



We cannot manage that we cannot measure!!



**KEY NOTE
of**

Mr. Jean - François DONZIER

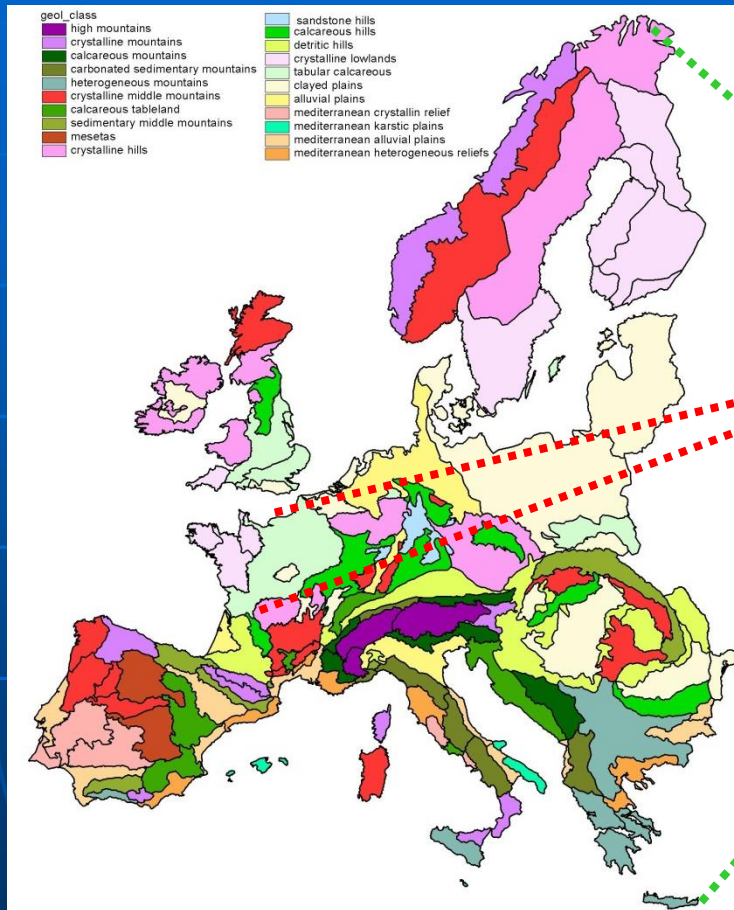
General Manager

INTERNATIONAL OFFICE FOR WATER

Permanent Technical Secretary

INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

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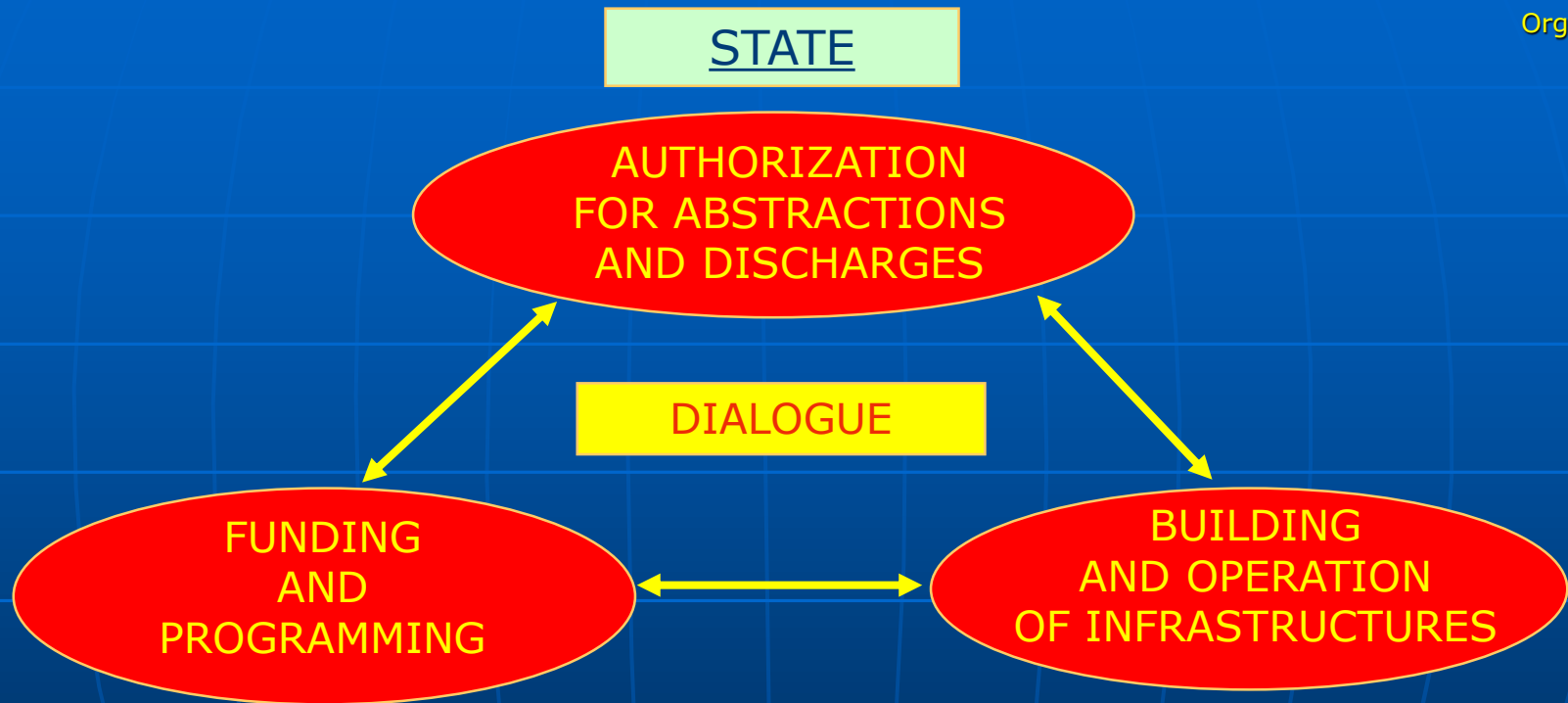
WISE



- **Integrated information and monitoring systems**, which are reliable, representative, harmonized and easily accessible, and specific research, **should be organized in each basin...**



MORE AND MORE STAKEHOLDERS ARE INVOLVED IN WATER MANAGEMENT



- Water Agencies
- River Basin Committees

- State administrations
- Municipalities
- Industrialists
- Farmers
- Developers

WATER INFORMATION AND INDICATORS ARE NEEDED!

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- **WATER INFORMATION AND INDICATORS
HAVE TO BE USED AS AN OBJECTIVE BASIS FOR:**
 - **DIALOGUE BETWEEN STAKEHOLDERS,**
