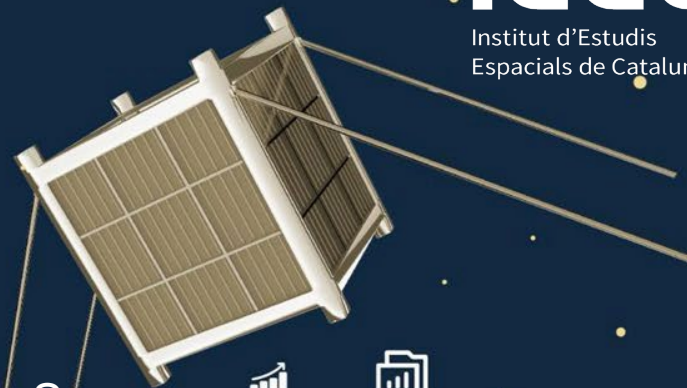


NewSpace Strategy of Catalonia

IEEC^R

Institut d'Estudis
Espacials de Catalunya

Josep Colomé
Director of the Area for the Promotion of the Space
Sector of Catalonia
Institute of Space Studies of Catalonia (IEEC)



Generalitat de Catalunya
Government of Catalonia



Note: the Digital Economy mapping has been carried out based on companies selected from the following CNAEs (Spanish Classification of Economic Activities): 2611, 2612, 2620, 2630, 2640, 2680, 4651, 4652, 5821, 5829, 6110, 6120, 6130, 6190, 6201, 6202, 6203, 6209, 6312, 6312, 9511, 9512, 2731, 2732, 2733, 2790 and companies from the following ACCIÓ reports: Audiovisual, E-commerce, Engineering (linked to ICT), Industry 4.0, Smart Cities (linked to ICT) and Startups. Companies with more than one classification have been mentioned only once

Source: ACCIÓ





Feb. 2019



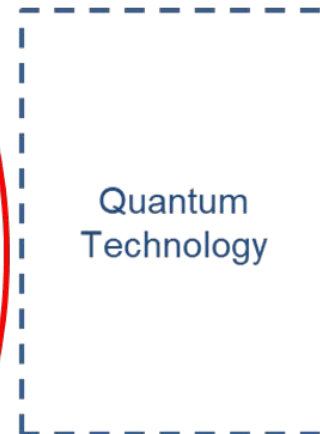
Jun. 2019



Feb. 2020



Oct. 2020



Coming soon

Catalonia, European Digital Hub



Catalan space ecosystem

Consolidated traditional space companies,
research centers and universities, and powerful
emerging entrepreneurial ecosystem.

The NewSpace strategy of
Catalonia was approved on
October 2020



Space

Digital

Traditional
Space agents

Sector

NEWSPACE

Other sectors
(ex. Industry 4.0)

