As it defined the mandate of its new portal, the “Autorità di bacino del fiume Po” (AdbPo) decided to acquire the tools to publish its considerable cartographic material. On the present web site (www.adbpo.it) sections containing geographic information are still available, but they do not have the interactive characteristics that could be implemented by exploiting the potential offered by mapservers. At present, the information content and functionality projects are in progress. In October 2005, the webGIS, designed by AdbPo and Politecnico di Milano – Polo Regionale di Como will become accessible to users from the new portal developed by Ariadne s.r.l.

One of the AdbPo’s main requirements is to communicate its activities in the Po basin. A specific goal is to provide a continuous view of the basin territory. This is central to the AdbPo’s approach which is based on a unitary concept of the hydrographical basin and on the analysis of the connection between the diverse natural and anthropic events.

Main portal and webGIS users are local agencies (AIPO, 7 regions, the autonomous province of Trento, 3200 municipalities), national agencies (APAT, Ministry of the Environment), technicians and citizens. An additional objective is to encourage cooperation and the exchange of documents with the public and private agencies operating within AdbPo’s jurisdiction.

From the technological point of view, AdbPo’s policy is to adopt FOSS (Freeware and Open Source Software): Linux as operating system, Apache as web server, MapServer, MapEdit, PostgreSQL and PostGIS as geographic data manager and publisher. In the design, implementation and management of the web site the content management system ACM (Ariadne Content Manager) will be used and integrated with the previously mentioned software tools.

With respect to the geographic content, three areas of interest have been identified and the decision was made to implement a thematic webGIS for each of them:

- The Plans Atlas, containing the basic maps (boundaries of the basins, hydrography, administrative boundaries, raster maps to be used as background, DTM, orthophotos) and the specific determination of the various Plans, such as the fluvial strips and areas of geological instability [in the Abridged Version of the Hydrological Plan (PAI), the risk areas of the Extraordinary Plan 267 (PS267)];
- The Projects Atlas, in which appear the projects in progress;
- The Monitoring Toolbox, containing the basic maps (as in the Plans Atlas), data from the water quality survey stations, information about river morphology.

With respect to functionalities, it is possible to navigate the maps in different ways and obtain predefined views corresponding to a specific topographic map at scale 1:25000, to a specific administrative locality, municipality, province, region or of a specific basin, sub-basin and body of water. Two levels of querying are possible: the former allows users to select a geographic feature and to obtain the connected attributes; the second makes it possible to download any related documents (e.g., the PDF files describing the fluvial strips).