

Smart City & Smart Environment



► Innovative smart systems for your ambitions

Operating in the rapidly changing world of the 21st century requires a great level of flexibility and agility. You must keep up with all changes that somehow affect your line of work. Staying ahead of it all demands even more of you.

Smart IT helps!

Implementation of smart IT technologies will bring about many new abilities that will boost and improve your processes.

Smart IT is the main competence of Inter Act smart solutions. Using our knowledge and experience and our 'off the shelf' products, can help you and your organization to stay ahead.

This prospect gives you a glance overview of our products and services and how we can help you.

Do you know how the Internet of Things will change your live?

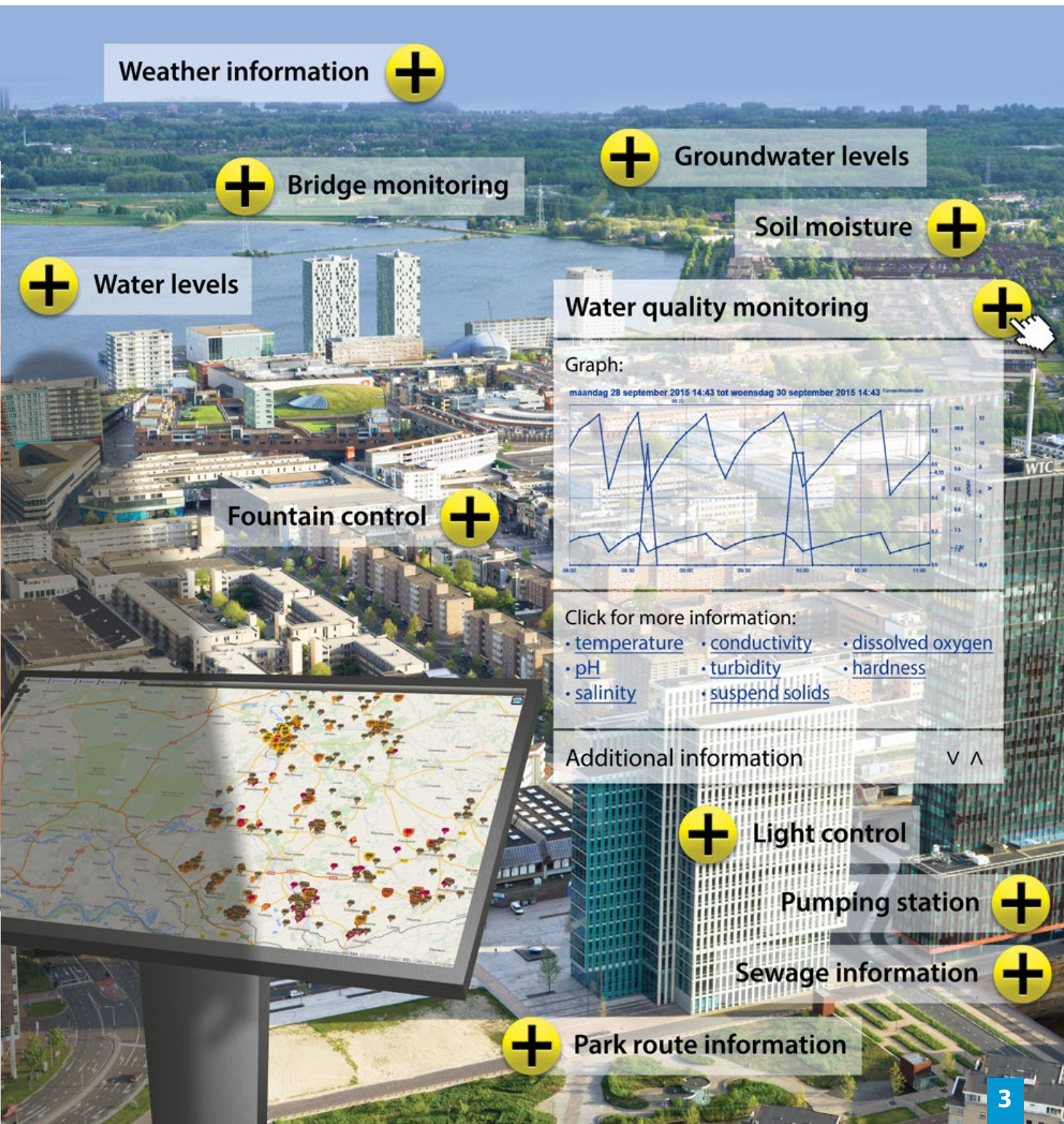


► Smart City & Smart Environment

A city is one of the most essential building blocks of the modern society, especially in the upcoming and fast growing economies. Hence, governments and municipalities put enormous efforts into keeping our direct living environment pleasant and manageable.