SMEs
Startups

Space
Technology

NEWSPACE

Commercial
components

Digital
technology

Commercial
applications

Demand

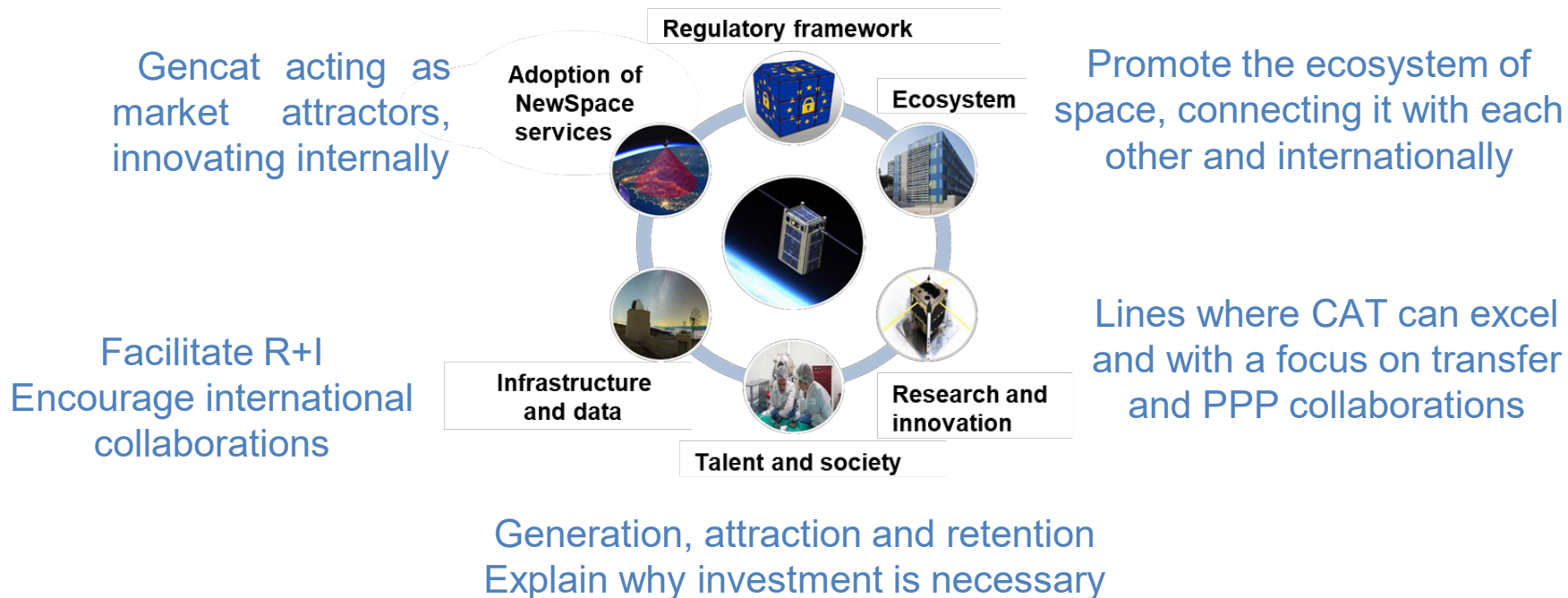
NEWSPACE

Private
users

Public
users

Commercial

Regions' role in the space sector



1. Space for STEM vocations

Inspire at the earliest stages of education. Working with the Education Department.



2. Space for research vocations

Encourage research vocations in secondary school students.



3. Advanced space education

Final stages of higher education. Incentives to organizations for student programs (internships or industrial doctorates)



4. Advanced training for professionals

Non space-professionals to develop in the space sector, or to boost the transference of technologies and services that space offers to other sectors.



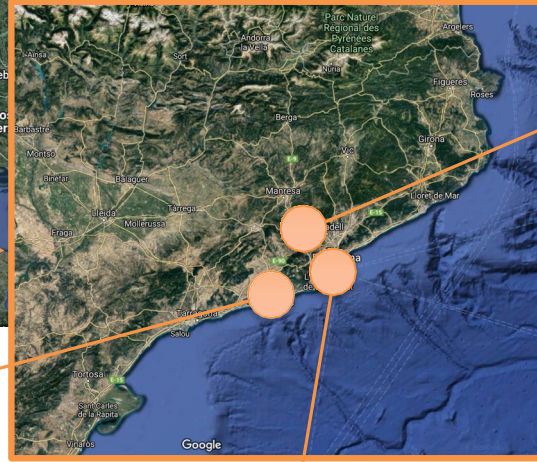
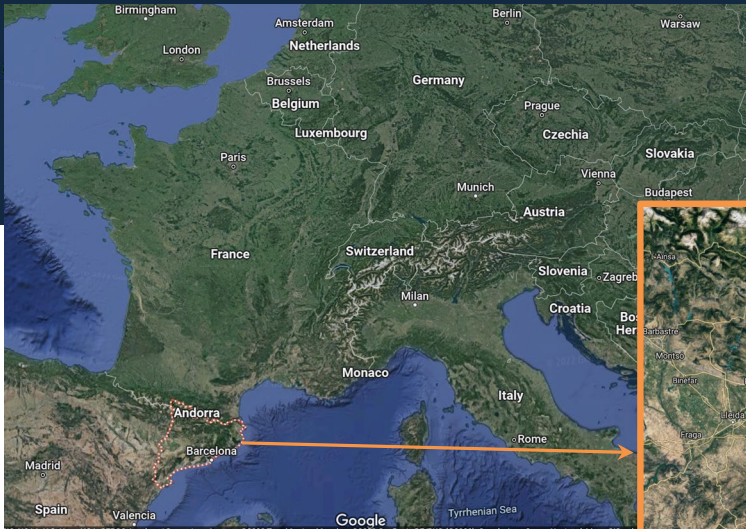
5. Space to society

