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Models and output are interpreted in conflicting frames that cause the gaps to be unbridgeable

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W6 abstract:

A matter of interpretation

Models and their output are interpreted in (conflicting) frames that cause the gaps (between design and use) to be unbridgeable

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The unreceptiveness of potential end-user organisations to the potential benefits of IAMs en DSSs can be analysed and explained by frame reflection. The notion of “frame” is already used in social psychology, management sciences, and policy sciences. Frames are used by a person to make sense of their environment, to make observations and decisions rationally accountable, both to themselves and to others. Frames are relevant for communication and learning at the level of both individuals and organizations. Collectively shared frames may influence how knowledge is selected and organised. This abstract focuses on the implications of frame research (Kolkman, 2005) on tool design for management and policy.

The challenge is to stimulate people to re-examine and revise existing frames. This requires a preceding creation of awareness for frames and frame differences. Frame reflection serves to reveal experiences, perceptions, assumptions, limitations, interpretations and uncertainties in argumentation, and thus make these available for discussion and mutual learning.

A frame reflection approach, however, requires individual willingness to:

- cooperate in the fields of system knowledge, legislation and economical consequences (including long term costs and but possible future flood damage claims) by open communication, also on disputed items;
- change existing regulations, or at least their practical interpretations;
- break through institutional communication patterns and distributions of responsibilities.

Such an integrated problem approach has to deal with different authorities, in order to creatively redefine the problems on a higher level of aggregation and to find new solution spaces. This also requires integrity of, and trust between participants. These requirements pose new challenges for the design of IAMs and DSSs. Many of the above requirements are present (* met *) in informal policy networks only, and formalising them in software systems may potentially have the adverse effect.

Keywords: Frame reflection; Sense-making; Decision Making; Modelling; DSS.

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