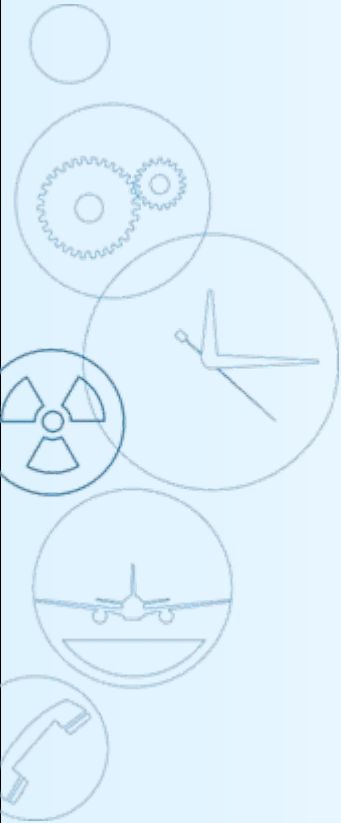


# ARGOS in the future

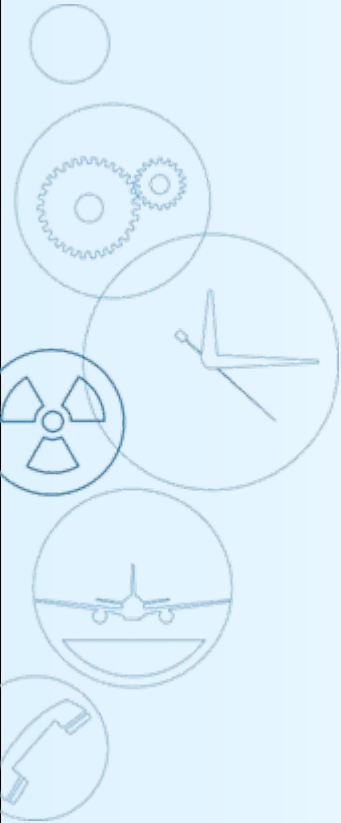
NKS NordDSS 2009  
Jan Pehrsson, PDC  
[jan@pdc.dk](mailto:jan@pdc.dk)



# ARGOS - Philosophy

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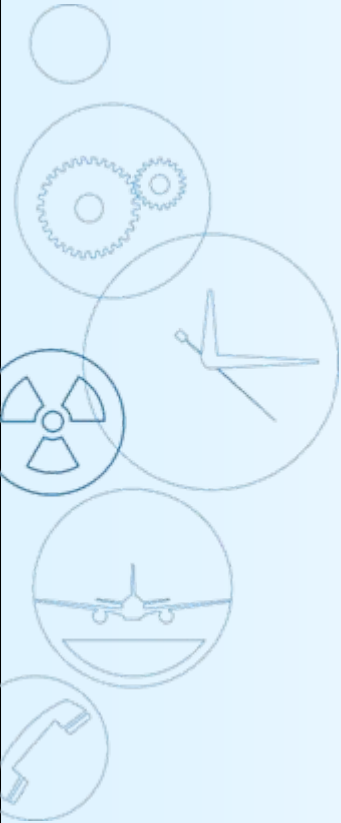
- User driven and user friendly system
- To collect data in order to provide information
- We interface rather than we integrate
- Very close cooperation with model makers
- Focused on operational use as well as planning
- Handling CBRN-E situations



