



ZENNER

METERING AS A SERVICE

MAAS

SOLUTION PACKAGE FOR THE MOST ECONOMICAL
REMOTE READING OF WATER METERS



THE FIRST STEP INTO DIGITAL WATER MANAGEMENT

NATIONAL WATER STRATEGY

On 15 March 2023, the German Federal Cabinet adopted the 'National Water Strategy' to accelerate the transformation in water management. The aim is to ensure a more conscious use of water as a resource. In addition to securing the drinking water supply and storing water, natural protection against flooding is also part of the action plan.

According to the BDEW, German drinking water suppliers invested around 3.5 billion euros in the construction and maintenance of their facilities and in the expansion and renewal of their infrastructure in 2022. About 17 percent of this was attributable to meters, measuring devices, IT or other investments.

CURRENT CHALLENGES IN THE WATER SUPPLY

One of the most important tasks for water suppliers at the moment is the nationwide switch to digital metering via radio, e.g. with LoRaWAN® or Wireless M-Bus (OMS).

Take the next step now! Metering as a Service (MaaS) fulfils all your requirements for a future-proof and sustainable water supply. The solution also lays the foundation for variable water tariffs and enables water management processes to be controlled efficiently.

OUR SOLUTION: METERING AS A SERVICE BY ZENNER

Metering as a Service by ZENNER enables remote reading of (radio)water meters regardless of fixed times or access to the meters and ensures convenient and simple meter reading through automation. This reduces personnel requirements and resources can be optimally utilised. Depending on requirements, the solution can be adapted to a combination of stationary radio and walk-by radio to achieve the highest read rates. The meter reading intervals can be individually selected - whether annually, monthly, daily or even hourly - and thus offer maximum flexibility for different requirements. The use of ZENNER Connect GmbH's LoRaWAN® network, which is available throughout Europe, minimises your own investment in readout infrastructure.



„The innovative combination of our ultrasonic water meter, state-of-the-art meter reading technologies and Europe's largest LoRaWAN® network significantly outperforms conventional meter reading technologies in terms of quality and cost-effectiveness. Metering as a Service represents the most advanced solution currently available in the field of Advanced Metering Infrastructures (AMI) for the remote reading of your water meters.”

René Claussen, Head of Business Unit Measurement Systems, IoT and Digital Solutions at ZENNER International GmbH & Co. KG

