Participating Company Presentations

PROJECT GALATEA

Reuben

A Maritime Company

HIOTEE

LIMITLESS CONNECTIONS FOR EVERYONE

A IoT/Sat Aerospacial Company

Reuben Sp.z.o.o

Reuben

What we do?

- Production of ships and floating structures
- Production of electricity from waves
- Research and development work in the field of natural and technical sciences
- Professional, scientific and technical activities
- Software development

- Activities related to the organization of fairs, exhibitions and congresses
- Activities related to translation
- Specialised education
- Specialised retail sales

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Vision and Mission

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- Limited access to electric energy and to drinkable water combined with an increase in world population and purchasing power, results in an increasing demand for these products the coming years.

- Reuben Sp. z o.o. is dedicated to satisfy customer demand, through year-round cost-efficient global distribution of technology which converts wave energy into electricity and/or desalinated sea water.

Business Goals

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Reuben Sp. z o.o. will make it possible for the business partner to be the number one in the field of health, environment and safety.

The goals are:

- No accidents, injuries or losses thanks to the lightweight buoy cylinder construction
- as well as no marine growth and wear problems.
- Continuous improvement of our operational partners
- that contributes in reaching our goals.

Reuben Sp. z.o. aims, through a unique combination of energy resources and qualified personnel, to:

- Be the first choice in the wave energy market.
- Be a leading wave energy technology.
- Be the supplier for most efficient wave energy operators.
- Be a front runner in applying new technology.

The inventor of The Wave Pump believes in doing business with sophisticated global organisations and genuinely two-way relationships with local communities, contractors, partners and governments.

Product

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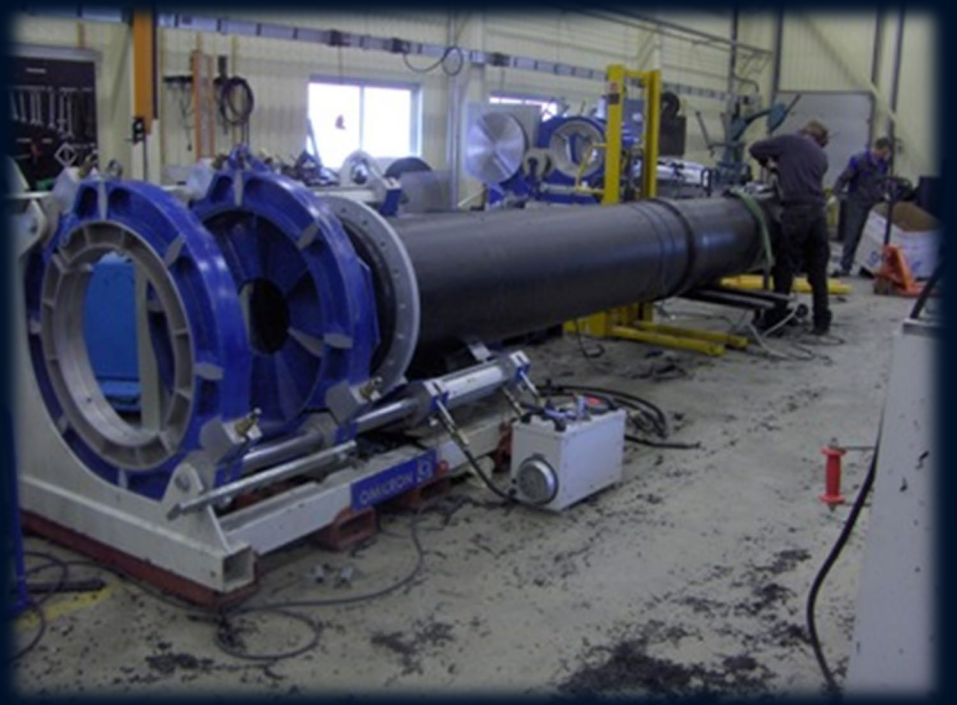
Quality Product

- Standard polyethylene pipes are chosen for all the pump parts.
- This material has an extreme strength as well as flexibility.

