

## SWITCHED ON!

### Newsletter 4 – July 2008

---

#### NEWS FROM SWITCH

1. HRH Prince Willem Alexander visits UNESCO-IHE
  2. SWITCH at EXPO 2008
  3. Spotlight on SWITCH cities
    - SWITCH activities in Accra
    - SWITCH activities in Birmingham
    - SWITCH activities in Belo Horizonte
    - SWITCH activities in Zaragoza educational centres
  4. Workshop to advance Learning Alliances to increase research impact
  5. The SWITCH movie: showing our progress!
  6. Easy access to SWITCH deliverables
  7. SWITCH photo competition results
- 

#### 1. HRH Prince Willem Alexander visits UNESCO-IHE

On 16 June 2008, His Royal Highness Prince Willem Alexander visited the UNESCO-IHE Institute for Water Education for information exchange and discussion sessions. One of the main topics covered in discussions with His Royal Highness was the scope of urban water related research aspect of SWITCH. Theme 1 Leader Peter van der Steen and Work Package 1.2 Coordinator Zoran Vojinovic, together with their MSc and PhD students, presented different aspects of the work undertaken to date. Some of the points discussed after presentations were: the necessity for paradigm shift in urban water management, integrated management and planning, the need for integrated modelling, and development of a decision support system.



HRH Prince Willem Alexander at UNESCO-IHE

#### 2. SWITCH AT EXPO 2008

The SWITCH Project recently had a very active presence at EXPO Zaragoza 2008, with presentations from the Learning Alliances of Accra, Belo Horizonte and Zaragoza and additional presentations by John Butterworth, Barbara Anton and Kala Vairavamoorthy. Videos of a 'Water for Cities' World Bank session which focussed heavily on SWITCH, plus interviews with Kala (The Netherlands), Javier Celma (LA Zaragoza) and Slawomir Turkoqski (LA Lodz) can all be seen at <http://www.e-waterexpo.org/index.php> More details can be found in the EXPO weekly newsletter [http://www.e-waterexpo.org/pdf/sesion2/news\\_en.pdf](http://www.e-waterexpo.org/pdf/sesion2/news_en.pdf)

---

#### 3. SPOTLIGHT ON SWITCH CITIES

##### >> SWITCH activities in Accra

Over the past 6 months, the members of the SWITCH Accra Learning Alliance (LA) have continued to deliberate on the way forward. A four day training workshop was held for top level planners and members of the LA in May 2008, on innovative methods for planning and management of urban water systems. Researchers could also share and discuss the relevance of research results with LA members on topics such as:

- Global change and urban water management (climate, urbanization etc)
- Moving from city development strategies to Integrated Urban Water Management.

LA members called for greater collaboration with other projects and interventions in the sector and a working group was formed to focus on strategy development.

Future agreed actions include:

- increasing collaboration with key stakeholders relating to raw water resources
- encouraging information and data sharing among stakeholders
- strengthening linkages with other partners in the sector
- undertaking research into sanitation
- incorporating the country's waste water strategy into the assembly's (AMA) development plan
- transforming research results into action.

#### Participation in other events

The Learning Alliance in Accra has participated in a number of local events in the last 6 months. Key among them was the 33<sup>rd</sup> WEDC conference held in Accra in April, 2008. The Accra LA Facilitator took part in a session on Communities of Practice and LAs to share experiences with both local and international participants.



Professor Esi Awuah at the WEDC International Conference

The SWITCH Poster Event also provided a good platform to interact with stakeholders and raise awareness. The facilitator is currently working closely with other projects (TPP and WASHCost) to promote a national level LA.



LA Facilitator sharing her experiences at the pre-launch meeting of the WASHCost Project

#### >> SWITCH activities in Birmingham

Birmingham currently has a population of one million and faces similar water issues to other large, industrialised cities, such as increasing urbanization of the landscape, increasing development, and an expanding population. In Birmingham, as in much of the UK, there are mainly combined surface water and foul water sewers and only about a quarter of the homes in the city have a metered water supply.

Birmingham is involved in four demonstration projects for SWITCH:

- green/brown roofs
- integrated catchment modelling
- attenuation of the hyporheic zone
- virus transfer in aquifers.

Research into green and brown roofs is being undertaken by Dr Adam Bates at the University of Birmingham. This project aims to understand the ability of roofs to mimic the brownfield habitat and to reduce runoff, as well as to inform the general public and practitioners about the benefits of brown roofs. Brown roof demonstration sites can currently be seen at the Birmingham Volunteer Service Council and the International Convention Centre.

'City Water Balance' is an urban water scoping model which is being developed by Ewan Last and Professor Rae McKay at the University of Birmingham. It is becoming increasingly clear that water within a city needs to be modeled holistically. This model will assess the sustainability of various water management options (such as greywater recycling and green roofs) applied to the city of the future. The Eastside development in Birmingham is being used as a test case for this.





Birmingham Volunteer Service Council brown roofs

Birmingham relied for many years on heavy industry, and as a result had polluted watercourses and groundwater. In the past decade, much work has been undertaken to improve the river water quality, although the groundwater is still contaminated. This project is *investigating the potential of the hyporeic zone within the groundwater to self-purify the water and to mitigate the impact of urban groundwater on river quality.*

The final project is the potential for *virus transfer within aquifers*. Urban wastewaters contain many viruses, and hence the use of wastewater in aquifer recharging requires a careful risk assessment. This project aims to determine the distances and depths at which viruses travel.