As modern intelligent technology finds its way into our daily lives, Smart City and Smart Environment become essential concepts that inevitably attract the growing attention of public-work-authorities.

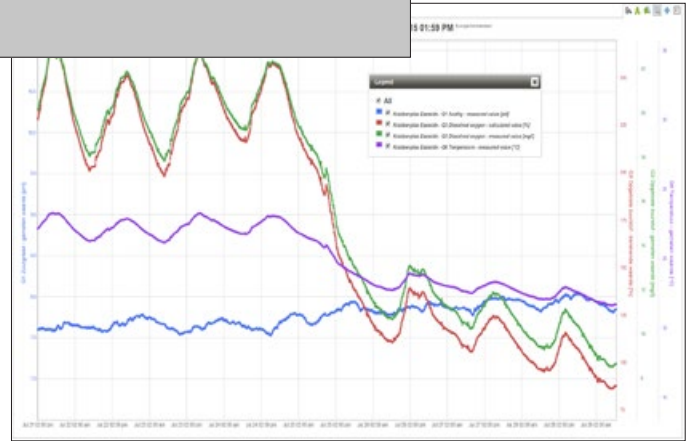
Turn existing cities into Smart Cities



Inter Act smart solutions, in association with a number of public-work-authorities and other customers in the Netherlands and Germany, has developed a series of smart systems. With our “off-the-shelf” products existing cities of today can be turned into Smart Cities of tomorrow.

Users of our systems are able to implement a series of gradual improvement steps. In this way it is possible to go “step-by-step” through a “makeover” process without taking high risks or making large investments. Small steps, that each will have great tangible improvement effects in short increments of time.

Measuring salination at sea locks (Rotterdam)



► Our solution to your challenge

Our solutions help you to be 'In Control'!