- The ocean tests have shown no kind of material wear.

- Tests and 40 years of experience with polyethylene pipes in fish farming have shown no sign of quality reduction after long time in tough seawater conditions.

- A realistic service life for The Wave Pump is therefore expected to be 20 – 30 years.



Reliable Performance

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- The construction is simple and will cause no complicated engineering.
- Polyethylene pipes and welding equipment are available in any
- corner of the world. Therefore pumps may be fabricated close to any actual site.

Why Choose the Wave Pump

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- The material is standard PE pipes, and few of the components have to be special made.
- This is to secure long-term reliable and safe service, and a very cost-effective installation.
- The Wave Pump has been a pioneer in new offshore technology for the past years and now offers to share its proven experience.
- The Wave Pump have proved the main goal from the very beginning:
- High effect - low price!

The Scope

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- The patent principles for the wave pump represent a revolutionary resistant, light weighted and technical simple buoy based piston pump converter.
- The facilities have few and simple connections – therefore the risk of breakdown is minimal.
- The wave pump has many areas for applications. Following are the primarily areas:
  - Converting of pressurized water to electric energy.
  - Desalination of sea water etc.
- Since The Wave Pump can also utilize low wave heights, the production time is high.
- The proportion of the yearly production/installed capacity time is significant higher and far better than the competitive solutions.

The Wave Pump – Basic Principle

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The wave pump is divided into the following items:

- A balanced loaded lightweight buoy cylinder construction.
- A valve system, which has shown no marine growth and wear problems.
- The valve system also provides a quick flow through the pump chambers
- A wave focusing design which optimizes the effect of the pump.
- These factors reduce the horizontal pendulum to a minimum, which is basic for survival and optimal function.
- The material is standard material, and few of the components have to be special made by the fabricator.

Applications

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The wave pump has many areas of application.

The primarily areas are as follows:

- Converting of pressurized water to electric energy.
- Pumping of seawater through land based or sea based fish farming plants.
- Osmotic desalination of seawater.
- Pumping of water to evaporating desalination basins.
- Pumping of fresh seawater to circulate through polluted harbor basins.
- Pumping of seawater to harbor basins with ice problems.
- Pumping of surface water and/or air down to sea bottom.

