SARDINIA RADIO TELESCOPE:

A double challenge

Sardinia Radio Telescope (SRT) was approved by the Italian Ministry of Research in 1997, in the context of a significant investment for the *development of the most depressed areas of the country*. Following this decision, Protocol was signed among the National Council of Research (CNR), the Italian Space Agency (ASI) and the Sardinia Autonomous Region government (RAS), which provided further financial support to the project. Later in 2003, following the overall reorganization of the main Research Institutions in the Country, the project was endorsed by National Institute for Astrophysics (INAF). According to the original Government strategy, the project was then challenging a double goal: SRT was not supposed to be a simple outpost of a prestigious scientific network, but it was supposed to inject a development seed into the Island. On the occasion of the inaugural ceremony, it results interesting to see what's actually happening in Sardinia around the project, which is rather impressive.

The main works	The main actors
a) **The basement.** Around 11,000 tons of iron and cements, six meter deep under ground and a 40mt diameter.	MT-Mechatronics, Mainz, DE ICOM, Cagliari BCV Progetti, Milano Istituto Italiano Saldatura, Genova Studio Associato SAMP, Cagliari COSPAL, Bergamo Vitrociset, Cagliari Temomeccanica, Cagliari CAP, Cagliari Mammoet, Milano And about 40 among companies and professionals, of which about 30 are located in Sardinia
b) **The radio telescope.** About 3,000 tons of metallic structure, 10,000 welds and alignment tolerances below a millimiter.	
c) ***The buildings.*** About 1,500 square meters, equipped with advanced control systems.	
In paraellel, the INAF staff developed the **scientific instrumentation**, with the involvment of many small companies distributed over the Country.	
Total cost ~60 Million Euros	~25 Million Euros brought about Sardinia

The local involvement in the construction

The construction of a complex equipment such a radio telescope requires a specialized expertise, and it is not obvious that works can be granted to local companies. Nevertheless, in the case of SRT, the involvement of local companies and professionals resulted to be significant, showing that the territory was almost ready to capitalize the original Government development plan.

A detailed screening of all the actors involved in the project, including a photographic report, will be available later, while we mention here the main companies and some overall figures.

SRT: further actions aimed to capitalize the main investment

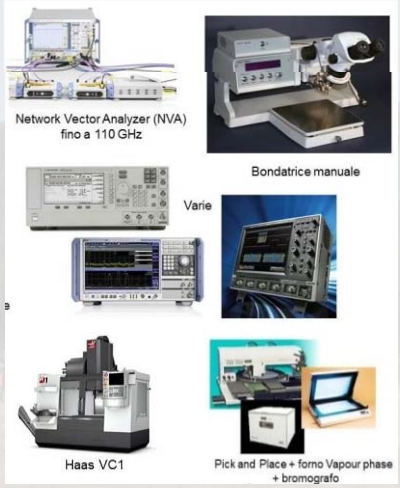
In parallel to the construction of the telescope ,other actions were undertaken, mainly by the Regional Government, at infrastructural, educational and dissemination level.

"CyberSAR": a supercomputing regional network

Thousands of computing nodes distributed over the main scientific and academic Institutions in Sardinia, including SRT, connected with wideband optical fibers. An investment of about 12 M€ of UE structural funds administrated by the Ministry of Research.

Research & Development

Modern laboratories and workshops equipped with modern instrumentation which will be open to students and small local enterprises for stages.



The new site of INAF reference Structure in Sardinia: Cagliari Astronomical Observatory

A large site, close to the University Campus, equipped with laboratories, workshops and outreach areas. An investment of about 11 M€ of UE structural funds administrated by the Sardinia Government in response to a joint proposal presented by INAF and Selargius Municipality.

Outreach

Thought the site is not fully equipped yet for opening to the public, we received many visitors, including scolars, about 2,000 per year. With the opening of the Visitor Center, and with adequate investment, the site could become a formidable and attractive center for scientific tourism.

Higher Education

In the context of the SRT project, several students of Cagliari University obtained a grant from the "Master & Back" educational program financed by the Sardinia Regional Government, performing a stage abroad, and coming back to Sardinia with a two year fellowship. Some of them were already enrolled for the SRT operational staff, while some others are still abroad.

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Outstanding scientific results

In the context of the international collaborations developed in the prospects of the SRT project, young local radio astronomers have achieved outstanding results and outstanding awards.