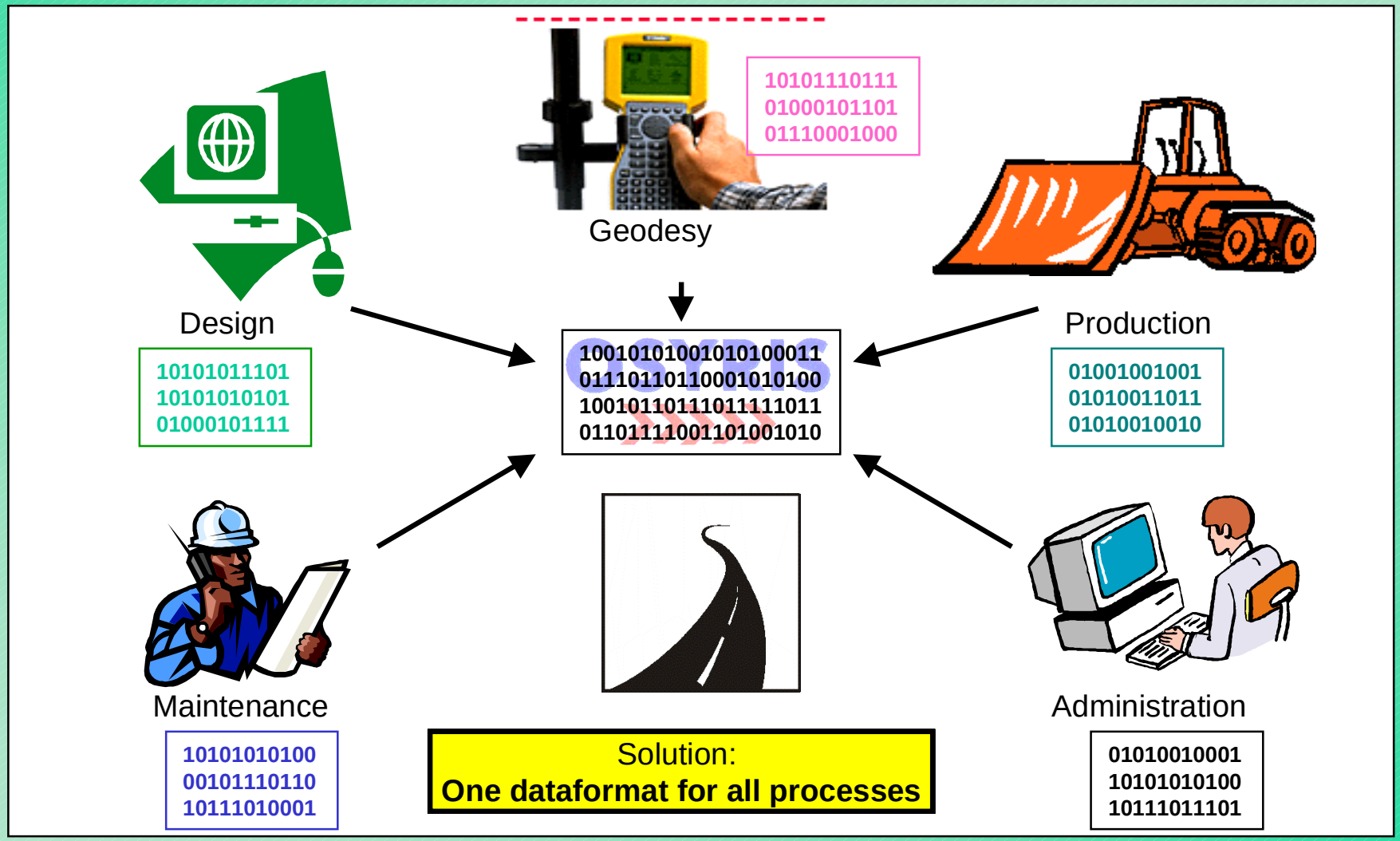
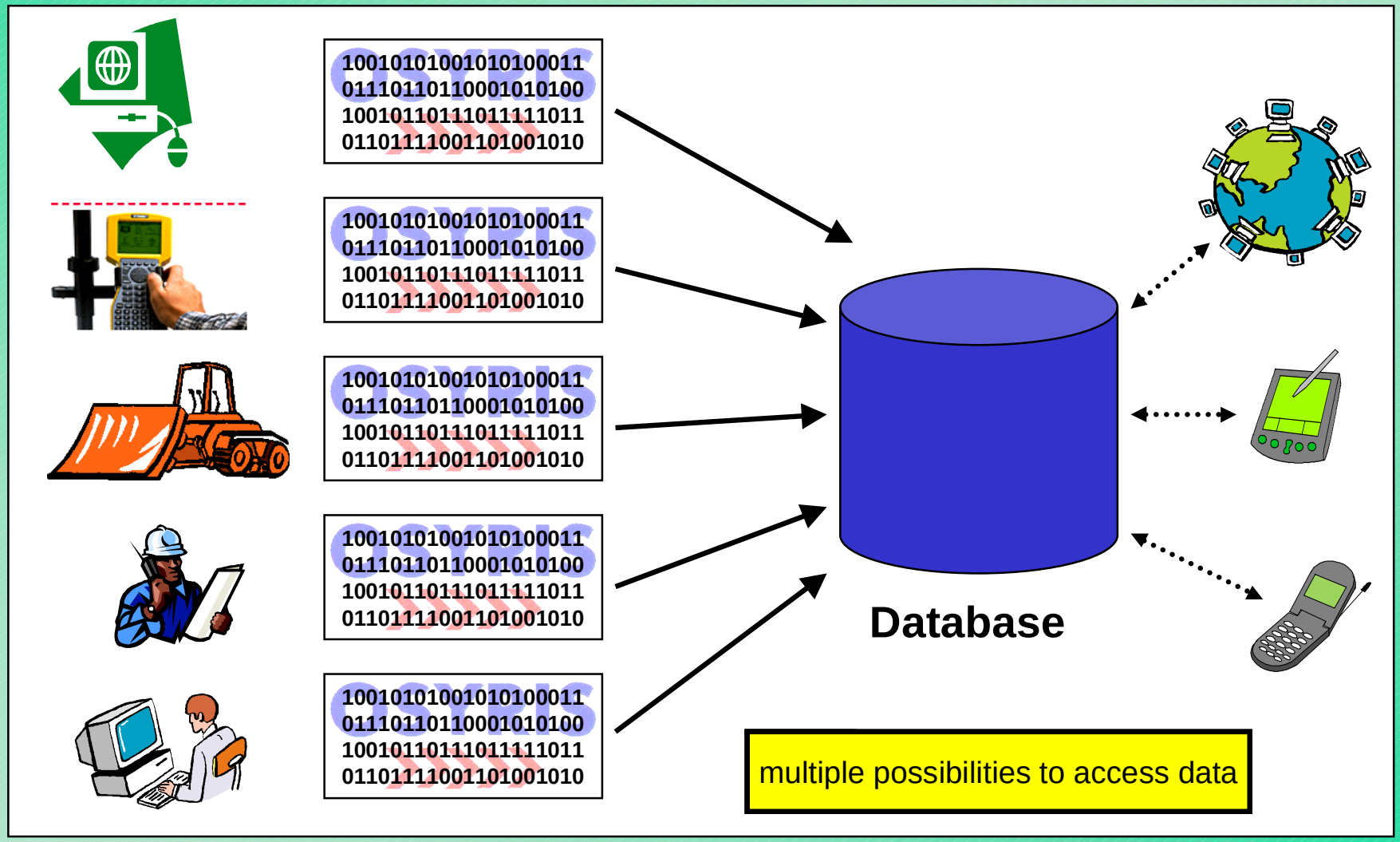
Open SYstem for Road Information Support