Market

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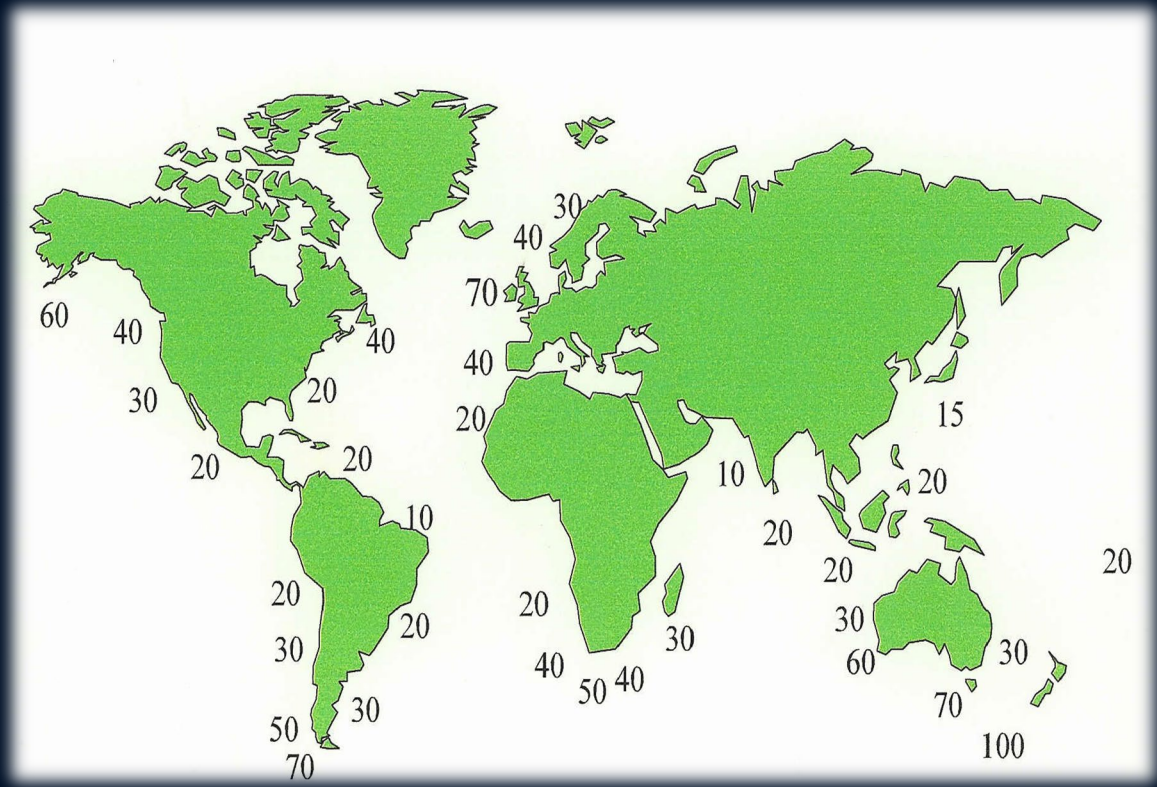
- Waves form a potentially large Worldwide resource estimated **to more than 2 TW!**
- There are several regions around the world with high incident wave power levels – which are particularly well situated to exploiting the renewable energy.



This map shows global distribution of wave power levels in kW/m of crest length.

Illustrations

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- The last stage of development has successfully tested a new and simple installation of several pumps with a flexible connection to sea bed anchors.
- Installation of many co-acting pumps may be operated with medium sized local fishing boats or similar.

The technology is now prepared for a commercial take-off !!!

Illustrations

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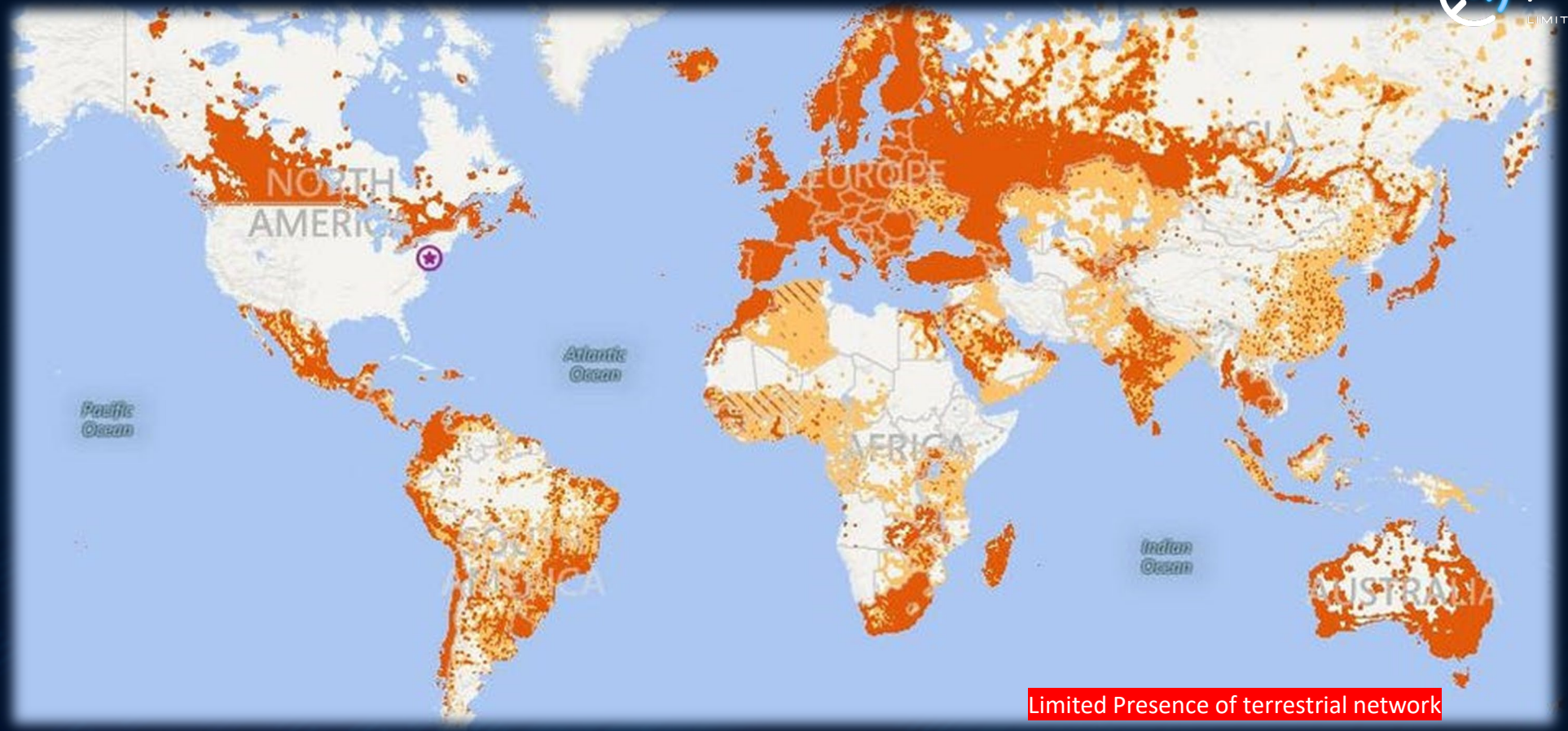

