## River Information Services (RIS) in Flanders

#### Piet Creemers RIS projectmanager W&Z



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## Overview

- Key RIS services: IENC, T&T, NtS and ERI
- Extra's: FlaRIS, C@LRIS, WLAN, ...
- Overview relationships
- Added Values of RIS + financial support
- Daily operation of the RIS-centers







## Notices to Skippers

#### State of Affairs:

- Application in operation since 25/05/10:
  - http://nts.flaris.be
  - Push (e-mail) en Pull (www)
  - BtoB : webservices



Responsibility per authority

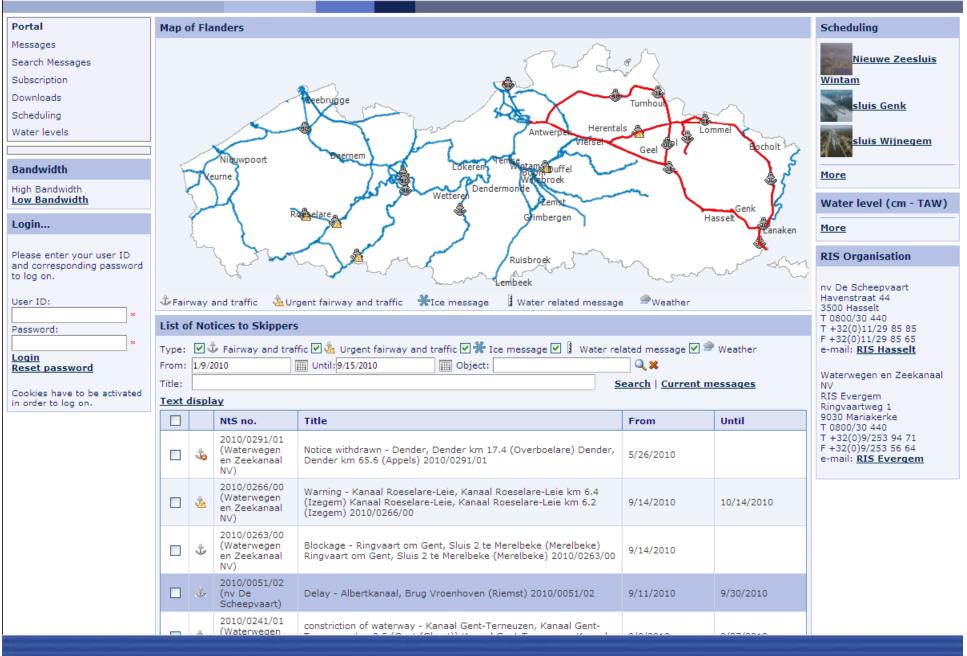


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#### **Notices to Skippers**