Citizens awareness



Transversal pillar: Inclusive gender equality plans (Pla DonaTIC)

Talent



- 6 public and private universities with degrees and masters on aerospace eng., TIC, advanced digital tech, GIS, sciences and mathematics
- Business schools



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

UAB
Universitat Autònoma de Barcelona



Universitat de Girona

laSalle
UNIVERSITAT RAMON LLULL

esade





'Pla DonaTIC' aerospace
(22/10/2021 - CAT)

EIX 1

Fer les vocacions aeroespacials
atractives per al talent femení

EIX 2

Augmentar la visibilitat de la dona
tecnològica i els continguts creats
per dones en l'àmbit aeroespacial

EIX 3

Formar i capacitar en l'àmbit
aeroespacial a tothom

EIX 4

Promoure una participació plena
i efectiva de les dones amb
vocacions aeroespacials en la
presa de decisions i
l'emprenedoria



projects to make a better world

#SPACE4CHANGE

GET TO KNOW COSMIC RESEARCH

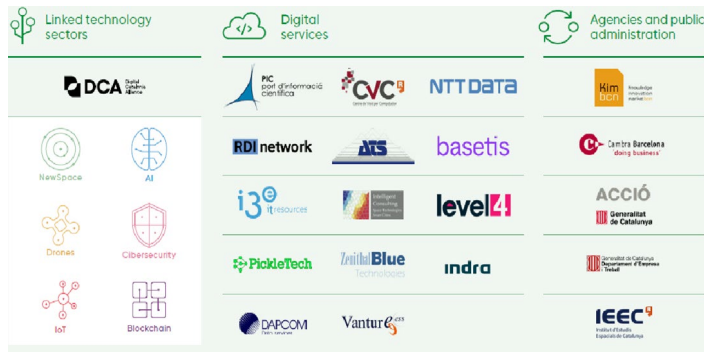


ALBA
BADIA

