The participation to the event is free of charge.
Please confirm your attendance
by 25th February, 2015 to
e-mail: Andreas.Korth@tzw.de
Phone: +49-351-85211-54
Fax: +49-351-85211-10

Name:

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Institution/Company:

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Date, Signature

Address:
DVGW-Technologiezentrum Wasser (TZW)
Wasserwerkstraße 2
01326 Dresden
Germany
www.tzw.de

Accommodation:
Hotel “Am Blauen Wunder”
Loschwitzer Straße 48
01309 Dresden
Phone: +49-351-3366-0
Fax: +49-351-3366-299
email: reservierung@habw.de
www.habw.de/en

INVITATION
Demonstration of SMaRT-Online
Online Security Management and Reliability Toolkit

March 18th, 2015
TZW Dresden
Wasserwerkstraße 2
01326 Dresden
Germany

www.smart-online.eu
Project SMaRT-Online<sub>WDN</sub>

Aim of the event is the presentation of the results of the project SMaRT-Online<sub>WDN</sub> to specialists in the drinking water area. This French-German cooperative research project was funded by ANR and BMBF. It started in April 2012 and lasted 3 years.

The SMaRT-Online<sub>WDN</sub> project’s main objective was to develop an early warning system and a decision support toolkit for emergencies and the deliberate contamination of water distribution networks (WDN). The project addressed the following important topics:

- Development of an **alarm generation module** which alerts if a contamination (or a harmful or abnormal event) in the water network occurs
- **Optimal sensor placement for a sensor network** as a combination of different sensor types (e.g. quality and hydraulic sensors)
- **Online simulation model**, which is automatically calibrated to the live sensor data and simulates the current hydraulic and water quality status of the WDN
- **Improved water quality model** with more accurate transport and mixing mechanisms.
- **Source identification** to locate the contamination source by using the inverse transport model, self-learning event detection module
- **New methods for risk analysis and impact evaluation** for the three aspects of sustainability: environmental, social and economical, combined with technical innovation.

A prototype of the decision support toolkit SMaRT-Online<sub>WDN</sub> was completed by combining all these tools. It allows the end user to simulate specific scenarios and helps in their decision making.

Some functionalities of the SMaRT-Online<sub>WDN</sub> prototype will be presented in a live demonstration at the test network at TZW in Dresden.

**Project Consortium:**

**German partners:**
- Berliner Wasserbetriebe (Project Lead)
- 3S Consult GmbH
- Technologiezentrum Wasser (TZW)
- Fraunhofer IOSB

**French partners:**
- Communauté Urbaine de Strasbourg
- Veolia Eau d’Ille de France
- Veolia Environnement Recherche & Innovation
- Irstea
- Engees

**Program**

**Wednesday, March 18th, 2015**

10:00 – 10:10 **Welcome**
Dr. Andreas Korth, TZW

10:10 – 10:45 **Overview about the Project Results**
Fereshte Sedehizade, Berliner Wasserbetriebe; Dr. Olivier Piller, Irstea

10h45 - 11h45 **Project Results – Part 1**
- Alarm generation module
- Optimal sensor placement
- Online hydraulic simulation model

11h45 - 12h00 Coffee Break

12h00 - 13h00 **Project Results – Part 2**
- Improved water quality model
- Source identification module
- Risk analysis methodology of a deliberate contamination event

13h00 - 14h00 Lunch Time

14h00 - 15h30 **Live Presentation at the test track**

15h30 - 16h00 Feedback and outlook

16h00 **End of the event**

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