

Ocean of Information

INCOIS's dynamic ocean portal is a rich source of information for the fishing and scientific communities

The sustained oceanic observations and focused research of the Indian National Centre for Ocean Information Services (INCOIS) is uploaded to its dynamic ocean portal (incois.gov.in). This serves as a rich source of ocean information and advisory services to the society, industry, government and scientific community.

INCOIS is responsible for collecting huge amounts of data from various institutions in India, which are involved in marine data collection, ocean observation and oceanic/atmospheric sciences. The website is then responsible for translating it into deliverable products to a range of users—the fishing community, State Fishery Department officers, Planning Commission, ports and harbors, the shipping industry, the Navy, Coast Guards, NHO Central Pollution Control Board, etc.

Prakash Kumar, Joint Secretary, Ministry of Earth Sciences says. "All the data that we get has to be archived and kept somewhere. It is immediately uploaded to the website," he adds.

"The department essentially provides three kinds of services," says K Somasundar, Scientist e-director, Ministry of Earth Sciences. "Firstly, it plays a crucial role in sustaining fisheries' development plans. Then the fishing community makes use of the information that we provide them with."

The department is also responsible for the weather forecasts for coastal states. "Information relating to the

state of the ocean, wind direction, etc, is vital for coastal states. All this information based on winds, waves, swells and tidal waves is generated and then put on our website," says Somasundar.

This information—updated every three hours—is valid for up to five days, he says. This forecast of the state of the ocean is vital to the shipping and fishery sectors for safe travel in the sea. The Navy, offshore industry, ports and harbors require this information for cost effective and safe operations.

To be able to successfully do all this, INCOIS is using the advanced remote sensing platform, Argos, which collects information from the oceans and then transmits it to the satellite, which in turn is reflected on the website. According to Kumar, there are very few websites in India, which are based on the Web-Geo-

graphical Information System. The website enables a person to retrieve data from the portal without knowing much about computers.

"The Web-GIS allows the user to query, analyze and visualize spatial and non-spatial data over the web. The information required by the client can be fetched from the RD-BMS/Spatial Server and displayed on the web as intelligent maps," says Somasundar.

"Our ocean portal is a crucial link in the chain. It is a dynamic website

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which is fully automated," says Somasundar.

The website was developed by INCOIS in collaboration with TCS. While the design and operations were managed by INCOIS, TCS provided the backend software support, which is now being maintained and continuously upgraded by INCOIS. "The website is a single window solution for the entire ocean community," he says.

The website is being built in four phases. The first two phases are already over and the department is now expected to have design availability for WAP-enabled information systems.

The portal is supported in multiple languages—Hindi, English, and other Indian languages, including all coastal languages.

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At a Glance

Challenges

- Information came from various sources; there was a need to make information available at one place, on one website
- Sourcing information for various stakeholders

Solution

- A dynamic Web-GIS based website

Benefits

- Integrated data available at one place
- User-friendly information
- Multilingual website provides services over the web
- Real time source of information for various ocean communities