 - **NEGOTIATION,**
 - **DECISION-MAKING**
 - **EVALUATION OF UNDERTAKEN ACTIONS,**
 - **REPORTING AT DIFFERENT LEVELS,**
 - **COORDINATION OF FINANCING FROM THE VARIOUS DONORS**
 - **INFORMATION OF THE GRAND PUBLIC.**

TWO KINDS OF INDICATORS ARE NEEDED:

- **INDICATORS TO EVALUATE UNDERTAKEN ACTIONS EFFICIENCY,**
- **INDICATORS TO EVALUATE QUALITY OF GOVERNANCE.**

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WATER INFORMATION SYSTEMS ARE NEEDED!

- **BUT, THIS INFORMATION IS TOO OFTEN DISPERSED, HETEROGENEOUS AND INCOMPLETE ... AND IT IS RARELY COMPARABLE AND ADAPTED TO THE PREREQUISITES FOR OBJECTIVE DECISION-MAKING.**
- **IT IS NECESSARY TO DEFINE COMMON STANDARDS AND FRAMES FOR GLOBALLY GATHERING COMPARABLE INFORMATION, PRODUCED BY THE VARIOUS STAKEHOLDERS.**
- **THESE INFORMATION SYSTEMS ARE PRIORITY TOOLS TO BE IMPLEMENTED IN ORDER TO SUPPORT AN EFFECTIVE POLICY FOR WATER RESOURCES MANAGEMENT AND RISK PREVENTION!**

We cannot manage that we cannot measure!!