The Reality Check

- Today 80% of the planet is in white zone, with 70% representing seas and oceans, and 10% in developing continents which need connections but also all the advantages offered by connected objects.
- The lack of cellular network is a major drawback, and the IoT/Sat technology is the only solution that will allow to have a network accessible to all, "Worldwide".

Mission & Vision

Mission

To offer worldwide digitalization solutions in order to reach complete industrial revolution 4.0.

Vision

Building a Worldwide IoT/SAT network accessible to everyone for a better sustainable future.

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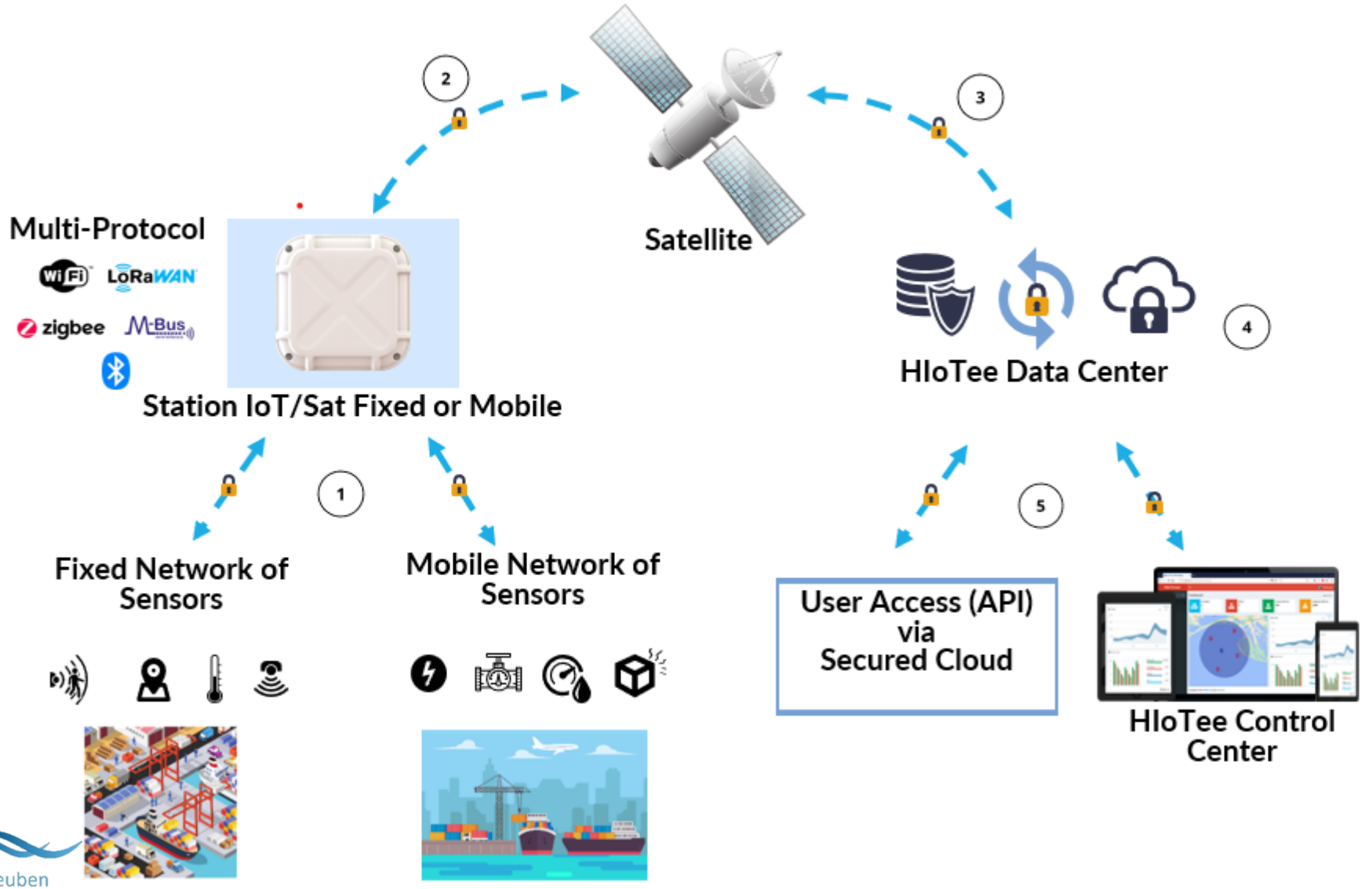
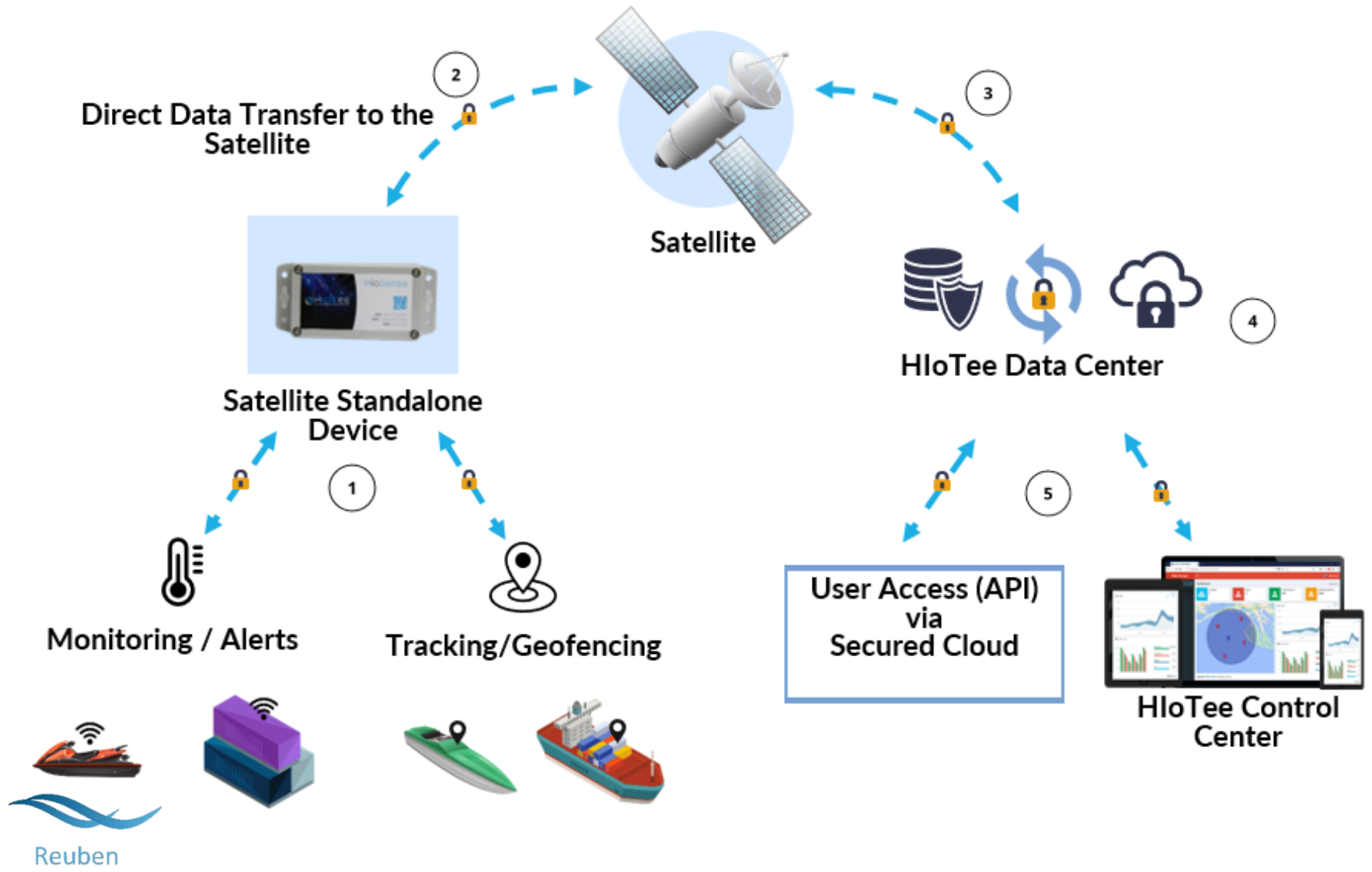
HIoTee : End to End solution



