

Italian National Noise Observation System: a data bank for the assessment and management of noise environmental information

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APAT

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APAT, Agency for Environmental Protection and Technical Services and the network ARPA/APPA developed the *National Noise Observation System*, a data bank as a structure including environmental national noise data, information related to the noise issues and to the noise indicators, which allows the analysis of the national situation about noise topics.



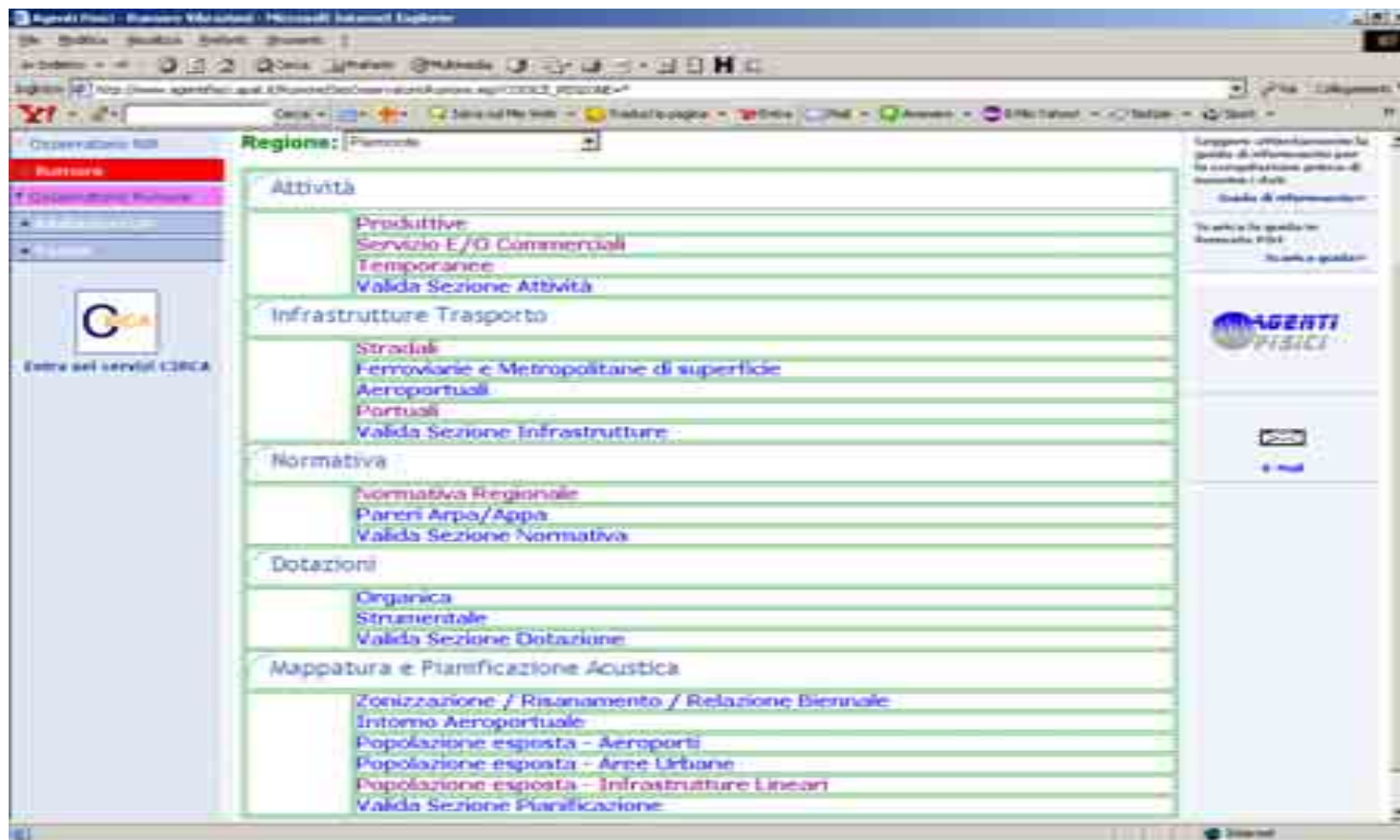
Presentation

The Noise Observation System is a management instrument that can be used like a valid operating support, dedicated to various users, both politicians and citizens. The environmental noise observation system, available to public on web, allows to acquire information related to the impacts due to the main noise sources, the statement of the legislation, the monitoring and control activities carried out by ARPA/APPA system, the adopted “acoustical planning” plans. The Observation System offers relative information about the verification of the legislative prescriptions, about the definition of the impacts caused by the main noise sources, about the requested and carried out monitoring activities, about the realization of the foreseen instruments of acoustic planning. The data