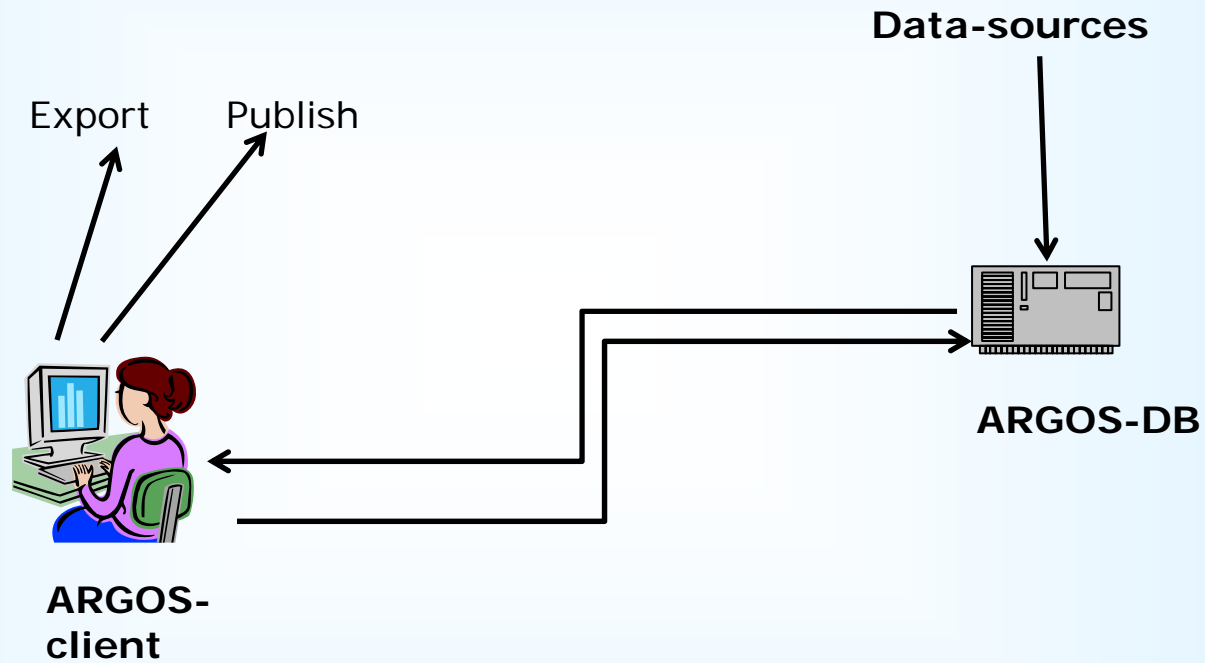
# ARGOS - Goals

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- Create an overview of the situation
- Create a prognosis of how the situation will evolve
- Calculate the consequences of the accident
- Assist on appropriate counter measures
- Assist on distribution of information
- Maintain the overview



