



TARKA-SYSTEMS BV

PRESENTATION 2018

TARKA-SYSTEMS BV

OUR BUSINESS:

- Development of client-specific monitoring systems (hardware and software)
- Multifunctional datalogger MOSS for harsh environment, portable and battery powered for all types of sensors.
- Assembly of equipment within pelican/explorer cases or flightcases.
- Sensors and sensor-cabling
- Setup and installation on-site

COMPLETE RANGE OF SOLUTIONS

**Permanent
complete systems**



Fixed location

**Semi-Permanent
(complete) systems**



**Systems in rugged cases.
Can move from project to project**

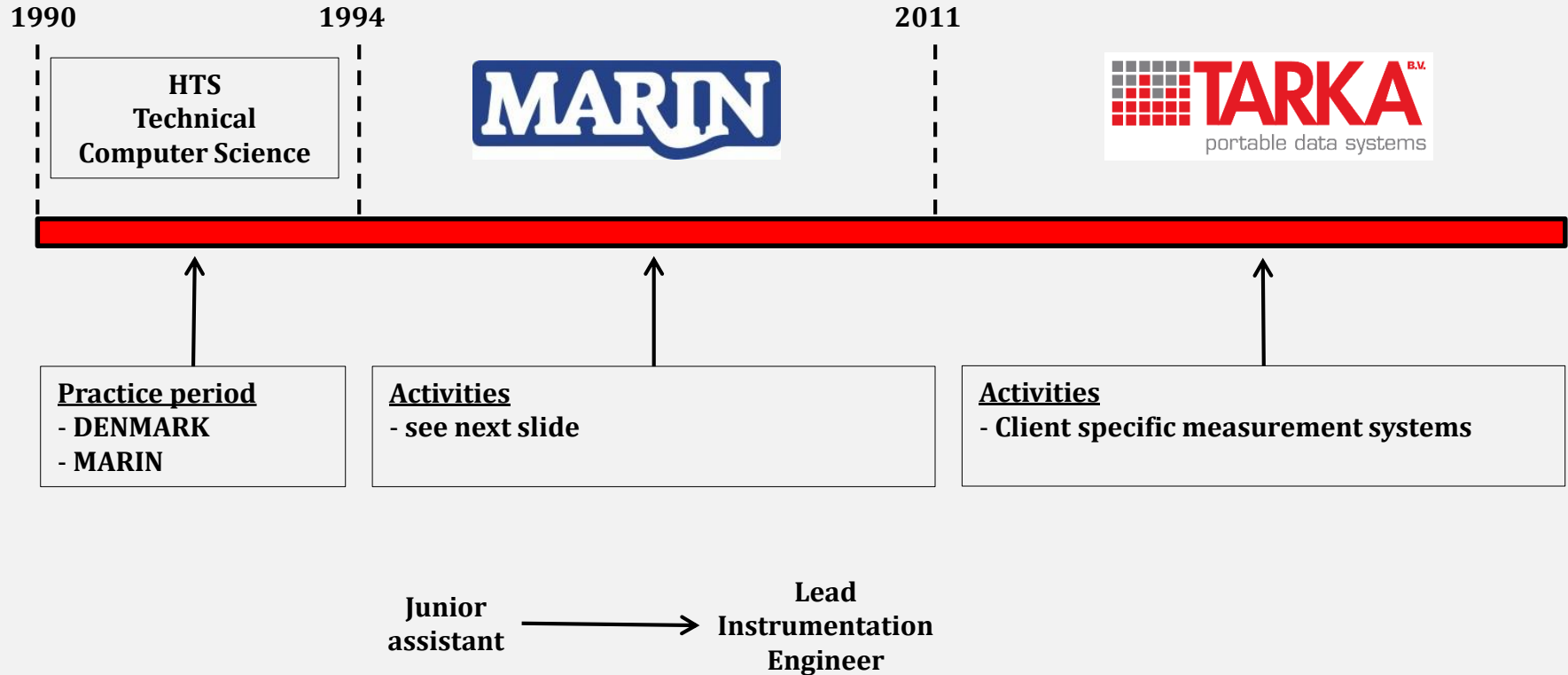
**Temporary
systems**



**Small systems for local
monitoring and control**

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- **BACKGROUND**
 - **TARKA-SYSTEMS**
 - **PAST, NOW, FUTURE**