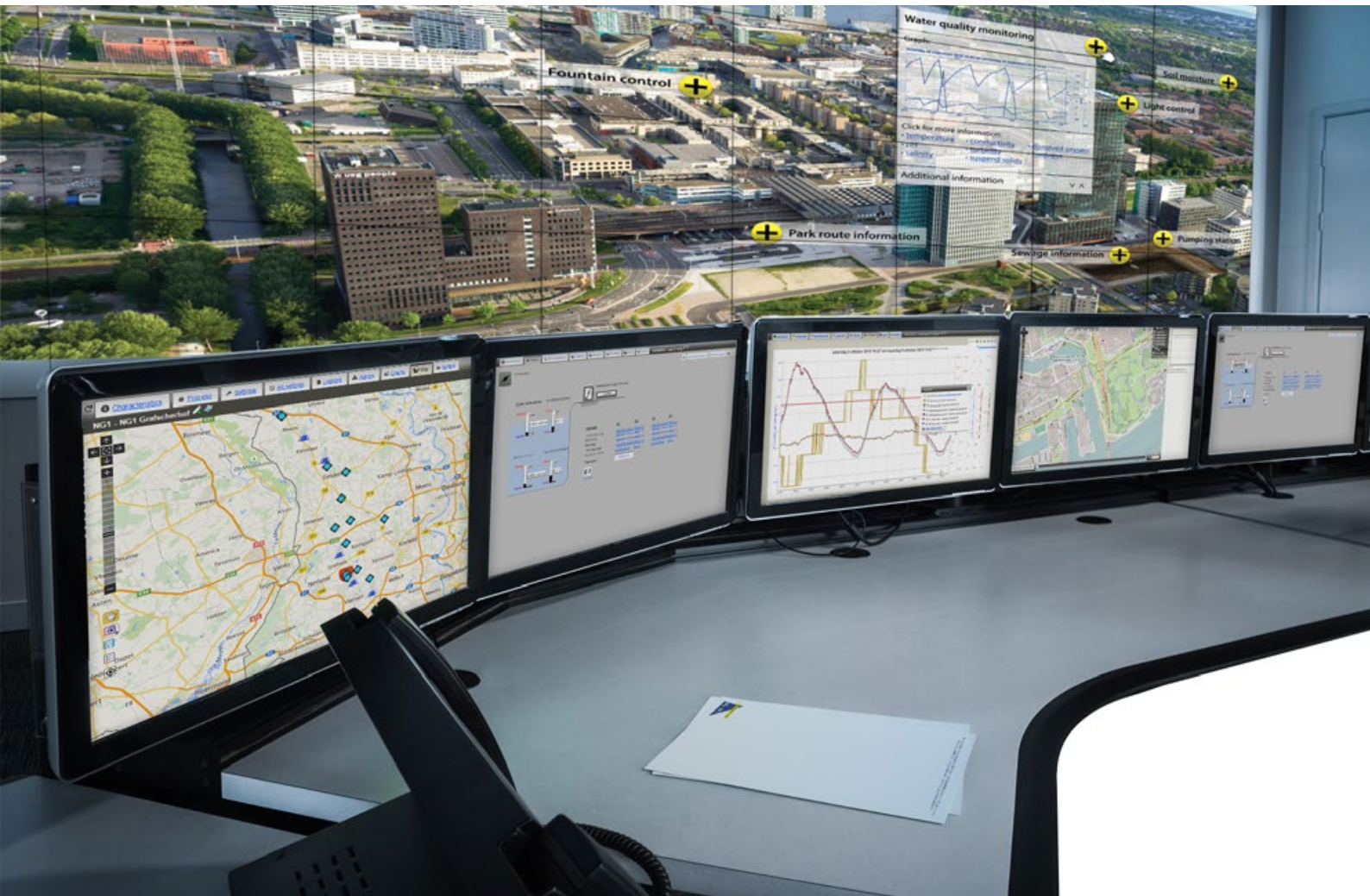
If you want to connect all your (smart) devices and systems to a single control centre, you are often hindered by technological limitations created by using different brands or technologies.

Of course you try to avoid 'vendor lock-in', but by doing so you find yourself captured in another pitfall!

You have to deal with several information data streams that are not easy to integrate.

We offer you the ultimate solution for this problem with TeleControlNet.

Central control and management dashboard with TeleControlNet



Connecting cross-system (with TeleControllers)

During the past decade Inter Act smart solutions has developed a series of TeleControllers. TeleControllers are intelligent modems or remote terminal units, able to connect practically any smart remote device to a central server such as:

- PLC control units,
- SCADA-systems,
- sensors and measuring devices,
- remote databases.

TeleControllers can be added to third party control systems without changing the existing programs or configurations.