# ARGOS architecture - present



# ARGOS - DIADEM dataflow

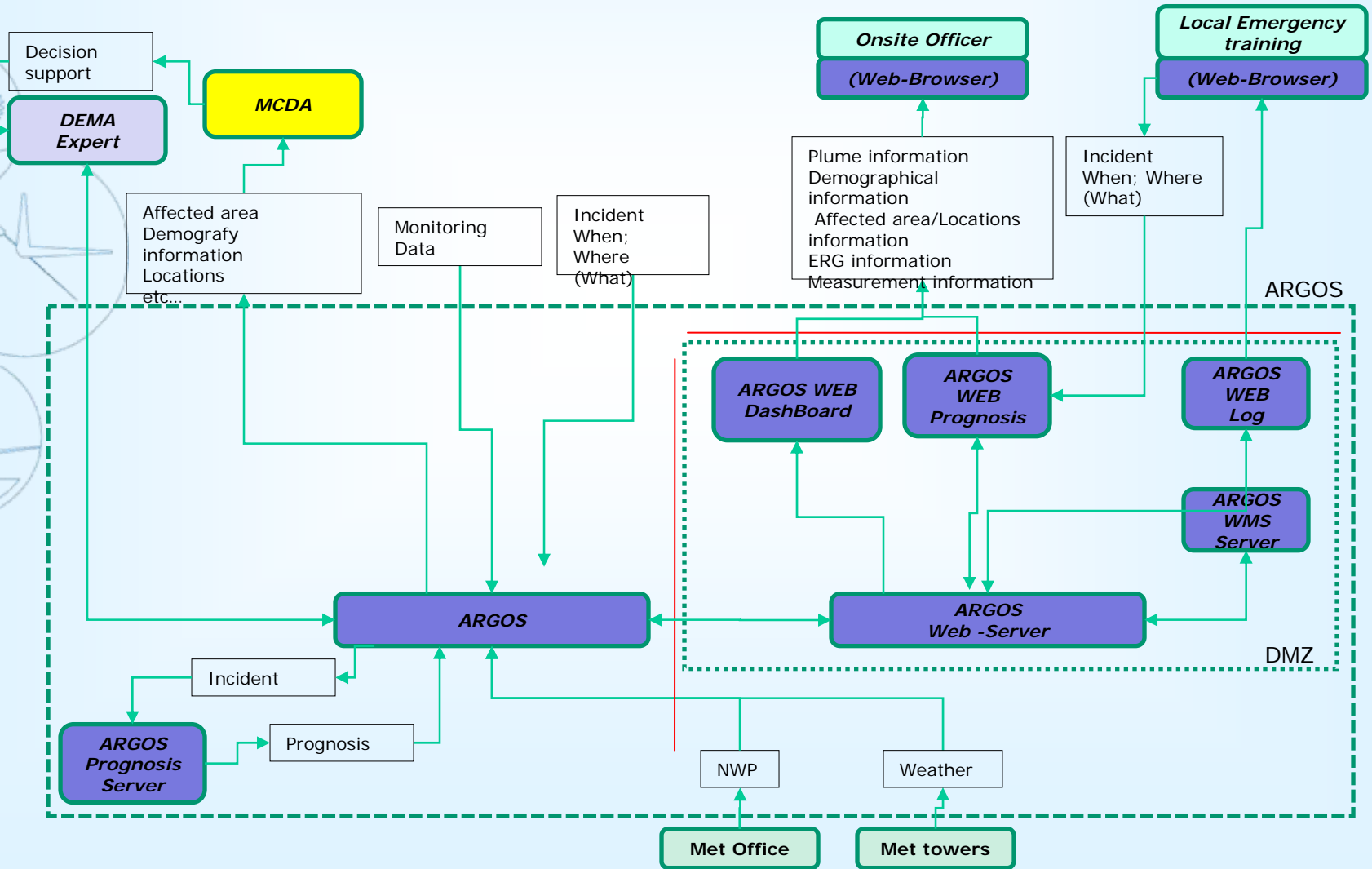
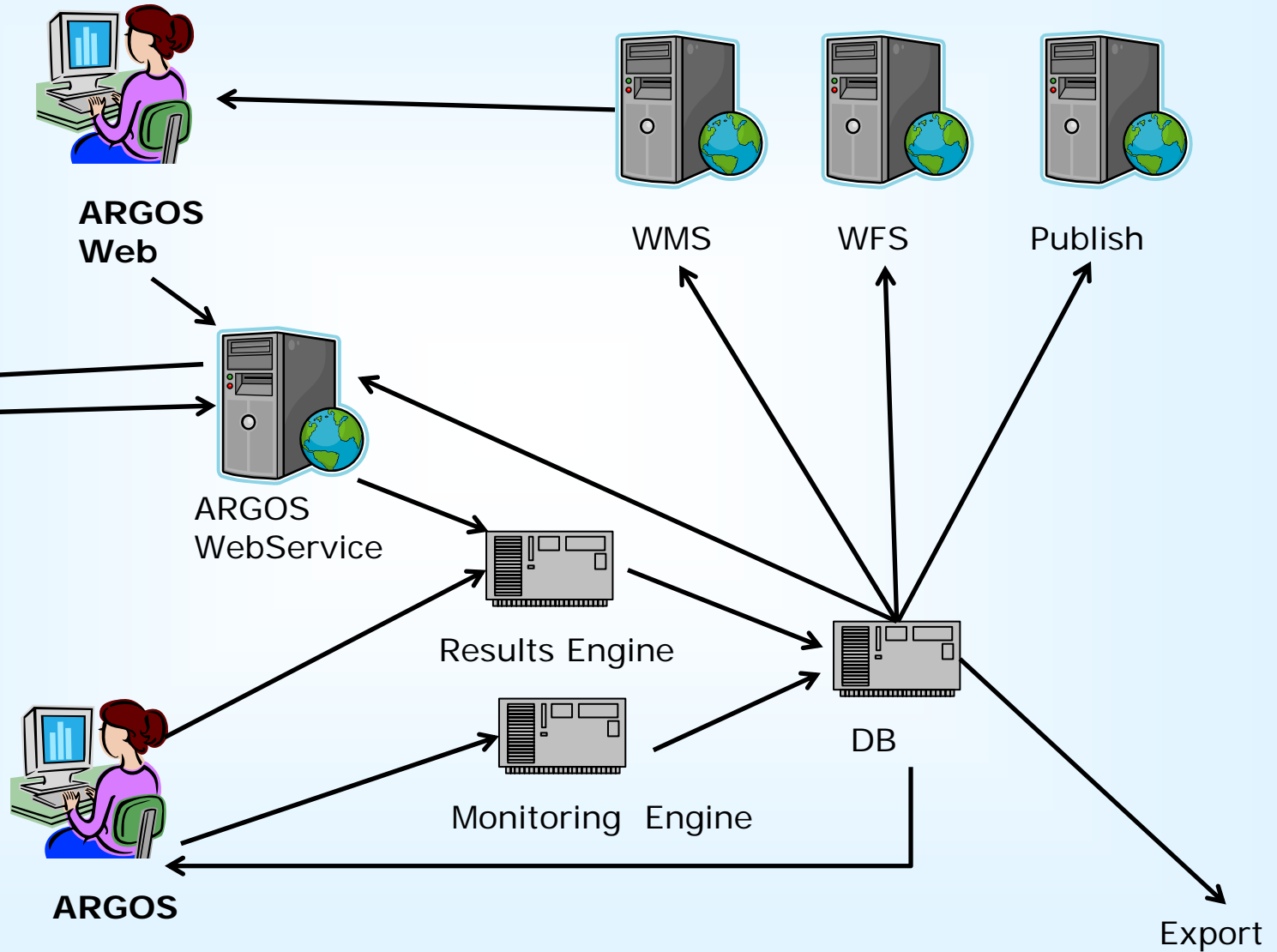