TIMEFRAME HENRY WIJGERSE



1994

2011



Activities

- Design and development of measurement equipment
 - hardware & software
- Worldwide installation/setup of equipment at ships and oil-rigs
- Over a total of 1000 days on-site experience
- Executing trials and measurements



What to measure

Motion sensor (6DOF)
Wind
Wave
Flow (Current ADP, ADCP)
DGPS (RTK)
Incline
Acceleration
Strain gauges
Force sensor
Torque / Engine power

Types:

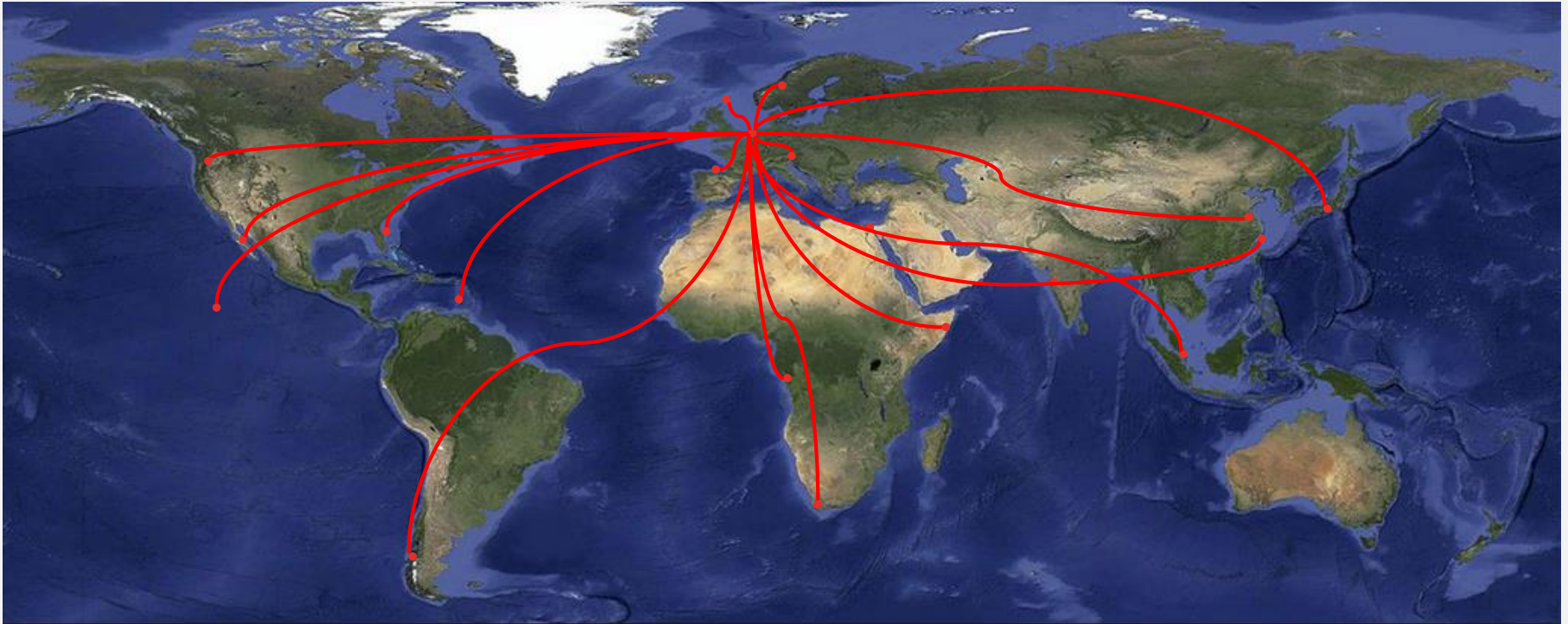
Bus-systems
Serial data (RS232/RS485)
Raw Electrical values (mA, V)

Applications

Motion monitoring
Environmental monitoring
Tow monitoring
Fatigue monitoring
Ship behaviour monitoring

Areas

Maritime
Offshore



Field experience and practical knowledge

- Over a total of 1000 days experience on-site worldwide
- Practical experience with onsite measurements
- Practical experience with design of field systems (hardware and software)

Large Projects

(as lead engineer at MARIN)

FPSO USAN (Korea 2010)

Installation of hardware and software system in Korea and Nigeria.



