



Rijkswaterstaat
Ministerie van Infrastructuur en Milieu

RIS in the Netherlands

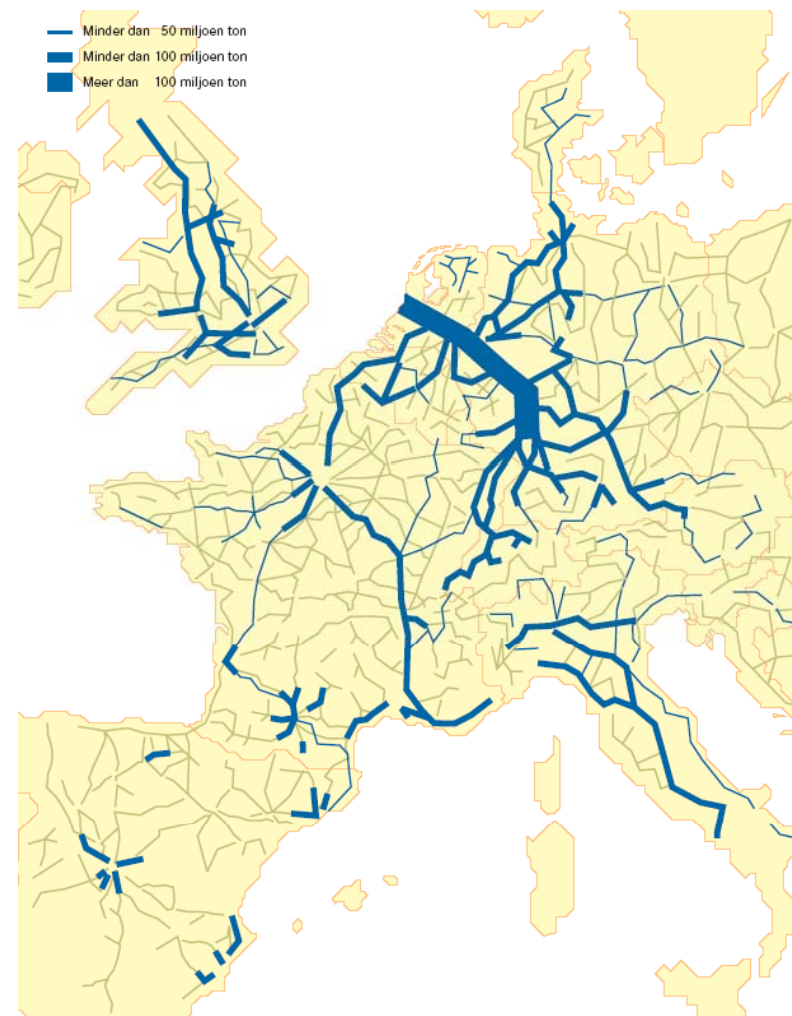
Ivo ten Broeke
Cas Wilems

19 october 2012



Transport in Europe

Total all continental transport modes annual tonnage





Transport in Europe

Inland navigation Rhine:

