ukraine).

This means that the key issues in terms of influencing climate-friendly mobility behaviour by visitors are:

• public passenger transport: adequate volume and quality, attractive fares and offers, acquisition and use of low-emission vehicles





- taxis: adequate and modern capacities, combined with attractive facilities for boarding and alighting at key locations
- · car park management: prioritisation of travel by bus, use of existing temporary parking areas to minimise the sealing of any additional areas, payable car park management
- traffic guidance and information systems for visitors: orientation guidance provided in local public transport, reduction in numbers of cars and buses looking for parking spaces, short access routes to final destinations
- travel and transport information for visitors: early information to influence choice of transport alternatives in favour of local public transport, coordination with 'accommodation' (links to major fan accommodation providers), coordination of information media (flyers, internet, travel guides)
- · pedestrians and cyclists: attractive and safe footpaths, early support for cycle use (local population) and provision of hire cycles (foreign visitors)
- · training sessions on driving and service provision (fuel saving, service personnel and volunteers)

Johannesburg on the move during the Soccer World Cup



For the Soccer World Cup, the organisers expected thousands of fans from all over the world in Johannesburg. The city became a meeting point for people from different countries and cultures, all connected to one other by a passion for the same sport. The good news is that the thousands of visitors to the city of four million inhabitants had no difficulty getting to and from the two stadiums, Soccer City and Ellis Park, quickly, safely and in comfort. On behalf of the German Government, KfW Bankengruppe financed the planning of a new public transport system in Johannesburg and GTZ provided advisory services to the city of Johannesburg on the planning and the

construction of its Bus Rapid Transit System (BRTS), a development designed to benefit all users.

More at www.sutp.org/brtjohannesburg



Reading list - mobility concepts for major events

Blue Skies at Shanghai EXPO 2010 and Beyond: Analysis of Air Quality Management in Cities with Past and Planned Mega-Events

http://cleanairinitiative.org/portal/system/files/attach/AQM in Mega-Events Survey Report FINAL.pdf

(with an overview of the Olympic Games, EXPO, Asian Games in Yeosu Korea 2012, Shanghai China 2010, Zaragoza Spain 2008, Aichi Japan 2005, London UK 2012, Beijing China 2008, Athens Greece 2004, Sydney Australia 2000, Atlanta USA 1996, Seoul Korea 1988, Guangzhou China 2010)

'Clean Air at Mega-Events' website

CAI-Asia is developing a website to communicate relevant information about past, present and future mega events, with a view to guiding future host cities on measures and strategies to improve clean air management in their cities.

More on: http://megaevents.cleanairinitiative.org

EURO 2008 - Evaluation Report Sustainability

http://www.are.admin.ch/themen/nachhaltig/00270/02671/index.html?lang=de&download=NHzLpZeg7t,lnp6l0NTU042l2Z6ln1acy4Zn4Z2qZpnO2Yuq2Z6gpJCDfXx8hGym162epYbg2c_JjKbNoKSn6A--

(German Language)

EURO 2008 - Die UEFA EURO 2008 TM - Verkehrsmanagement und Mobilitätsverhalten zu den Spielen in Österreich Abschlussbericht (Final Report on Traffic Management and Mobility Patterns for Matches in Austria; German Language)

http://www.bmvit.gv.at/verkehr/gesamtverkehr/download/euro2008.pdf

FIFA 2006 - World Cup 2006 - Legacy Report

http://www.oeko.de/oekodoc/292/2006-011-en.pdf

The FIFA report summarizes the results and lessons learned from the 2006 World Cup in Germany. In chapter 4.4. it describes the measures taken in the transport sector to reach Green Goal aims and reduce the environmental impact of the World Cup.

Bovy (2001): Exceptional Mobility Management for large events: Transport Issues for the Sydney 2000 Olympics.

http://www.mobility-bovy.ch/page1/assets/49_UITP.London.01.pdf

This paper offers a comprehensive overview of the transport concept for the 2000 Olympic Games in Sydney.

SMASH: Ecological event management

http://www.smash-events.net/evm_mobility.phtml?sprache=en



The international 'SMASH-EVENTS' project aims at developing a standard for integrated environmental management for large events. More particularly, it tends to add the aspect of mobility management to already existing practices in reducing the environmental impact of large events. The website includes a best practice example in the transport sector.

e-Atomium (2006): Mobility Management - Training manual

http://www.e-atomium.org/IMG/pdf/mm_manual.pdf

The aim of the e-Atomium training project is to strengthen the knowledge of local / regional managing agencies in the transport field and to accelerate the take up of EU research results in the field of local and regional transport. The compendium contains results of EU research projects and complementary results of national research projects and is mainly based on the Mobility Management Manual, which was developed as part of the PORTAL project in 2002.

