Making and using scientific knowledge and local expertise as evidence in the implementation of the Water Framework Directive:

achieving effectiveness, efficiency and legitimacy.

A research proposal & invitation.

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Context: evaluation of WFD

"find the root causes of lagging achievements" (Ms Katrin Sjöberg)

Mr François Mittauld stated three important points:

1. participation fatigue
2. silo thinking: connection with other domains is needed, esp. agriculture
3. emphasis should be on working with nature

I am adding:

4. assuring the evidence base:
   - substance: what new evidence do we need?
   - process: how can we produce this efficiently, effectively and legitimately?

focus

Terminology & starting points

Evidence comes as different types:

- scientific knowledge
- measured data
- professional experience
- ‘lay’ knowledge
- political awareness

Knowledge becomes evidence by **interpretation in context**. This makes it useable for action (incl. policies).

This is most obvious and necessary in local, concrete implementation, but also most difficult.

In the real world, everything is connected to everything – integration is the natural state.

This complexity should be take seriously – incl. factor time.

Efficient production of evidence: questions

Are efforts to harmonize evidence base in e.g. CIS EU FP6, FP7, H2020 cost-effective?

Are they actually useful in local implementation?

If more/other evidence is needed, how can we generate this as cheaply as possible?

Should certain pristine sites be excluded from monitoring requirements unless new impacts arrive?

Effective production of evidence: questions

Do we have the evidence that is needed to achieve good ecological status (GES)/potential?

Mr Christian Lécussan: what is degradation? a change of state, not the change of one single parameter.

AW: GES is an emergent property of the complex hydro-socio-ecological system where whole ≠ Σparts.

Do we take sufficient account of professional (local) experience and ‘lay’ knowledge?

AW: they may be able to assess GES more as a whole.

Legitimate production of evidence: questions

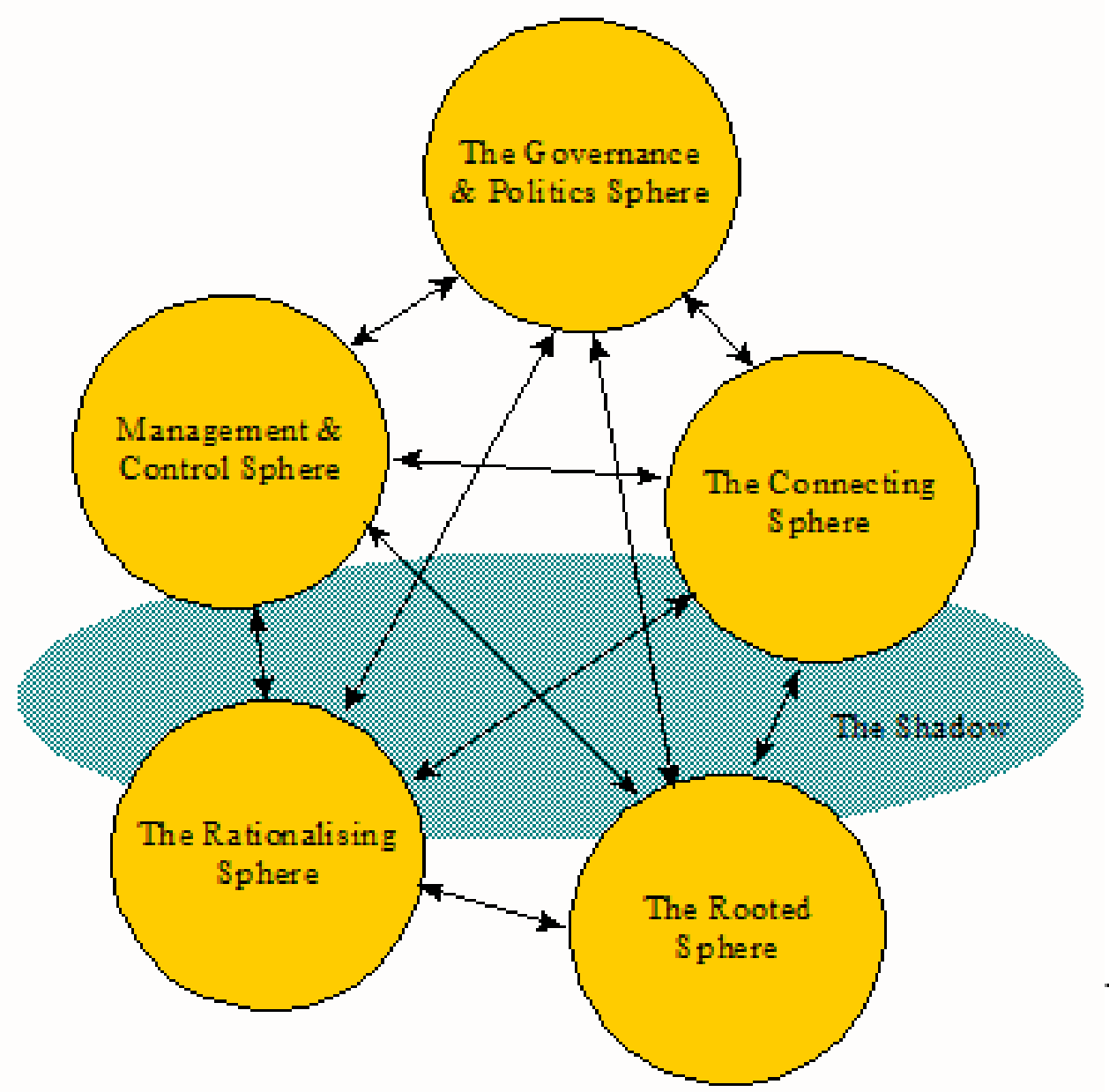
Can we persuade the EC that the assessment of GES is sometimes not fully quantifiable?

