onesalt utilities

# Smart Solutions for the Digital Utility

More than 450 Utilities worldwide support their key business processes using Minsait Solutions





An Indra company

## Onesait, opening new ways, today and tomorrow

Making a difference through solutions enabling digital transformation

Anticipate and manage the rapid changes in your environment through our ecosystem of digital solutions, built on the basis of extensive industry experience, technical know-how and disruptive ambition



## We accelerate the transformation of your business through our solutions

Navigate the transformation with flexibility. Our solutions support you from proof of concept through deployment so you can focus on the performance of your business, without distractions and from a position of strength.



#### We undertake a vision of the future for your business

Because having a clear goal matters, we focus on the customer when designing our solutions, with a future vision of your industry aligned with the evolution of technology.



#### We are leaders in cutting-edge technologies

Integrate the latest technologies into your business at the rate you need, confident that your approach to transformation has a solid foundation and is focused on your goals.



#### We innovate in an open ecosystem

We are stronger when we work together. Our solutions encourage community-based innovation and we promote secure and open digital ecosystems.

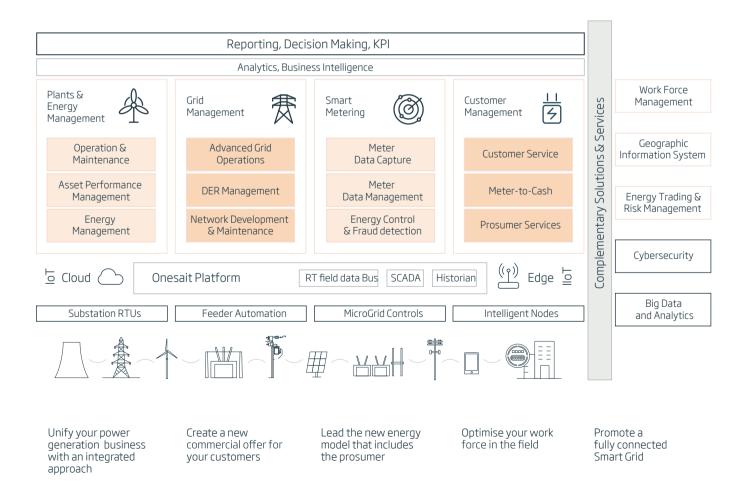
### Supporting the digital transformation of Utilities during the energy transition, while promoting a customer centric business model

At Minsait, we leave our mark through solutions and services that support the entire energy value chain, from the intelligent management of plants and networks, to the commercialization of energy, water and value-added services. Our value proposition is based on innovation and a profound knowledge of the business processes and challenges of the utilities industry.



onesalt utilities Generating impact through a Solution Suite that supports all business processes of electric, gas & water utilities.

#### Onesait Utilities is the most complete end-to-end solution suite for utilities



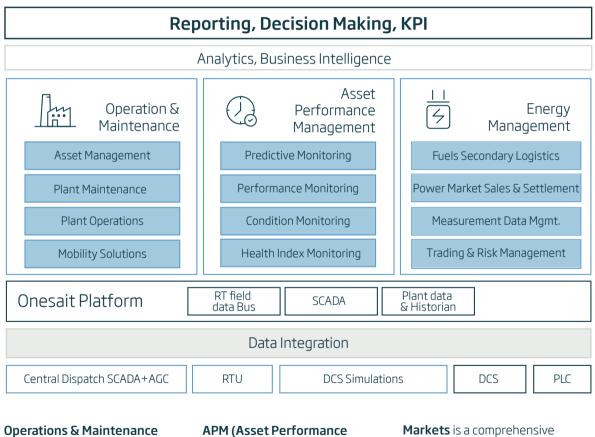




# Onesait Plants and Onesait Markets integrate, in a common and unified vision, the entire plants and energy management business, from plant operation & maintenance to portfolio management and participation in wholesale energy markets.