Victoria Transport Policy Institute: Special Event Transport Management

http://www.vtpi.org/tdm/tdm48.htm

Part of the Online TDM Encyclopedia, a comprehensive information resource concerning innovative transportation management strategies. This describes dozens of Transportation Demand Management (TDM) strategies and contains information on TDM planning, evaluation and implementation. It also contains a large number of hyperlinks that provide instant access to more detailed information, including case studies and reference documents.

VRR (2008): Public transport concept for the Love Parade 2008 in Dortmund

http://www.cities-for-

mobility.net/index.php?option=com_docman&task=doc_download&gid=238&Itemid=131

Prepared by the local organization for public transport, this presentation shows the concept and experiences for organizing public transport to and from the Love Parade 2008, a major event with about 1.2 million visitors.

City of Dortmund (2008): Experiences with the urban 'World Cup Mile' in 2006

http://www.cities-for-mobility.net/documents/wc08/cfm_world_congress_workshop_d_dortmund.pdf

A presentation prepared by the City of Dortmund, which summarises experiences in establishing a 'Fan Cup Mile' in the city for use by fans during World Cup matches. By providing these special pedestrian areas, the city significantly reduced pressure on public transport for travel to and from the stadium.

Mobility Management during the 9th National Games of China in Guangzhou

http://www.cities-for-mobility.net/documents/wc08/cfm_world_congress_workshop_d_guangzhou.pdf

Presented during the CFM World Congress, this summary provides a useful overview of the experiences gained by the City of Guangzhou during the National Games. It also contains recommendations for key actors in organising transport provision at mass events.



Future plans for mobility in Curitiba: Preparing the city's urban transport system for the FIFA World Cup 2014

http://www.cities-for-mobility.net/documents/wc08/cfm world congress workshop d curitiba.pdf

This presentation provides information about Curitiba's integrated transportation network, with a special focus on the city's bus/bus rapid transport system.

Belo Horizonte: Preparing the city's urban transport system for the challenge of the FIFA World Cup 2014

http://www.cities-for-

mobility.net/documents/wc08/cfm_world_congress_workshop_d_belo_horizonte.pdf

This presentation shows the concept for preparing the City of Belo Horizonte for the 2014 World Cup. This document is available in Portuguese only.

ivm: Major event management in Frankfurt and the Rhine-Main region

http://www.ivm-rheinmain.de/index.cfm?siteid=31

The ivm rheinmain website offers information about transport management for special events in the Rhine-Main area around Frankfurt. The organisation was engaged in planning for the 2006 World Cup and is involved in forthcoming events (available in German only).

ITS for large events - the STADIUM project: http://www.stadium-project.eu/site/index.php?id=15

STADIUM stands for Smart Transport Applications Designed for large events with Impacts on Urban Mobility. The STADIUM project aims at improving the performance of transport services and systems made available for large events hosted by big cities. The project demonstrates Intelligent Transport System (ITS) applications at three major events: the South Africa World Cup (2010), the India Commonwealth Games (2010) and the London Olympics (2012).

World Cup 2010 - South Africa - Overview on transport operational plans and concepts

Host cities / venues:

City	Stadium	Stadium capacity
Johannesburg	Soccer City Stadium	94,700
	Ellis Park Stadium	65,000
Durban	Moses Mabhida Stadium	70,000
Cape Town	Green Point Stadium	68,000
Tshwane/Pretoria	Loftus Versfeld Stadium	53,056
Mangaung/Bloemfontein	Free State Stadium	48,000
Port Elizabeth	Nelson Mandela Bay Stadium	46,500





Polokwane	Peter Mokaba Stadium	45,000
Nelspruit	Mbombela Stadium	43,500
Rustenburg	Royal Bafokeng Stadium	42,000

General approach / documents*:

- South African Department of Transport: 2010 Transport Operational Plans: Transport Sector Coordinating Forum – 19 August 2008 http://nasp.dot.gov.za/siteimgs/WC%20approach%20TSCF19%20Aug%2008.pdf
- Transport Action Plan for 2010 Version Year 2006 Action Plan for ensuring Operational Success and Establishing a Legacy of Improvement from the Investment towards the 2010 FIFA World Cup http://www.cityenergy.org.za/files/transport/resources/2010/2010_transportactionplan.pdf
- FIFA 2010 World Cup South Africa Transport Preparations http://www.pmg.org.za/files/docs/090901dot-edit.pdf
- Host City Plans Download: http://nasp.dot.gov.za/content_sub.aspx?ssID=111
- All you need to know about Match Day 1
 http://www.fifa.com/worldcup/organisation/media/newsid=1232789/index.html

