

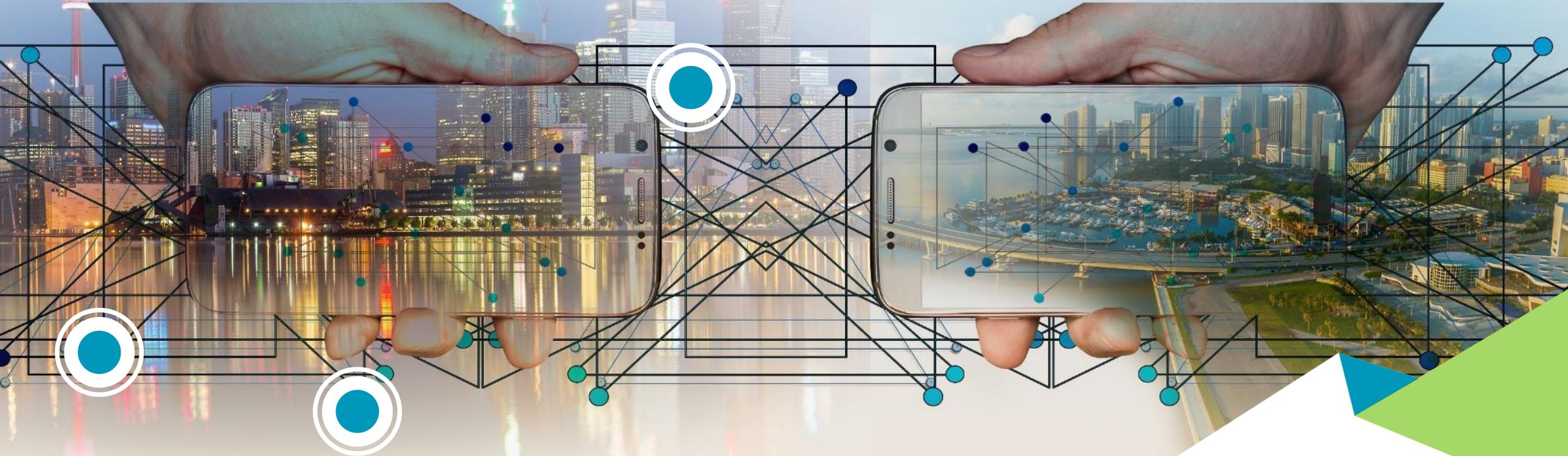
From digital to Safe City

Maximilian Weber

SENIOR VICE PRESIDENT, HEXAGON



Digital City Safe City



Use and integration of sensors

Save Cities





Agriculture

Intelligent agriculture solutions



Geospatial

Geospatial data management solutions



Geosystems

Reality-capture solutions



Manufacturing Intelligence

Sensing and manufacturing solutions



Mining

Integrated solutions for safer, more productive mines



Positioning Intelligence

Satellite positioning and correction solutions for land, sea and air



PPM

Solutions for design, construction and operation of industrial projects



Safety & Infrastructure

Applications for government, public safety, utilities and transportation



Featured Technologies

Innovative technologies & solutions for progress and problem solving

Autonomous Driving

- EMIL Research Project in Regensburg
 - Autonomous driving in urban areas
 - Laser scanner and GNSS antenna
 - 1300 journeys in 90 days – 10 terabyte of data
 - Centimeter precision



Hexagon PIM7500

- GNSS 3D-Positioning
- Inertial measuring
- Centimeter precision



Autonomous Driving – a successful test project of Hexagon, Deutsche Telekom, Fraunhofer ESK and Nokia on the digital test track A9

- Joining the technologies enable the positioning of vehicles with centimeter precision
- Using the precise location service HxGN SmartNet, regional corrections were directly delivered to the vehicle's Global Navigation Satellite System (GNSS) receiver in the vehicle.