😜 Internet

🔍 100%

#### **Notices to Skippers**

Portal	Blockage - Ringvaart om Gent, Sluis 2 te Merelbeke (Merelbeke) Ringvaart om Gent, Sluis 2 te Merelbeke (Merelbeke) 2010/0263/00
Messages	Message Code format XML (raw format)
Search Messages	
Subscription	Select a language italiano 🖌
Downloads	• messaggio RIS:
Scheduling	<ul> <li>(identificazione del tratto):</li> </ul>
Water levels	<ul> <li>mittente del messaggio: WenZ</li> <li>origine dell'informazione: WenZ</li> </ul>
	<ul> <li>Stato interessato: Belgio</li> <li>lingua originale: olandese</li> </ul>
Bandwidth	<ul> <li>data di emissione: 20100914</li> </ul>
High Bandwidth	<ul> <li>orario di emissione: 0704</li> <li>o messaggio relativo a canale navigabile e traffico:</li> </ul>
Low Bandwidth	<ul> <li>: 2010</li> <li>anno: 0263</li> </ul>
Login	numero progressivo: 00
Loginin	<ul> <li>codice oggetto: interruzione</li> <li>motivazione: diversi</li> </ul>
Please enter your user ID	<ul> <li>fonte dell'avviso (autorità): WenZ</li> <li>periodo di validità:</li> </ul>
and corresponding password to log on.	<ul> <li>da (aaaammgg): 20100914</li> </ul>
	<ul> <li>comunicazione:</li> <li>mezzo di comunicazione: telefono</li> </ul>
User ID:	<ul> <li>numero o indirizzo: (+32) 9 253 94 71</li> <li>comunicazione:</li> </ul>
Password:	<ul> <li>mezzo di comunicazione: telefax</li> </ul>
*	<ul> <li>numero o indirizzo: (+32) 9 253 56 64</li> <li>comunicazione:</li> </ul>
Login	<ul> <li>mezzo di comunicazione: Internet</li> <li>numero o indirizzo: http://nts.flaris.be</li> </ul>
Reset password	testo: Vanaf heden - dinsdag 14 september 2010 om 7.00 uur - is sluis 2 gestremd wegens een defect aan de opwaartse deur.
Cookies have to be activated	<ul> <li>tratto idrovia o canale navigabile:</li> <li>definizione geografica dell'idrovia o dell'oggetto:</li> </ul>
in order to log on.	<ul> <li>identificativo oggetto geografico: BEMRL05906S000200181 (km 18.1)</li> </ul>
	<ul> <li>identificativo oggetto geografico: BEMRL05906S000200181 (km 18.1)</li> <li>denominazione dell'oggetto geografico: Ringvaart om Gent</li> </ul>
	<ul> <li>tipo di idrovia: canale navigabile</li> <li>coordinate dell'oggetto:</li> </ul>
	<ul> <li>latitudine (decimali): 51 00.5061 N</li> </ul>
	<ul> <li>longitudine (decimali): 003 44.9036 E</li> <li>coordinate dell'oggetto:</li> </ul>
	<ul> <li>latitudine (decimali): 51 00.5061 N</li> <li>longitudine (decimali): 003 44.9036 E</li> </ul>
developed by ALSIC	
Medegefinancierd door de Europese Unie Trans-Europees vervoersnetwerk (TEN-T)	