in the different sections will be able to carry out a main analysis of the thematic about acoustic pollution on national level, elaborating data on regional level, comparing the various territorial situations, regarding actions on environmental noise, the state of the rules and the modalities of their application and the state of adoption of the instruments of acoustic planning.

This information is necessary for the definition of strategic planning actions about the prevention and the control of the acoustic pollution. Through this data bank the referents of the ARPA/APPA can insert and update the information on the noise regarding the own region. Moreover the regional referents verify that the inserted data are correct and observe the respect of a protocol agreed between APAT and the ARPA/APPA; during the operation of verification of the information, other controls are carried out automatically by the system on the reliability and the validity of the data. APAT manages the service on national level and guarantees the correct operation, proposes and realizes the new implementations, the updating and the elaboration of periodic reports.

Database architecture

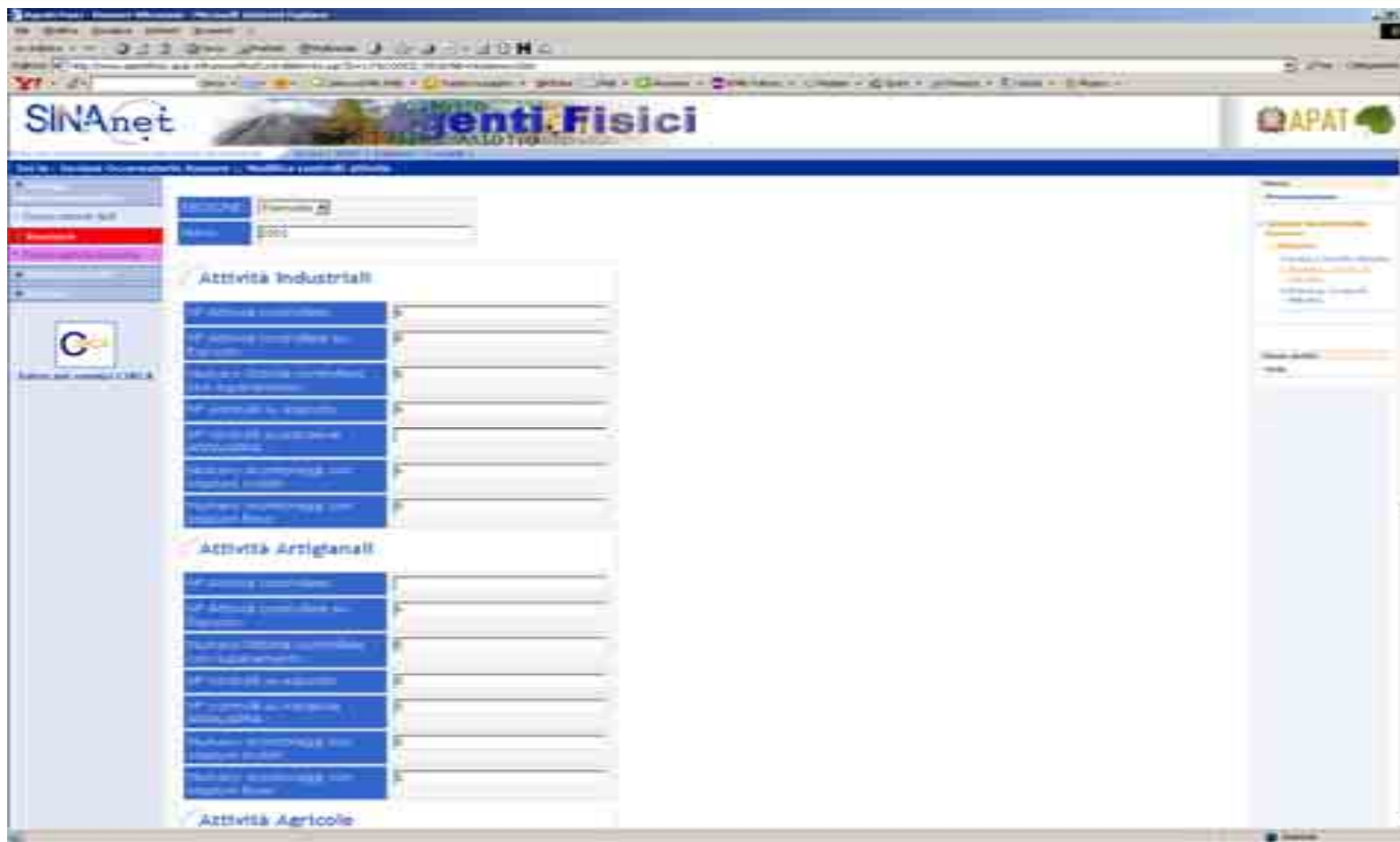
This Database introduces an architecture based on the model of environmental indicators DPSIR, (Main causes - Pressures - State - Impacts - Actions), introduced from European Environmental Agency and Eurostat.



