

# **E-CORCE**

An innovative system for acquiring and distributing Earth observation images with high spatial and temporal resolution

## **Technological advantages**

Three interacting cellular technique layers

cnes

-A very low-cost satellite constellation providing global coverage

-A distributed telecommunications network based on widely-used, simple and proven technology such as WIFI.

-An IT network of wide area grids (WAG) consisting of computers and stations, enabling integration of data on a global scale and low-cost distribution in peer-to-peer mode.

### **Disruptive innovation**

The reception and redistribution of data are decentralised (thus enabling the transfer of very large volumes of data) No onboard recording (seamless buffering)

The psycho-visual compression of images adapted to the human eye allows the data volume to be reduced by a factor of 50.



A satellite constellation providing internauts with a daily image of the Earth

# Summary of the invention

e-Corce (e-Constellation d'observation récurrente cellulaire [Cellular recurrent observation e-constellation]) is a satellite-based Earth imaging system offering resolution to within 1 metre and weekly or even daily revisit capability for the entire planet.

## **Potential applications**

High capacity Internet geoportals Mapping and management

Monitoring of land-use, regional administration and development, anthropic impact, harvest forecasting, precision farming, illegal forest exploitation, water surfaces of lakes and reservoirs, etc.

#### **Commercial advantages**

**Revolutionary, low-cost technology** Eliminates the need for centralised storage and processing of data Assembly-line production of satellites Costs reduced tenfold in comparison with an offer using existing systems

TRL : 3

Patented invention available under licence

For further information

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Industrial applications and spin-offs of space technologies