

3. Conclusion

TEMPO will be hopefully recovered during summer 2007. Acquired imagery and environmental data will be analyzed to study the links between environmental changes and biotic factors, including composition, density, biomass and growth of visible species (mussels, shrimps, crabs), behaviour and, biological interactions such as predation.

4. Acknowledgements

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THE NEMO PROJECT: DEVELOPMENT OF PHASE 2

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1. Introduction

The detection of high-energy neutrinos coming from the deep universe is considered by the Astrophysics and Particle-Physics community one of the main scientific goals of the next years.

The Infn, (Istituto Nazionale di Fisica Nucleare), after the realization of a technological demonstrator (the NeMO Phase 1 project), at 2.000 m depth, has under way an advanced R&D program, the NeMO Phase 2, that include long term exploration close to the Sicilian coast for the installation of the detector.

The Phase 2 consist of a new electro-optical cabled facility at 3.500 m depth at 50 nautical miles from the south-east coast of Sicily.

This infrastructure it's also used for others scientific applications, (Acoustics, Geophysics, etc.) and operate as a multidisciplinary underwater laboratory.

2. Results and Discussion

Technical aspects under realisation will be presented with particular attention to:

- Cable Backbone

- Sub-sea Distribution Network
- Power and Data Transmission
- Connection System

3. Conclusions

An underwater infrastructure is under realization on the deep sea site selected by the NeMO collaboration as a candidate for the installation of the km3 neutrino telescope.

The infrastructure includes a 100 km long electro-optical cable, a shore station in Portopalo di Capo Passero and the power feeding and control equipments.

The installation of the backbone cable and power systems has started. The plant will be installed by the end of spring 2008.

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AN INFORMATION MODEL FOR A POLICY BASED MANAGEMENT. EXTENSIONS TO MARINE SENSOR NETWORKS AND OCEAN OBSERVATORIES

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1. Introduction

Sensor networks for environmental data acquisition will play an important role in the development of future large data acquisition systems, particularly in oceanographic observation and operational oceanography.

This paper will show the application of Policy Based Network Management (PBNM) on Marine Sensor Networks (MSN) and Networked Ocean Observatories aiming to overcome the lack of flexibility im-

posed by more traditional network management paradigms.

The development of MSNs must deal with several technical challenges focused mainly on the management of the heterogeneity (equipment and data) and on the extension of the operational time. Different systems and technologies are concurrent in the same network, forced to share hardware resources and exchange data. At same time many acquisition devices, and the network itself, have limited resources that must be well managed. Their multidisciplinary