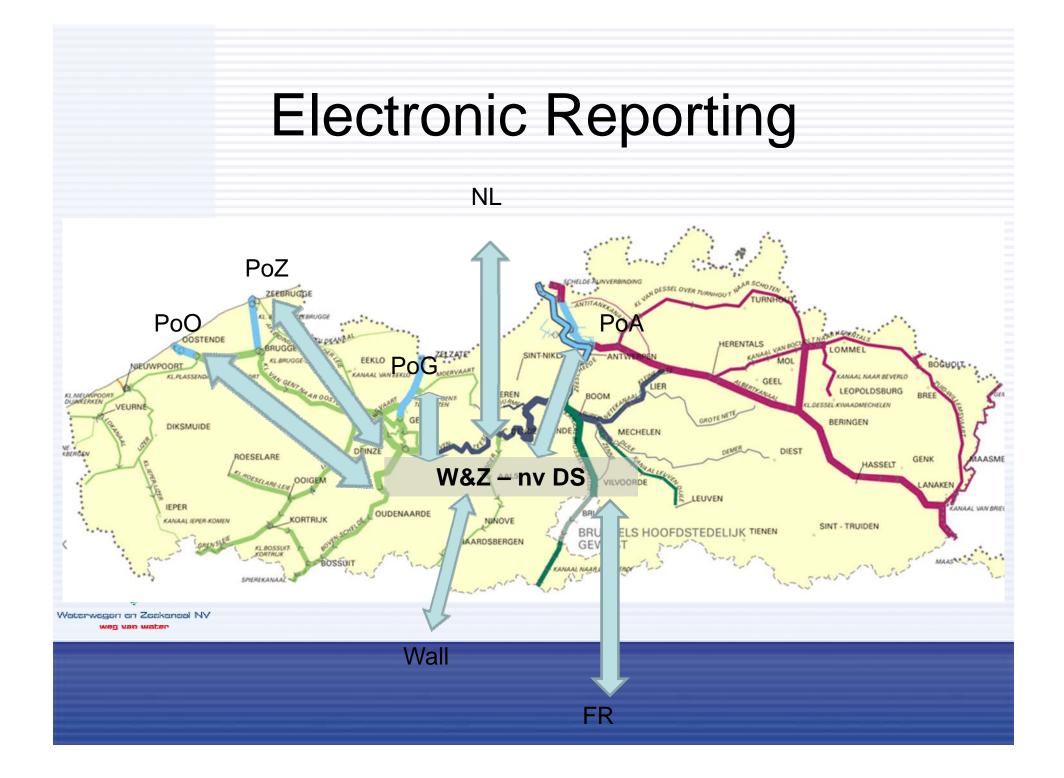
## **Electronic Reporting**

- State of Affairs:
  - Information is collected on the locks (invoicing)
  - Authority to authority: since 2008 both waterway authorities exchange information with:
    - The seaports Ghent, Antwerp, Zeebrugge, Oostende, the Netherlands, Wallon region and France.
  - Ship to authority: in operation since summer



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2011



## **Electronic Reporting**

#### • Future:

- Study on SPOC for electronic reporting in Flanders is nearing completion
- Ultimate goal : corridor-oriented SPOC for single reporting per trip, even international
- Maximal sharing of information between all authorities to reduce administrative burden to users





## **Tracking & Tracing**

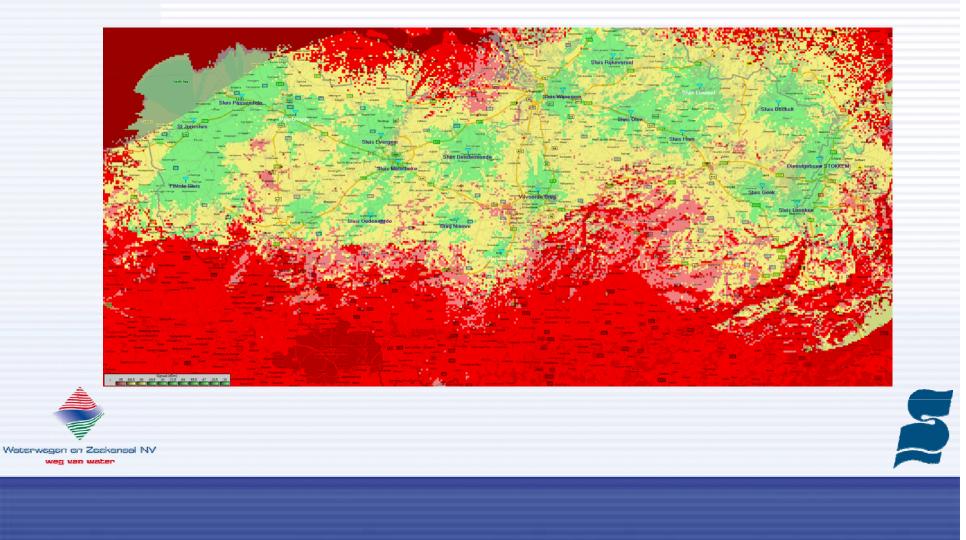
- State of Affairs:
  - Inland AIS-network technical in operation since 02/2012
  - Functional use: cfr. infra VisuRIS



weg van water



## **Tracking & Tracing**



## **Tracking & Tracing**

- AIS obligation is advisable:
  - on all waterways

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- for all commercial navigation
- respecting class A transponders
- Timing ~ other countries/CCR (12/2013)
- Legislation needs to be as clear as possible (limit the number of exceptions)

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## Inland ECDIS

- State of Affairs
- IENC's of class IV and higher are available for download and free of charge via <u>http://ris.vlaanderen.be</u>
- Other classes will follow



## Inland ECDIS

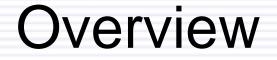
- Next steps:
- Update to usage 7 of existing charts
- Tender production of new charts, incl. maintenance
- Gathering survey data via mobile mapping
  - Quick, accurat, rich data set, extra feed for other applications, ...