Pilotprojekt: Digitale Teststrecke A9

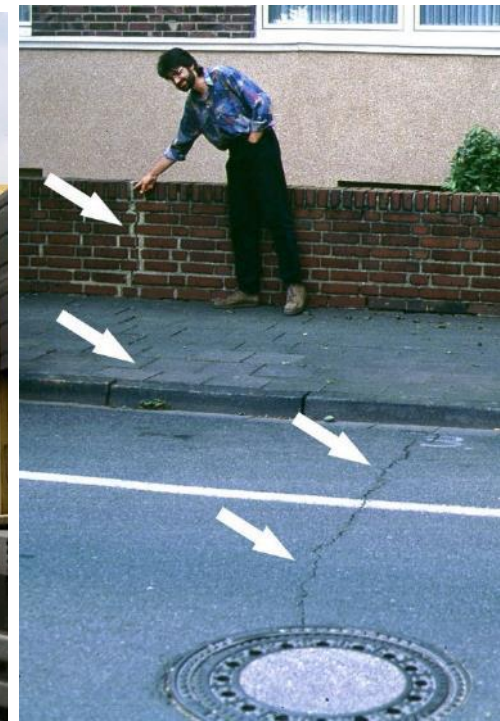


Infrastructure



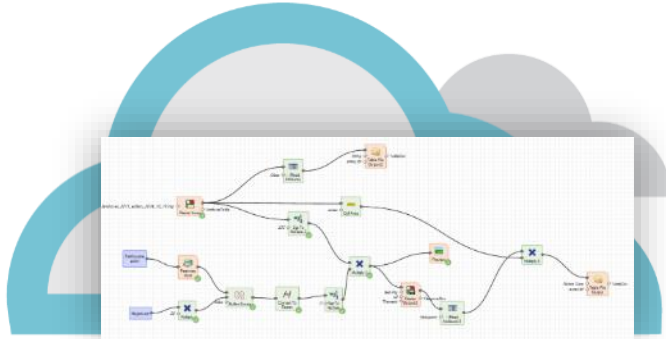
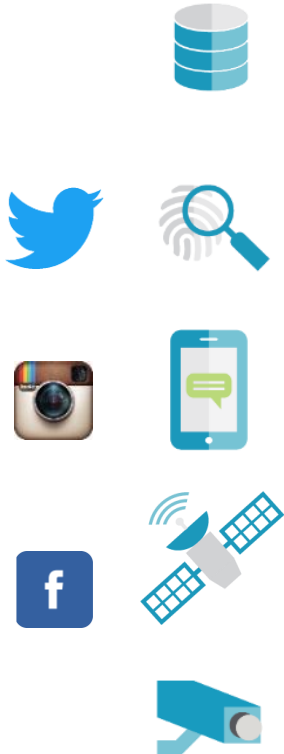
Service Infrastructure for Monitoring Ground Surfaces and Infrastructures

- Underground motions or shifts caused by stress can cause
 - Damage to the infrastructure
 - Massive interruption of operations
 - Significant risk to life, property and economy



Service Infrastructure Architecture

All
sensors
data sources



Context data / operative data

Decision support in M.App Zone



Cellphone Positioning



Startseite Bundesländer Großstädte Local Tipps Leser-R

Neue Handy-Ortung: Schon in über 1300 Notfällen im Einsatz

E-PAPER ABO & SERVICE NT-TICKET IMMO TRAUER ANZEIGEN STELLEN MAGAZINE PROSPEKTE VERLAG WETTER

Teilen

GEBEN SIE IHREN ORT EIN

Onetz

DER NEUE TAG SULZBACH-ROSENBERGER AMBERGER ZEITUNG

THEMENSUCHE

OBERPFALZ D & WELT SPORT BLAULICHT THEMEN RATGEBER BILDER MEIN ONETZ

Onetz > D & Welt

DEUTSCHLAND & WELT 06.09.2017 - 21:48 Uhr

Mittwoch, 06.06.2018

Stellen Immobilien Kfz Angebote Service

Main-Echo

Startseite Regional Überregional Sport Mediathek Anzeig

Startseite > Regional > Blaulicht

Schwerverletzter Mann: Fieberhafte Suche per Handy-Ortung

Joachim Herrmann (CSU) lä

Mittwoch, 06.09.2017,

Die vor einem h ist von den Eins 1300 Fällen gen

Nächtlicher Unfall beim unterfränkischen Knetzgau

Samstag, 25.11.2017 - 11:58 Uhr

Ein junger Mann, schwer verletzt, sitzt eingeklemmt in seinem zerstörtem Auto. Wo in Unterfranken er zuvor mit seinem Mercedes von der Autobahn und eine Böschung hinunter geschleudert ist, weiß er nicht. Mit seinem Handy ruft er in der Nacht zum Samstag den Notruf. Die Retter wissen: Jetzt zählt jede Minute.