150 million tonnes annually
R'dam - Germany



VTS areas anno 2012





Typical lay out of traffic centres





Shore based radar display





Traffic Station: Radar, VHF, Information dBase



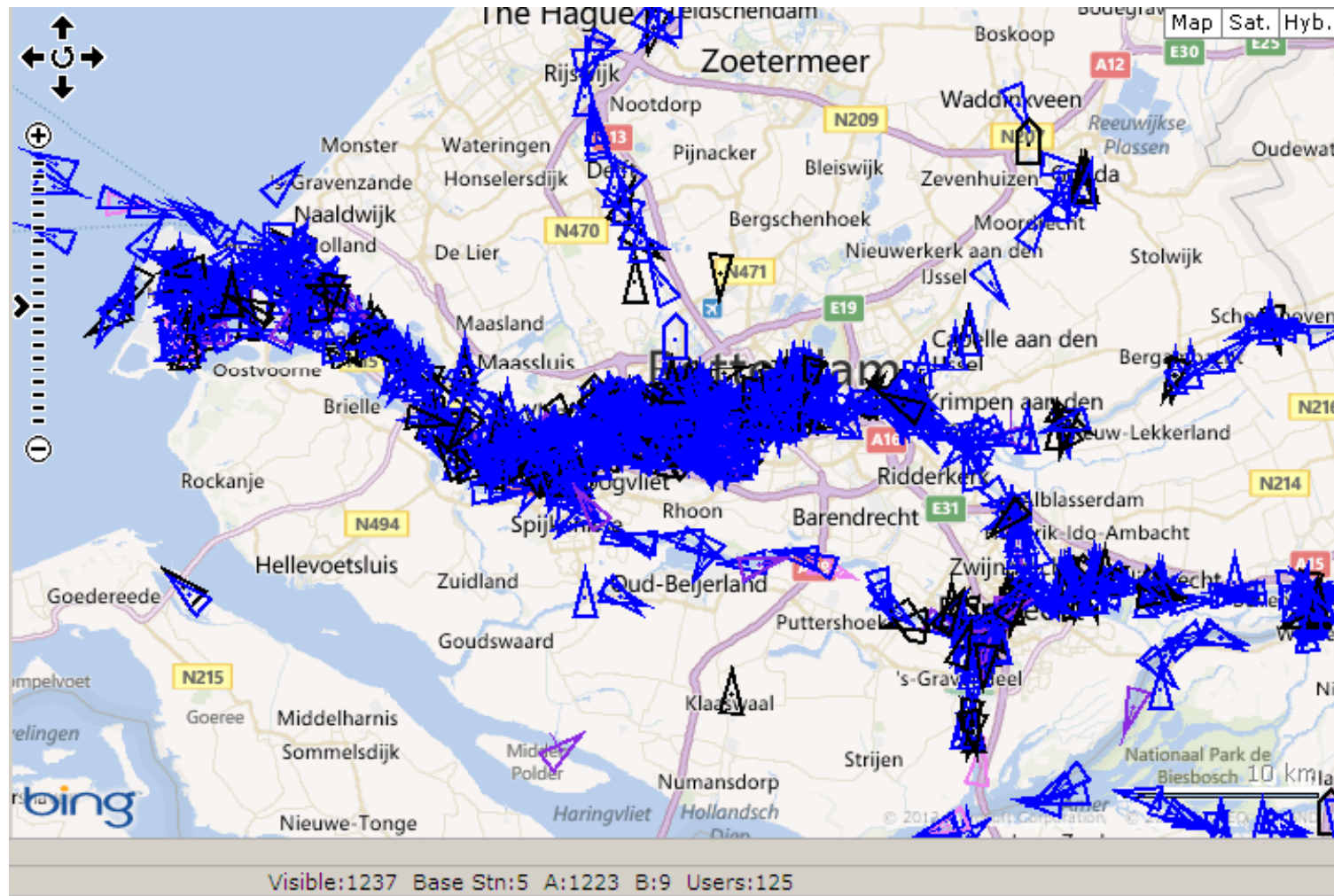


Implementation of RIS since 2005

- FIS
- Tracking and Tracing
 - AIS on board
 - AIS shore infrastructure
- VOS
- VCM
- IDVV