How can we persuade the EC that they should not keep changing targets?

How do we ‘report back’ to stakeholders & the public?

Mr François Mitteault: we need to be accountable also to the actors, not just Brussels

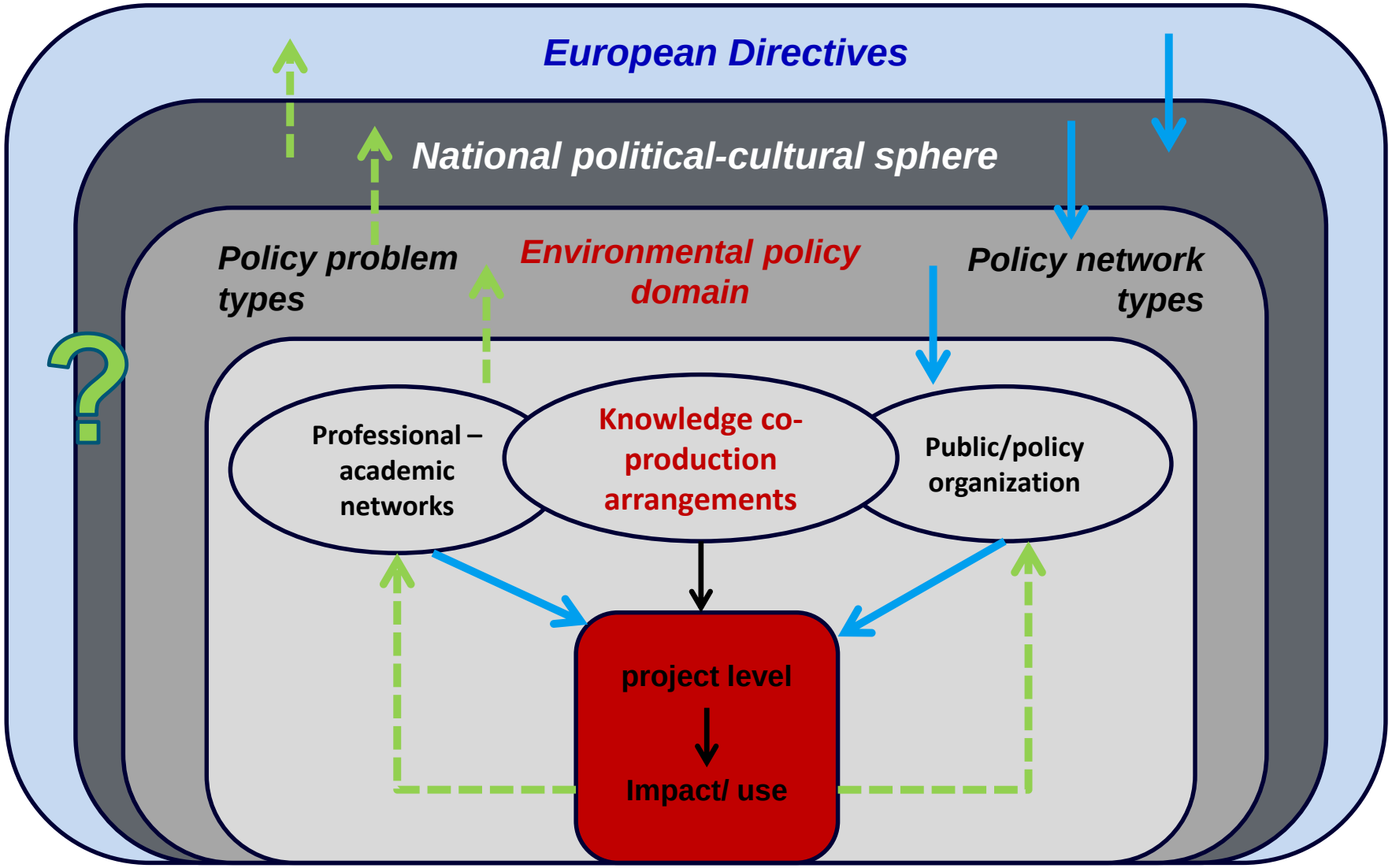
Creating best evidence: bringing knowledges together in the Workstead



Observation:
the management and control sphere is taking over at the expense of the others, esp. the rooted sphere.
This happens through norms, protocols etc. that reduce issues to measurable items.