To measure, we need good data... 😊

**These data are produced in the field
by many stakeholders ...**

**To produce indicators, we need first to organize
WATER INFORMATION SYSTEMS !!**

**In transboundary basins,
data have to be produced by riparian countries**



COMPLEX INFORMATION SYSTEMS



DIALOGUE



INFORMATION



Resources

- Surface water (Rivers –Lakes)
- Groundwater
- Wetlands



Uses



Seasonal variations



Geographic locations



Economical informations

- Quantity
- Quality
- Ecology
- Requirements
- Abstractions
- Discharges
 - Flowrates
 - Pollution

- Frequencies

- G.I.S

- Cost, budget...

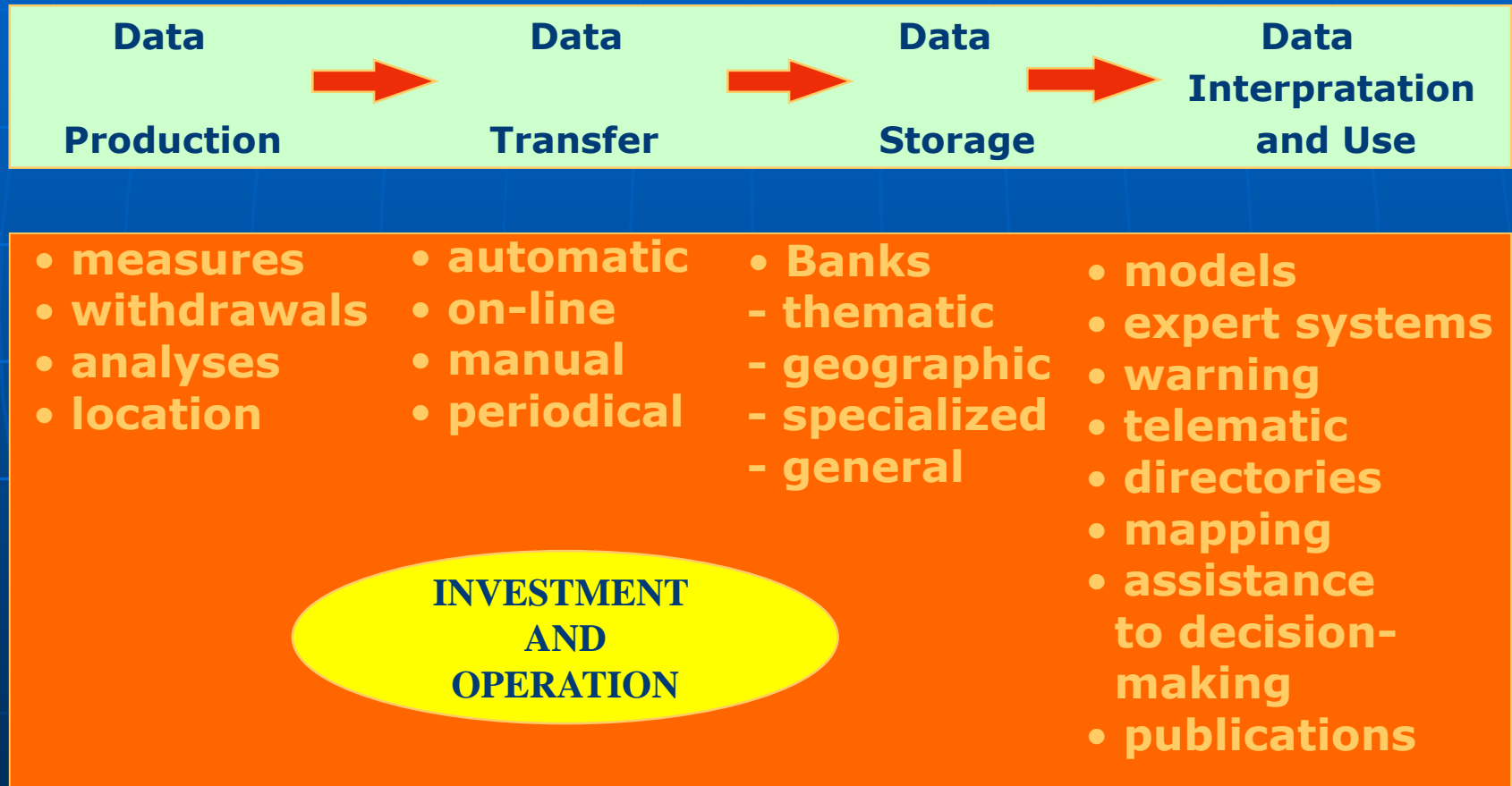


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COMPLEX INFORMATION SYSTEMS



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AUTOMATIC WARNING OR OPERATION SYSTEMS - "SLOW" SYSTEMS FOR STATISTICS