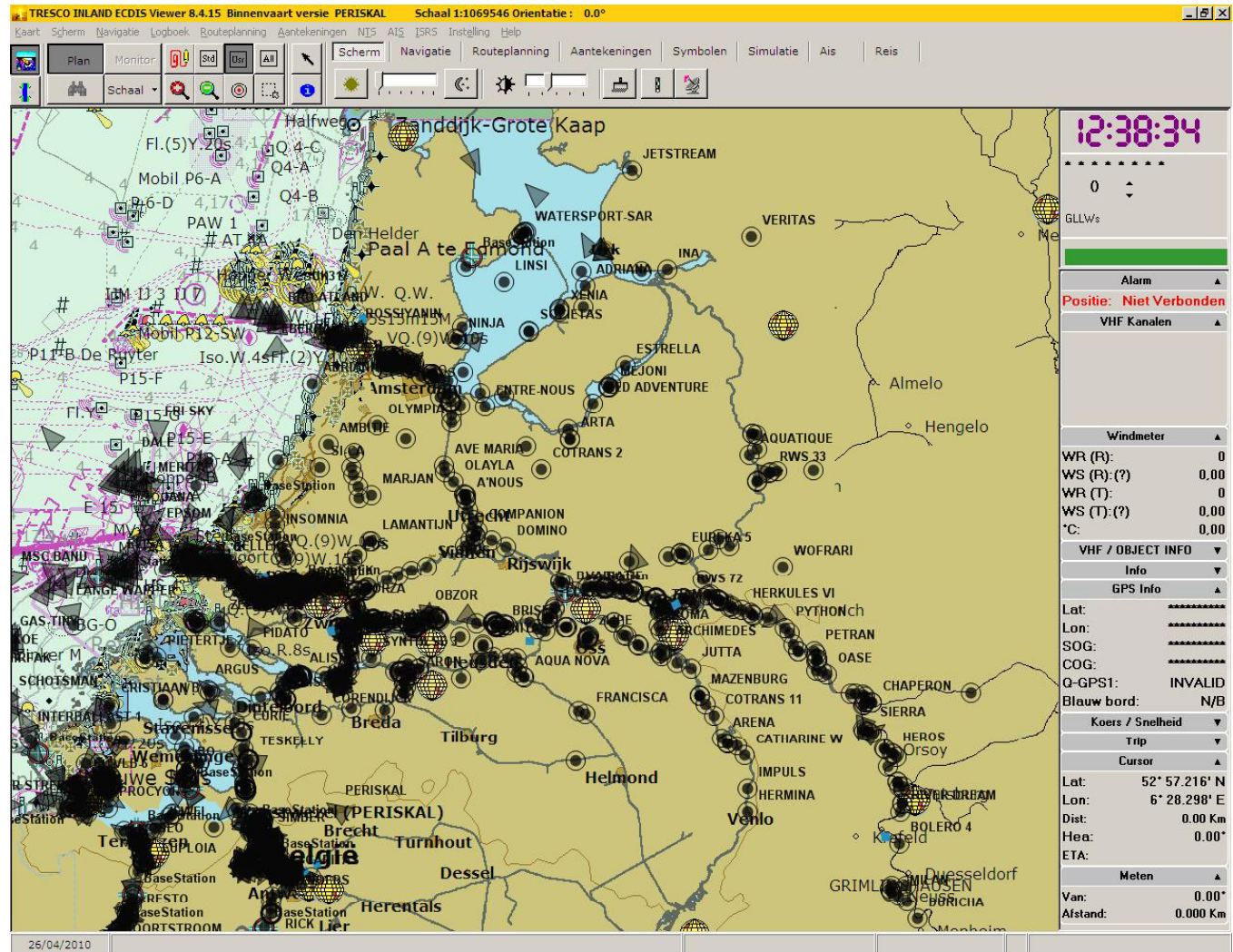


2012-04-02 08:36 Rotterdam area 1237 AIS vessels



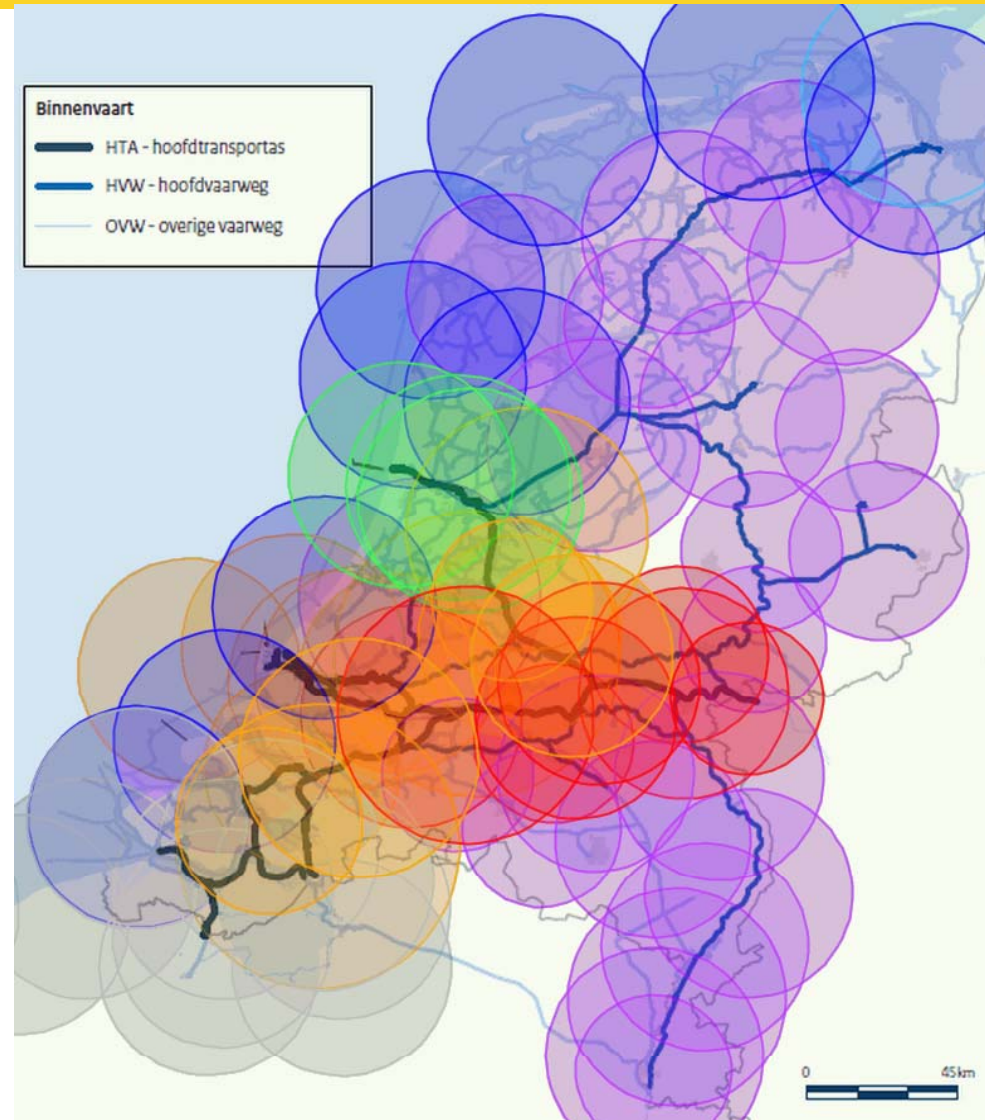


AIS in NL





AIS Basestation Network





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Impulse to inland navigation

Traffic Management Centres of the Future
(VCM)

Cas Willems

19 october 2012



Impuls Dynamisch Verkeersmanagement Vaarwegen IDVV

Impulse to the development of
Dynamic Traffic Management on the waterway network
in the Netherlands

Part of a policy vision on Vessel Traffic Management
VTM2020

... 100 Meuro.....

2010-2013



Policy objectives

Sustainable transport

Improve position of inland navigation in the transport chain;

Shift from road to water;