1. Data collection and processing
2. Data encryption and transmission to satellite
3. Data transfer: two way and real-time protocol
4. Data storage
5. Remote control for monitoring operations including assets and personnel

HIoTee : End to End solution



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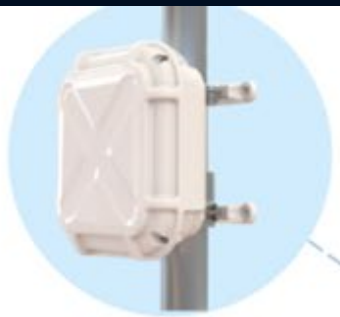
Our Products



OmniTee

IoT/Sat Fixed Station

The leading wireless network for digitalizing isolated areas with IoT/Sat connection

Liber-Tee: Universal Data Supervision Platform

Easy-to-use interface, compatible with all IoT products & protocols for data supervision & remote control

MobiliTee

IoT/Sat Mobile Station

The mobile wireless network for digitalizing means of transport & logistics

HIoSense

IoT/Sat Compact Standalone Device

The next generation of integrated satellite solution for worldwide monitoring

HIoTrack

IoT/Sat Compact Mobile Device

The next generation of integrated satellite solution for worldwide asset tracking & geolocation

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Our Domain of Expertise : Maritime

Boating

Maritime

Logistics

HIoTee Benefits

Why HIoTee ?