What is OSYRIS?



Dataprocessing



Who is OSYRIS?

TEKLA OY :

Development of Product Model, Work Site Web, On Site Design, Work Documentation

SKANSKA Sverige AB :

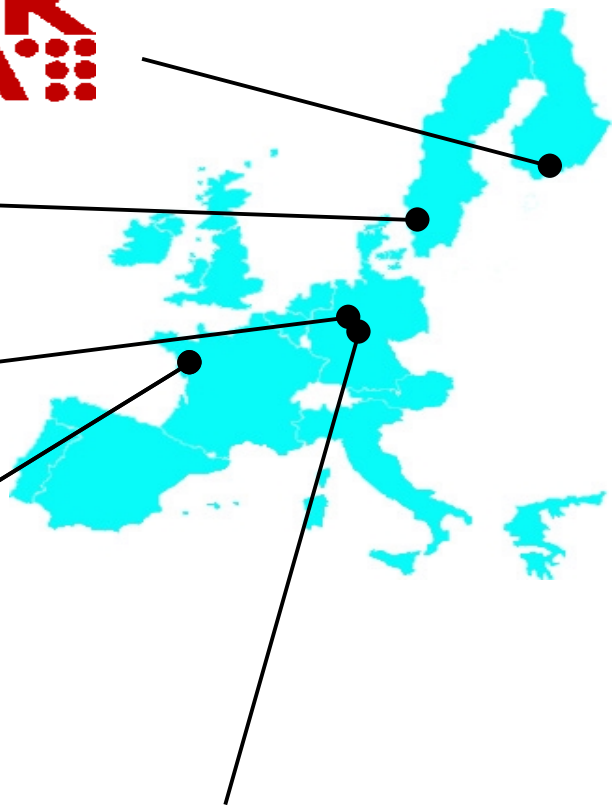
Contractor and owner requirement specifications, worksite tests