Cape Town:

Webpage:

http://www.capetown.gov.za/en/GreenGoal/Pages/TransportmobilityandaccessNew.aspx

Documents:

- CITY OF CAPE TOWN, SUMMARY SUBMISSION HOST CITY TRANSPORT OPERATIONS PLAN, MAY 2008 http://nasp.dot.gov.za/siteimgs/2010%20WC%20-%20City%20of%20Cape%20Town.pdf
- HOST CITY TRANSPORT OPERATIONS PLAN: CAPE TOWN INTERNATIONAL AIRPORT
- VENUE TRANSPORT OPERATIONS PLAN http://www.satsa.com/Downloads/WC/ACSA/ctia-vtop-vers-3-20090812.pdf
- WESTERN CAPE PROVINCE: DEPARTMENT OF TRANSPORT & PUBLIC WORKS SUMMARY SUBMISSION - PROVINCIAL TRANSPORT OPERATIONS PLAN MAY 2008 http://nasp.dot.gov.za/siteimgs/Final%20PGWC%20DTPW%20PTOP%20Version%201%20Summary%20for%20NDOT%20May%202008.pdf
- 2010 FIFA WORLD CUP HOST CITY CAPE TOWN GREEN GOAL PROGRESS REPORT http://www.capetown.gov.za/en/GreenGoal/Documents/GREEN%20GOAL%20PROGRESS% 20REPORT_EMAIL.pdf





with 4 transport-related goals (objective: to promote energy-efficient and universally accessible mobility and to minimise air pollution):

- o Development of bicycle and pedestrian facilities
- Development of public transport infrastructure
- CBD bicycle servicesEcotaxis

Durban

Webpage:

http://fifaworldcup.durban.gov.za/Pages/GettingAround.aspx

Documents:

System concept	http://fifaworldcup.durban.gov.za/pages/TransportPlan.aspx
Event venues	http://fifaworldcup.durban.gov.za/pages/TheEventVenues.aspx
Pedestrian plan	http://fifaworldcup.durban.gov.za/pages/ThePedestrianPlan.aspx
Rail plan	http://fifaworldcup.durban.gov.za/pages/TheRailPlan.aspx
Public transport plan	http://fifaworldcup.durban.gov.za/pages/ThePublicTransportPlan.aspx
Regional services plan	http://fifaworldcup.durban.gov.za/pages/TheRegionalServicesPlan.aspx
Park & Ride plan	http://fifaworldcup.durban.gov.za/Pages/TheParkRidePlan.aspx
Park & Walk plan	http://fifaworldcup.durban.gov.za/Pages/TheParkWalkPlan.aspx
Long distance & charter services plan	http://fifaworldcup.durban.gov.za/Pages/TheLongDistanceCharter.aspx
Metered taxi plan	http://fifaworldcup.durban.gov.za/Pages/TheMeteredTaxiPlan.aspx
Special needs plan	http://fifaworldcup.durban.gov.za/Pages/TheSpecialNeedsPlan.aspx
Airport shuttle	http://fifaworldcup.durban.gov.za/Pages/TheAirportShuttle.aspx
People mover	http://fifaworldcup.durban.gov.za/Pages/ThePeopleMover.aspx
Traffic management plan	http://fifaworldcup.durban.gov.za/Pages/TheTrafficManagementPlan.aspx
Stadium zone TMP	http://fifaworldcup.durban.gov.za/Pages/TheStadiumZoneTMP.aspx
Beach zone TMP	http://fifaworldcup.durban.gov.za/Pages/TheBeachZoneTMP.aspx
Stadium precinct	http://fifaworldcup.durban.gov.za/Pages/StadiumPrecinct.aspx
Beach precinct	http://fifaworldcup.durban.gov.za/Pages/BeachPrecinct.aspx
Fantrains schedules	http://fifaworldcup.durban.gov.za/Pages/FanTrainsSchedules.aspx





 Durban: TRANSPORT OPERATIONAL PLAN - SUMMARY GENERAL SPECTATOR MOVEMENT PLAN AND TRAFFIC MANAGEMENT PLAN http://fifaworldcup.durban.gov.za/documents/Transport%20operational%20plan%20M arch%202010.pdf

Johannesburg

Webpage:

http://www.joburg.org.za/index.php?option=com content&task=view&id=5312&Itemid=168