Sections

The information is organized on regional level and comes from the analysis, control and monitoring activities carried out by the ARPA/APPA. The Database is structured in several sections on the basis of the contained data typology:

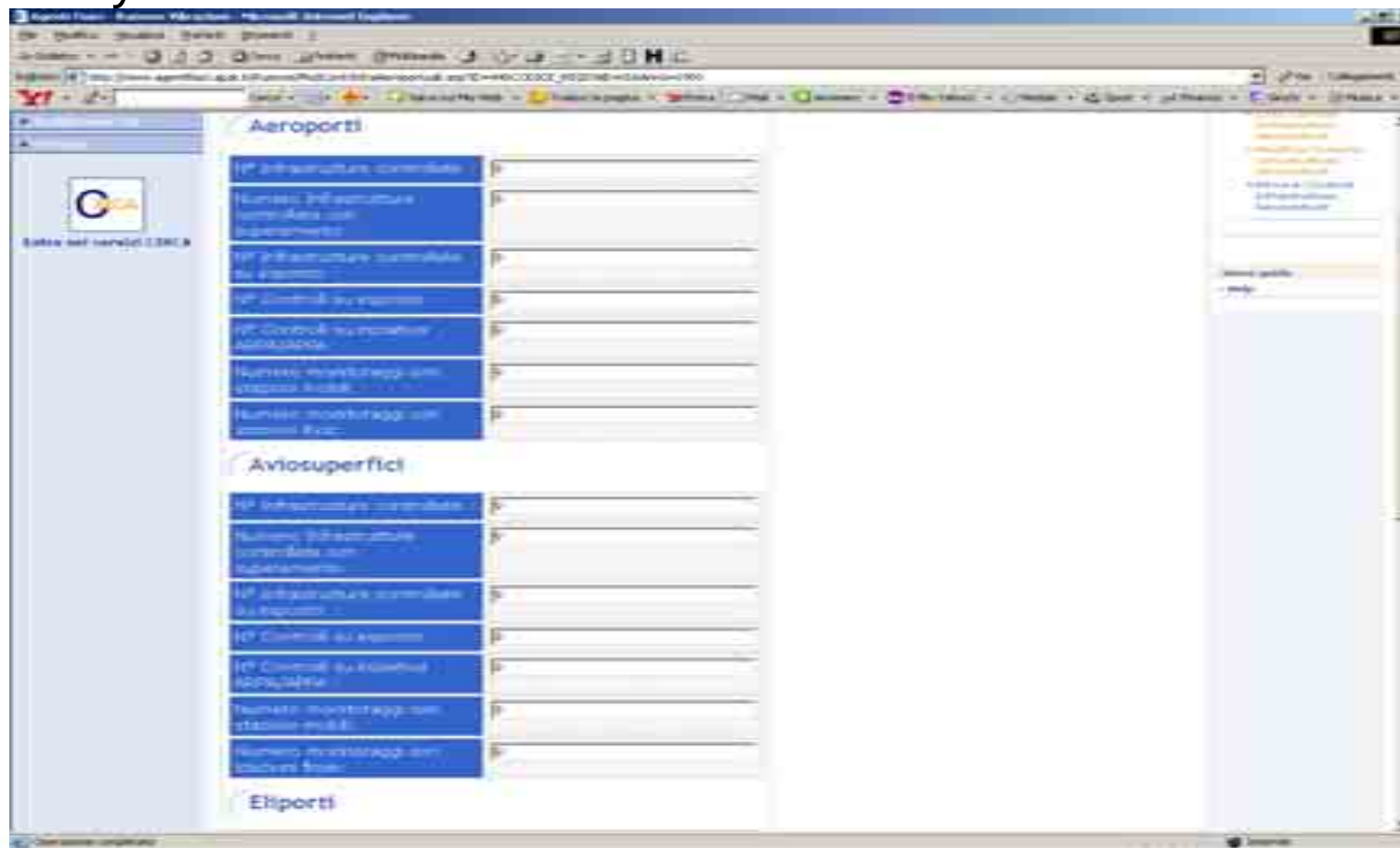
- I. SECTION : ACTIVITIES
- II. SECTION : INFRASTRUCTURES
- III. SECTION : RULES
- IV. SECTION : INSTRUMENTAL EQUIPMENT
- V. SECTION : ACOUSTIC PLANNING