Schutz & Rettung ZH @SchutzRettungZH Folgen

#Handyortung: Seit letztem Jahr kann die #ELZ auch Handys von Notrufen per SMS orten und so punktgenau entsprechende #Hilfe schicken. #SID24

Lokalisierungsdienst der Notrufzentrale: Bitte Link aufrufen:

Ortung LocationServices.srz.borsnet.ch

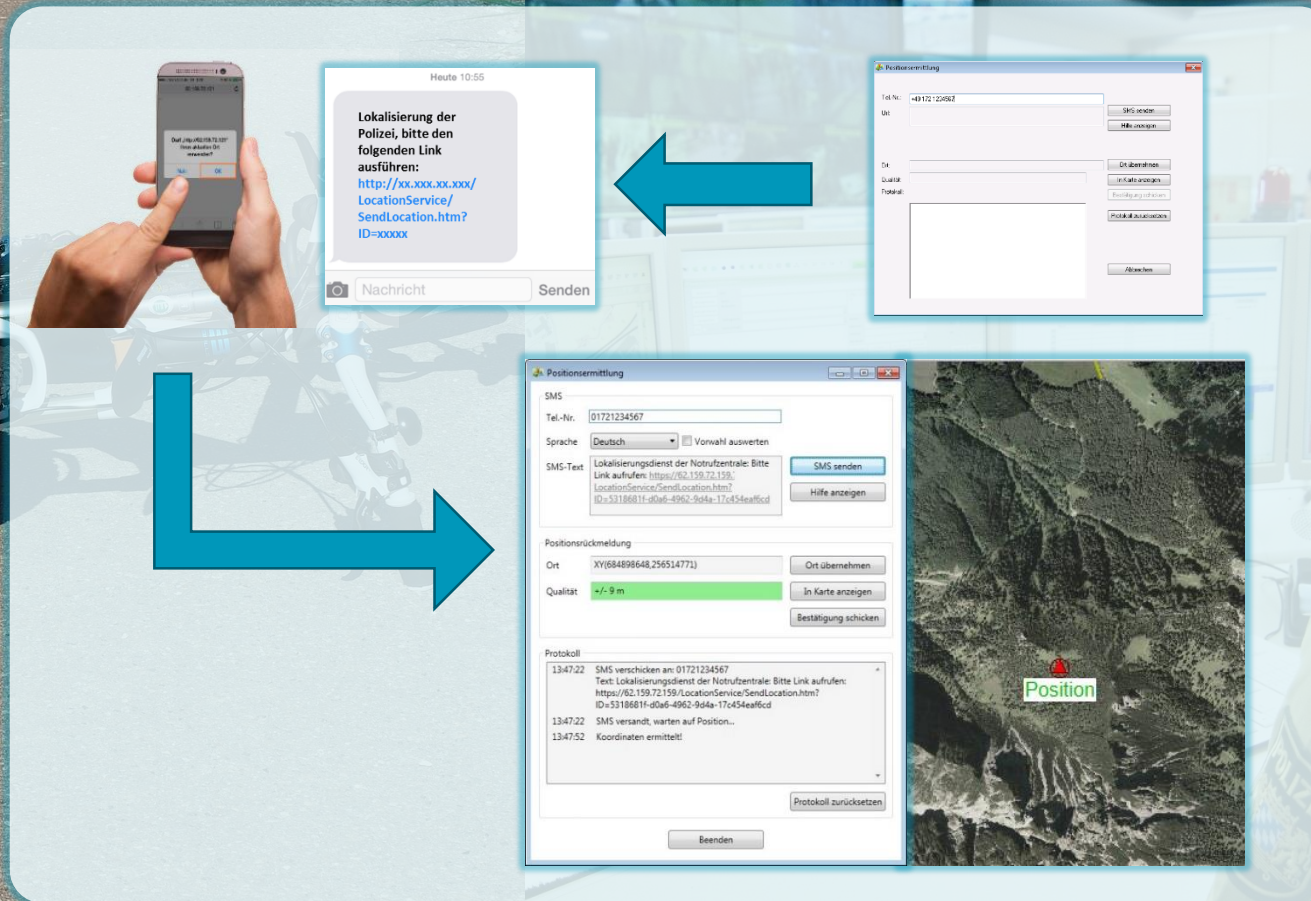
Lokalisierungsdienst der Notrufzentrale: Ortung erfolgreich durchgeführt