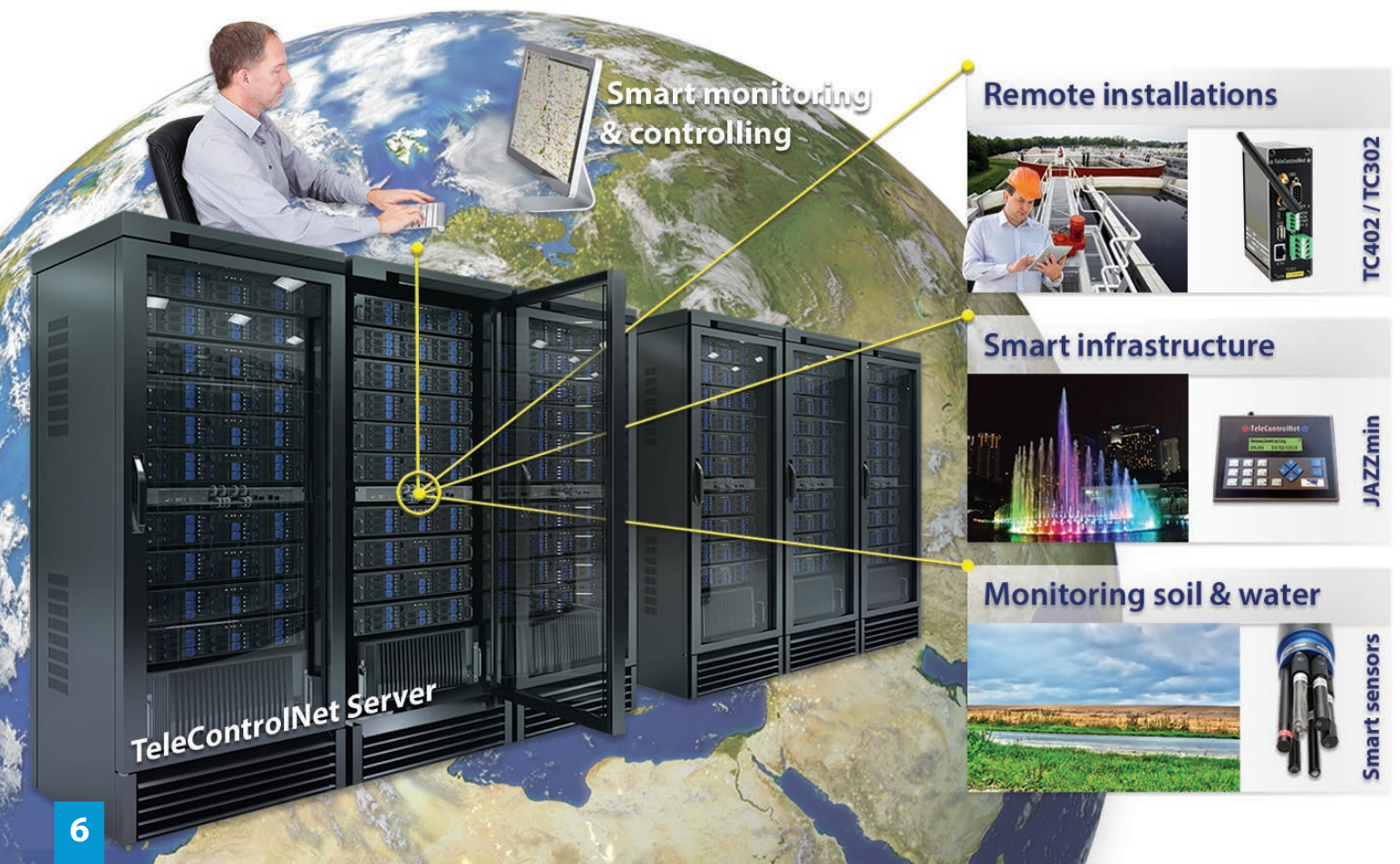
Family of TeleControllers

Central dashboard and control

The TeleControllers connect all remote devices and installations to one central TeleControlNet server. Our TelecontrolNet server can be used as central management dashboard or control room. This is regardless of specific protocols & vendor restrictions of different systems.

One independent central monitoring and SCADA control system that can be installed at your premises or used as SaaS through the internet. In addition real-time data from all remote processes becomes available in various office applications.

Monitoring & controlling via Internet



► Have it under control with smart IT

Stay 'in control' of your business with TeleControlNet.

TeleControlNet combines smart IT functions and historical data storage, with traditional scada functions. TeleControlNet is ahead, and it will be in the future because of the way Inter Act smart solutions develops new technology continuously.

Some integrated functions are elucidated below, but we would be delighted to explain them in more detail to you personally.

Be prepared for the future with TeleControlNet!

Smart Alerting & Alarming (forecasting)

Is your monitoring and alarming system smart enough?

Before alerts and alarms are sent out, TeleControlNet performs a quick automatic assessment of the process situation before urgent alarms are sent to individuals. With a new feature called 4Caster, TeleControlNet even tries to avoid unpleasant and unexpected urgent alarming.