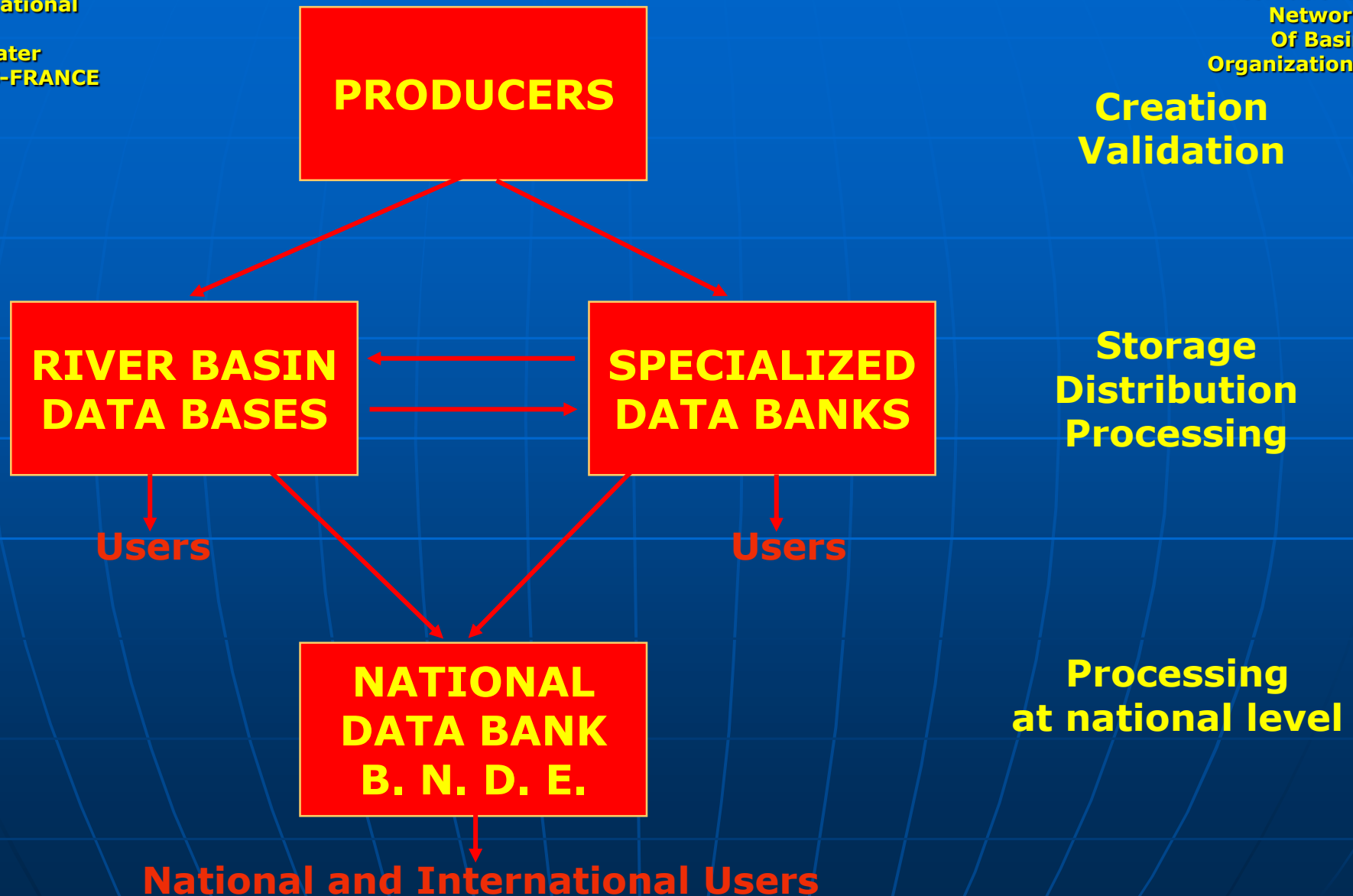


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CIRCULATION OF DATA



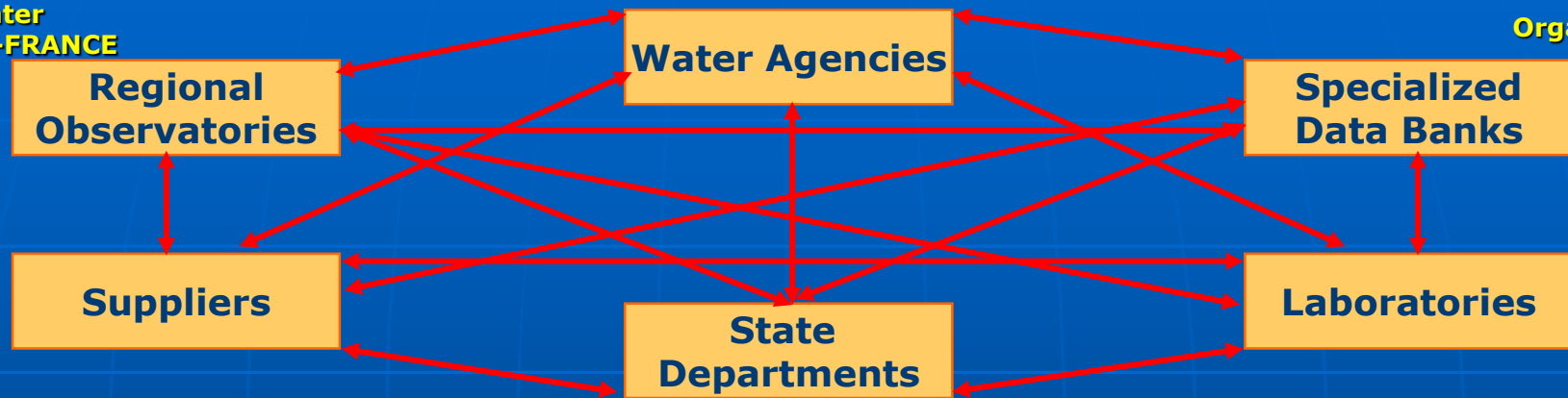


WATER INFORMATION SYSTEMS

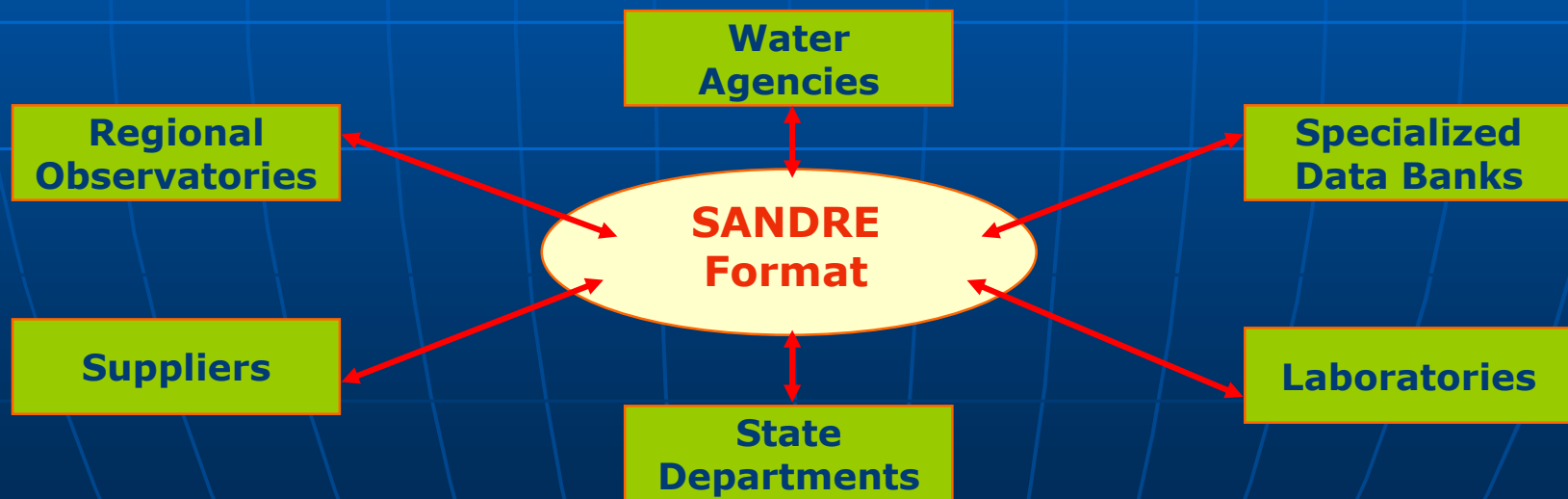


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As many exchange formats as users



A sole exchange format whatever the number of users



All kinds of water and environments Must be taken jointly into consideration



- * **surface waters**
- * **groundwater**



- * **transitional water**
- **coastal waters...**
- **Aquatic ecosystems**
- **Spacial planning**

IWRM

INTEGRATED WATER RESOURCE MANAGEMENT

- OVERALL MEETING

- OF RATIONAL AND LEGITIMATE DEMANDS

Agriculture

Electricity

Domestic uses

Transports

Industry

Leisure- Tourism

Fish farming

Fishing

- WASTEWATER TREATMENT AND RECYCLING,

- CONSERVATION OF ECOSYSTEMS:AND LANDS

rivers, lakes, wetlands, aquifers, costal areas, forests, lands

- RISK PREVENTION :