## Additional realisations to support/extend RIS:





-FlaRIS -C@LRIS -Wlan -VisuRIS





## FlaRIS (Flanders RIS)

- Phase I: skeleton (reference tables), port management, storage of position, voyage and cargo data.
- Phase II: replace existing invoicing apps and integration of existing applications (i.e. lock planning)
- Phase III:
  - electronic payment
  - Single reporting point
  - Visualisation layer RIS for RIS-center, logistic partners, ports, rescue services, ...



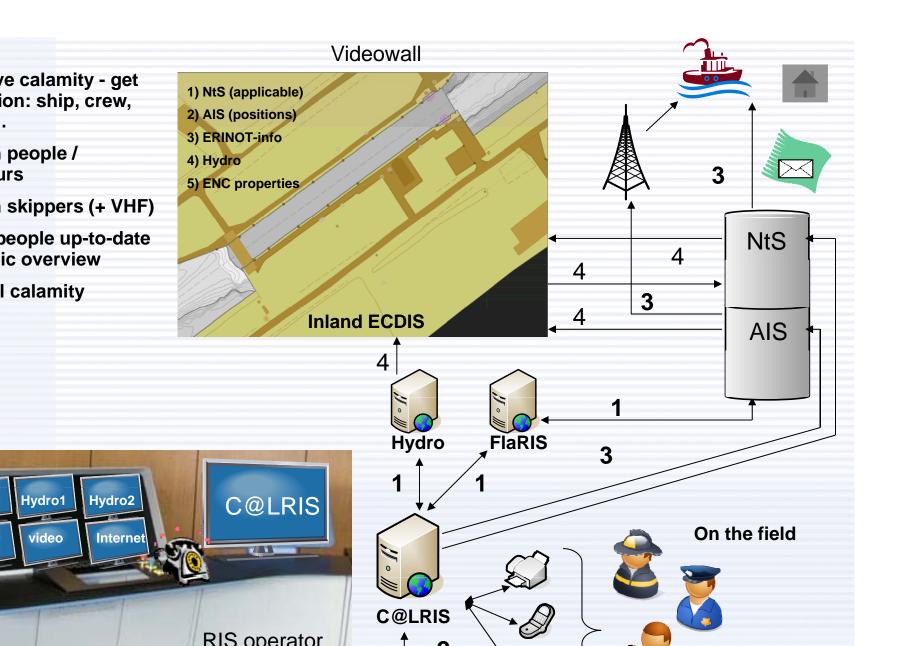
## @LRIS – Calamity Abatement

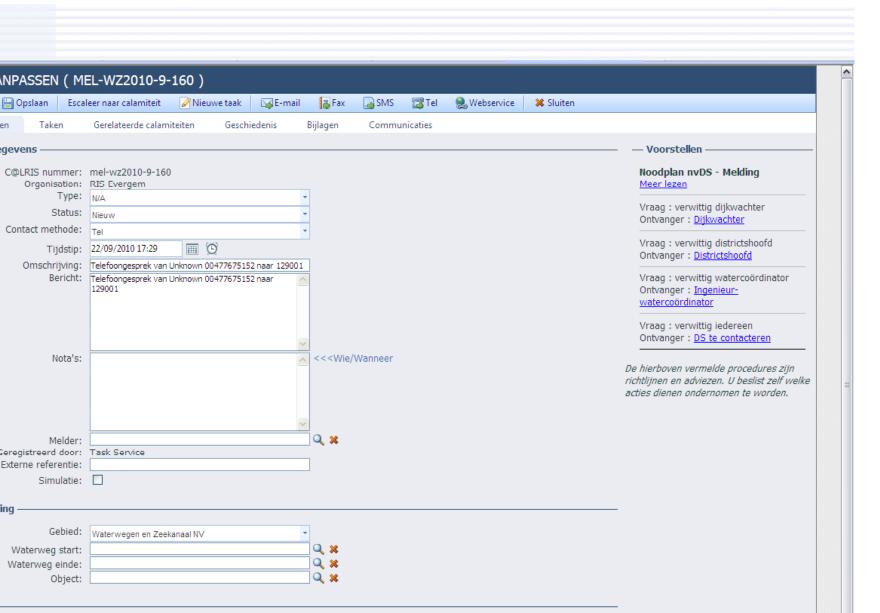
#### Aim of RIS-center:

- Based on results IRIS I Best Practices
  - RIS = supporting function, no coördination
  - Standards for Classification and severity of calamity is necessary in crossborder exchange.