This integrated view of energy management is based on more than 20 years of experience with implementations worldwide, managing all types of plants (power generation, water, gas, industrial) and operating within different types of energy markets:

- Real-time Connectivity: Robust connectivity with process variables using SCADA and IoT technologies
- Analytical capability: Allows from granular data analysis (by plant / client with sub-hourly detail) to aggregated data analysis (region / company and monthly / yearly breakdown)
- Modularity and Scalability: The modularity of the solution architecture allows easy expansion of functionality and number of assets



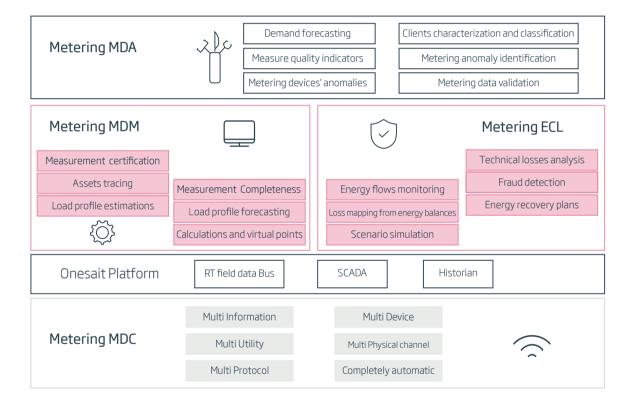
is a modular and integrated solution that supports plant operations, maintenance and environmental processes APM (Asset Performance Management) is a solution that monitors asset perfomance in Real-time, optimizing industrial plants operation and maintenance activities **Markets** is a comprehensive solution that enables energy companies to optimize business operations in physical markets

- Energy planning platform (Planner)
- Contract Management & Settlement (SET)
- End-to-end Meter Data acquisition and Meter Data Management (MDM)



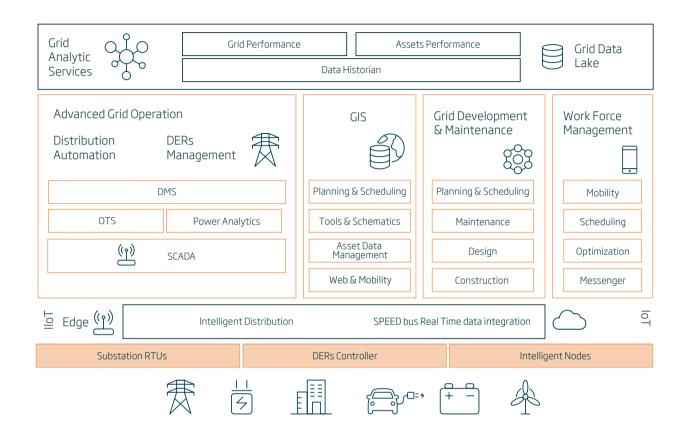
Onesait Metering is Minsait's Multi Utility solution for automatic acquisition, management, certification and exchange of information coming from meters. It supports also the analysis and decision making based on big data technologies, including advanced functions like demand forecasting, customer behavior or assets tracking.

- Meter Data Capture (MDC) is the solution for the acquisition of data measurements (electric, gas or water) independently of the meter type or brand
- Meter Data Management (MDM) supports the validation, edition, estimation, certification and exchange of information coming from electric, gas or water meters
- Meter Data Analytics (MDA) is an analytic platform oriented to the massive analysis of meter data, including advanced functions like forecasting or fraud detection
- Energy Control and Losses (ECL) allows a comprehensive control of flows across the distribution network, identifying losses (both technical and commercial) and supporting revenue assurance





Onesait Grid is a comprehensive modular solution that fully supports transmission and distribution business processes, including the planning, development and maintenance of assets and the advanced and proactive Real-time control and operation of complex grids and distributed energy resources.



## **End-to-end** distribution and transmission grid management

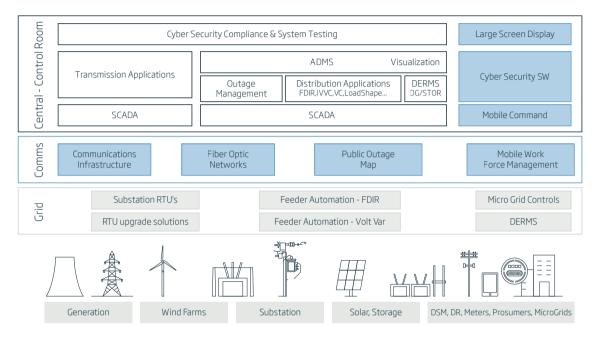
- Supports the entire grid management cycle including grid asset inventory and maintenance, grid planning and design, real time operation, crew management and grid analytics
- Geo-referenced : All modules are supported by GIS advanced functionality
- Modular and Interoperable: Standards-based interoperability, enabling seamless integration with existing assets and systems
- Advanced Real-Time Analytics automating and supporting complex operation
- Complete Scada and grid automation solution, including RTUs and control systems