4Caster predicts events on basis of data-fusion and big-data analysis. Tendencies in data trends are recognized and interpreted. The results are presented in dashboard type reporting, for example indicating the actual quality of equipment on a scale in between 0% and 100%.

Impending technical defects can be brought to the attention of responsible operators before they occur.

Smart IT is looking into the future!

With TeleControlNet the need for maintenance can be predicted, and by doing so, prescriptive maintenance becomes available, preventing unexpected process interrupts.

Predicting pump stoppage with the 4caster module



Asset Management

@ssets is an integrated Asset Management tool powered by TeleControlNet with a wide variety of standard reporting and maintenance management functions. With @ssets, you can easily manage all maintenance and repair activities using the available information in TeleControlNet regarding actual status, performance, malfunctioning, repair times, estimated costs, depreciation of parts, etc.

With the available standard and tailor-made maintenance-checklists and menus, your maintenance engineers can fill out preconfigured reports on their mobile devices and upload them along with photos or other documents into a central long-term storage database within TeleControlNet.

All reported data is processed into specific Asset Management reports and is online available in management dashboards.

Online reporting on remote service actions with @ssets



Big Data Analysis

The amount of data that is gathered from devices and machines is huge. It can only be interpreted after being processed and converted into understandable information. Inter Act smart solutions is fully engaged with the development of data oriented management systems. The combination of Big data analysis, data assimilation and modelling technics opens a new world to users.

Too good to be true or just wonderful?

Some practical examples:

- detecting volume discrepancies (for example in distribution grids),
- saving on investments in expensive measuring equipment by calculating process variables instead of measuring (for example flow),
- advanced (fuzzy) validation of measured data,
- predicting course of processes,
- providing insight into future investment needs and risk management,
- online analysis of process quality.

Groundwater levels at your fingertips (Apeldoorn, registered from 1960 onwards)



Data integrity

Having all available information into one central homogeneous environment puts you 'in control'. All measured data is validated and enriched with Big data and reconditioned for presentation in adequate smart management dashboards. These standard dashboards, supplemented with customised smart reports, enables users to make the right decisions at the right time.

With multiple authorisation levels in the user interface you can share information. You all work from the same platform. Not a variety of data sources with the risk of data mismatch anymore.

Share information in between departments



► One-Shop-Stop approach for smart projects

As system integrator Inter Act smart solutions has been coordinating projects, whereby multiple disciplines work together under our supervision and responsibility. We aim at best price-performance-ratio by bringing expertise and labour together in the right mix. Working with local parties is one of our strengths.

Partners install groundwater level sensors in Hebei China



► More than 20.000 objects connected to TeleControlNet

What has been realised with TeleControlNet so far?
Underneath an overview:

Objects

- Waste water plants
- Drinking water plants
- Realtime controlled sewage watergrids
- Drinking water grid monitoring (water leakage detection)
- Weather systems
- Surface water monitoring & alerting levels and water quality
- Groundwater monitoring
- (Remote) Production process monitoring
- Remote stock monitoring

Regions

- Netherlands
- Germany
- France
- Great Britain
- USA
- Switzerland
- Denmark

Key Functions

- WEB based scada control
- Analysing Big data
- Production dashboards
- Rule based control functions
- Realtime remote process control
- Smart alarming
- Asset management
- Predictive & analytic functions

User workshops



Inter Act

Dijkgraafweg 16 - 7336 AT Apeldoorn - The Netherlands

Tel.: +31 (0)55 534 2002

Fax: +31 (0)55 534 2010

E-mail: info@interact.nl



Inter Act smart solutions

Chromsteden 16 - 7547 TL Enschede - The Netherlands

Tel.: +31 (0)55 534 2002

Fax: +31 (0)55 534 2010

E-mail: info@interact.nl



Inter Act Germany

Stadtring 17 - D-48527 Nordhorn - Germany

Tel.: +49 (5921) 72 76 804

Fax: +49 (5921) 72 76 805

E-mail: info@interact-automation.de



Inter Act smart solutions

Office No. 135-FD, Incubator Building, Level 1
Masdar City, Abu Dhabi, United Arab Emirates

E-mail: info@interact.nl