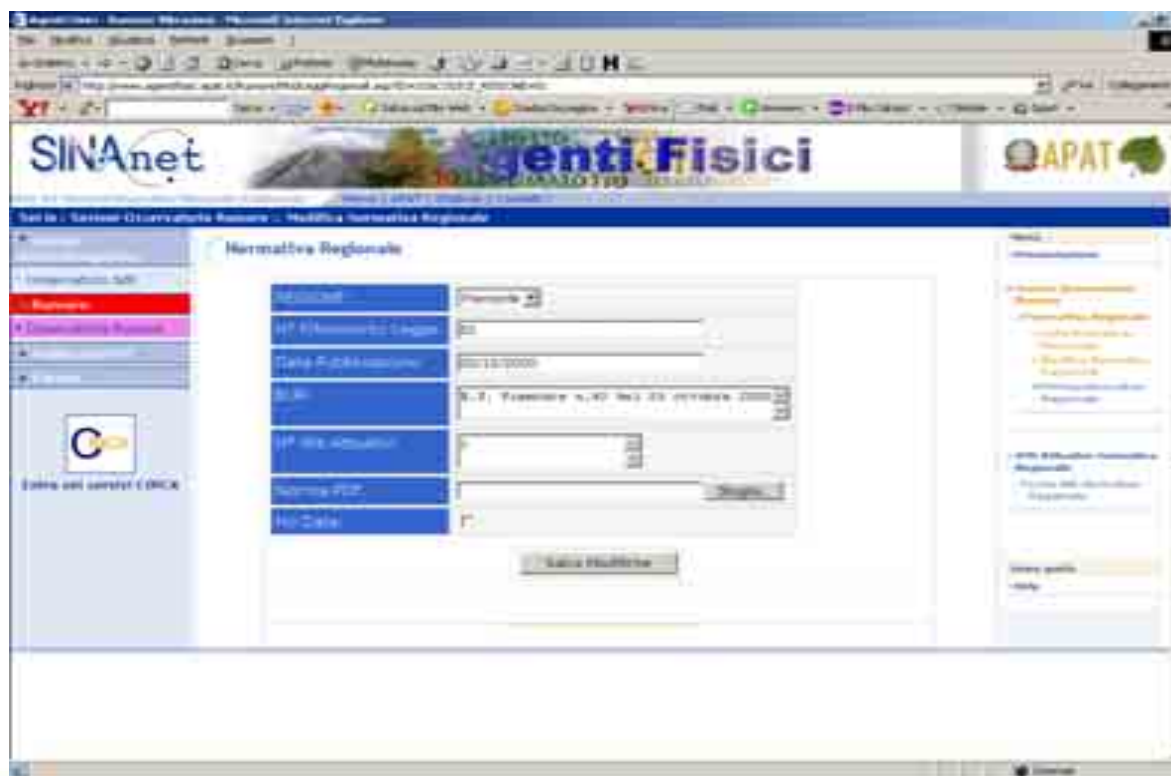
The first two sections have the aim to describe the state of the environment using the indication that can be obtained knowing the number of checked sources and the number of controls executed by ARPA/APPA and, together, the cases in which overcoming of the limits fixed by the enforced rules occurred.