SWITCH in Birmingham has also been heavily involved in the *Eastside Development*. Working with Birmingham LA members, University of Birmingham, Arup and an Independent Eastside Sustainability Adviser (Rosemary Coyne), a Critical Infrastructure Positioning Statement Report was prepared and presented to the Eastside Developers Forum (available shortly at <http://switchbirmingham.wordpress.com/reports/>). This assessed the capacity of existing infrastructure (particularly water and wastewater/drainage) and a projection of future demands based upon planned development within the regeneration project. Eastside is a key component in Birmingham's renaissance: encouraging new residential communities, investment, business and job creation, economic and cultural growth. The project represents £6 billion worth of investment and brings together public and private sector organisations.

#### >> SWITCH activities in Belo Horizonte

The objectives of the SWITCH Project have a strong resonance with existing activities of the Belo Horizonte City Council (PBH) in urban water management, such as the Stormwater Master Plan and DRENURBS Programme. Participation in SWITCH has therefore been a natural process. PBH's main involvement is in:

- Non-conventional solutions for urban drainage infrastructure

- Development of hydrologic mathematical techniques
- Governance and Learning Alliances.

#### SWITCH BH implants technical experiments and social projects in Municipal Schools

Infiltration experiments will take place in Lidia Angelica Municipal School, as part of the LA approach. These alliances include students, and employees of Ladao do Nado Park. Anne Frank Municipal School is to install a rainwater capitation system to irrigate flower beds and wash patios, an idea suggested to SWITCH by the School's Environmental Council. LAs will unite students, parents, teachers, employees and community members of the surrounding area to strengthen the project's sustainability.

#### >> SWITCH activities in Zaragoza's educational centres

During the school year 2007-2008 in Zaragoza, a SWITCH educational programme was developed in some Educational Centres within the ACTUR district within the Municipal Programme of Environmental Education "From my classroom, to my city".

The specific objectives of this are:

- To supply awareness on water (resource, uses, cycle)
- To raise awareness of the SWITCH Project
- To create a critical conscience on water problems
- To analyse water management and consumption patterns
- To promote good behaviour relating to water use
- To involve the students and the educational community in saving water in the centres and in the home
- To disseminate and communicate the results of the programme more widely.

The programme aims to achieve these long term objectives by 2011. The focus for this year is on the following:

- The global and local water situation
- Zaragoza's water cycle
- Water and rivers
- Analysis of consumption in educational centres and in the home

Seven centres are participating, each having very different characteristics, including infant, secondary and special education centres.

The programme was adapted to the different educational levels and ages of the students. 1400 children and young people were involved in the activities which ran from November 2007 to May 2008.



Zaragoza Educational centre

---

#### 4. WORKSHOP TO ADVANCE LEARNING ALLIANCES TO INCREASE RESEARCH IMPACT

To share lessons after two years of experimentation with the Learning Alliance approach in the SWITCH project, a special training workshop will be held prior to the next SWITCH annual conference in Brasil. From 26-28 November 2008 in Ouro Preto near Belo Horizonte, the workshop aims to share experiences in applying the Learning Alliance approach and to draw upon the experiences of other multi-stakeholder processes and attempts to improve water governance. Given the location of the workshop in Latin America, one session will focus on the experiences in Belo Horizonte, Lima, Zaragoza and Cali. Other sessions focus on experiences in other cities and programmes, social inclusion, documentation for impact evaluation and joint strategic planning. For further details, see <http://www.switchurbanwater.eu/page/2717>

---

#### 5. THE SWITCH MOVIE: SHOWING OUR PROGRESS!

SWITCH has produced a documentary called *SWITCH: Towards a water sustainable City of the Future*. The 20-minute film shows how a combination of science, technology, stakeholders' integration and global knowledge sharing can provide solutions to the water problems facing cities now and in the future.

The film reviews research activities in three demonstration cities – Lodz, Beijing and Accra – chosen to ensure a variety of research topics and geographical areas. It aims to raise awareness among the general public and cities' stakeholders, and generate enthusiasm for a water sustainable city.

SWITCH cities can broadcast the film on national and local TV, while the SWITCH Secretariat will target it at international broadcasters and specialized channels. In addition, it is a useful and attractive communication tool for workshops and presentations. It could be used as the basis for the cities to develop short documentaries on their own research and demonstration activities, as it provides

guidelines for a consistent story. It will be made available to all SWITCH cities and research partners.

The documentary was mainly funded by the Dutch Ministry of Foreign Affairs (DGIS), the UNESCO-IHP Urban Water Programme.

Cristina Gonzalez

The video will soon be available on the SWITCH website!

---

#### 6. EASY ACCESS TO SWITCH DELIVERABLES

There is now an easy way to find and access all SWITCH public deliverables online. Go to <http://switchurbanwater.lboro.ac.uk/outputs/>, where you can search under city, theme, work package and publication type, to receive downloadable versions of all these documents.

---

#### 7. SWITCH PHOTO COMPETITION RESULTS

Thanks to all of you who sent in photographs to the SWITCH photo competition back in February. The two winning entries are from Adriaan Mels and Peter Bury who will each receive a copy of the book *Water, life force*. All entries will soon form part of a SWITCH image library, a resource which all will be able to use and add to.



Peter Bury – Zaragoza



Adriaan Mels – Tel Aviv