#### mplementation =>







## Wlan

• Why?

 To facilitate in communication between ship & shore

- How?
  - Hot spots: wireless internet access on specific places (locks, morring facilities, ...)
- What?
  - Free access to inland navigation related sites
     (everybody) & internet (skippers)

## VisuRIS

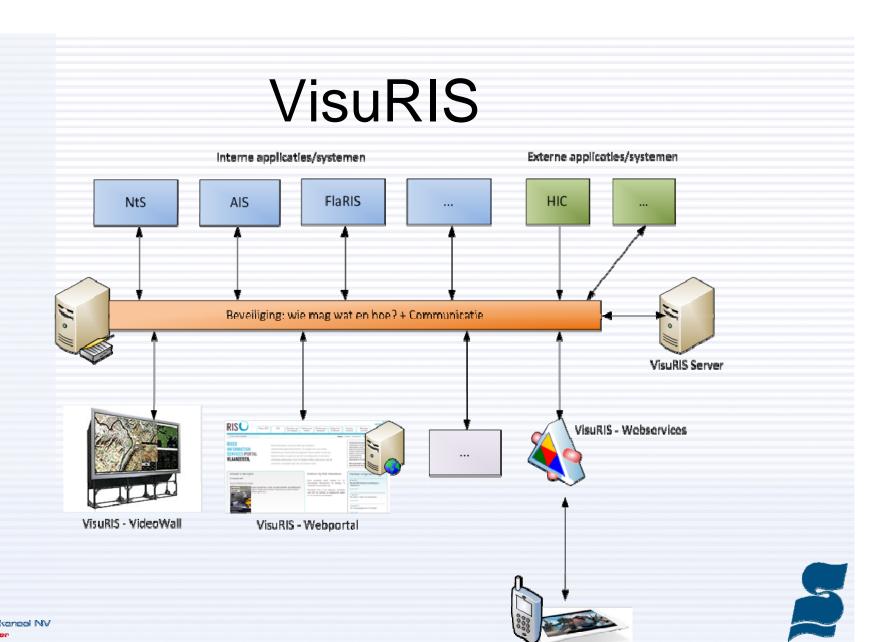
Can we extend the use of RIS?

Study:

- inventory of internal and external customers
- their needs,
- available data
- how to supply, incl. legal aspects (privacy)!

Realisation:

RIS suite of applications (web, clients, apps for tablets/phones, M2M, ...)



## Electronic payment

- Reduce administrative burden
- Allow skipper to stay on board for all administrative tasks (invoice, permits, ...)