The following two sections annually update information on regional level, subdivided into several typologies of sources (activities or infrastructures).

Moreover sources checked for statements of the citizens (directly and/or through the Administrations) are pointed out; this information is very important because it points out which is the most annoyance source perceived by citizens.

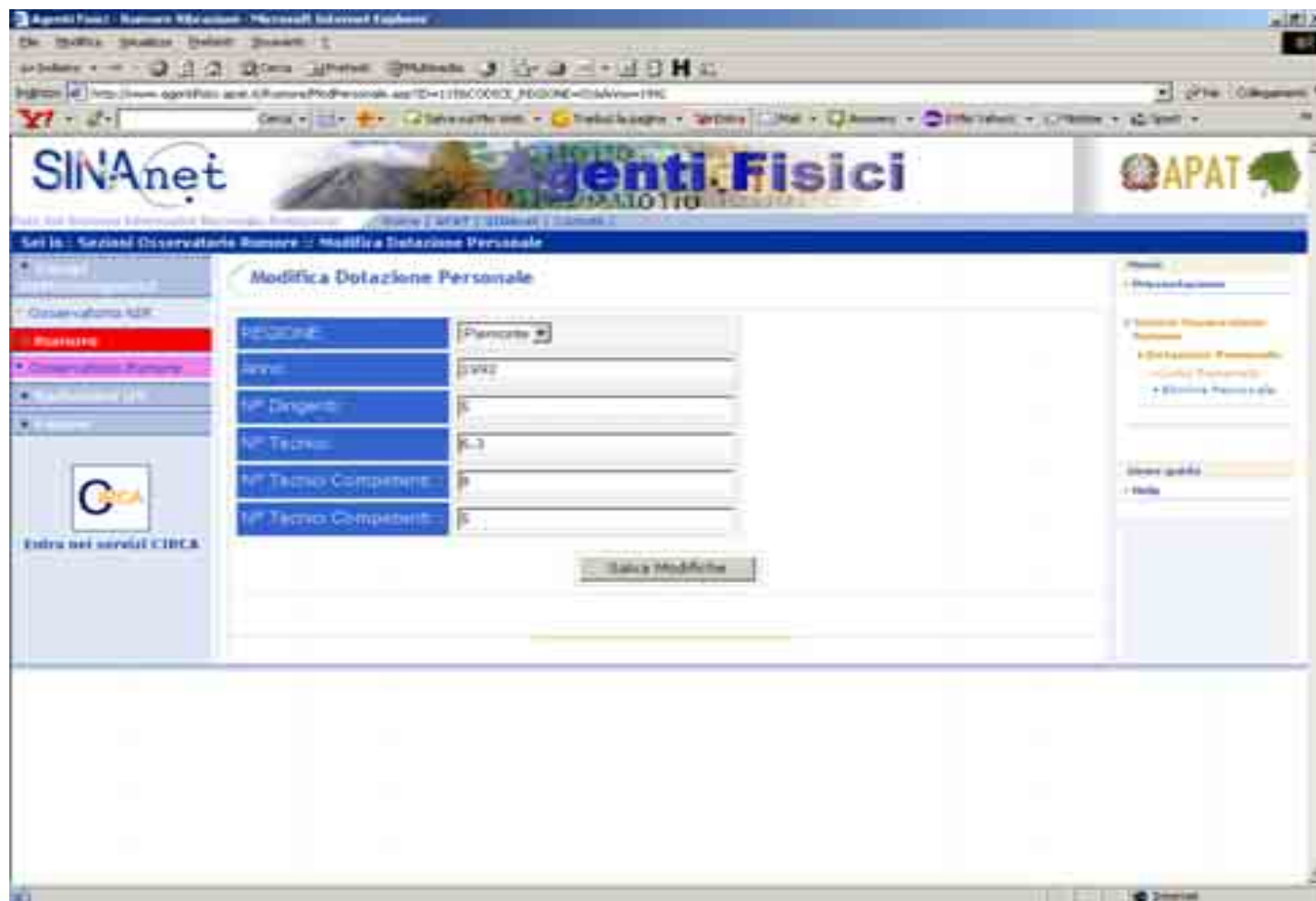


The section about the Rules is useful as an indicator of the actions puts by the Administrations in order to face the problem of the acoustic pollution. The section does not contain a simple directory of regional rules but also a short analysis of the main contents of each one. It also presents the activity that is carried out by ARPA/APPA at regional level in matter of passing of technical opinions to estimate the validity of the content of the documentation requested by the rules in order to authorizative processes (es. zonings, passive acoustic requirements of the buildings, acoustic impact, etc.).



The screenshot displays the SINAnet web application. The main content area is titled 'Normative Regionale' and contains a table with the following columns: 'Regione', 'Norma', 'Data Pubblicazione', 'Data', 'Norma', 'Data', 'Norma', 'Data'. The table lists various regional norms, including 'Regione', 'Norma', 'Data Pubblicazione', 'Data', 'Norma', 'Data', 'Norma', 'Data'. The interface also features a sidebar on the left with navigation links and a right sidebar with additional information and links.

The section about the Equipment has the aim to realize a national picture about the human resources and the availability of instruments in the ARPA/APPA system in order to carry out all the activities that the national and/or regional rules request to them.