#### Next generation grid management solution for Smart Grids and the integration of Distributed Energy Resources

- Industrial IoT that enables a scalable, secure and reliable coordination of millions of devices (inc DERs) in the field
- Edge Intelligence. Novel hardware and software platform with Edge devices enabling distributed data processing and analytics, reacting to changes in environmental conditions
- Real Time Integration Bus supporting a common data space where information can be exchanged securely and efficiently between field devices, systems and operators in a coordinated operation
- Real Time and Big Data Analytics, allowing advanced grid analytics and control



Advanced Control Systems (ACS) designs, develops, and supports solutions to solve some of the electric utility industry's most difficult challenges. ACS supplies utility systems throughout the world with SCADA and many other advanced applications in a scalable platform that support both centralized and distributed architectures that optimize automation in the control room, at the substation, and the edge of the grid. ACS also supplies one of the most comprehensive lines of intelligent substation controllers and remote terminal units in the industry.



#### "PRISM

PRISM is a suite of Real-time applications that optimise smart grid operations and provide utilities greater insight into their grids

#### **CENTRIX**

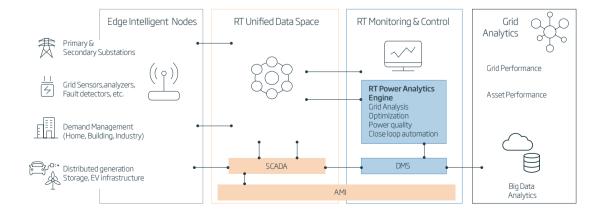
Centrix is a suite of applications enabling distributed control, automation, and intelligence, that easily integrates into legacy systems

#### **<sup>#</sup>NTX**

NTX is our product line of the most sophisticated Remote Terminal Units (RTU) in the industry, applied at the substation and downstream devices

#### Active Grid Management

- Onesait Grid AGM is an industrial IoT software platform that monitors and manages power networks using distributed control
- Real time data is processed and distributed across a publisher/subscriber interoperability data bus, openly available to 3rd parties (iSpeed)
- Improves feeder power quality, while maximizing renewables and DER utilization for grid asset optimization
- Incremental and seamless evolution with our distributed architecture and open data integration with third-party systems

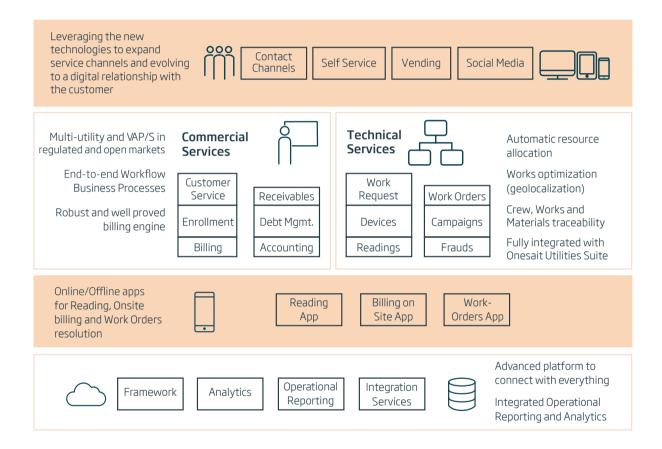




With more than 30 years of proven expertise, and more than 100 million end-customers, Onesait Customers manages the commercial processes of utilities in regulated and competitive markets, supporting electric, gas and water utilities. It includes customer relationship functionality and fully supports the meter-to-cash cycle including the management of prosumer services.

Its highly configurable functional architecture has been designed to meet the requirements of a dynamic market in constant evolution.