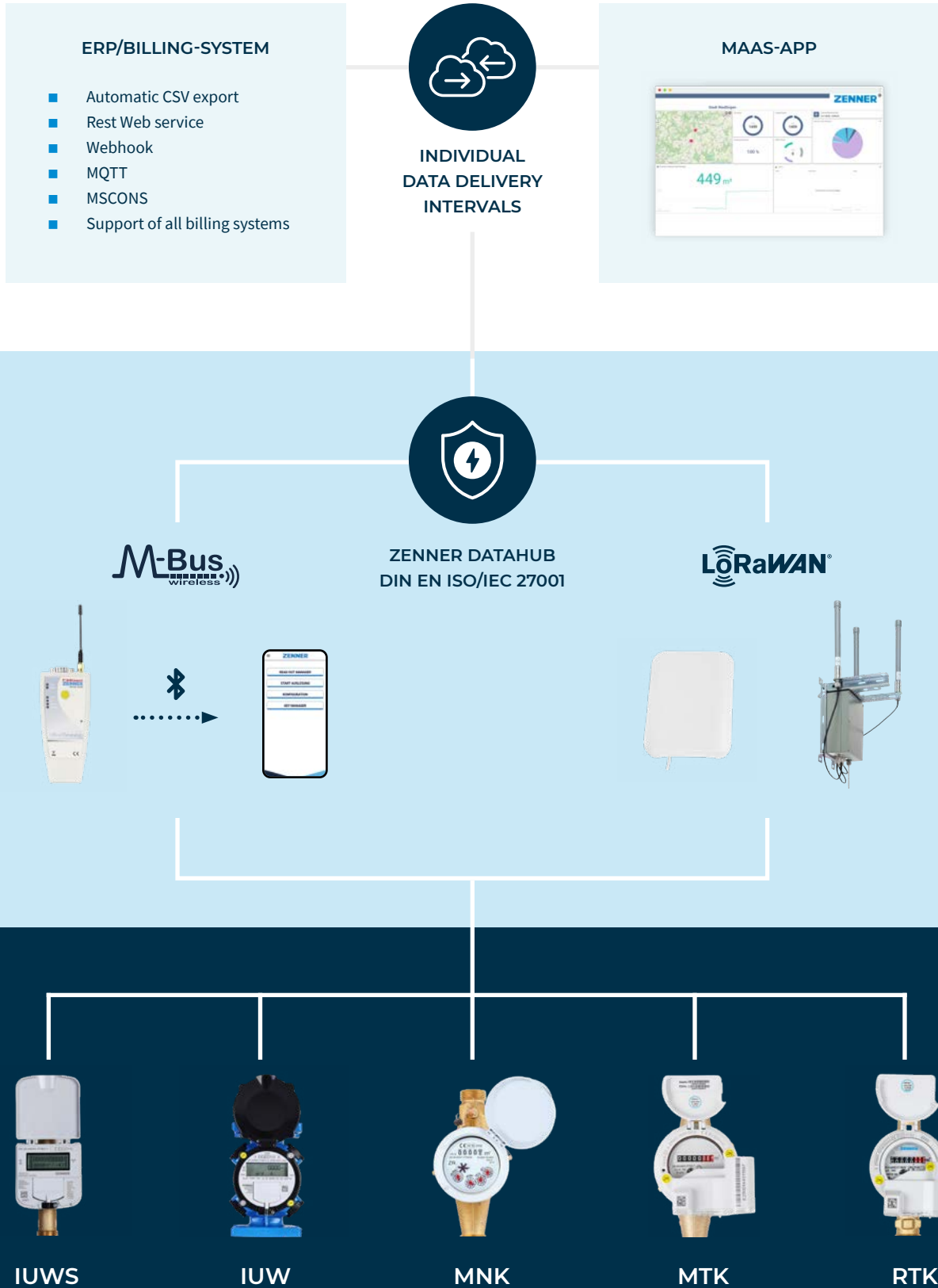
METERING AS A SERVICE AT A GLANCE

VISUALISATION

INTEGRATION

READING

ASSEMBLY



Assembly:

ZENNER offers you a complete installation and onboarding service for meters, sensors and software from a single source. This does not require any personnel expenditure on your part. In addition, digital documentation of the assemblies is available to you without media discontinuity.

Meter reading:

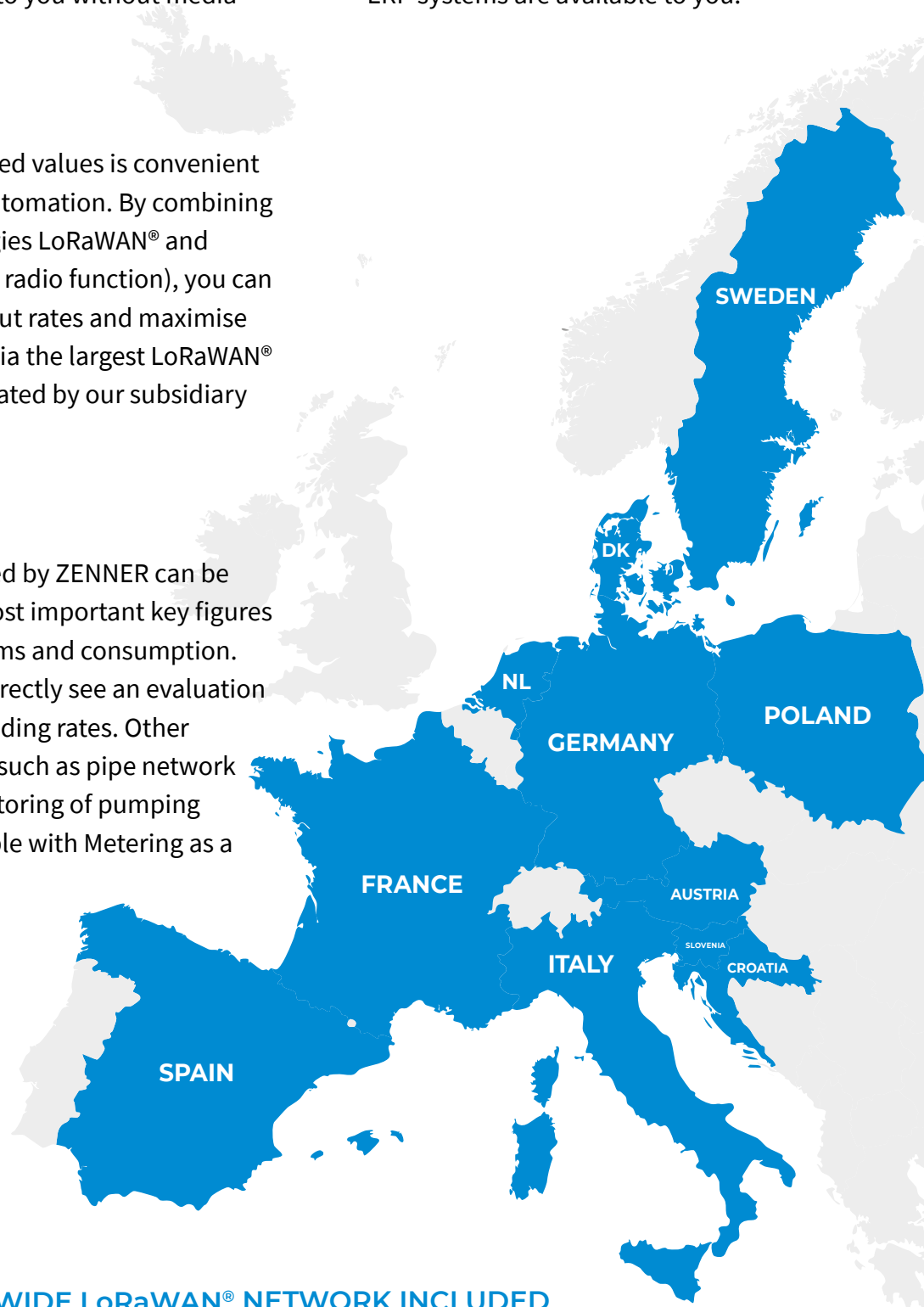
Procurement of measured values is convenient and simple thanks to automation. By combining the two radio technologies LoRaWAN® and Wireless M-Bus (parallel radio function), you can achieve very high readout rates and maximise synergy and efficiency via the largest LoRaWAN® network in Europe operated by our subsidiary ZENNER Connect.

