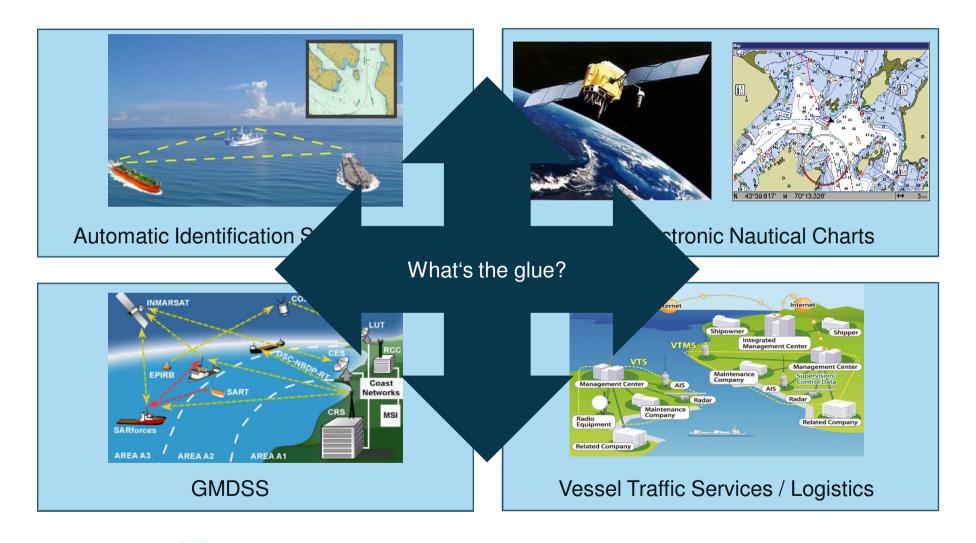


THE CONCEPTS OF THE MARITIME CLOUD

Axel Hahn (OFFIS), Jens Jensen (DMA), Mikael Lind (Viktoria Swedish ICT), Thomas Lutz (Frequentis), Benjamin Weinert (OFFIS), Jin H. Park (KRISO)



Technology on its way to the Ocean





WE HAD A DREAM...

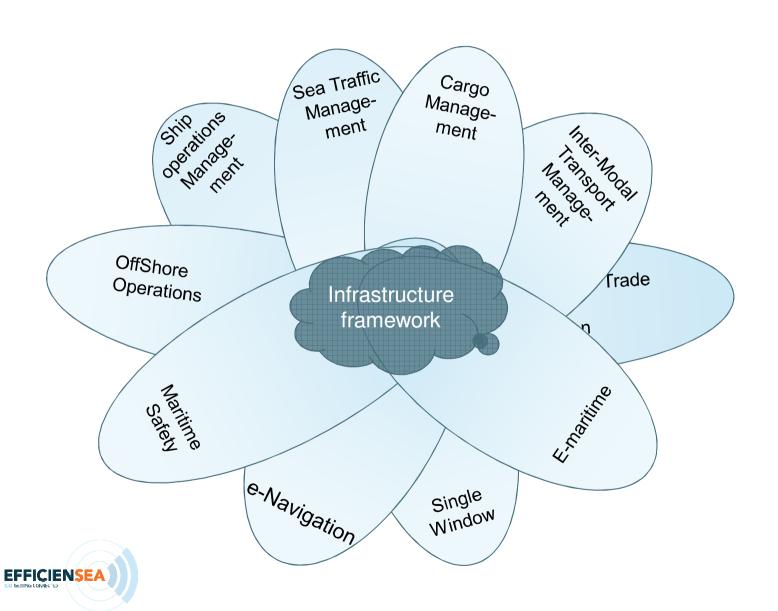


The Glue: The Internet of the Seas





The Maritime Infrastructure Framework



The Architecture of the "The Internet of the Seas"

Ship Sea Traffic Offshore And many Manage-Manage-Navigation more Opps ment ment Infrastructure Value Added Services (like SeaSWIM) Management The technical The Maritime Cloud backbone Common Maritime Service Infrastructure **EFFICIENSEA**

The Maritime Cloud: A Quick Recap..... The Concept

An Internet Protocoll (IP) based multimodal communication Backbone

Stakeholders

Customs

Service

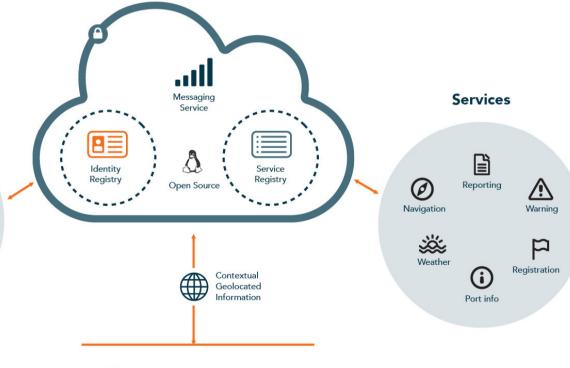
providers

A Service Oriented Architecture

- "Everything is a Service"
- Service user (Clients) an Service provider (Server)

VTS

Operators





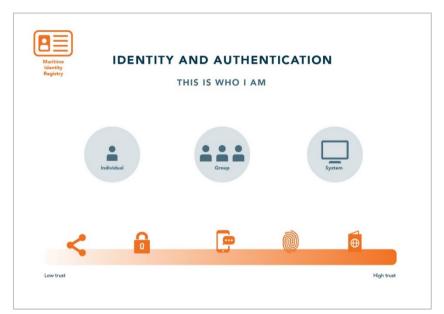




MARITIME CLOUD

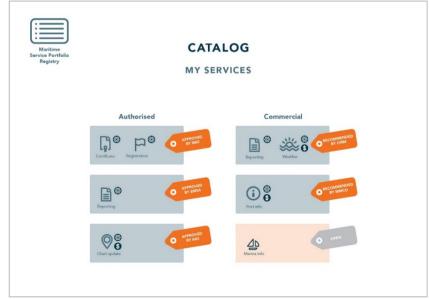


The Maritime Cloud: A Quick Recap..... Additional Elements









Established "Maritime Cloud Development Forum" to Coordinate the Work

Maritime Cloud Development Forum Austria Denmark, Germany, Korea, Sweden.