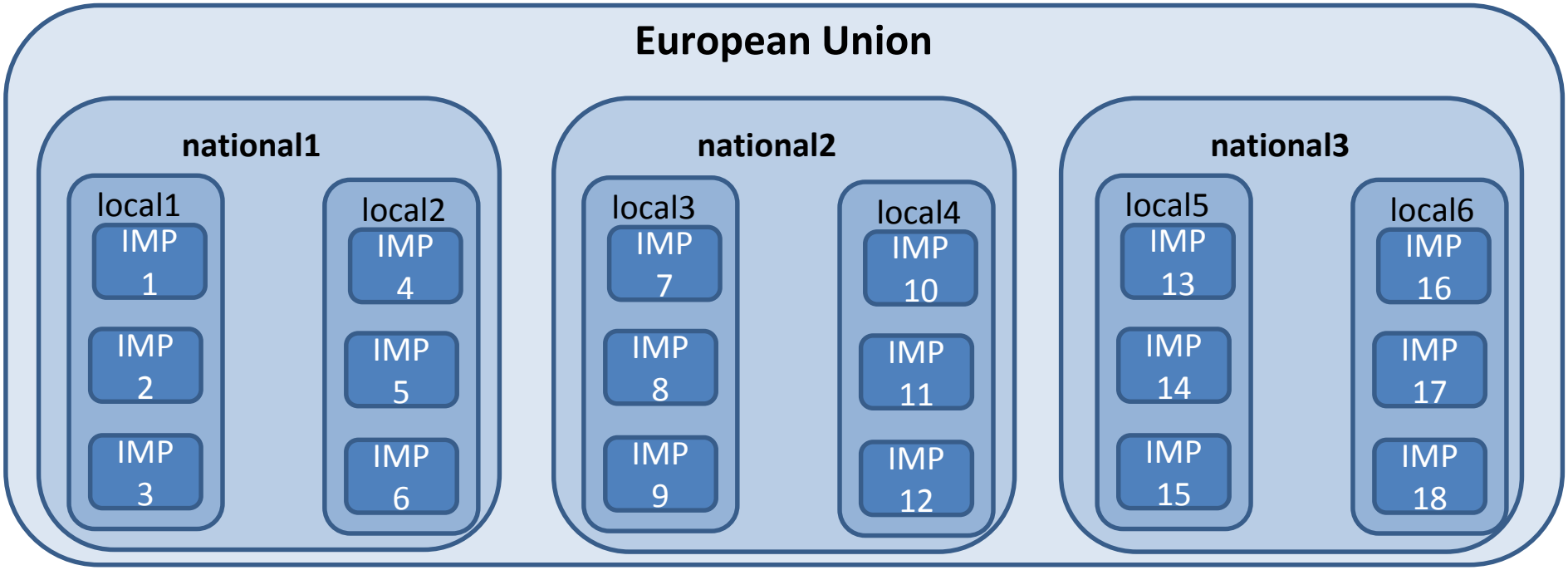
Solution:
accept complexity & look for shared wisdom & enthusiasm

Multi-level science-policy interaction model



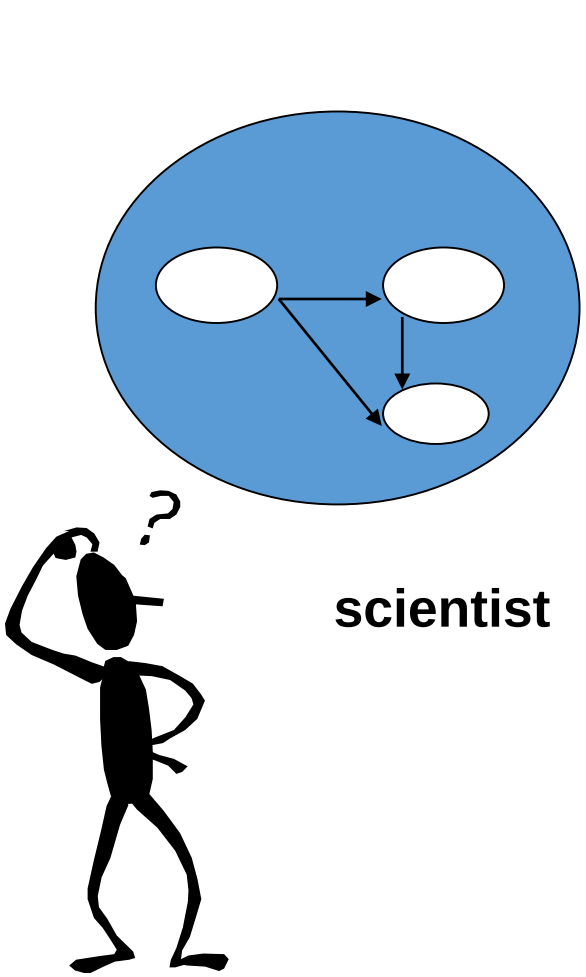
A proposal to the European Research Council (ERC) & invitation for RBM to participate