Onesait Customers is an integrated, modular solution designed to support customer management, meter reading, invoicing and collection for utilities across multiple commodities (electric, gas, water). It also incoporates a strong intelligent data layer that supports the analysis of information from commercial processes and customers.

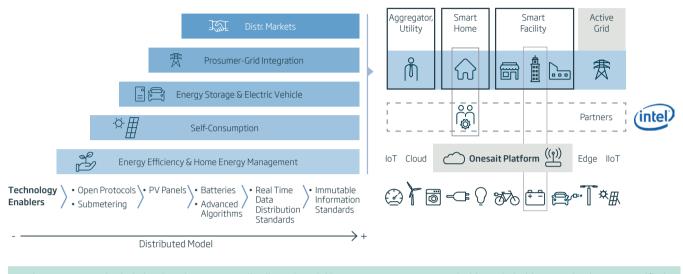






#### Enabling Transactive Services by integrating Prosumers with the Grid

Onesait Prosumers is Minsait's energy management solution for consumers, as they increasingly become Distributed Energy Resources. Prosumers can greatly increase their value if they integrate with the grid and adopt multiple roles in the energy value chain.



The Energy supply chain is migrating to a new distributed model in which Stakeholders will dynamically exchange energy and services, for maximum global efficiency. This change is encouraged by technology enablers and social awareness about sustainability. New roles and opportunities arise from customer integration with the Grid. Demand-Side Stakeholders need to leverage unified horizontal platforms that seamlessly operate in real-time with Active Grid Ecosystems. Vertical integration of niche algorithms and high value energy assets are provided by specialized vendors.

Onesait Prosumers is built on the Onesait Platform which uses a container based architecture for modularity and scalability and allows our partners to integrate their own cloud or edge solutions. This architecture, developed in partnership with Intel, enables:

- E2E coverage for the distributed energy model
- Prosumer services and Active Grid services integration
- Smart Home & Smart Facility progressive functional paths
- Multiprotocol last mile connectivity
- Go-To-Market acceleration through a Partner ecosystem approach
- Scalable solutions that allow our clients to embrace new distributed energy business models and paradigms

• 'Behind the meter' and Aggregated Energy Management

Additional to the 'state-of-the-art' energy efficiency business capabilities, the Prosumers Efficiency modules seamlessly integrate the consumption at substation level with the DSO's use cases, turning facilities into Distributed Energy Resources with the ability to shift from local to global efficiency.

- Capture Up to 20% of energy savings
- Multi-site Real-time monitoring of disaggregated consumptions and asset conditions
- Global KPI visualization and customized analytic dashboards
- Real-time control, assuring savings through automated processes
- Traceability and verification of customized ECM's impact
- Energy certification support for ISO-50001







Further to providing a PV adoption channel for customers, and a market-place to monetize it, the Prosumers Self-Consumption module works on an hourly basis allowing the simulation of the surplus of generation for the use cases of Energy Storage and Net Metering.

- Accurate PV simulation from Smart Meter data, optimizing installation for customer preferred measure (Return of investment, Production Potential, etc.)
- Customer facilities simulation repository, with periodic updates triggered by market or regulatory changes
- Market-place for customers, PV installers and credit entities
- Customer management back office, providing 'willingnessto-adopt' ratings, and 'simulation-to-lead' tracking
- Seamless integration with Efficiency module for integrated consumption and generation monitoring

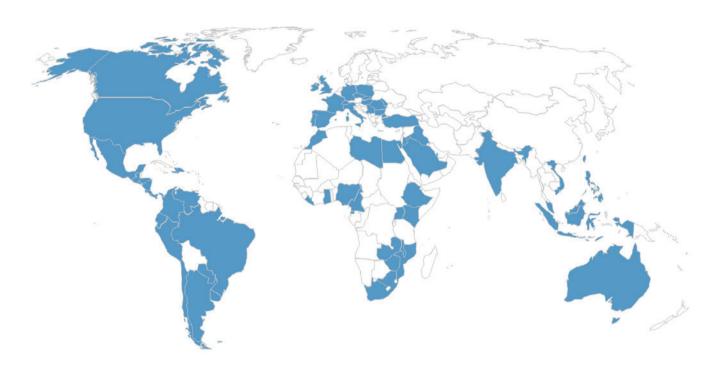
In addition to enabling the reduction or delay of hefty investments in Utilities grid infrastructure, the Prosumers Demand Response module opens a customer engagement channel for new energy services, such as Home Energy Management and additional home automation use cases.

