



Co-funded
by European Union
eContentplus

Project overview

Antonio Di Natale
Acquario di Genova

AQUARING

Accessible and Qualified Use of Available Digital Resources about Aquatic World In National Gatherings



Partnership

Coordination

Acquario di Genova - Costa edutainment S.p.A. (IT)

Content Providers and Scientific Experts

Acquario di Genova - Costa edutainment S.p.A. (IT)

Nausicaa - French National Sea Centre (FR)

Royal Belgian Institute of Natural Science (B)

Rotterdam Zoo (NL)

Lithuanian Sea Museum (LT)

IT Partners

Softeco Sismat SpA (IT)

Robotiker Tecnalía (ES)

Evaluation

University of Genoa, Department of Anthropological Sciences (DISA) (IT)

Awareness and dissemination

ECSITE, European Network of Science Centres and Museums (B)



Rationale

- **To develop a European portal to access new digital contents on marine and freshwater systems science and culture**
- **To improve access and use of digital multidisciplinary contents available in many European organisations, either public or private, which were not available for the public**
- **To provide value added services to citizens, schools, scientists, media, museums, children**




Aggregation of digital contents on aquatic science and culture

Sources

Natural history museums - Aquaria, Zoos

Aqua topics



- Water-related climate problems
- Ecosystems
- Biodiversity
- Biology of aquatic organisms
- Animal kingdom
- Animal behaviour
- Vegetal kingdom
- Aquatic food resources
- Regional management of aquatic
- Environments & development



- Hydrological cycle
- Water and Society
- Education
- Aquatic research
- Information
- History & Navigation
- Fishery
- Water use
- Water quality
- Aquatic pollution





AquaRing approach

Media
Museums and
Aquaria operators



Citizens, Visitors,
Schools, Teachers,
Children

Information
Education
Entertainment

Value added services
- High quality contents
- Scientific Collection data



AQUARING web portal
Unified semantic classification and indexing

Direct visit !

Pre Visit
• Visit planning
• Information material
• Tourist information
Post visit
• Educational effectiveness evaluation
• Additional material
• Educational support



Museums and
Aquaria





Project objectives

- **To add value to individual collections** of the participating science centres and external providers and encourage the development of a global view of the European heritage in the domain
- **To allow visitors to explore a virtual global knowledge space**
- **To combine specific investigations and learning routes across the digital resources of different centres**
- **To support improved education and informal learning experiences, for both individual learners and groups**
- **To increase communications to and awareness of the public at large on aquatic environment conservation and sustainable management of aquatic resources**
- **To strengthen the cultural and scientific offer of participating centres and the capability of offering combined experiences to their visitors**
- **To deliver value added services to media producers and other business uses**



Services provided

- **Semantic-based content search and navigation supported by domain ontologies and according to visitor's profile**
- **Educational paths planning with the strong involvement of project scientific partners with different specialisations**
- **Interaction with the content infrastructure to provide feedback on the user experience**
- **Provision of value-added services for content (re)use**



Ways to address the objectives

- ❑ Investigate and define suitable common data and meta-data models and suitable common copyright policies
- ❑ Domain's semantic descriptions (ontologies) to enable content integration and development of the global digital data space on aquatic heritage
- ❑ Design and set up an open semantic web based infrastructure, with an associate set of e-services
- ❑ Web portal to access a distributed content database.
- ❑ Multilingual content base management tools:
 - multilingual metadata model and ontology
 - multiple language user interface
 - multilingual content navigation and search
- ❑ Definition and provision of value added services to business users (i.e.: media producers, journalists, etc.)

The project takes advantage of the fact that the project consortium includes the **main organisations in this field at EU level** with significant mass of public at large (about 30,000,000 visitors per year), also thanks to the ECSITE's network



Workpackages



WP1
Project & Financial Management



WP2
Digital Collections & User Needs

WP3
Meta-Data & Semantic Resources



WP4
Enabling Infrastructure & Services



WP5
Global Content Space Set-up and Validation



WP6
Assessment & Evaluation



WP7
Awareness & Dissemination



General work plan

Duration: 30 months