President and Team leader of
Cosmic Research

📅 October 7th
🕒 16:00 h (CEST)
📍 Zoom





NewSpace technology

Component providers



Infrastructure & Testing



Launchers & Propulsion



NewSpace services

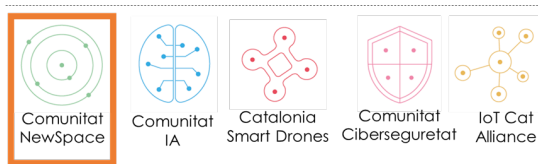
Earth Observation



Telecommunications



Navigation



<https://dca.cat/en/dca-newspace>

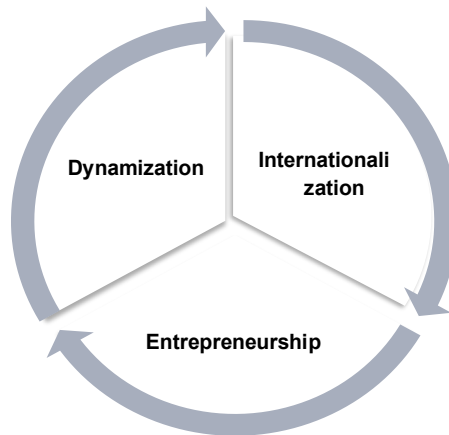


Cambra de Comerç
de Barcelona



ACCIO

Generalitat de Catalunya
Government of Catalonia



Awareness

Business incubation

Acceleration

Investment



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH



BUSINESS
INCUBATION
CENTRE

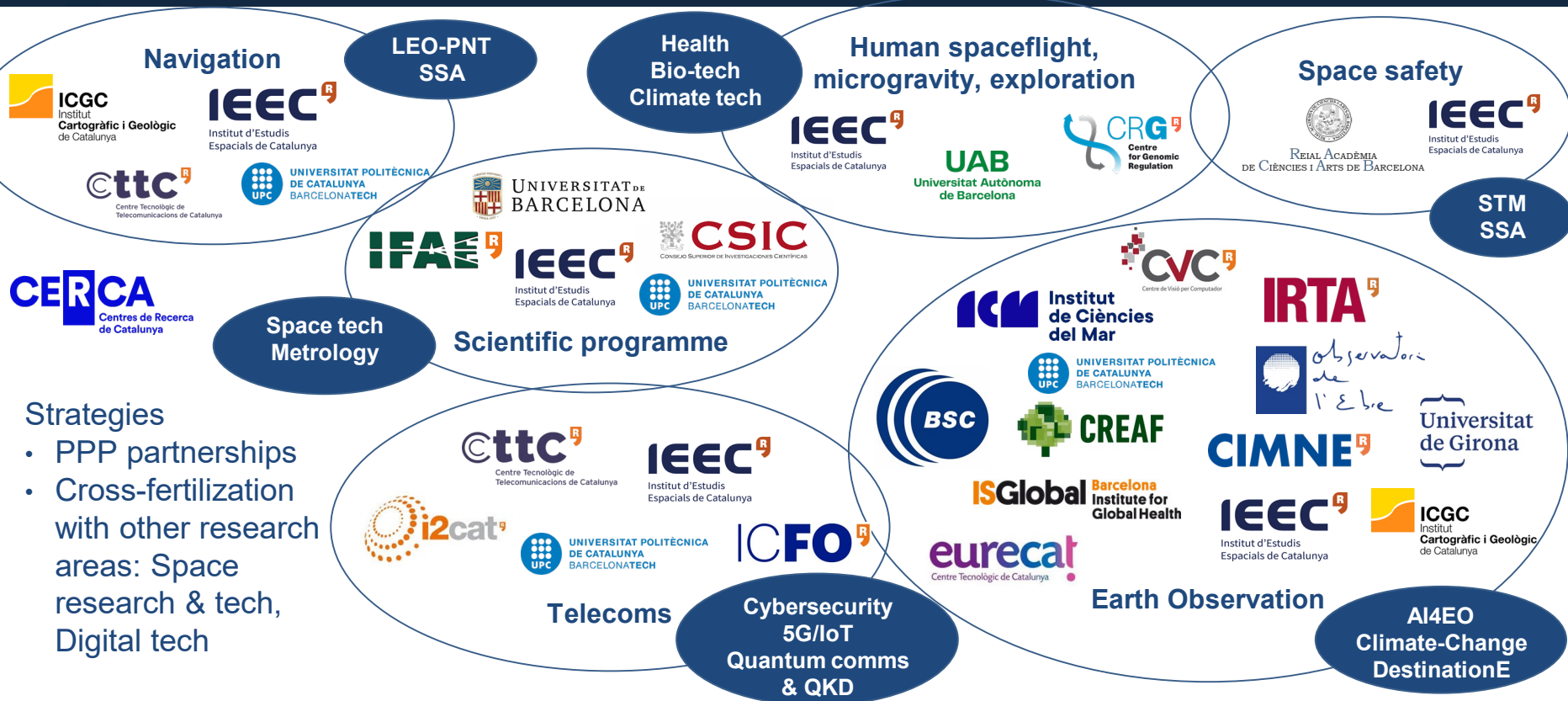
Barcelona

Generalitat de Catalunya
Government of Catalonia

- 18 companies incubated (6 c/yr x 3 years)
- Total incubation time: 2 yr/company



Generalitat de Catalunya
Government of Catalonia



Strategies

- PPP partnerships
- Cross-fertilization with other research areas: Space research & tech, Digital tech