Mobile Automation GmbH, MOBA :

Intelligent sensors, on-board-communication

Laboratoire Central de Ponts et Chaussées, LCPC :

Research on intelligent sensors and data models, expertise in road construction and maintenance, tests of subsystems.



University of Karlsruhe, IMB:

Project Coordination, Development of Mobile Services, On board Computers and Setting Out Aid.

OSYRIS on a construction machine

OSYRIS-Components:

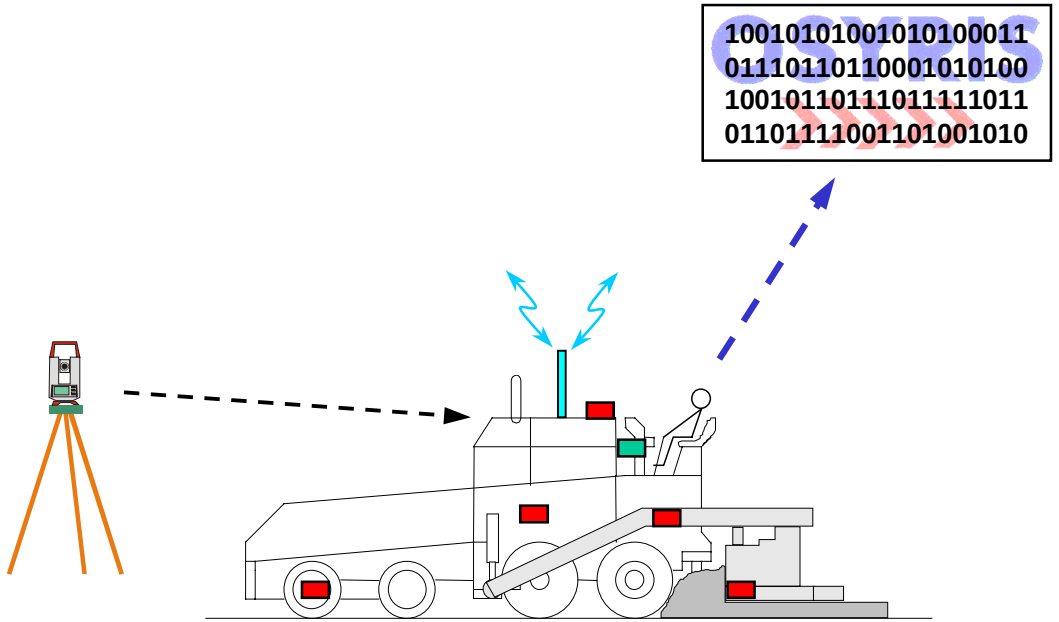
Sensors:

- Speed
- Temperatures
- Thickness of layer
- Machinedata
- ...