Figure 1.0.1  
Date 16/04/09

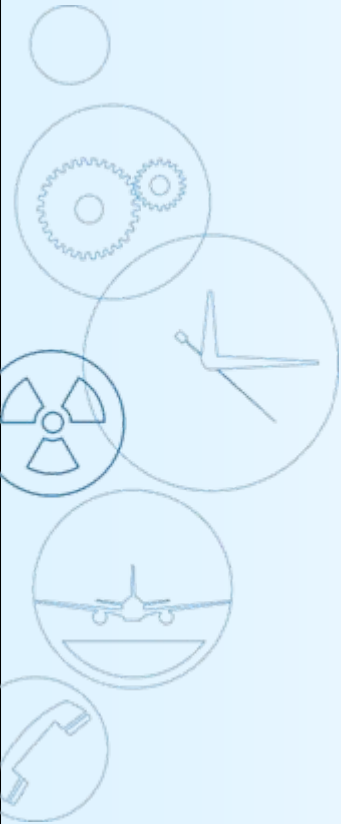
# Service Oriented Architecture



# Modularisation

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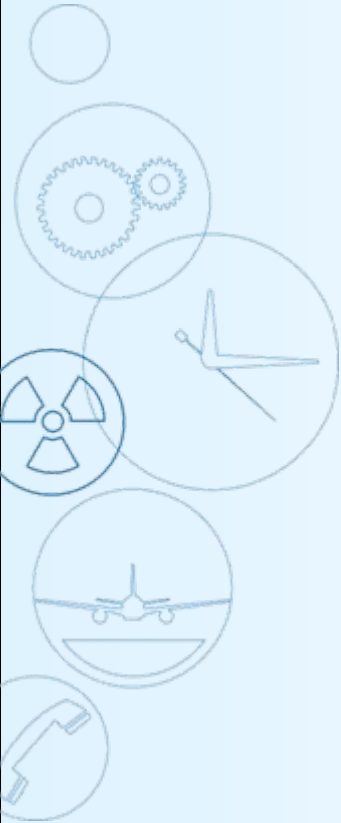
- “Thin” core ARGOS
- RIMPUFF-module
- Long Range-module
- AgriCp-module
- ERMIN-module
- Measurement-module
- Monitoring-module (permanent)
- Monitoring (AGS/CGS/BGS)
- WEB-module
- Audit-module
- ...