SMS-Nachricht

Danke Ja Nein

“...I crashed my bike and need help.
Unfortunately, I don't know my exact
position.”

“I will send you a text message with a
positioning link. Please follow the link and hit
confirm. This will enable us to locate you!”



Social Media



Assign Social Media Message ...

[TIME] 19/7/2017 2:35 PM
[SENDER] JULIE ALEXANDER
[MESSAGE] ANYBODY KNOW WHATS HAPPENING HERE? LOTS OF SMOKE ALL AROUND THE PLACE #SHEFFIELD
\\PUBLIC_SONAR\IMAGES\1704000073\IMAGE1.PNG

☒ Assign to active event
1704000073
Select another event

☐ Create new event
Cancel
OK

Intergraph - I/Dispatcher [ahariso]

Incident Information
1704000073
13:11:07
26/09/17
swi-sgi-psdemo2

Mode
Create
Update
View
Clear

Caller Info
Source: 999
Phone:
Name:
Malicious:
Location:
Verify
Copy
Challenge

Incident Location Info
Location: SHEFFIELD RAILWAY STATION
Validated
Road Junctions:
Add Info:

Incident Type Info
Inc Type: F - Fire
Subtype: F01 - Building
Save
Propose Resources
Add Info: FIRE AT JUNCTION BOX NEAR SHEFFIELD STATION
Auto Close
Notify Press

Previous
Site Specific
Action Plan
Deploy Points
Stop Received
Caller Location
Queue
Supp Info
Resource Log
Incident Log
Cross Reference
Nearby Incidents
Graphics
Tags

Remarks
Don't Send to Resource
System
Add
Viewer

19/07/17 14:12:02 ** [CRO SEARCHED FOR LOCATION] : SHEFFIELD RAILWAY STATION
19/07/17 14:35:01 [TIME] 19/7/2017 2:35PM
19/07/17 14:35:01 [SENDER] JULIE ALEXANDER
19/07/17 14:35:01 [MESSAGE] ANYBODY KNOW WHATS HAPPENING HERE? LOTS OF SMOKE ALL AROUND THE PLACE #SHEFFIELD
19/07/17 14:35:01 THE PLACE #SHEFFIELD
19/07/17 14:35:01 \\PUBLIC_SONAR\IMAGES\1704000073\IMAGE1.PNG

Callsign St TOC: 13:12:02 FRS R P Stn Area DGroup Incident Dups: Talk Group:
AL: OA Y 2 DS OA 1704000073
ME:
IA:
STOP:
History of 1 1

Incidents
Shared 0 Cumbria 1 Cheshire 1 Lancs 1 Manx 1
In Progress 0 Pending 1 Queued 1 Awaiting Closure 0 All 1
TOC Info Incident Typ Subtype Location
13:12:02 26/09/17 1704000073 Fire Building 2 P EN(435889.357,387020.270): EST A61 SHEFFIELD

Map View (1.33 mi) - [Total: 376]