- Enrolment and device management (including BYOT)
- DR Service management, setting features and economic parameters
- DR needs planning, through advanced forecasting algorithms
- Ranking of different Distributed Energy Resources alternative scenarios to meet DR needs
- Operational tracking
- Seamless integration with Efficiency and Homes modules for a unified management experience

Besides making homes more efficient and connecting the long tail demand for aggregated value propositions, Prosumers HEMS (Home Energy Management System) module offers end-users a unique energy, comfort and safety management experience, while establishing a limitless ecosystem for home-service providers' solutions.

- Consumption and power monitoring and control, through both smart meter integration and submetering devices
- Consumption and power alerts. Objectives management, defined in terms of energy and budget
- Integration with energy storage devices and EV charger
- Energy disaggregation, through both submetering devices and third party algorithms
- Multi device programming and Scene configuration
- Seamless integration with Self Consumption and Demand Response modules for a unified Home management experience

### Onesait Utilities is used by more than 450 Utilities worldwide



#### Americas

Avangrid (USA) Georgia Power (USA) Avista (USA) BWL (USA) SCE&G (USA) DTE Energy (USA) SDGE (USA) City of Anaheim (USA) COBB EMC (USA) A.de Hermosillo (Mexico) A. de Monterrey (Mexico) MITSUI (Mexico) EDH (Haiti) Edesur (Dom. Republic) Edenorte (Dom. Republic) Edeeste (Dom. Republic) Energuate (Guatemala) DelSur (El Salvador) Disnorte- Dissur (Nicaragua) AyA (Costa Rica) Edemet-Edechi (Panama) Electricaribe (Colombia) EPSA (Colombia) ISAGEN (Colombia)

Petrobras (Brazil) Elektro (Brazil) Sabesp (Brazil) Eletrobras (Brazil) Energisa (Brazil) EDP (Brazil) Light (Brazil) Sedapal (Peru) Electrodunas (Peru) Luz del Sur (Peru) Ande (Paraguay) CGE (Chile) EDEN (Argentina) Edesal (Argentina) Enersa (Argentina) Aysa (Argentina) Edelap (Argentina) OSE (Uruguay) UTE (Uruguay)

#### Europe

Naturgy (Global) Enel (Global) Viesgo (Spain) Iberdrola (Global) OMIE (Spain) REE (Spain) Canal Isabel II (Spain) Acciona (Spain) Enagas (Spain) AXPO (Spain) REPSOL (Global) EDP (Portugal) A2A (Italy) HERA (Italy) ACEA (Italy) Engie (France) ENEA (Poland) OTE (Czech Republic) CEZ (Czech Republic) SSE (Slovakia) SEPS (Slovakia) Red Chisinau, Centru, Sud (Moldova) Electrica (Romania) NEK EAD (Bulgaria)

#### Africa

GECOL (Libya) SEGAS (Egypt) EEU (Ethiopia) AEDC (Nigeria) ECG (Ghana) LEC (Liberia) ENEO (Cameroon) SEGESA (Eq. Guinea) UMEME (Uganda) KETRACO (Kenya) KPLC (Kenya) Nairobi Water (Kenya) Gulf Power (Kenya) ZESCO (Zambia) ESCOM (Malawi) EDM (Mozambique) ZETDC (Zimbabwe) ETEKWINI (South Africa) Sonelgaz (Argelia)

#### Asia & Oceania

SEDAS (Turkey) KRG (Kurdistan) JEPC (Jordania) EWA (Bahrain) RAWEC (Saudi Arabia) BESCOM (India) TPC (Taiwan) Meralco (Philippines) Maynilad (Philippines) Manila Water (Philippines) FirstGen (Philippines) PLN (Indonesia) HydroTasmania (Australia) Origin (Australia) Monash University (Australia)

More than **100 million Customers** managed by Minsait commercial systems More than **700 Power Stations** are managed with Minsait solutions More than **340 utilities use Minsait Grid Solutions** for Grid or Metering Management

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minsait.com



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