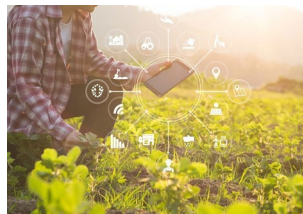
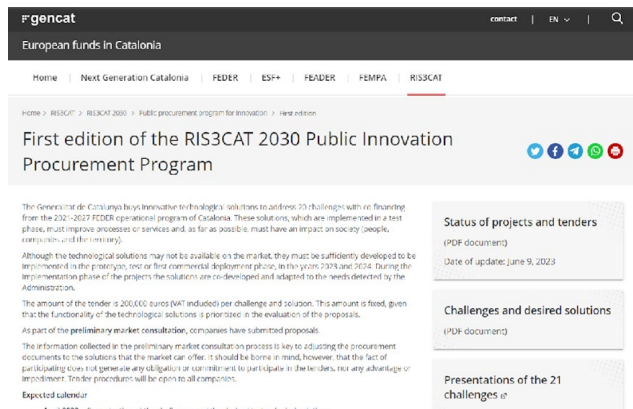
Digital innovation challenges for public entities

Use cases to promote innovation from the public sector (total budget 745 k€, 2022-23)

- Innovative public procurement (3 contracts, 200 k€/contract)
- Challenges (3 prizes, 15 k€/prize)
- Open innovation services (2 prizes, 50 k€/prize)



Open innovation service procurement to promote new space applications for the private sector



Innovative public procurement to promote new space applications for the private sector: rail transport & GNSS, agriculture & IoT/5G, livestock & IoT/5G

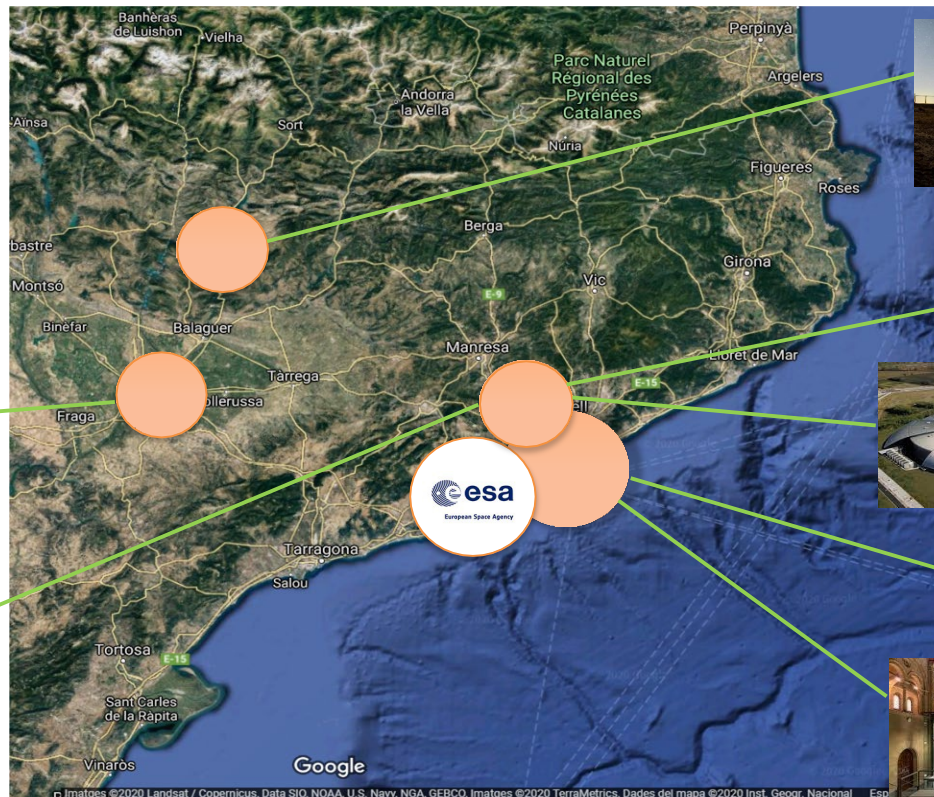
Ecosystem for
Research &
Innovation on space
and digital
technologies
Private and public
flagship
infrastructures