On-board computer

Mobile Services

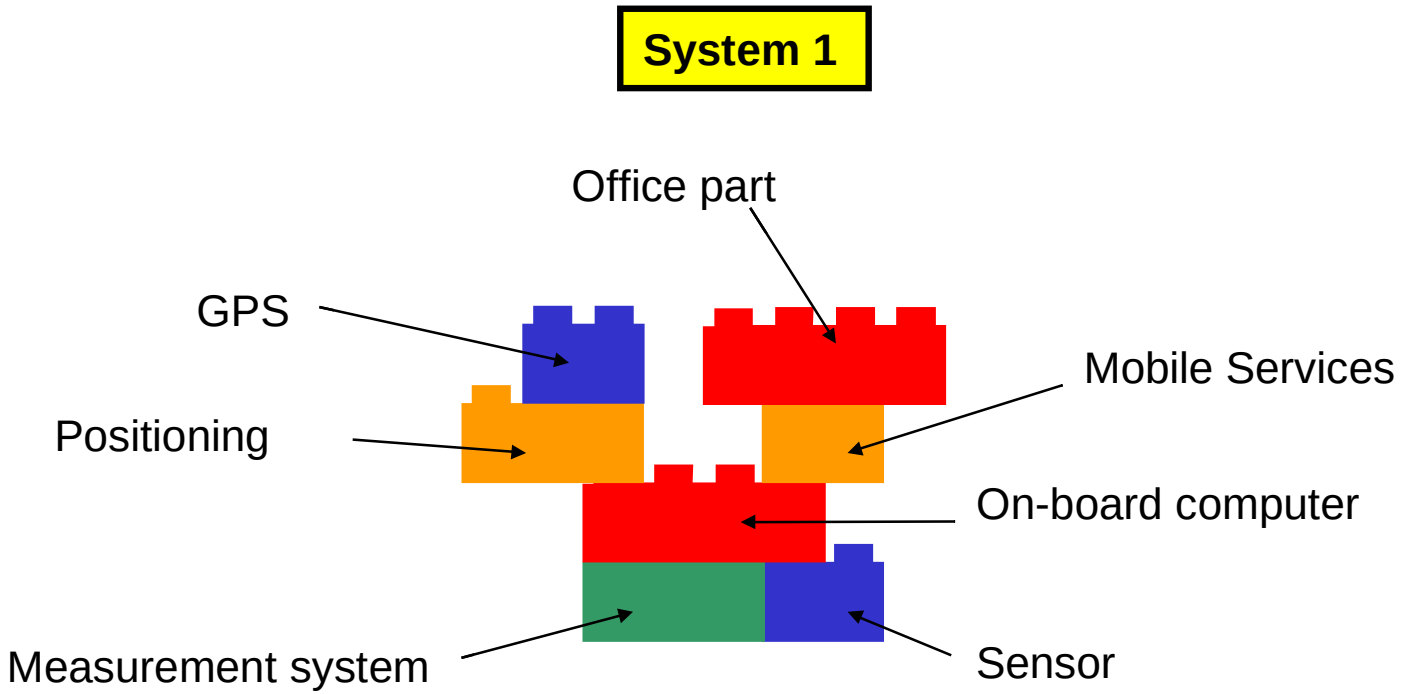
Positioning e.g. GPS, Total Station



Example: Paver

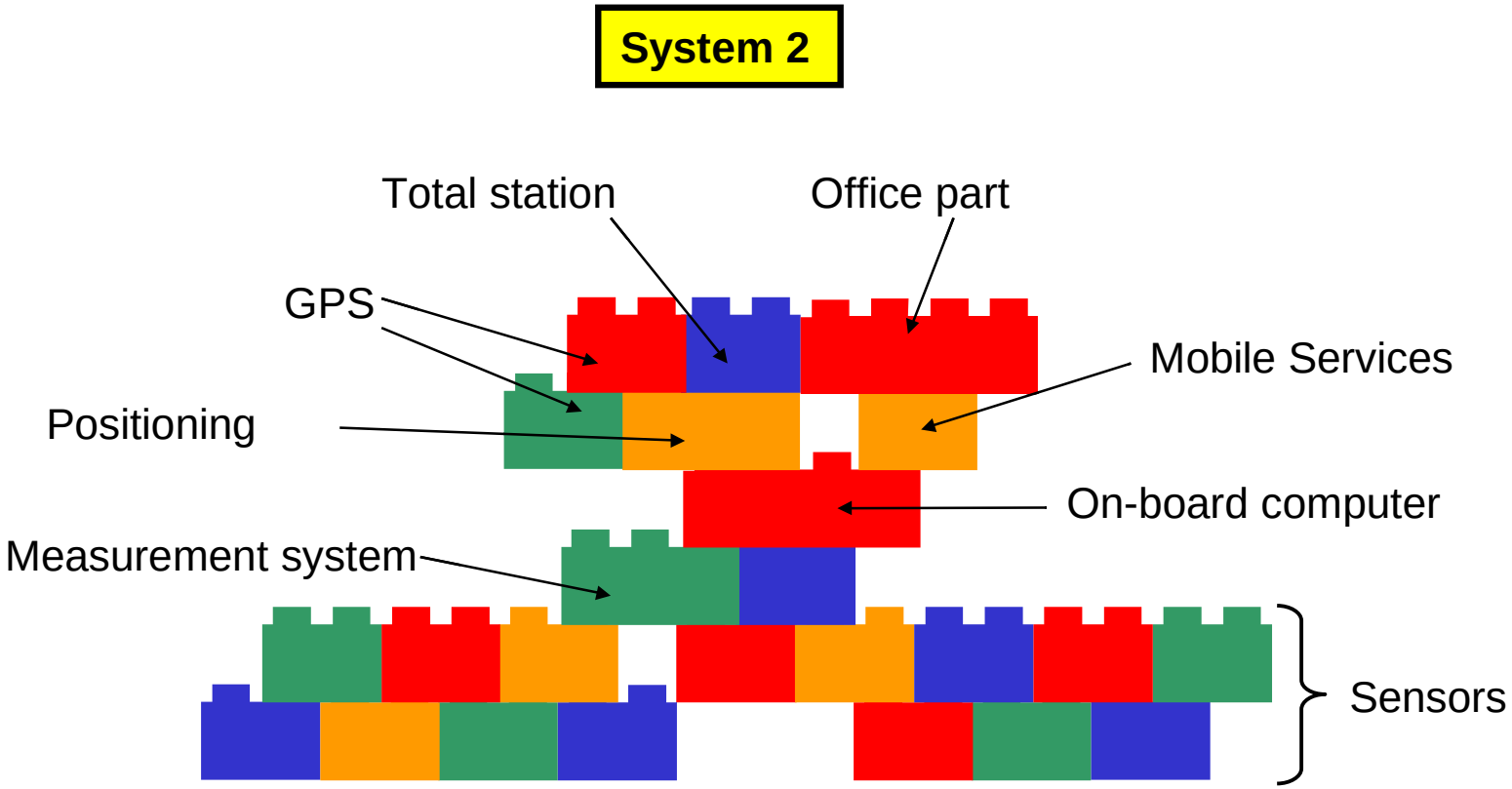
component-based system

OSYRIS-componentents can be freely combined:

