FINMECCANICA

Official Global Partner
EXPO
MILANO 2015

PRESS NOTE

Milan, 15 June, 2015

Finmeccanica-Telespazio: satellites for the services in agriculture

Agriculture is one of the most ancient human activities. Throughout history, the cultivation of land has been the subject of an incredible evolutionary process, while still maintaining its magic: one seed yields many, and its fruits feed the planet. Today, it is up to the most modern technologies to support these activities, so that their development can cope with the changes our planet is undergoing.

Finmeccanica and Telespazio presented, at the Cereals and Tubers cluster of Expo 2015, the contribution that space technology offers to the environmentally sustainable development of the food sector: the eye of satellites is able to monitor, day and night, the path that goes from ploughing to seeding, up until harvest. Satellite observation of the Earth's surface allows constant monitoring of the land and crops, both globally and locally, through also what is called Precision Agriculture (PA). Using satellite geo-positioning technology, together with the use of "smart labels", it can also enable the certification of the origin of products (for example, precious truffles), contributing to their exploitation.
All this is told in the video inside the Cereals and Tubers cluster, made by Telespazio, a leading company among the global operators in satellite services: a virtual flight through the beautiful optical and radar satellite images, processed by e-GEOS (Telespazio/Agenzia Spaziale Italiana), shows the immense crops of corn and rice that help feed billions of people every day. The proper management of the agro-environment, with an eco-compatible exploitation of the land and its resources, will enable better living conditions on Earth.

The Clusters are a new attraction for Expo 2015. For the first time at the Universal Expositions, instead of grouping exhibitors geographically, 50 Countries share collective pavilions that have a common food group or distinctive environmental feature. The clusters include areas dedicated to Rice; Cocoa and Chocolate; Coffee; Fruits and Legumes; Spices; Cereals and Tubers; Bio-Mediterraneum; Islands, Sea and Food; and Arid Zones.
Telespazio in particular collaborates with the clusters Cereals and Tubers and Islands, Sea and Food to illustrate how the use of satellite technologies, and all the applications and services connected with it, play an important and innovative role in the monitoring and management of heterogeneous areas and environments: in agriculture, forestry and fishing.

Finmeccanica is pleased to contribute with its skills and activities to the sustainable development of our planet, offering innovative solutions and an efficient use of satellite technology in the service of a fundamental common asset: our Mother Earth.

Background information

Agriculture:
e-GEOS (Telespazio/ASI) provides users with value-added products and operational services, based on satellite and aerial imagery, both optical and radar, used for:

- Management and monitoring of the European Common Agricultural Policy subsidies
- Agronomic maps of land use
- Agronomic statistics
- Agro-environmental and agro-meteorological services

e-GEOS is also involved in the creation and management of the Italian LPIS (Land Parcel Identification System), a database of agronomic data on a large scale, necessary for proper distribution of the annual European Union subsidies to about 1.3 million farmers. Every year, e-GEOS supports the National Administration (AGEA and Italian Ministry of Agriculture, Food and Forestry) for the acquisition, processing and interpretation of multi-temporal satellite data for the control of subsidies. This follows a Territorial risk analysis over all the Regions, while localised information on agro-environmental best practices, being implemented or to be implemented, is provided.

Environmental monitoring:
e-GEOS offers an analysis service aimed at monitoring the stability of the soil, providing, through dedicated interfaces and simplified information on urban subsidence, infrastructure, archaeological sites, landslides and volcano monitoring, all with an accuracy of a few millimetres. e-GEOS is responsible for the Italian project for monitoring landslide risk (Extraordinary Plan of Remote Sensing) promoted by the Italian Ministry for the Environment. This project is the largest initiative of landslide risk monitoring ever undertaken by a national government. The company is able to process billions of measurement points, evaluating millimetric movements over months, thus providing information on possible areas of concern due to subsidence or landslides.