# ARGOS Release strategy

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- Stable longlived production versions  
24 months or longer
- Frequently delivered "R&D"-versions  
4 per year or even more

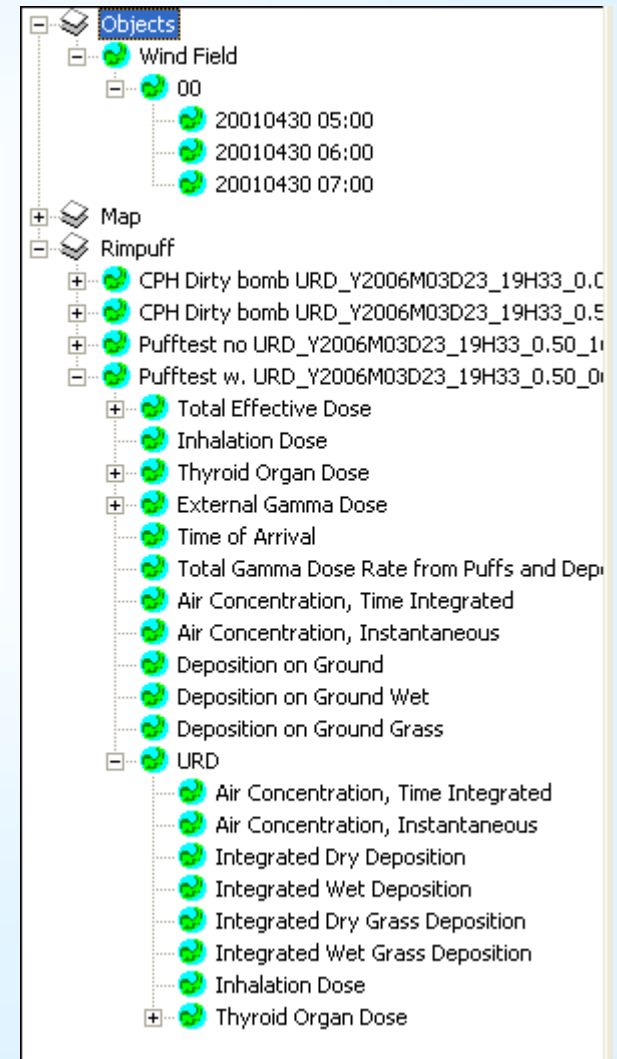




# Scenario Oriented Approach

- Move away from "technical" approach

F R D L T E



# Operational vs Sandbox mode

- Emergency management vs. Emergency planning
  - Operational mode with limited (predefined) functions and only “relevant information”  
When, Where, What
  - Sandbox mode “play with all the handles”

Rimpuff Prognosis - CPH Dirty bomb URDweb

Release handling

Release	New
Dirty bomb	Copy
Truck accident	Delete
Ship release	
Ringhals	

Release Time Setup

Release Start... Time Day: 19:33:00 03/23/06  Use Current Time

Release Stop: 22:33:00 03/23/06

Prognosis

Prognosis Length: 2 hours  Automatic Mode

Prognosis Stop: 21:33:00 03/23/06

Isotope	Inventory	180 mins
Co- 58	3.036042e+016	2
Co- 60	1.139487e+016	2
Kr- 85m	6.395415e+015	100
Kr- 85	2.480183e+016	100
Kr- 87	9.905712e+010	100
Kr- 88	1.106312e+015	100
Rb- 86	7.590611e+015	50
Rb- 88	1.238649e+015	50

Setting Selections

RELEASE	RINGHALS-1 - BWR2
MET	MAN
AOI	Grid:0.50, User specified AOI
MODEL	MAN (Puff:10 Outdata:10)
DETECTOR P...	NO
FDM SAVE	OFF
URD	Grid:10.0 m, Zone:1.0 km Out:10 s