Benefits for the environment by shifting to rail and water.

Program objectives

Reliable voyage times

Maintain safety level

Fast and reliable incident management

Improve the use of infrastructure

Reduce administrative burden

Improve quality of the basic information

Impuls

Dynamisch
Verkeersmanagement
Vaarwegen





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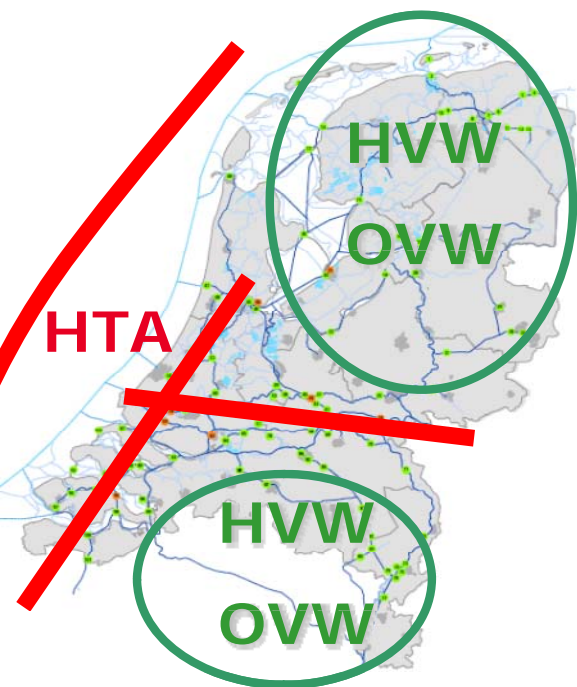
Traffic Management Centres of the Future (VCM)



on: Corridormanagement



essel Traffic management on the corridors



*Safe, efficient and reliable
transport on the fairway network*

*Facilitate cargo transport and
pleasure crafts on their voyages
from A to B on a corridor*