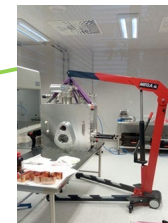
Algaire SpacePort



MELISSA Pilot Plant



Montsec
Observatory



ICE-CSIC
(Institute of
Space Sciences,
CSIC) labs



ALBA Synchrotron



NANOSAT LAB



Barcelona SuperComputing
Center

Infrastructures Space assets

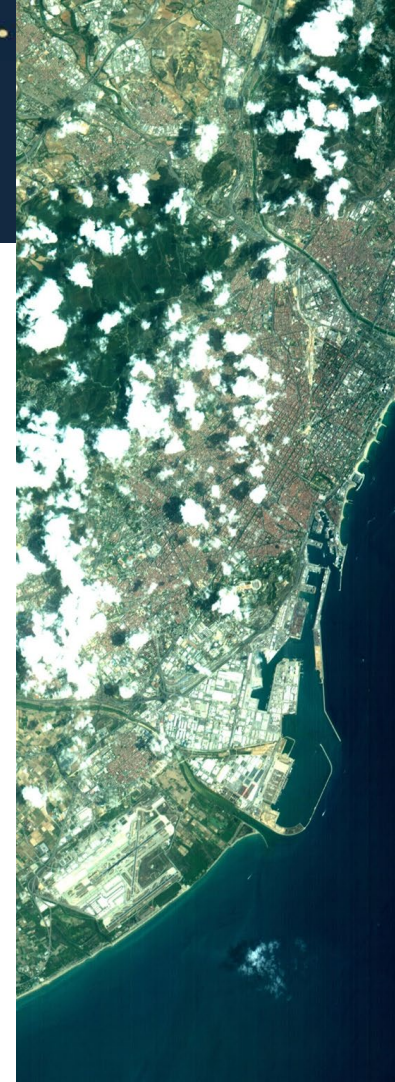
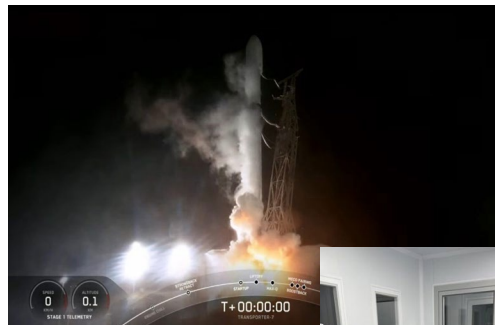
New assets to increase the competitiveness of the sector in Catalonia

Space missions:

- GENIOT-01/Enxaneta – IoT/5G (22 March 2021)
- GENE0-01/Menut – EO (3 January 2023)
- GENIOT-02/Minairó – IoT/5G (15 April 2023)
- GENE0-02 – EO (Public Tender: August 2023)

IOD opportunities

- GENE0-1/Menut – Payload for on-board AI processing
- GENE0-02 – Open Call (2U available)



Teleport Sant Esteve de la Sarga, at the Montsec Observatory

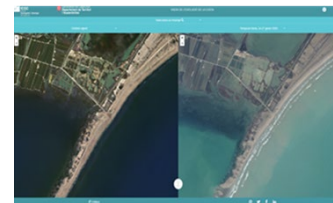
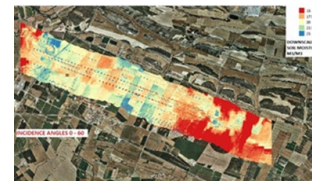
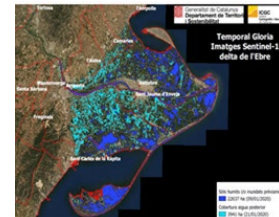
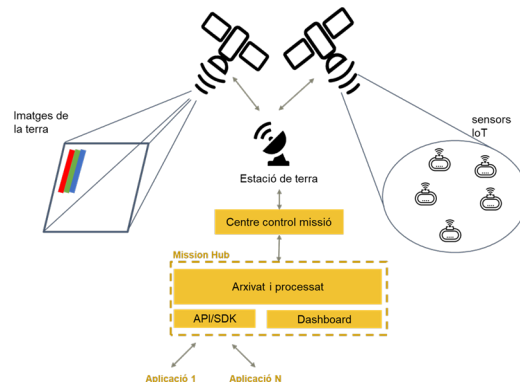
- Ground Stations: S band, UHF/VHF band, X/S band