Working groups

One or more technical coordination groups Participants from projects

Project Efficen Sea2

STM Validation Project

Project **KRISO** /ETRI

Develop the Maritime Cloud concept with the aim of becoming the global infrastructure for e-**Navigation**

Develop the Maritime Cloud in order to meet infrastructure requirements in EfficienSea2, STM validation and KRISO/FTRI e-navigation projects

Implementation and realisation of the Maritime **Cloud Concept**







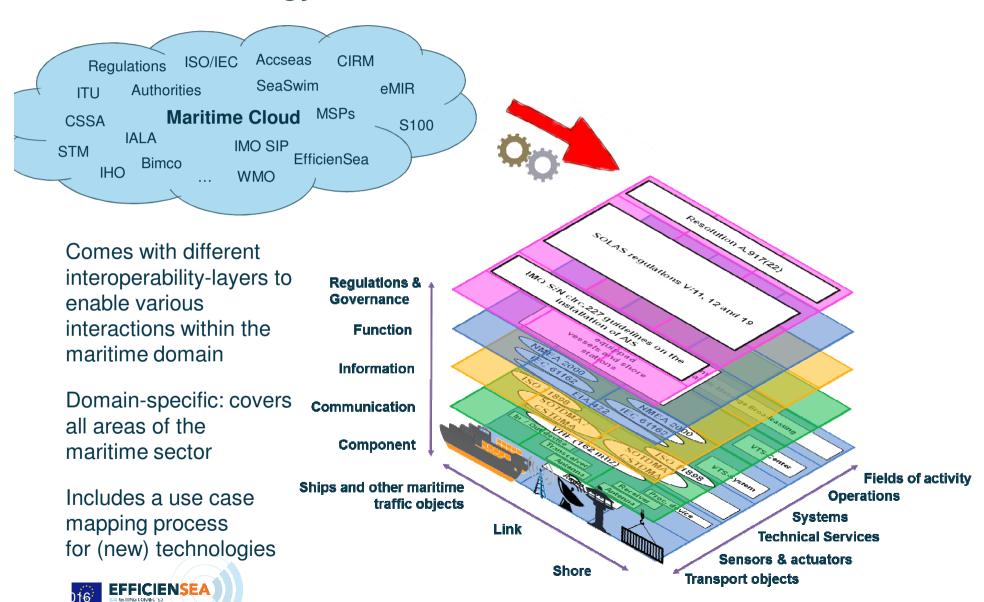








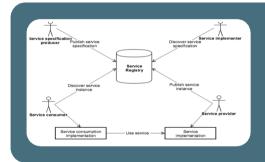
The Methodology: The Maritime Architecture Framework



MCDF Working Groups

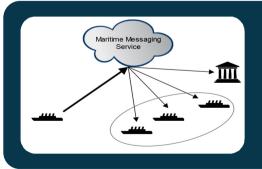


Identity management and security
Lead by DMA



Service specification and provision

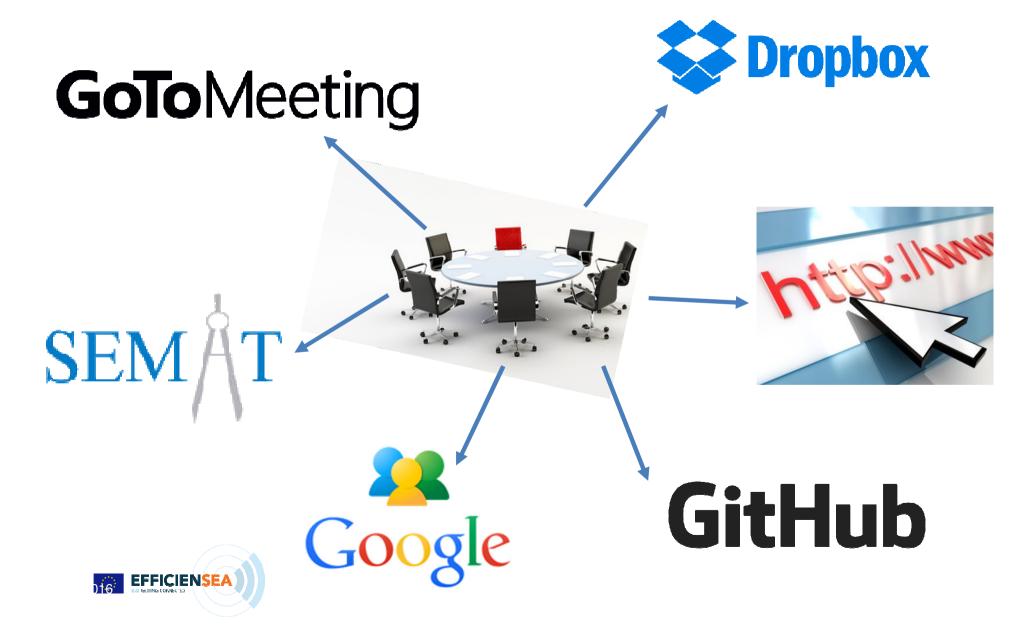
Lead by OFFIS



Communication and Messaging Lead by KRISO



MCDF: Lightweight Cooperation



Do You have a Contribution? Join the Team!