Model parameters and outputs

Mode:  Automatic  Manual

External Gamma Dose from Plume  
 Gamma Dose Rate from Deposit  
 External Doses from Deposit  
 Inhalation Dose

Buff released every [mins]: 10

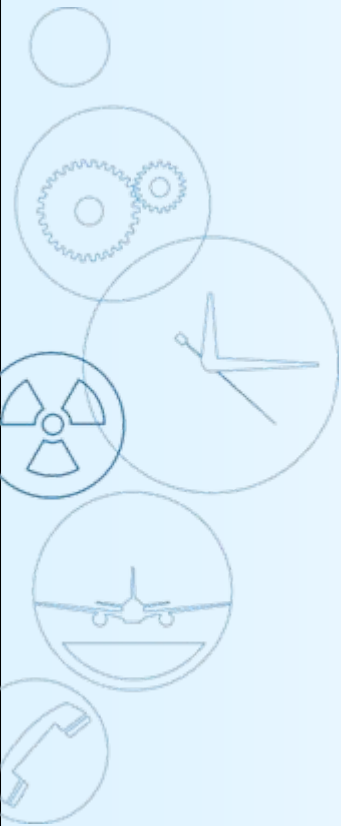
Trajectory

Outdata every [mins]: 10

# Collaboration towards other systems

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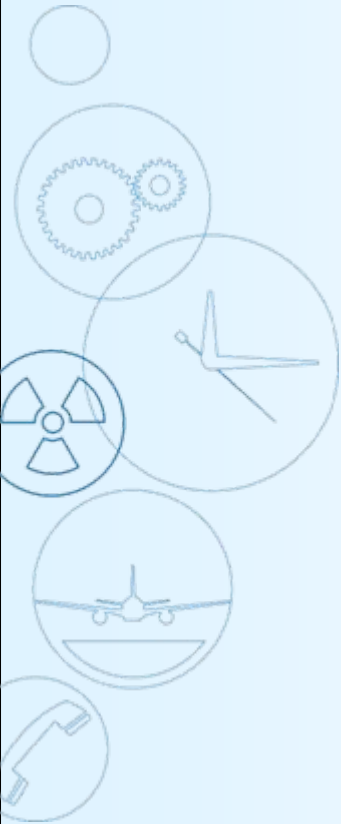
- Open Database
- Export to
  - Shape, GeoTiff, KML, KMZ, GML, ...
  - NARAC, ATP 45 (NATO)
- MODEM -> IRIX
- Import of
  - Measurements, monitoring
  - NWP (several sources)
  - Maps
    - WMS, WFS, "Internet maps", local map



# Cooperation with modelers

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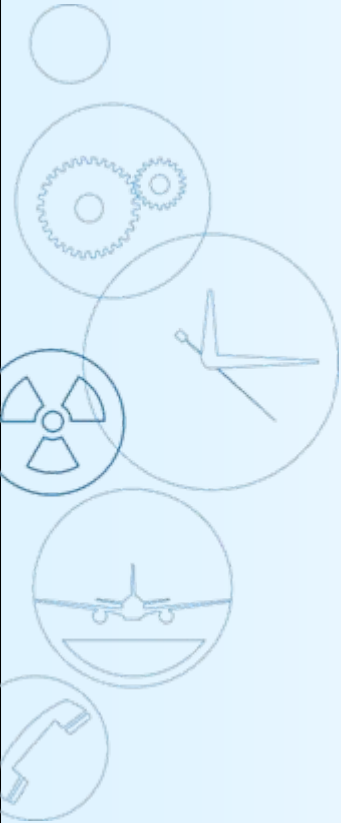
- Long Range models
- RIMPUFF
- URD
- AgriCp
- ERMIN
- Source modeling (chemical)
- MCDA
- What the users wish...



# Conditions for use

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- Networked environment
  - Connected to central DB-server, the internet, etc.
- Stand alone
  - Every thing is (still) running (only) on your laptop



**Thank you for your  
patience**

**Questions?**