Objectives VCM

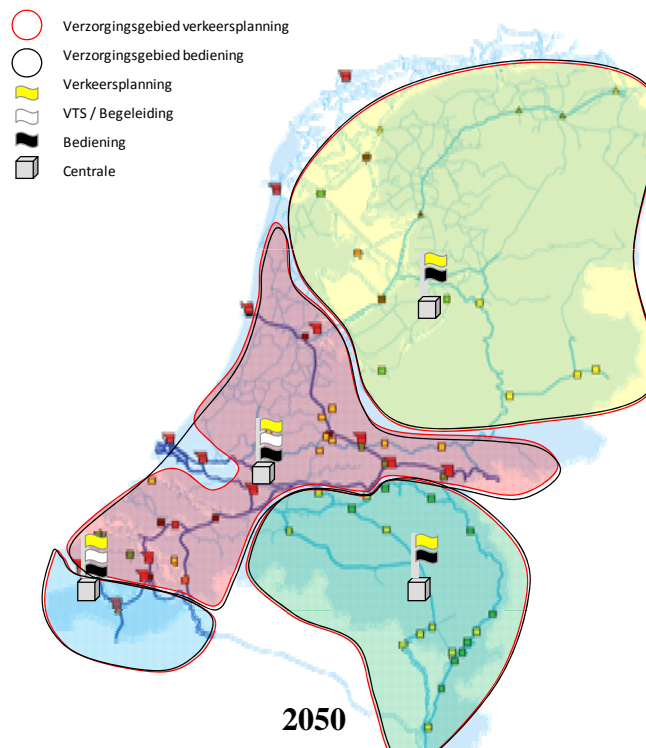
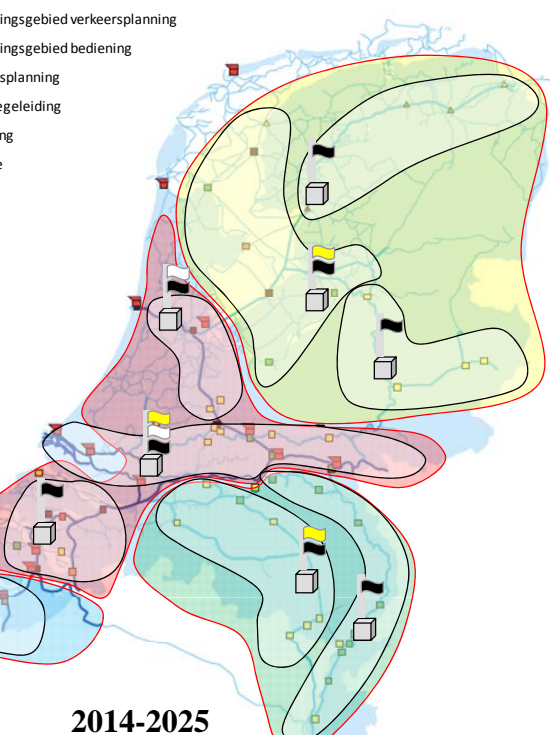
Development of the reference Framework (blueprint) of the “Vessel Traffic Management Centres of the future” and implement VCM in Rotterdam as proof of concept

- Integral Vessel Traffic Management: VTS, control of locks and bridges , traffic planning services as a support to the logistic chain
- Improve efficiency for private and public parties by
 - Interaction and integration of VTS and control of locks and bridges.
 - Uniformity and optimal use of the systems for traffic management like AIS, inland ECDIS, VOS, electronic reporting services, network data services.