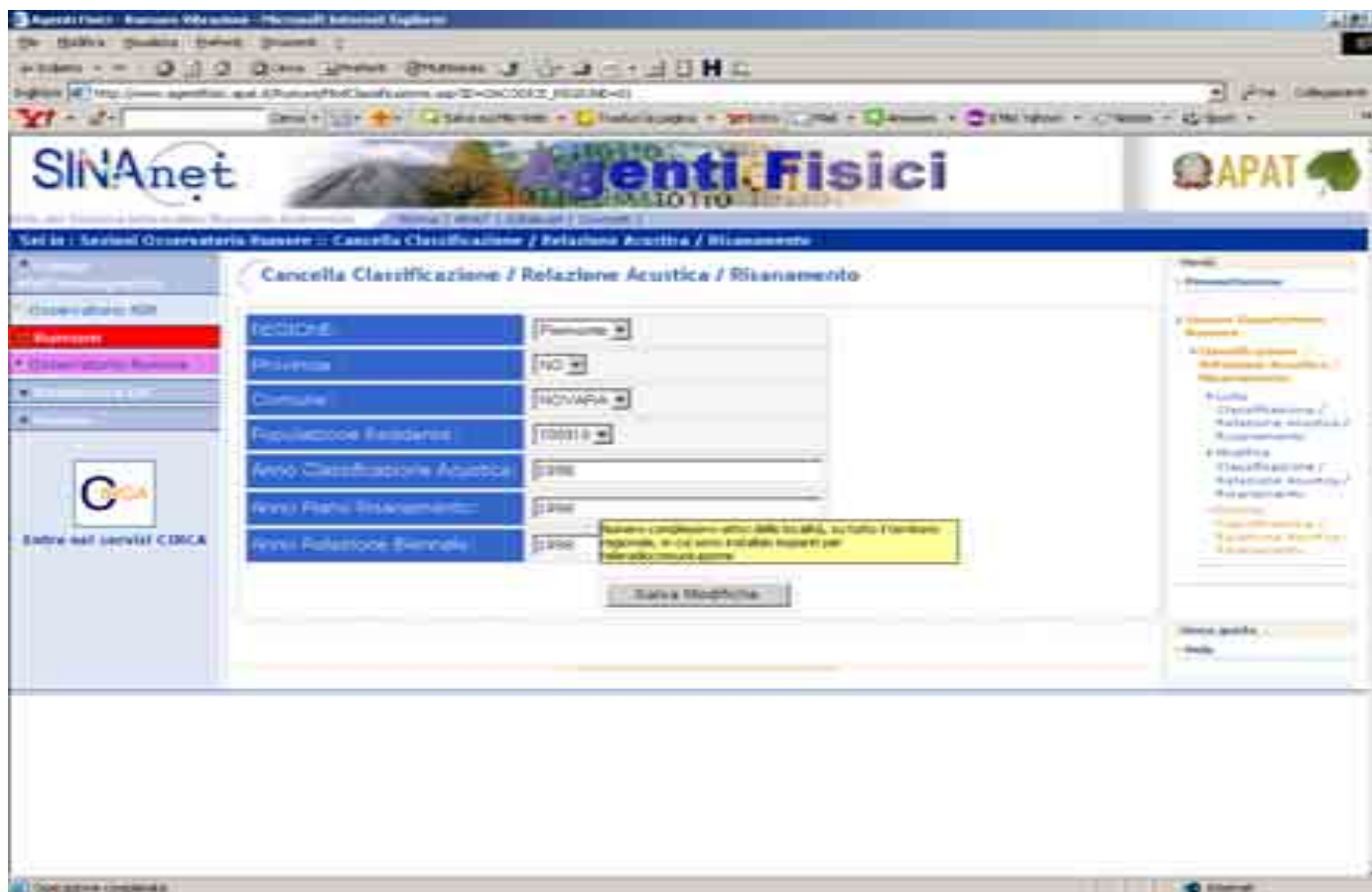


The screenshot shows a web browser window displaying the SINAnet application. The page title is 'Modifica Dotazione Personale'. The form contains the following fields:

Regione:	Piemonte
Anno:	2002
NT Dirigente:	5
NT Tecnico:	5.3
NT Tecnico Competente:	5
NT Tecnico Competente:	5

Below the form is a 'Salva Modifiche' button. The left sidebar shows a navigation menu with 'Osservatorio ARPA' and 'Osservatorio ARPA' selected. The right sidebar contains links for 'Osservatorio ARPA', 'Osservatorio ARPA', and 'Osservatorio ARPA'.

The section Acoustic Planning collects information about the state of performance of the acoustic zonings, the plans of urban reorganization and the biannual report on the acoustic state at municipality level. This information presents another action that the Administrations put into effect in order to the prevention and control of the problems connected to the acoustic pollution.