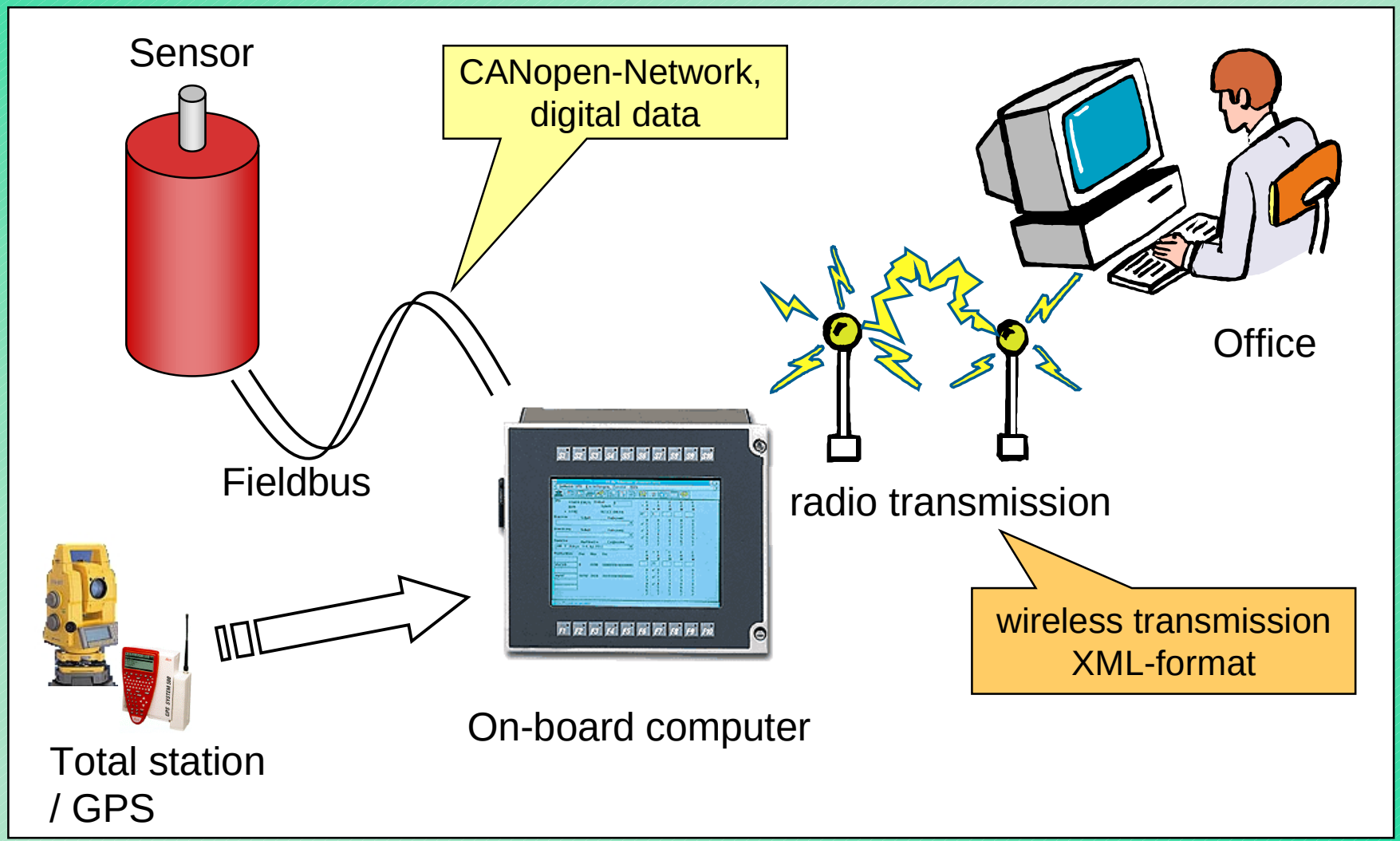


component-based system

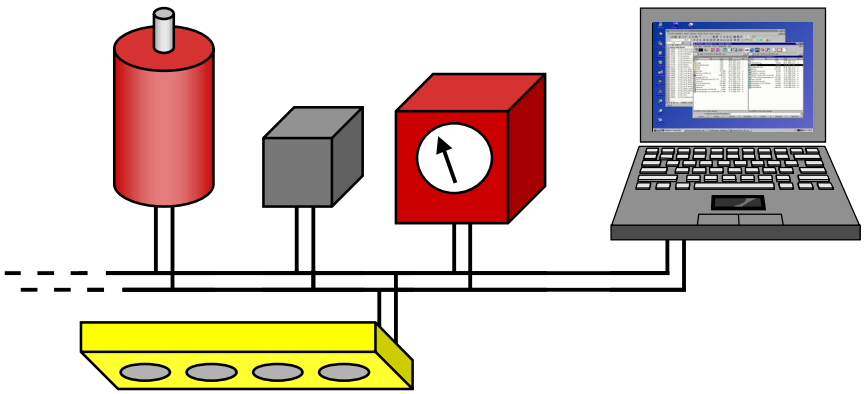
OSYRIS-componentents can be freely combined:



Dataflow


Sensor
CANopen-Network,
digital data
Office
Fieldbus
radio transmission
wireless transmission
XML-format
On-board computer
Total station
/ GPS