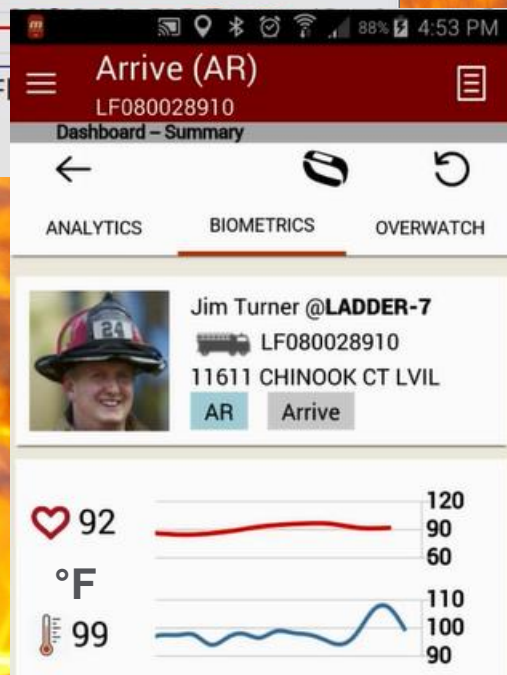
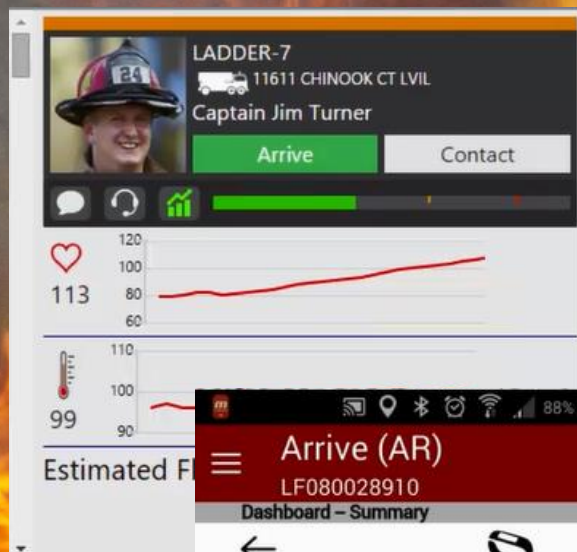
1704000073