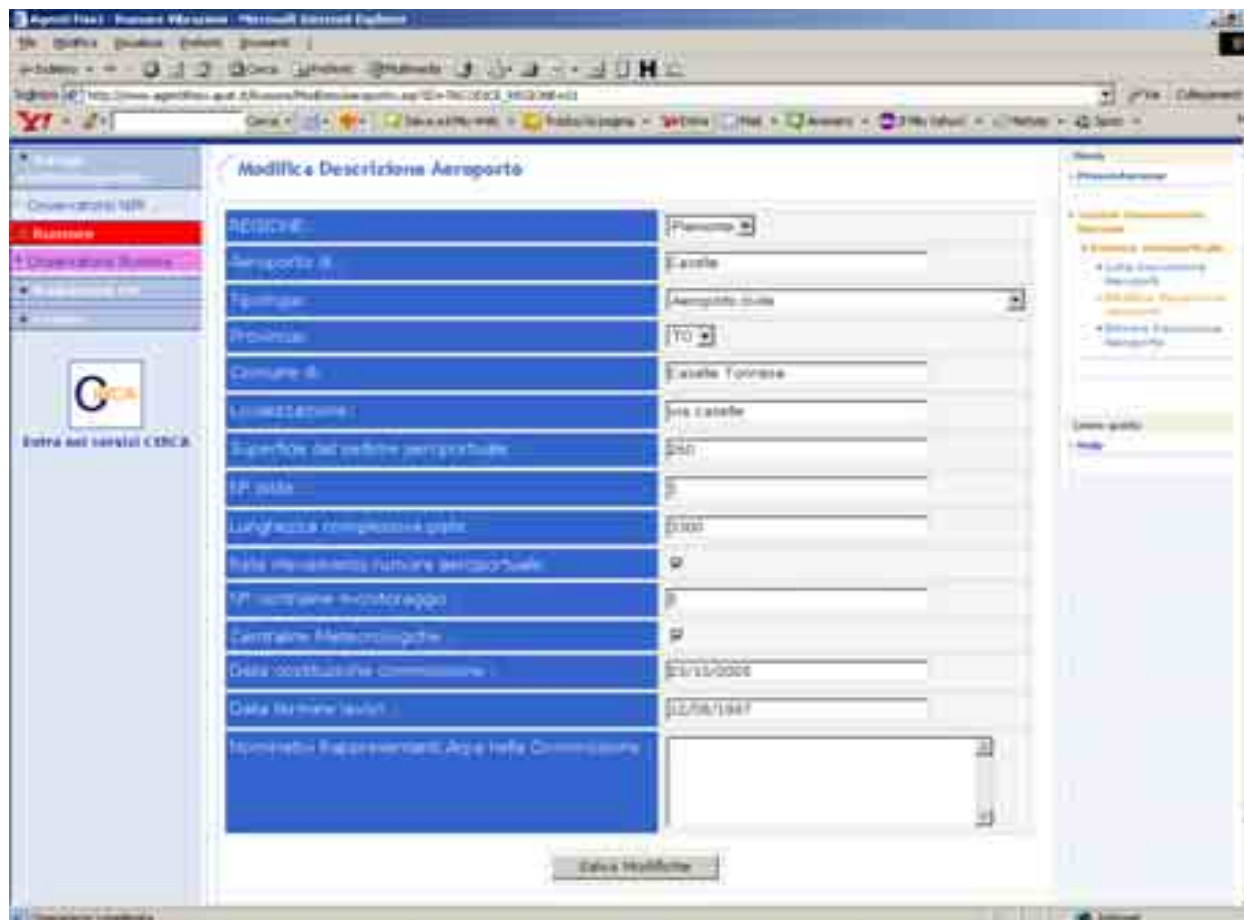


The screenshot shows the SINAnet web application interface. The main title is 'Agenti Fisici'. The left sidebar contains a navigation menu with 'Ricerca' and 'Gestione' sections. The main content area is titled 'Cancella Classificazione / Relazione Acustica / Risanamento'. It contains a form with the following fields:

Indirizzo	[Form field]
Provincia	[Form field]
Comune	[Form field]
Popolazione Residente	[Form field]
Anno Classificazione Acustica	[Form field]
Anno Piano Risanamento	[Form field]
Anno Relazione Biennale	[Form field]

Below the form is a 'Salva Modifica' button. A yellow warning box is visible, stating: 'Selezionare con attenzione il tipo di agente fisico, in quanto influisce sulla scelta del livello di inquinamento acustico da raggiungere.' The right sidebar contains a 'Menu' section with links to 'Classificazione / Relazione Acustica / Risanamento', 'Ricerca', 'Gestione', and 'Informazioni'.

This last section collects also information about the implementations foreseen by Italian Decree 194/2005, which has put in force the European Directive 2002/49/CE, with a particular care to the noise exposure of the population



Modifica Descrizione Aeroporto	
REDAZIONE:	Piemonte
Servizio di:	Enache
Regione:	Aeroporto di Enache
Provincia:	TO
Comune di:	Enache Torinese
Localizzazione:	Enache
Superficie del perimetro perimetrale:	240
SP: strada:	0
Lunghezza complessiva gate:	0000
Indice di intensità rumore perimetrale:	0
Tipi di rumore in costruzione:	0
Caratteristiche meteorologiche:	0
Data costituzione commissione:	23/11/2006
Data termine lavori:	12/06/1997
Indirizzo Rapporto Annuale Azioni Commissione:	

Salva Modifica

Finally, the below information regards the studies carried out in some municipality in order to estimate the noise exposure produced in urban areas, around transport infrastructures. In relationship to these main sources the number of exposed population is evaluated with reference to intervals of values related to the acoustic indicators fixed by the Directive 2002/49/CE (Lden and Lnight).

[illegible]