Documents:

http://nasp.dot.gov.za/siteimgs/WC2010%20FIFA%20Submission%20Host%20City%20TOP%20-%20CoJ.pdf

Rea Vaya Bus Rapid Transit System:

http://www.reavaya.org.za/

Tshwane/Pretoria

Webpage:

http://www.tshwane.gov.za/fifaworldcup/index.html

Documents:

 $\frac{\text{http://nasp.dot.gov.za/siteimgs/CoT\%20WC2010\%20\%20TOP}_\%20September\%202009\%20}{\text{Rev}\%204.doc}$

Mangaung/Bloemfontein

Webpage:

http://web.mangaung.co.za/en/fifaworldcup/Pages/Home.aspx

http://web.mangaung.co.za/en/FifaWorldCup/Pages/transport.aspx

Documents:

http://nasp.dot.gov.za/siteimgs/2424_WC2010%20NDOT%20TOP%20Submission_%20Mang aung Final LV 14%20Septem.zip

http://nasp.dot.gov.za/siteimgs/WC2010%20%20FIFA%20%20HOST%20CITY%20MANGAUNG.pdf

 $\frac{http://web.mangaung.co.za/en/FifaWorldCup/MangaungPdf/A-2010-Media-Information-Iransport-Concept-28-May-2010.pdf}{}$

Road signs:

http://web.mangaung.co.za/en/FifaWorldCup/MangaungPdf/C-2010-Media-Insert2-28-May-2010.pdf

Road closures:



http://web.mangaung.co.za/en/FifaWorldCup/MangaungPdf/E-2010-Road-Closure-System-28-May-2010.pdf

FIFA Fan Fest Guide

http://web.mangaung.co.za/en/FifaWorldCup/MangaungPdf/MangaungFIFA%20FanFestguide final.pdf

Port Elizabeth (Nelson Mandela Bay)

Webpage:

http://www.nmbt.co.za/2010_transport.html

Documents:

http://nasp.dot.gov.za/siteimgs/NMBM%202010.pdf

http://nasp.dot.gov.za/siteimgs/NMBM_J00319_%202010%20TOP%20Vol%201%20Main%20 Report%20Final%20Draft 2009-09-15.pdf

Polokwane

Webpage:

http://www.polokwane.org.za/index.php?view_page+2743

Documents:

 $\frac{\text{http://nasp.dot.gov.za/siteimgs/CoT\%20WC2010\%20\%20TOP}_\%20September\%202009\%20}{\text{Rev}\%204.doc}$

Nelspruit

Webpage:

Documents:

http://nasp.dot.gov.za/siteimgs/Mbombela_VTOP.pdf

http://www.satsa.com/Downloads/WC/2010_Nelspruit_Event_Transport_Service.pdf

Rustenburg

Webpage:

http://www.rustenburg.gov.za/fifaworldcup/

Documents.

http://nasp.dot.gov.za/siteimgs/WC2010%20FIFA%20HOST%20CITY%20RUSTENBURG.pdf





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More information at www.sutp.org/suteca

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About us: Про нас: О нас:

Our project "Climate-friendly Mobility in Ukrainian Cities" works with decision-makers and planners in developing concepts, in applying international best-practices and implementing these approaches to create modern public transport systems. The project is part of the International Climate Protection Initiative. The German Federal Ministry for Environment, Nature Conservation and Nuclear Safety supports this initiative based on a decision of the German Bundestag. For more information please visit our webpage www.sutp.org/suteca

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

В рамках проекту «Кліматично сприятлива мобільність в За підтимки Федерального українських містах» ведеться робота з особами, відповідальними за прийняття рішень та планування,

міністерства навколишнього середовища, охорони природи та





скерована на розробку концепцій, використання міжнародного передового досвіду та реалізацію цих підходів для створення сучасних систем громадського транспорту. Проект фінансується Німецьким Федеральним міністерством навколишнього середовища, захисту природи та безпеки реакторів у контексті Міжнародної ініціативи по захисту клімату.

безпеки реакторів на підставі рішення Німецького Бундестагу

В рамках проекта «Климатически благоприятная мобильность в украинских городах» ведется работа с лицами, ответственными за принятие решений и вопросы планирования, направленная на разработку концепций, использование международной передовой практики и реализацию этих подходов для создания современных систем общественного транспорта. Проект финансируется Немецким Федеральным министерством окружающей среды, защиты природы и безопасности реакторов в контексте Международной инициативы по защите климата.

При поддержке Федерального министерства окружающей среды и безопасности реакторов на основании решения Немецкого Бундестага

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