The satellite-based AIS

The satellite-based maritime traffic information system is managed through the Canadian company exactEarth, which is the result of a joint venture between COMDEV and Hisdesat. The ten satellites in this new constellation receive AIS signals from the over 110,000 vessels that are equipped with this system. The data are then relayed to ground stations, where the information is collated and prepared in accordance with the requirements of the system's various users. This new constellation

of satellites will provide an accurate picture of the world's maritime traffic in real time.

The system can offer details on the vessel's identity, its location, course, speed, navigational status, destination and cargo, any maneuvers made, draft, length, registry, surf conditions, rocky areas, fuel consumption, etc. This information can be of great use to government, maritime, port and fishing authorities.

Space Communications at the Service of Society



www.hisdesat.es Paseo de la Castellana, 149, 5th floor. 28046 • Madrid. SPAIN Tel: +34 91 4490149



GOVERNMENT SATELLITE SERVICES

Global Satellite Services

Hisdesat was founded in 2001 as a government satellite services operator to act primarily in the areas of defense, security, intelligence and foreign affairs.

Since 2005 we have been providing secure satellite communications services to government agencies from various countries, and we are currently developing new satellites for Earth Observation and a constellation for Maritime Traffic Information (AIS).

Secure communications services

Hisdesat has an innovative generation of satellites that provide more flexibility and security to satellite communications in the military X and Ka bands. This government communications system relies on two satellites, already in operation, that offer communications coverage over two-thirds of the Earth. Thus, Hisdesat consolidates its leadership as a global operator of government communications by satellite, both nationally and abroad.



Earth Observation

SpainSat: Positioned at 30° west, SpainSat's coverage area includes practically all of the American continent, Africa, Europe and the Middle East. This satellite has two control centers and tracking stations in Spain, one in Arganda (Madrid) and the other in Maspalomas (Canary Islands).

Xtar-Eur: Positioned at 29° east, it offers coverage from Brazil to Indonesia, including Europe, Africa, the Middle East and much of Asia. This satellite has two control centers, one in Ottawa (Canada) and the other in Mt. Jackson (Virginia, USA). Due to the satellite's orbital position, its tracking stations are located in Spain (Arganda and Maspalomas). This systems consist of two satellites, PAZ and INGENIO, featuring two space observation techniques: radar (SAR) and optical. They will be for both military and civilian use and will offer nighttime and daytime images in any weather conditions.

> PAZ satellite-Radar technology

> INGENIO satellite. Optical technology

Both satellites allow Earth Observation for multiple purposes: border control, intelligence, environmental monitoring, protection of natural resources, military operations, enforcement of international treaties, surface monitoring, city and infrastructure planning, monitoring of natural catastrophes and high-resolution mapping, among many others.

Radar Satellite Constellation TerraSAR-X/PAZ

The PAZ satellite is located in the same orbit of TerraSAR-X and TanDEM-X (Airbus Defence & Space). This three satellites, virtually identical, operate in a constellation, providing data to customers more flexibly and effectively, with no weather constraints for covering specific areas, anywhere worldwide and receiving daily revisit over any point on the earth's crust. A wide range of time-critical and data-intensive applications will benefit from this constellation approach.