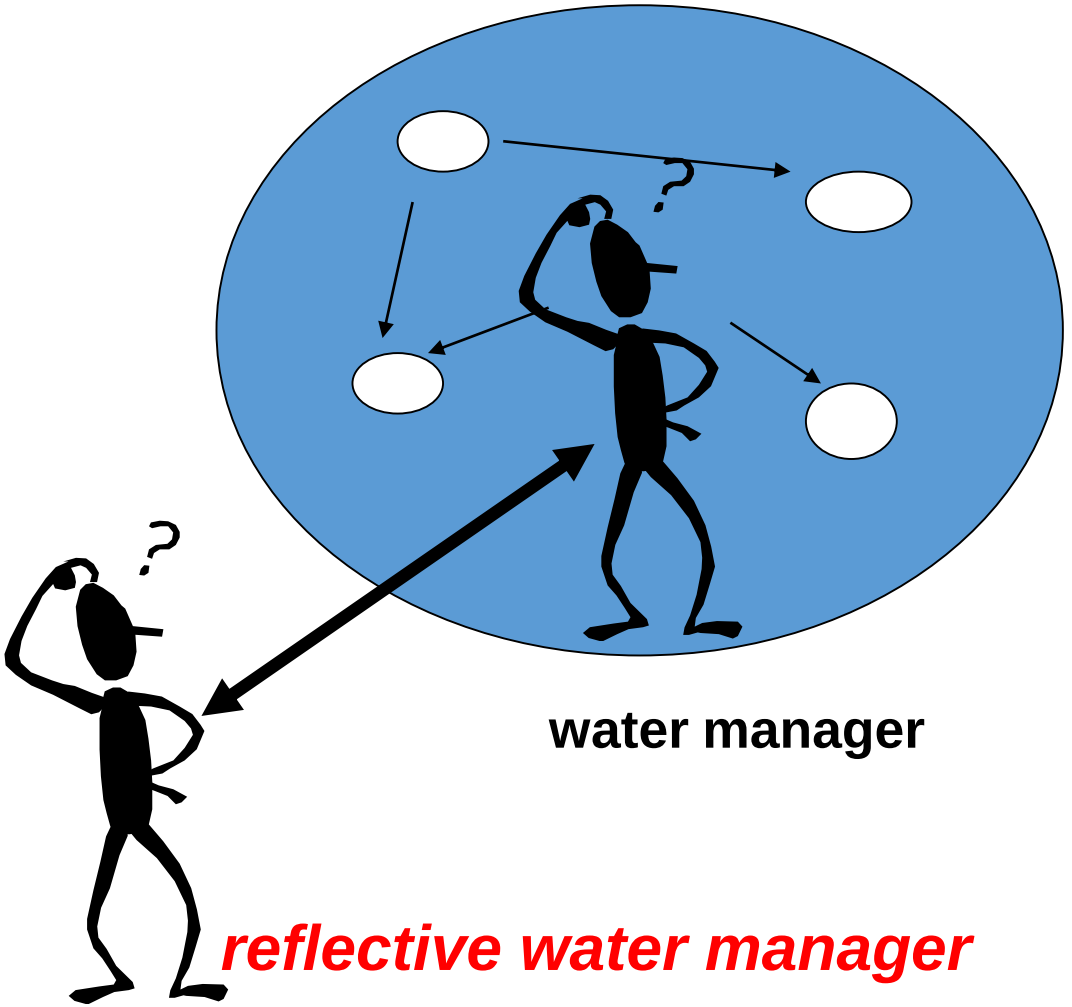
- max. € 2,5 million over 5 years
- previous submission 2014: doubts about feasibility & embedding
- extend & deepen peer-to-peer review & twinning



How can we make ‘good ideas’ ‘land’ in the context of water management?

Reflection in and on action should be built into WFD and our daily work





Why me?

- Tropical Land & Water Management Wageningen UR
  - environmental interdisciplinary engineering degree

- hydrologist expert in UK, CAR, Madagascar, e.g. Environmnt Agency (England & Wales)
  - why are the best data & models (not) used?
  - experience of New Public Management protocols and disregard for expertise

- PhD policy sciences 'integration of expertise in policy making'