- Erosion

- Drought

- Floods

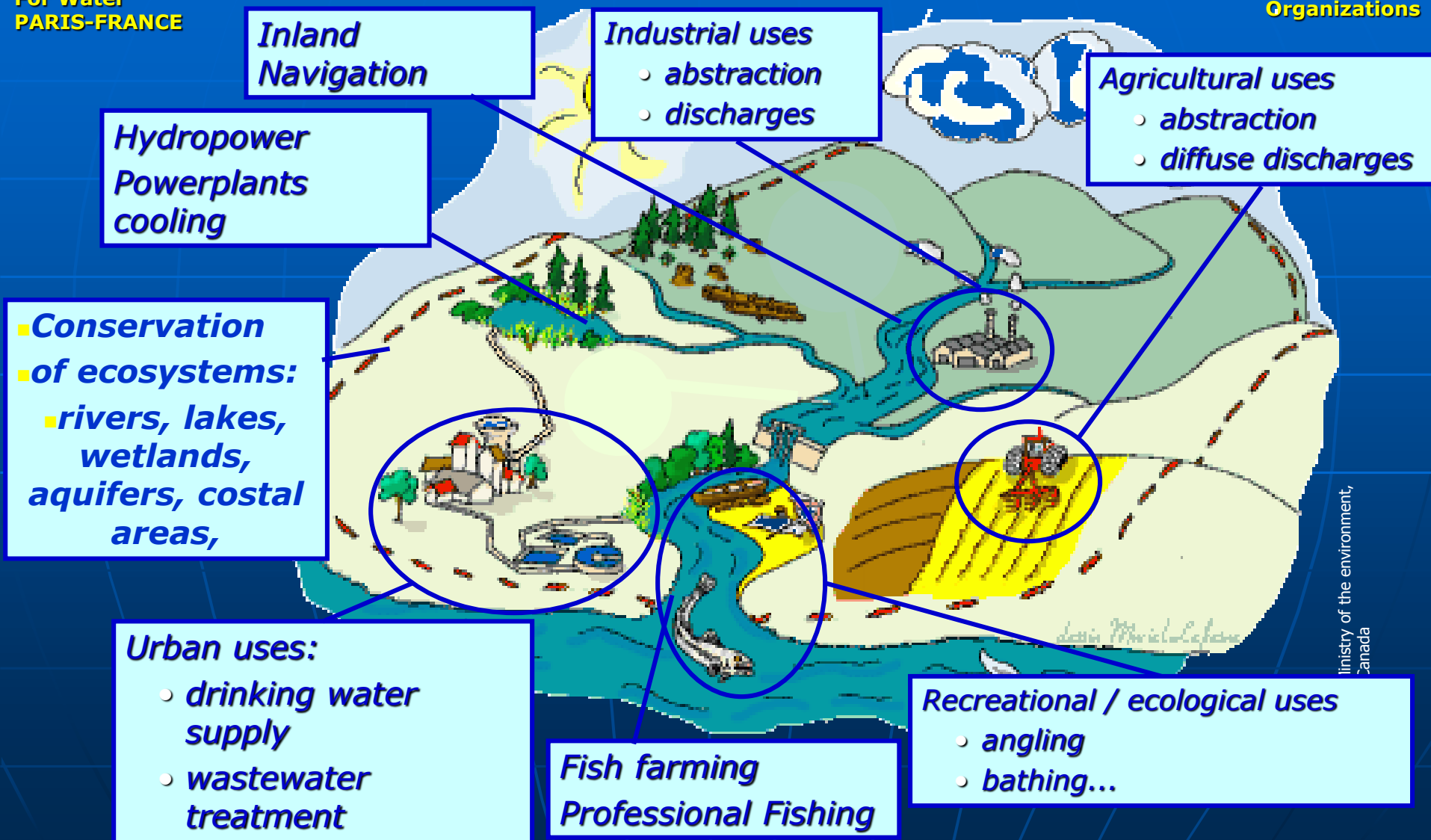


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ALL MAJOR WATER USES ARE CONCERNED



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Governance and indicators



HARD

Investments, agenda, costs, ...

SOFT

Governance,
Legal framework,
Ownership, IWRM,
Participative planning,
Funding, Monitoring +
Information System



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ASSESSING WATER QUALITY:



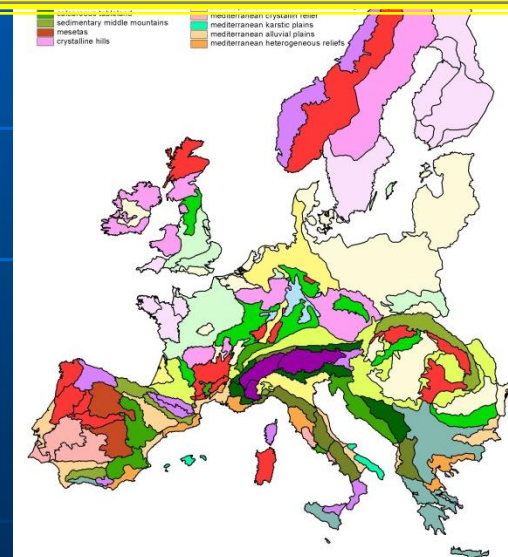
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In the European Union,

50,000 "WATER BODIES" have been identified:

- **River WB = 27 455**
- **Lake WB = 10 060**
- **Groundwater WB = 7 719**
- **HMWB/AWB = 5 783**

European Hydro – eco-regions



**THE DEFINITION
OF COMMON FRAMES
OF REFERENCES.**



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KPI (Key Performance Indicators) have been tested in 10 transboundary basins in Africa:

- **Niger (ABN / NBA)**
- **Volta (ABV / VBA)**
- **Victoria Lake (LVBC)**
- **Nile (NBI)**
- **Congo (CICOS)**
- **Sénégal (OMVS)**
- **Gambia (OMVG)**
- **Okavango (OKACOM)**
- **Orange (ORASECOM)**
- **Lake Chad (CBLT / LCBC)**



**ACP-EU WATER FACILITY / ACTIONS IN ACP COUNTRIES
Development of IWRM performance indicators for African
Transboundary Basins management**



MERCI DE VOTRE ATTENTION!
THANK YOU FOR YOUR ATTENTION!

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International Network of Basin Organizations
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