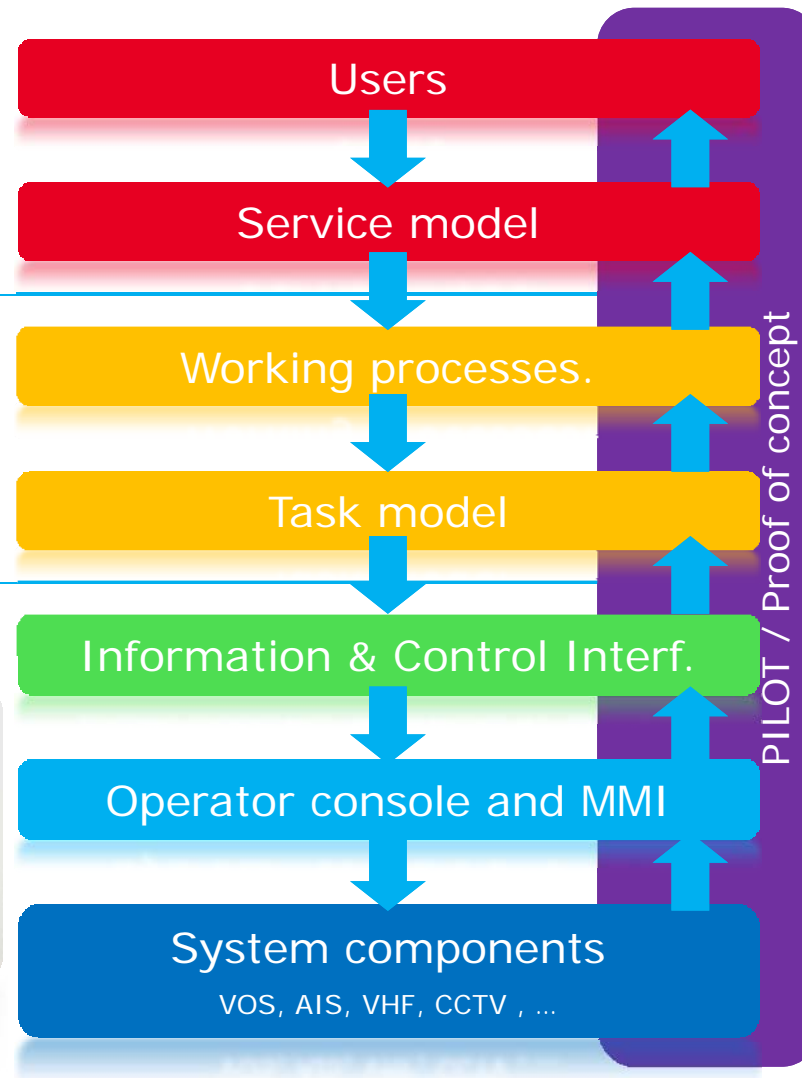
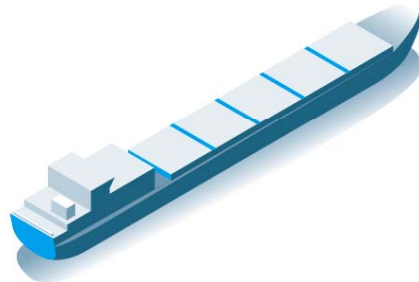
Future Vessel Traffic Management Centres

