



Strategy of Irrigation Branch in Russia

A. Zeyliger and O Ermolaeva

Moscow State University for Environmental Engineering, Centre for Geo and HydroInformatics, Moscow, Russian Federation
(azeiliger@mail.ru, +7499 9764907)

At this moment, at the starting time of the program on restoration of a large irrigation in Russia till 2020, the scientific and technical community of irrigation branch does not have clear vision on how to promote a development of irrigated agriculture and without repeating of mistakes having a place in the past.

In many respects absence of a vision is connected to serious backlog of a scientific and technical and informational and technological level of development of domestic irrigation branch from advanced one. Namely such level of development is necessary for the resolving of new problems in new conditions of managing, and also for adequate answers to new challenges from climate and degradation of ground & water resources, as well as a rigorous requirement from an environment.

In such important situation for irrigation branch when it is necessary quickly generate a scientific and technical politics for the current decade for maintenance of translation of irrigated agriculture in the Russian Federation on a new highly effective level of development, in our opinion, it is required to carry out open discussion of needs and requirements as well as a research for a adequate solutions.

From political point of view a framework organized in FP6 DESIRE 037046 project is an example of good practice that can serve as methodical approach how to organize and develop such processes.

From technical point of view a technology of operational management of irrigation at large scale presents a prospective alternative to the current type of management based on planning.

From point of view ICT operational management demands creation of a new platform for the professional environment of activity. This platform should allow to perceive processes in real time, at their partial predictability on signals of a straight line and a feedback, within the framework of variability of decision making scenarios, at high resolution and the big ex-awning of sensor controls and the gauges supervising parameters of system, fast proper response to changes in behaviour of controlled system, and all this on a firm support on the creative professional approach of the staff to execution of the professional duties.

Development of such professional environment cannot be solved for a short time interval and within the framework of several projects, and will demand the interconnected and purposeful actions directed on extensive information - technological development of administrative and operational segments of irrigation branch. For this purpose it is necessary to develop, create and use the interconnected elements of information - technological developments shown by us in four directions and entitled: 1) Technologies; 2) Infrastructure; 3) Staff; 4) Tools. These four elements will be discussed in a contribution.