The participation to the event is free of charge.

Please confirm your attendance

by 25th February, 2015 to

email: Andreas.Korth@tzw.de

Phone: +49-351-85211-54

Fax: +49-351-85211-10

Name:

_____

_____

_____

Institution/Company:

_____

_____

_____

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

SMaRT-Online ^{WDN}

Online Security Management and Reliability Toolkit
for Water Distribution Networks

www.smart-online.eu

SPONSORED BY THE
Federal Ministry
of Education
and Research

ANR
PROJET FINANCÉ PAR L'ANR
PROJECT FUNDED BY THE ANR

INVITATION

Demonstration of SMaRT-Online ^{WDN} Online Security Management and Reliability Toolkit

March 18th, 2015

TZW Dresden

Wasserwerkstraße 2

01326 Dresden

Germany

www.smart-online.eu

Project SMaRT-Online^{WDN}

Aim of the event is the presentation of the results of the project SMaRT-Online^{WDN} 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^{WDN} 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^{WDN} 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^{WDN} 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'Ile de France
Veolia Environnement Recherche & Innovation
Irstea
Engees

SMaRT-Online^{WDN}
Online Security Management and Reliability Toolkit
for Water Distribution Networks
www.smart-online.eu

SPONSORED BY THE
Federal Ministry of Education and Research

ANR

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**

www.smart-online.eu