United States Coast Guard (San Francisco 2008 - 2010)

Site manager during installation of fatigue measurement system on coast guard cutter “BERTHOLF”, hardware and software. Overall 200 sensor inputs, acc, strain-gages, environment.

FPSO GLASDOWR (2008 - 2011)

Installation of system on FPSO GLASDOWR of BLUEWATER for several projects in Scotland, South Africa and Singapore.



TLP MARCO POLO (USA 2007 - 2010)

Installation and maintenance of hardware and software at dock-site and on-site in Gulf of Mexico.

- BACKGROUND

- TARKA-SYSTEMS

- PAST, NOW, FUTURE

TARKA-SYSTEMS bv

- Founded October 2011
- Development of client-specific (portable) data systems
- Client-specific measurement and monitoring tools
- One-Stop solution for complete systems (hardware/software)
- Based on 15 years of system design and practical experience

Complete monitoring systems

- Production and assembly
- Hardware & Software
- Setup & Installation
- Maintenance
- Support

BENEFITS FOR CLIENT

- One-stop solution for a complete monitoring system
 - Single investment for multiple solutions
 - Modular setup of monitoring systems
 - Reduce setup time and improve uptime
 - Data output format matching analyzing tools
 - Clear GUI to improve decisions and overall safety
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- Setup/Installation onsite
 - Offshore safety papers
 - Practical experience

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STRUCTURAL AND TRANSPORT MONITORING



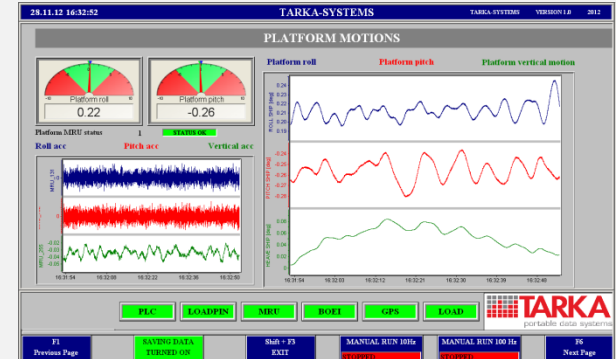
Barge H851

Argutun-Dagi
project



Stress, motion and environmental monitoring at tow and installation.
Strain gauges, Motion sensors, wireless data link, wind, wave, current

TRANSPORT MONITORING



Monitoring System covering the following items:

- Battery control system with solar panels
- Motion sensor
- GPS sensor
- Tracker unit with data visible on website
- Wireless data-links between barge and tug
- Data storage and presentation



CHINA : FLOATOVER PROJECTS



Complete motion and environmental monitoring system for floatover installation.

Motion sensors, wireless data link, wind, wave, current

SALVAGE PROJECT



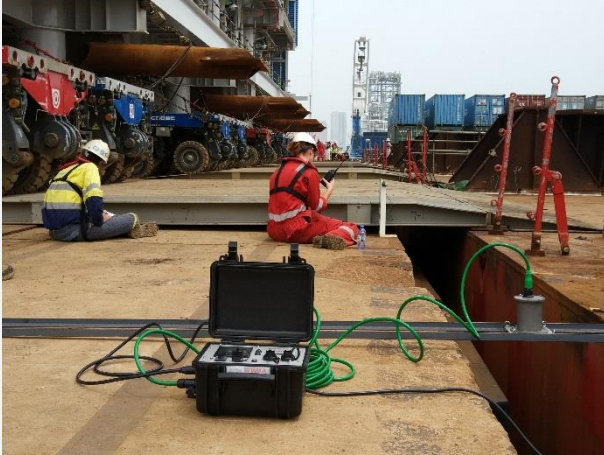
Motion monitoring during salvage operation