SHEFFIELD

Ready Successful completion: 13:18:42

Activity Tracker





Digital Wristband

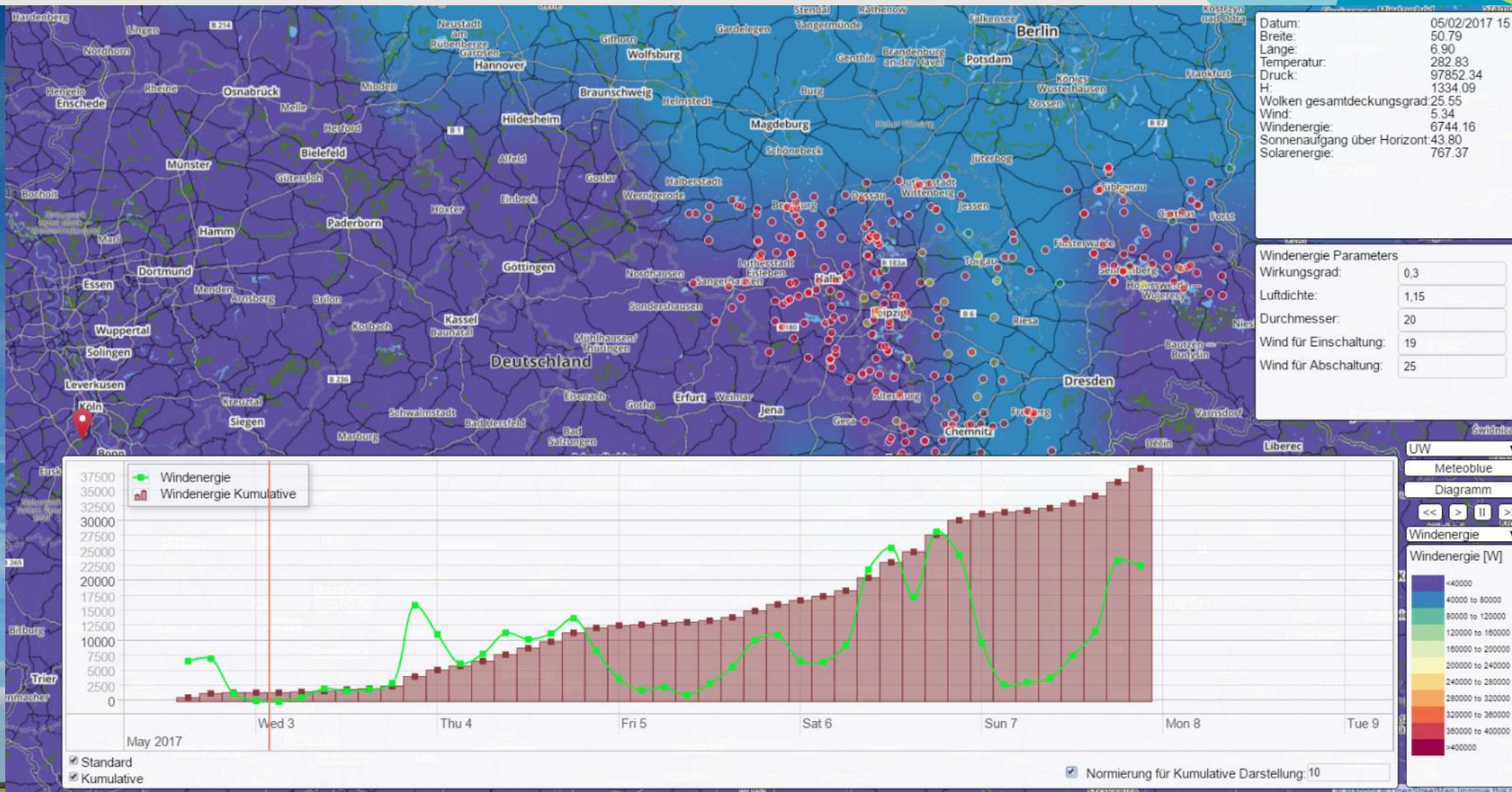
Monitoring vital signs

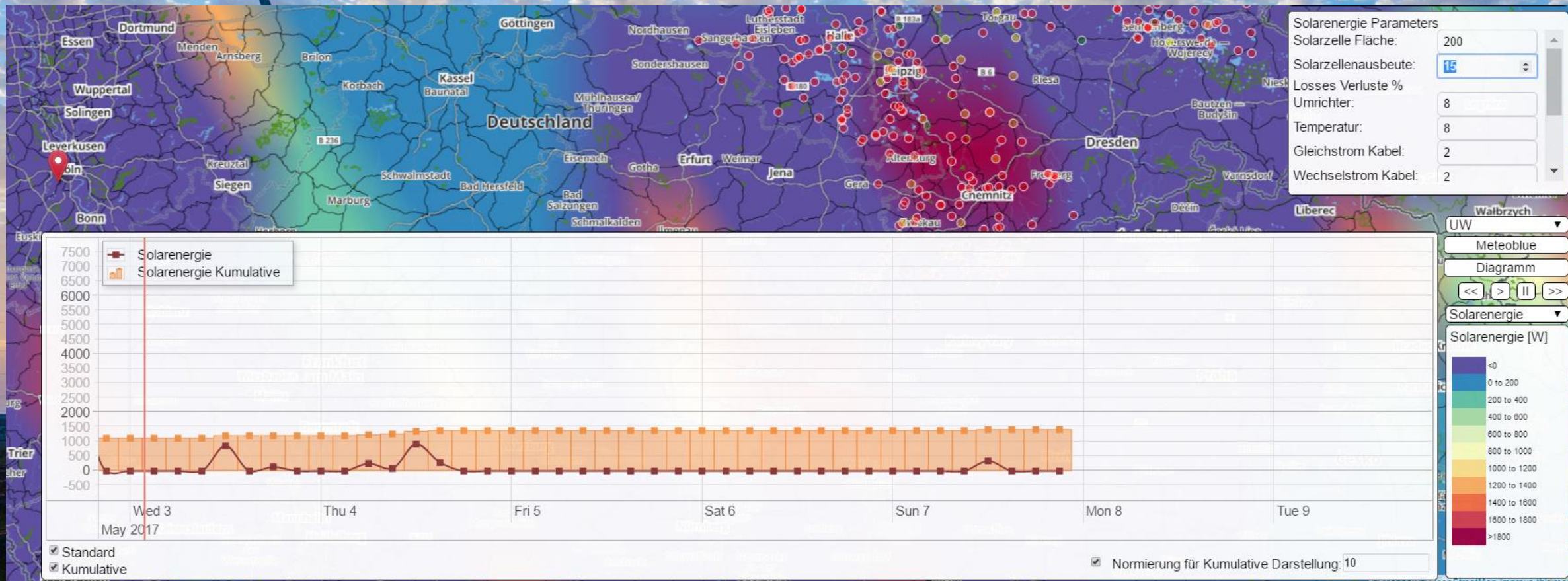
Alerts if threshold values are exceeded



Analyses







Conclusion



Smart City Monitoring and Control

Smart City Cockpit

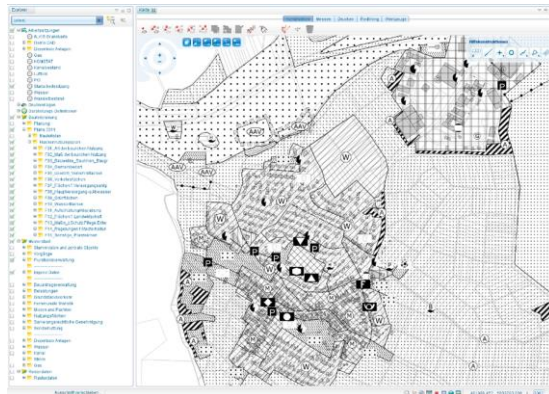
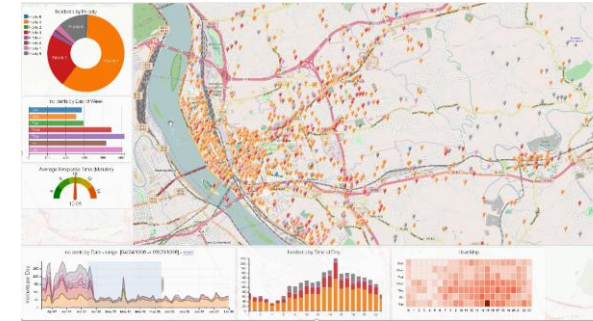
Personal
Mobility

Public
Transport

Utilities

Safety