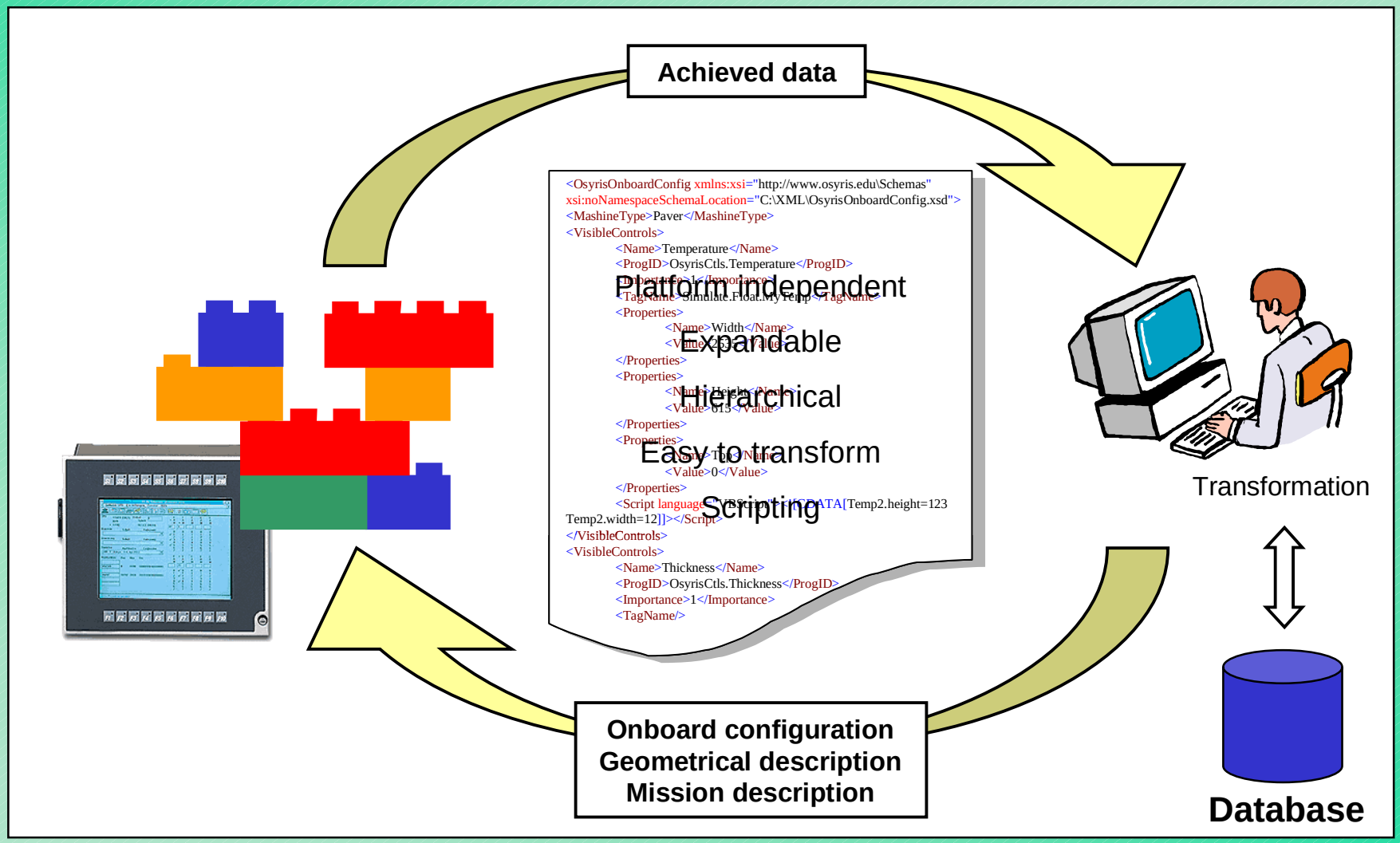
CAN - Controller Area Network



Data on bus has
different priorities

Messages	Priority
data	medium
configuration	low
error messages	high
synchronisation	very high