Visualisation:

The MaaS app developed by ZENNER can be used to visualise the most important key figures for the meter fleet, alarms and consumption. For example, you can directly see an evaluation of the current meter reading rates. Other value-added solutions, such as pipe network monitoring or the monitoring of pumping stations, are also possible with Metering as a Service.

Data transfer and integration:

With MaaS, all your data is available centrally in one platform. Billing-relevant meter readings are automatically provided in the solution and all common interfaces to billing or ERP systems are available to you.



EUROPE-WIDE LoRaWAN® NETWORK INCLUDED



IUWS ULTRASONIC-DOMESTIC WATER METER: OUR MULTI-TALENT

The IUWS ultrasonic water meter stands for maximum precision and offers you, among other things, the new 'parallel radio' function. This guarantees you the most complete measurement recording possible.

AN INNOVATION IN MEASURING TECHNOLOGY: PARALLEL RADIO

Parallel radio makes it possible to transmit measurement data simultaneously via two different radio technologies - Wireless M-Bus (WM-Bus) and LoRaWAN®. This approach is helpful, for example, in peripheral areas with insufficient LoRa network coverage. The parallel radio function provides water suppliers with a reliable fallback level for remote meter readout.

ZENNER DEVICE MANAGER BASIC APP: FLEXIBLE CONFIGURATION OF RADIO WATER METERS

ZENNER Device Manager Basic sets new standards in the configuration and customisation of meters. Our powerful app provides utilities with an indispensable tool for configuring ultrasonic water meters from the IUWS series efficiently and flexibly.



THE RADIO TECHNOLOGIES FOR REMOTE READOUT

LORAWAN®

LoRaWAN® is an international, open wireless standard that is being continuously developed by the LoRa Alliance®. Very long ranges, bidirectional communication, high security thanks to modern encryption technologies and low energy requirements make LoRaWAN® the perfect technology for interoperable remote readout of water meters, heat and cooling meters (thermal energy meters), gas meters or sensors from a wide range of manufacturers.



WIRELESS M-BUS

With Wireless M-Bus, you can realise the remote readout of consumption meters using the walk-by or drive-by method. As a result, appointments and flat inspections are no longer necessary. The meter readout intervals become flexible. The wireless M-Bus radio system fulfills all requirements for interoperability.






ADVANTAGES OF REMOTE READING

The use of radio technology means that water meter data is transmitted automatically. The need to drive directly to the properties is eliminated. By eliminating meter reading appointments or self-reading, this also means a noticeable increase in convenience for citizens. Radio technology is particularly helpful for meters that are difficult to access and can now be conveniently recorded. It also enables remote reading at short intervals, with high data quality and significantly lower error rates. Leakages, burst pipes or malfunctions can also be detected at an early stage with the help of wireless technologies.

DATA PROTECTION AND DATA SECURITY

- BSI-compliant cryptography (acc. TR-02102)
- Confidentiality and authenticity of data transmissions according to the latest state of the art
- ZENNER Datahub: Operation in DIN EN ISO/IEC 27001-certified data centre with server location in Germany (Nuremberg, Ludwigshafen)
- ZENNER Connect is a telecommunications network operator (LoRaWAN® network) authorised by the German Federal Network Agency (BNetzA)
- Security concept acc. German Telecommunications Act (TKG)

ZENNER is continuously developing its technical systems in order to guarantee the security of processing in the future.





IN SUMMARY: THESE POINTS SPEAK FOR MAAS BY ZENNER

- Less water loss thanks to accurate measurements and transparency
- Less effort for annual billing
- Smaller selection intervals will enable variable water tariffs in future
- Contribution to environmental protection for water as a protected resource
- Improved image for municipalities and suppliers through sustainable use of water

SUSTAINABILITY AND CLIMATE PROTECTION

Challenges such as climate change affect all countries and regions. The solutions must therefore be developed locally and be applicable globally. The energy industry, the housing industry and technology providers such as the Minol-ZENNER Group can make a difference together by developing sustainable concepts in partnership.



“Cities, municipalities and regions worldwide are facing similar challenges. Sustainability is the most important goal. In the coming years and decades, we will need to find answers to climate change and the increasing scarcity of resources, as well as to demographic change and other megatrends of our time. Municipal utilities and energy suppliers play an important role here. We support them with innovative and future-proof solutions.”

Alexander Lehmann, CEO of the Minol-ZENNER Group

DIGITAL SOLUTIONS FOR
THE WATER INDUSTRY CONTRIBUTE
TO THE FOLLOWING SDGS:



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