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IWRM-NET

**Towards a European-wide exchange Network for integrating research efforts on
Integrated Water Resources Management**

Thematic priority: Integrated water resource management

DELIVERABLE N°43

***INDICATOR SET FOR IWRM-RELATED RESEARCH PROGRAMME SELF
EVALUATION***

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PU	Public	
PP	Restricted to other programme participants (including the Commission Services)	x
RE	Restricted to a group specified by the consortium (including the Commission Services).	
CO	Confidential, only for members of the consortium (including the Commission Services).	

Deliverable D43

Indicator Set for IWRM-related Research Programme Self Evaluation

19 December 2006

This Document consist of two parts: the table presents the indicators chosen, and the subsequent section explains the self assessment procedures including the terminology of the tables.

PROSA

PROgramme Self Assessment

Herbert Haubold, 10 Nov. 2006

Information for IWRM-Net participants

The below activities refer to Task 4.2 in the DoW.

Purpose

Self Assessment means measuring how well the activities that are conducted within a particular frame fit to the targets that were articulated for this frame. Specifically, related to the research programmes that are linked via IWRM-Net, we plan to introduce a pilot Self Assessment activity to demonstrate how this method is operationally conducted.

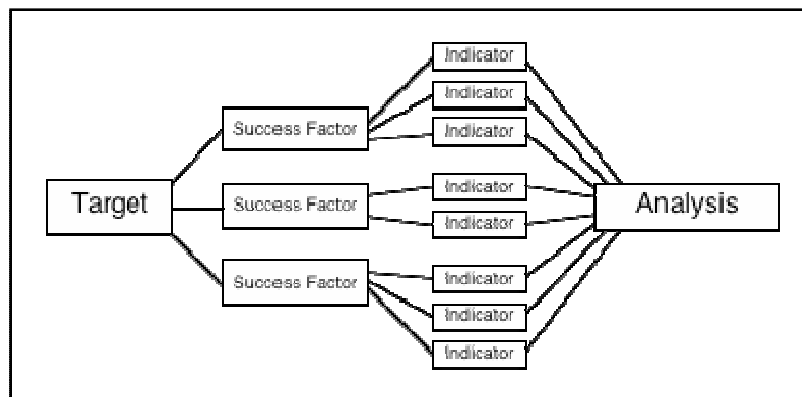
Periodical Self Assessment provides an innovative means for programme managers to semi-quantitatively investigate particular details of their programme. Thus, it is a primary tool for Quality Management in that it enables the design of well targeted management activities and, subsequently, the determination of their effects. If Self Assessment is conducted among a range of research programmes, their differences and complementarities are elucidated. Importantly, Self Assessment does not mean a determination of how good a programme does, but it rather means a test to which degree the activities of a programme are in line with its own targets. Finally, by highlighting specific qualities of a research programme, the Self Assessment also proves the success of this programme in certain areas. By doing so, it provides a tool that can very well be utilised for justification and marketing purposes.

Approach

The essential prerequisite for Self Assessment to work, is reducing complexity. Research programmes are complex systems, and, as such they are difficult to comprehend, and their qualities are difficult to articulate. The managers of such programmes may be compared to the pilots of an air plane. The latter can never know the exact state of the entire system they are operating, but they rely on a well chosen set of instruments, each of which shows particular data. By observing all

these instruments, the pilots obtain an overall view of the whole system. Moreover, if instruments show data that deviate from the desired state of the system, the pilots may take corrective measures, the effects of which they can, again, observe using the same instruments.

By transferring this analogy to research programmes, firstly, the objectives of the programmes are explicitly articulated. Subsequently, for each objective, success factors are deduced that form a prerequisite for this objective to be accomplished. Thirdly, for each success factor, indicators are defined that isolate a specific aspect each and, thus, enable measuring if and how this success factor is met. Finally, the data of the indicators are collated, analysed and interpreted. Importantly, the indicators always need to be explained and viewed in their particular context, as the sheer face values likely have little meaning. The below figure depicts this work flow.



Schematic depiction of the work flow of PROSA.

PROSA is based upon combined elements of different methods previously published, namely Intellectual Capital Accounting, Intangible Assets Monitoring, and the Common Assessment Framework. These joined approaches are structured by using the Balanced Scorecard as an overall frame. Accordingly, PROSA focusses on four major perspectives:

- 1 Internal perspective: programme management procedures
- 2 Financial perspective: utilisation of public funds
- 3 External perspective: stakeholder response
- 4 Learning perspective: scientific innovation

Pilot

Rather than setting up full scale Self Assessment systems for the participating research programmes – a task that would be far beyond the scope of IWRM-Net and

also exceed its resources – we will demonstrate to the partners how such a system works, and how it can be established, if, in the future, they chose to do so. This pilot effort will be based on a small set of exemplary indicators, that reflect the four above described Score Card elements and that refer to targets that are likely valid for each of the participating programmes. Moreover, some special indicators will be defined that reflect the progress of IWRM-Net as to the sustainability of the networking beyond the FP6-financing.

By defining all these indicators, emphasis will be placed on minimising the efforts needed for collecting the data. In this pilot effort, indicator data will be determined solely at programme management level, whereas such indicators will be avoided, which require consulting third parties such as various stakeholders or the co-ordinators of projects funded by the respective programmes. Please note that consulting third parties is, however, essential in any full scale Self Assessment system.

Example

This example illustrates the above description: One of the *targets* of a particular research programme is to have a positive impact of the long-term development of the national science scene and, specifically, to enhance the sustainability of research within the fields this programme covers.

One of several *success factors* for this target to be accomplished, would be *"Support to young scientists and partial compensation for the fact that in Europe they currently face insufficient career opportunities."*

To measure how this success factor is met, an indicator could be defined *"Total number of graduate students' theses funded by the programme"*. Another indicator could be defined for each project which is funded by the programme: *"Part of the project budget allotted to salary of non-permanent university employees"*. The former indicator would be a number, the latter a ratio. These examples also show that each indicator can not be taken at face value but has to be viewed within its particular context.

These, and all the other indicator data would then be collected annually and analysed.

Activities

The planned Self Assessment related activities will be discussed in a session at the IWRM-Net GA in London on 11 and 12 January 2007. Subsequently, a work sheet

will be drafted by the task leader that contains the indicators chosen and brief explanations as to their meaning. Once this work sheet has been distributed to all participants of the pilot, a test run will be conducted, in which the representatives of each programme will fill in the data (e.g. numerical values) or chose from a list (some indicators will be multiple choice).

The work sheets will then be returned to the task leader who will analyse them and produce a preliminary report, which will be distributed among the IWRM-Net partners for comments. Depending on the outcomes of this test run, the indicators chosen may be adapted or not. Subsequently, until the end of IWRM-Net, the work sheet will be circulated annually to obtain a time series of indicator data. Finally, a report will be produced by the task leader as deliverable D44 of IWRM-Net.