Alguair Airport

- Microlaunchers: testing facility for rocket engines

Space Data Platform

- Data access for the development of applications and services



@ Aeroports de Catalunya

- Public promotion of collaborations
- Federation of labs and services
- Support for new assets

10+ companies/entities
30+ infrastructures

INFRASTRUCTURES, EQUIPMENTS I SERVEIS

TOTES CREACIÓ I COL·LABORACIÓ DESENVOLUPAMENT I FABRICACIÓ
TESTATGE I VALIDACIÓ

Empresa

Aldora Tech

Fabricació mitjançant materials compostos, colada de resina i injecció de plàstic / Aeronaus no tripulades per a testatge de sistemes en caiguda lliure

MÉS INFORMACIÓ >

Centre de recerca/tecnològic CD6

Taller de mecànica / Taller d'electrònica / Sala de prototipatge / Disseny optomecànic avançat / Laboratori de fotometria

MÉS INFORMACIÓ >

Empresa

GUTMAR

Disseny i càlcul d'estructures; Qualificació de nous materials i estructures; Fabricació d'estructures

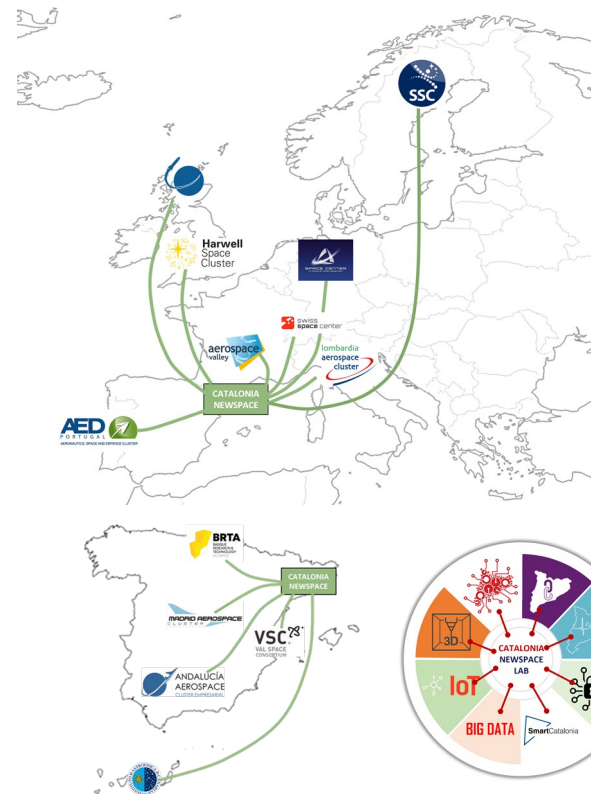
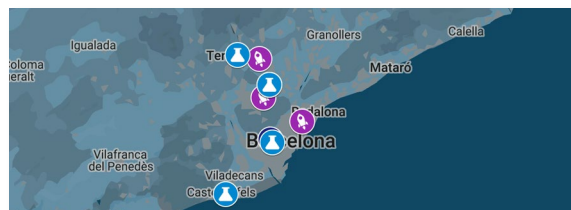
MÉS INFORMACIÓ >

Empresa

GUTMAR

Maquinària, Laboratoris, Sales de muntatge i Enginyeria

MÉS INFORMACIÓ >



ESA & EU programs

- Subscribed optional programs, scientific missions, ground-based assets
- Cassini program, Galileo and Copernicus masters
- Copernicus & contributing missions, Destination Earth, SST, Galileo, LEO-PNT, IRIS2 and QKD, etc.



Spanish Space Agency & Spanish Government

- Cooperation on subscribed ESA and EU programs, PERTE aeroespacial, research & innovation programs

International organizations & events

- Eurisy, NEREUS, IAF, EARSC
- IAC, Space Tech Expo, EU Space Week, NewSpace Economy Congress, Mobile World Congress, Smart City Expo World Congress

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newspace.gencat.cat