Corridor oriented approach





Reference framework VCM 2014-2025 & Pilot



effectivity



efficiency &
Human factors



uniform
Systems &
innovations



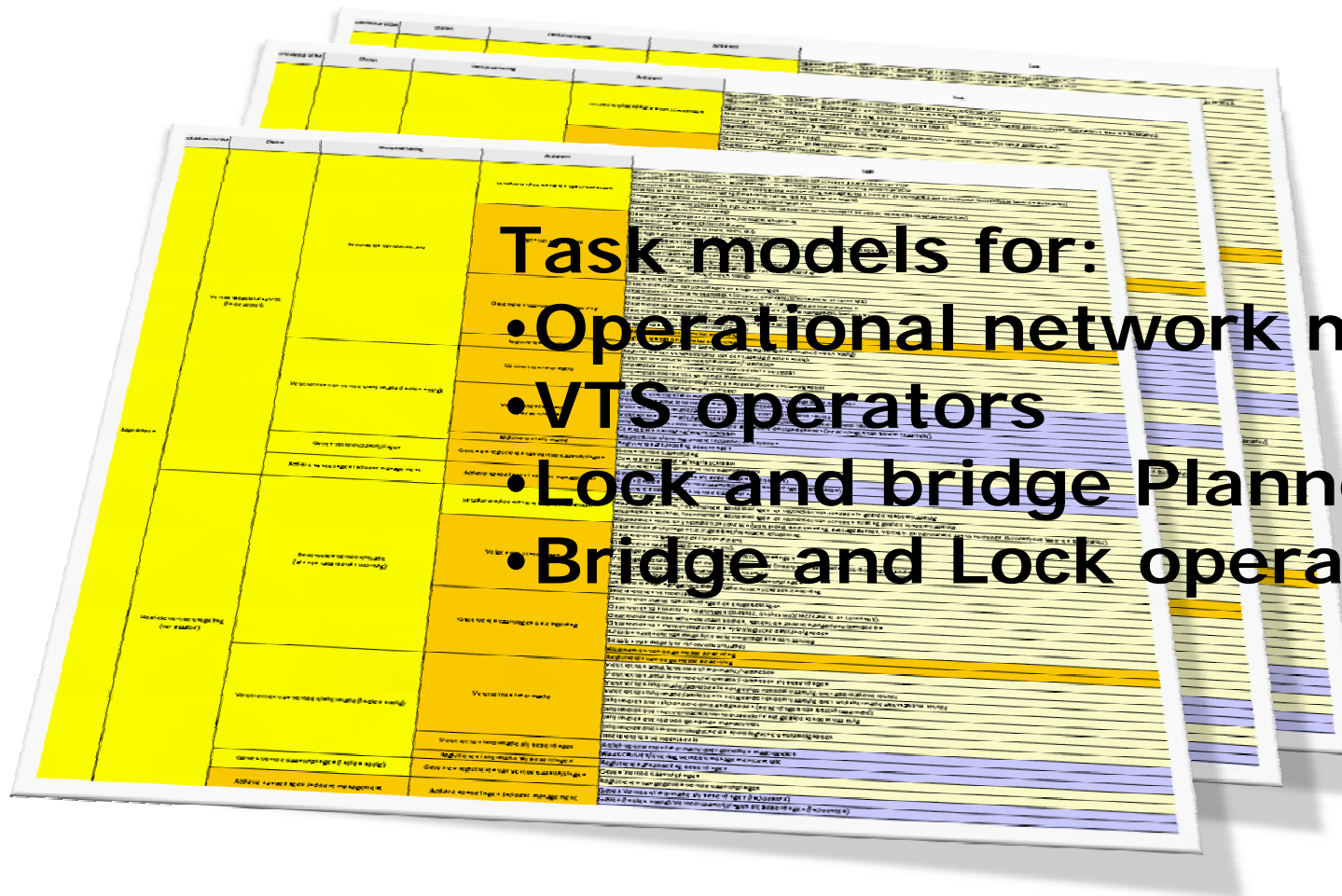


VCM RIS Domain

- *Mainly traffic related*
- **1 Fairway information Services (FIS)**
- **2 Traffic information (TI)**
 - a) Tactical traffic information (TTI)
 - b) Strategic traffic information (STI)
- **3 Traffic management (TM)**
 - a) Local traffic management (vessel traffic services - VTS)
 - b) Lock and bridge management (LBM)
 - c) Traffic Planning (TP)
- **4 Calamity abatement support (CAS)**
- *Mainly transport related*
- **5 Information for transport logistics (ITL)**
 - a) Voyage planning (VP)
 - b) Transport management (TPM)
 - c) Inter-modal port and terminal management (PTM)
 - d) Cargo and fleet management (CFM)
- **6 Information for law enforcement (ILE)**
- **7 Statistics (ST)**
- **8 Waterway charges and harbour dues (CHD)**



De-composition of services and working processes



Task models for:

- Operational network managers
- VTS operators
- Lock and bridge Planners
- Bridge and Lock operators



Task driven Man Machine Interfaces

Creating Situational awareness





Questions ?

or later:

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