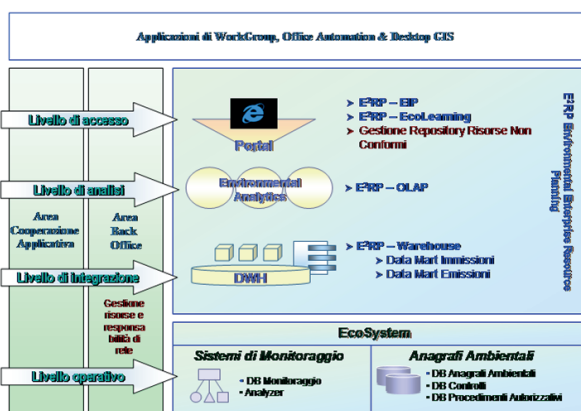# Project Automation
Ingegneria dei sistemi

REGIONAL ENVIRONMENTAL INFORMATION SYSTEM WITH PFR- SINAnet FUNCTIONS

The Regional Environmental Information System SIRA (Sistema Informativo Regionale Ambientale) of the Abruzzo Region with PFR – SINAnet functions has two main purposes:
- Support the policies for the regional territory government;
- Assure, at various institutional levels, the environmental information.

These objectives are pursued by allowing the environmental data management and information exchange between Abruzzo Environmental Agency (ARTA) and other national bodies involved in environmental data processing (as, for example, the Environmental National Agency) .

The system is made up of integrated infrastructures and applications which provide:

- the rational management of the whole set of environmental data coming from the monitoring networks, from inspection and control activities and from environmental authorizations;
- the environmental data processing and their transformation into meaningful and effective "environmental information" to support the policies of regional government;
- the availability of the territory's environmental data and information towards both the national System, and the public opinion in order to notify the environmental status and actions aimed at improving the regional environmental conditions.

SIRA physical architecture implements the informative support infrastructure and is made up of a Technical Centre based at ATRI headquarter and a Data Network connecting headquarter with Departmental offices.

SIRA architecture is based on the adoption of the classical three layers paradigm adopted for the implementation of decision making DataWarehouse: operational layer, integration layer, processing and access layer.

The main functions of the SIRA system for ARTA Abruzzo are:

- Data acquisition from local and provincial level operating systems
- Data output, integration and organization aimed at on-line analysis
- Processing of environmental indicators and production of standard reports according to the Environmental Data Yearbook published each year by the National Environmental Agency.
- Dynamic data access through advanced query and reporting tools and multi-dimensional analysis
- Management of unstructured information resources
- Data communication to the public through the SIRA environmental portal
- Data transmission to the national SINAnet network through interoperability and application cooperation systems in compliance with the guidelines for e-Government
- Access, data and application security management.