Strong Expertise in Radiofrequency IoT/Sat : Leading edge product, top quality support and high reliability networks

End to End Service : From data collection to data supervision/visualization (API)

IoT/Sat Technology : Hardware and software in house development , we customize our solution for new industry 4.0 uses.

R&D Adaptability for evolutive solution : We will integrate the up coming IoT protocols and the future LEO satellite constellations .

Why HIoTee Solution ?

Global Coverage and Worldwide Scalability : Our solutions can be deployed anywhere in the world, even in the most remote areas.

Easy to deploy and Maintain : 100% wireless, compact and durable.

Security : Data collection “encryption”, data transmission with a permanent satellite connection and a secured cloud network.

French Solution : Product made in France and uses French constellation of satellites

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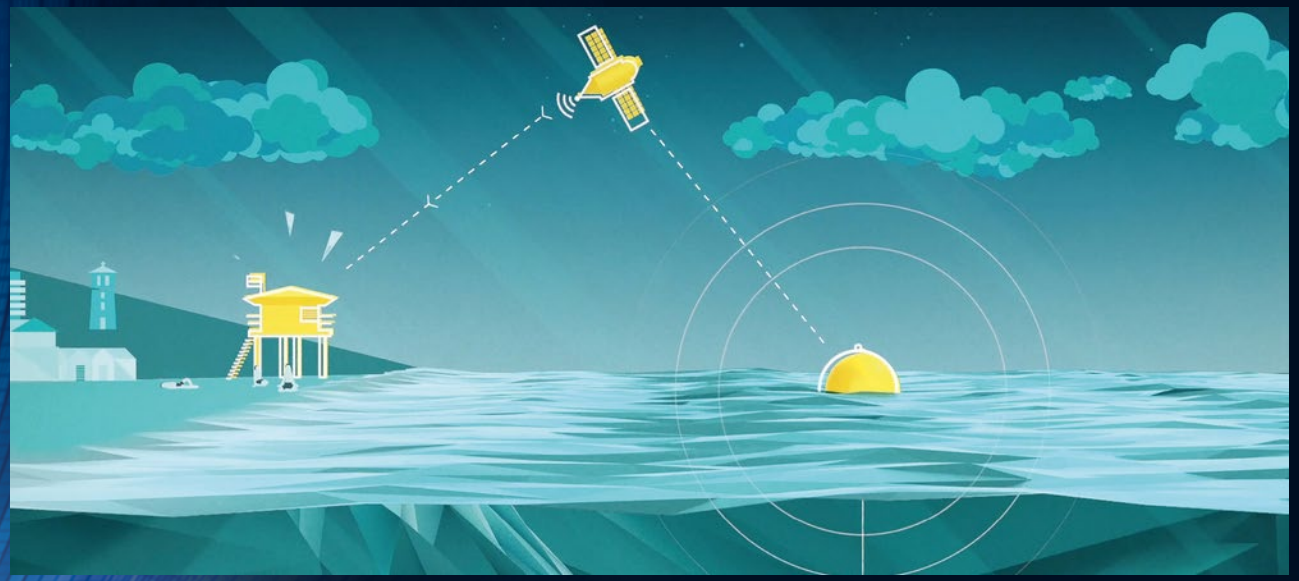
Use Case Rewave Smart Wave Pump



Monitoring the pressure and performance of pump

- Measuring the pressure shall provide the performance analysis of pumps
- Detect areas of improvement with help of dedicated supervision platform
- Aid in smart decisions online

Geolocation and Tracking of pumps

- Geolocation of pumps worldwide by satellite
- Track the pumps in the event of floods and natural disasters
- Remotely control via dedicated platform

Predictive Maintenance

- Temperature & vibration monitoring for better functioning of pumps
- Maintain the efficiency, especially the performance of the machines
- Send alerts in terms in terms of battery performance and functioning

Monitoring pollution and environment for sustainability

- Monitor the quality of water and level of pollution with sensors
- Detect areas of concerns and send real time alerts
- Aid in monitoring pollution and general statistics of the quality of marine life

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Contact us!

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