Motion sensors, wireless data link, visualization software

MOSS **Multi Operational Survey System**



- **Portable / Battery powered**
- **Sensor data gathering / visualization**
- **Data logging internal/USB**
- **Data forwarding wired/wireless**
- **Time synchronization**
- **Modbus / Ethernet / USB connection**
- **Digital inputs/outputs**
- **Counter/Timer options**
- **Options for client-specific hardware & software**



RAMP-ANGLE

- Digital ramp-angle measurement
- Local and remote on bridge
- Data storage
- Battery powered



BARGE-ANGLE/FREEBOARD

- Roll/Pitch angles of barge during loadout
- Draft values during loadout
- Local and remote on bridge
- Data storage
- Battery powered



HYDRO-STATIC TEST ON PIPELINE

- Pressure and temperature measurements
- Long term measurement with external battery pack (5 days)
- Data storage local and remote to webserver



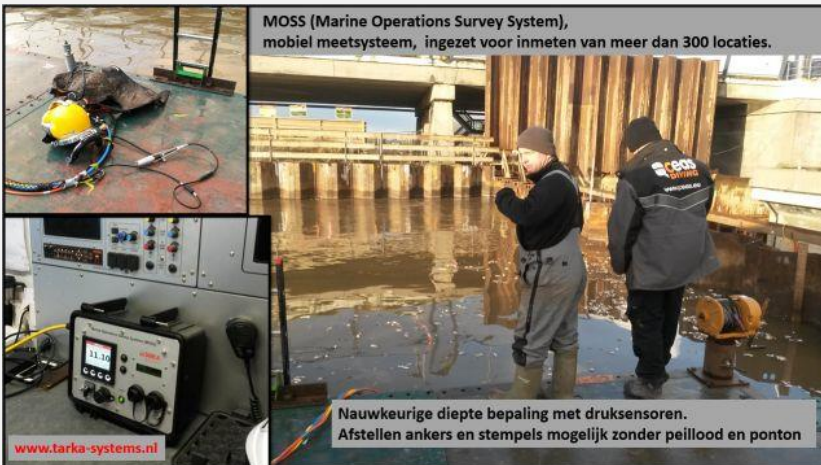
DRAFT /FREEBOARD

- Ultra-sonic distance measurement
- Data storage
- Battery powered



ENVIRONMENTAL MONITORING

- Wind direction/speed
- Humidity, Pressure, Dewpoint, Temperature
- Long term measurement with external battery pack (5 days)
- Data storage local and remote to webserver



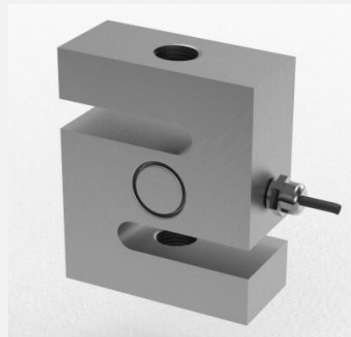
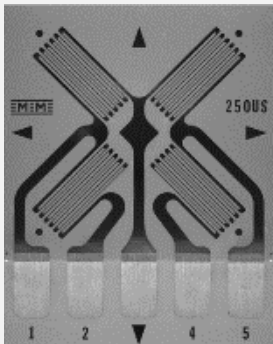
DEPTH MEASUREMENT

- Pressure sensor
- Hydrostatic / Atmosphere
- Data storage
- Battery powered

FLOW MEASUREMENT



- Water direction, water speed
- Quick installation
- Useful for diving projects
- Data storage
- Battery powered
- Data storage



STRAIN GAGES, LOAD CELLS

- Bridge measurement
- Load cells
- Data storage
- Battery powered

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Areas

Maritime
Offshore
Salvage
Civil
Mining
Industrial
Chemical
Agriculture
Infrastructure
Archeology
Research
Oceanography
Others

Power supply

-Direct power from net (95-240 Vac).