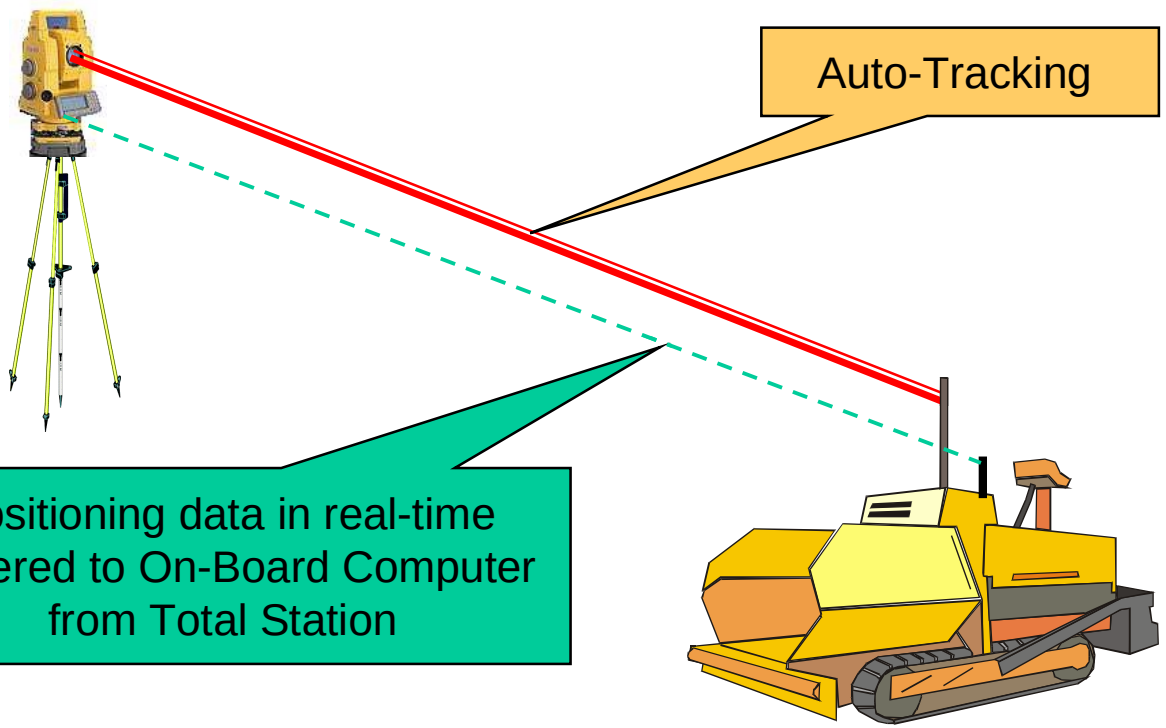
XML - eXtensible Markup Language



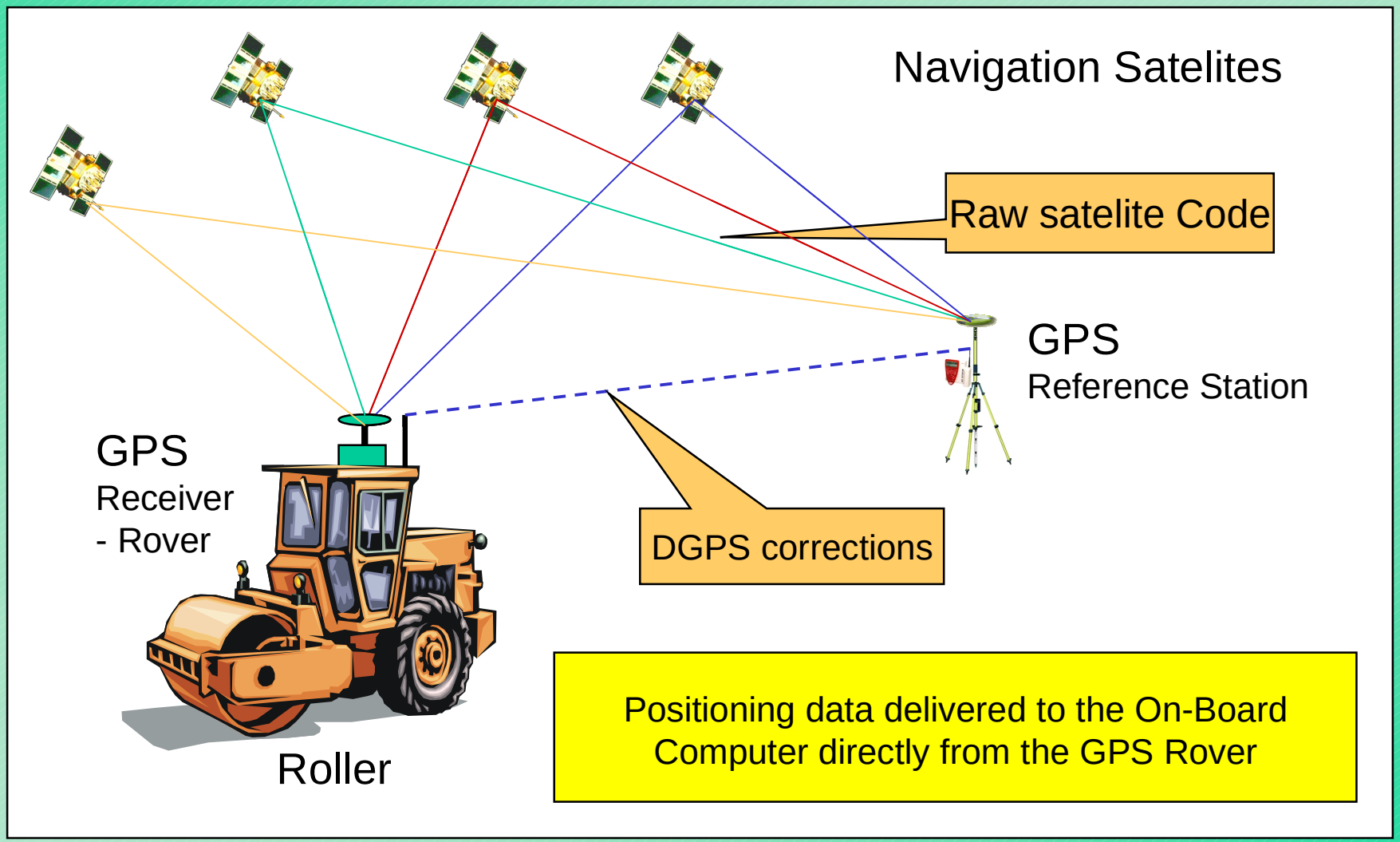
IMB, University of Karlsruhe

Positioning: Robotic Totalstation

Robotic Total Station



Positioning: GPS



more information

more information at

www.osyris.org

or via email

osyris@imb.uni-karlsruhe.de