## Schematic overview



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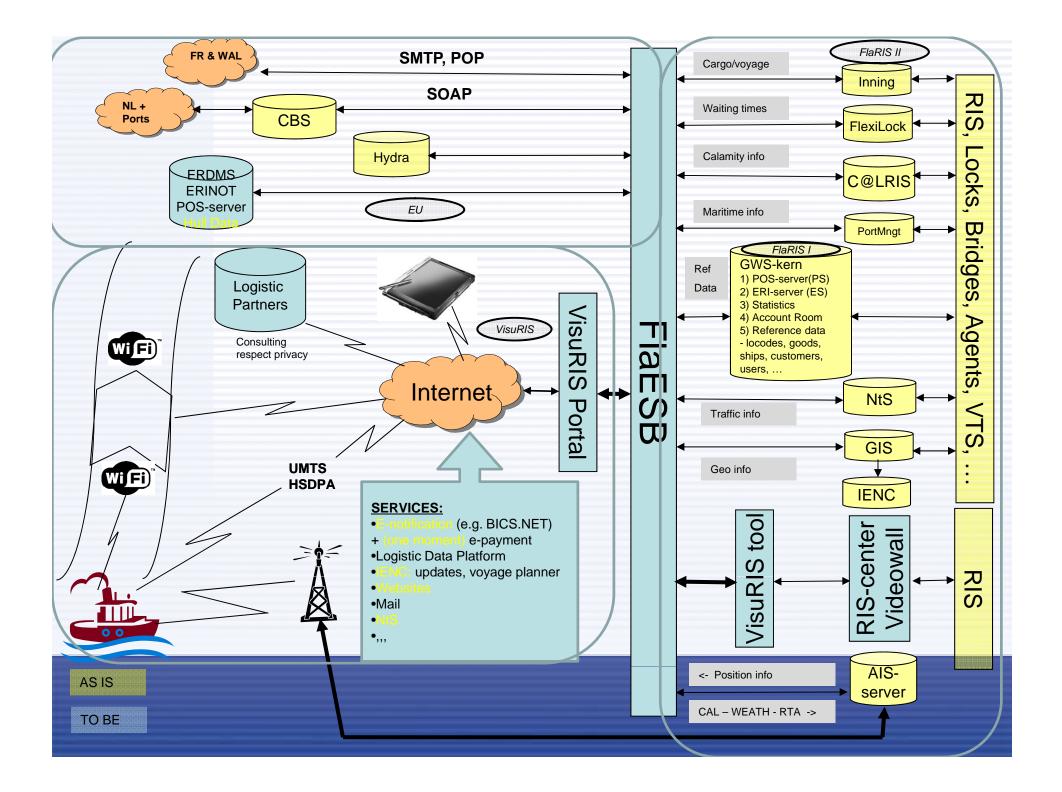
## Flanders RIS system

## NtS + IENC + FlaRIS I (ref) + II (ERI) + III (T&T + VisuRIS + e-payment) + WLAN + C@LRIS



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## **RIS** Westernscheldt



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## **RIS** Westernscheldt

#### Contactpersons:



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## Added value of RIS



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## Added Values of RIS (1)

- Inland ECDIS: route planner, properties of locks and bridges, <u>view NtS</u>, calamities and other ships with <u>AIS</u>
- Notices to Skippers: Language independent, import in <u>ECDIS</u>, push/pull,...
- AIS: view around the corner, receive extra information (wheather, signal status, water levels, emergency, RTA,...), logistical follow up, integration with <u>ECDIS</u>, ...

ERI: announce voyage ONCE, incl. e-payment (restricted to a corridor).

## Added Values of RIS (2)

- Pre-contract (VisuRIS):
  - Offer information: empty vessels (type), ETA's, current position, contact information, ...
- Post-contract (VisuRIS):
  - Current position and ETA's: JIT
  - Triggering pro-active action if deadlines will not be met

\*\*\*\*\*\*

REMARK: exchange of information only when approved by owner of data !!



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# **Daily operation**



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## **Daily operation RIS**

- RIS Evergem and Hasselt
- Manned day and night (24/7)
- Crisis- en information center
  - Crisis: c@lris
  - Information center: operating times, possibles routes, support lock keepers, waterlevels, support SI, statistics, support invoicing, …



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## Practical organisation



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## Organisation

- CoRIS-team:
  - Both waterway authorities represented
  - Vision, ideas, concepts, principles, ...
  - Follow up expertgroups EU, projects, ...
- Expertgroup ICT DS & W&Z:
  - Check concepts, ideas, ... against ICTimplementation

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## Organisation

- Management level:
  - Agree with draft projects: go vs no go
- Tender prodecure + selection of contractor
- Follow up by:
  - Project SCOM: admin. & fin.
  - Projectgroup: technical

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• Technical issues:

 Historically grown -> first adaptations -> replacement of different applications -> finally no real architecture.

– Migration towards Service Oriented Architecture (SOA).



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- Operational issues:
  - Rubbish in, Rubbish out
    - Repeat training
    - Take into account the level of education of your employees.
    - Keep documentation up to date!
  - Not only technical support, also business/user support

RIS-index is the core of your RIS!

- Project issues:
  - Timing: only possible when well prepared -> no hasty decisions!
  - Financial: always foresee an amount for unforeseen works/services/...
  - Personnel: coördinating the implementation of RIS is not a side job.