-Battery supply small

-Handheld tools

-Travel cases



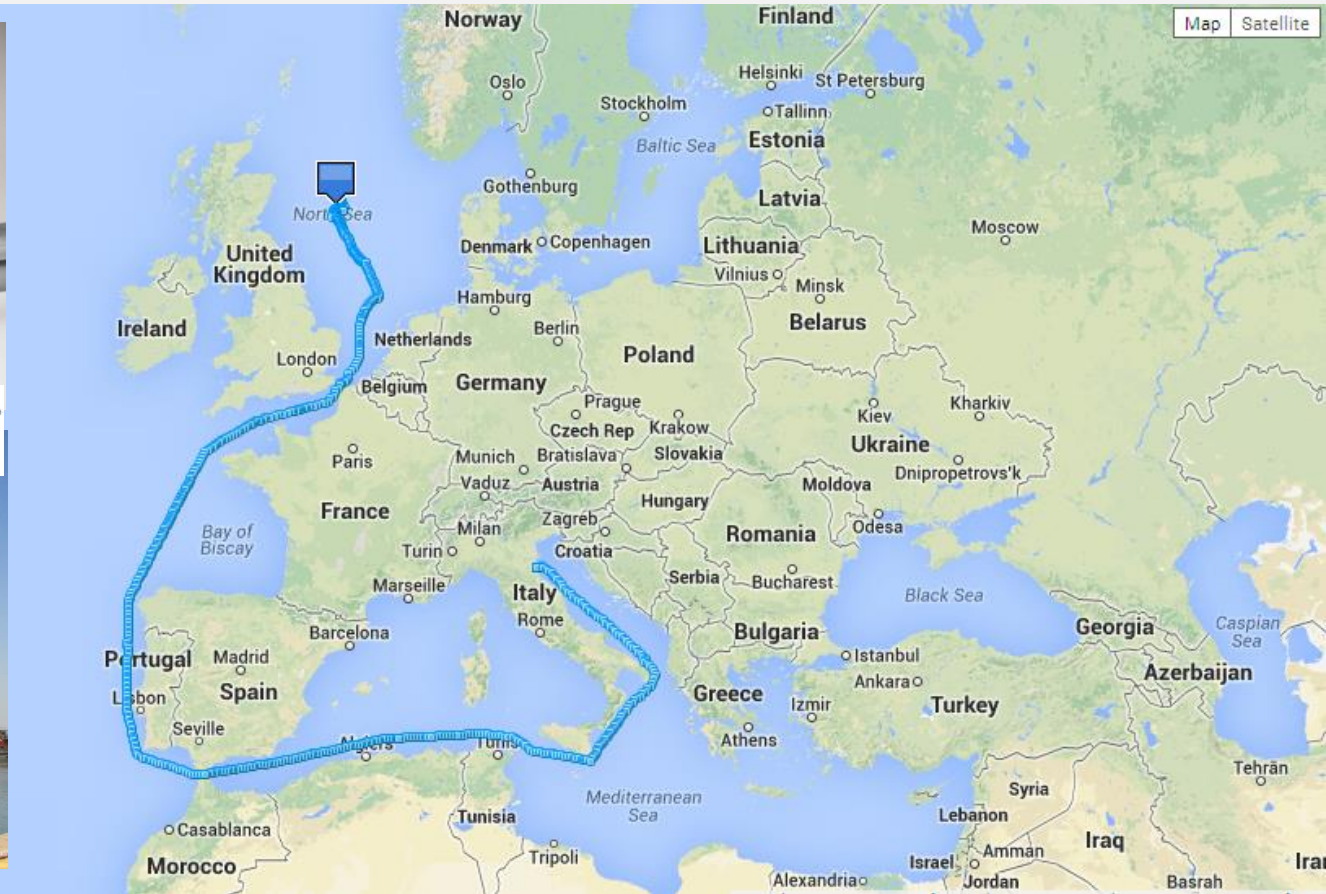
-Battery supply + solar

-Semi permanent systems

-Permanent systems



TRUE GLOBAL TRACKING UNIT GTTS - 3000





THANKS FOR YOUR ATTENTION

QUESTIONS ??

More information available at website:

www.tarka-systems.nl