Government



Large-Screen Display

Business intelligence \GIS
Platform\MPS\VM, etc.



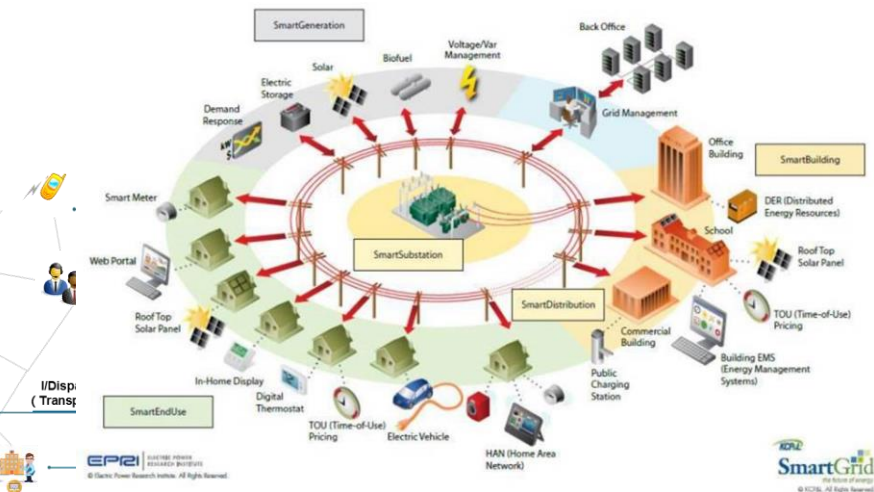
Video Meeting System

operation seats

I/Dispatcher
(Police)

I/Dispatcher
(Fire)

I/Disp
(Trans)



Xalt Technologies

Applied Capabilities

Autonomous Connected Ecosystem





“... Intergraph
was ok, but
Hexagon – that’s
really something!”

- Ludmiła Pietrzak
Hexagon customer

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