Paris Astronomical Data Centrer

Stéphane Erard
Catherine Boisson
Pierre Le Sidaner

PADC / Observatoire de Paris

IVOA 2019, Paris
16/5/2019

stephane.erard@obspm.fr

Paris Astronomical Data Centre

~2003 

VO-Paris

2013 VO-Paris Data Centre

2015+ Paris Astronomical Data Centre

Director: Stéphane Erard
Deputy: Catherine Boisson
Technical director: Pierre Le Sidaner

Laboratories: GEPI, IMCCE, LERMA, LESIA, LUTH, SYRTE (+ LPP & APC)
+ services: USN, UFE (teaching), DIO (IT dpt.)
Cotutelles: CNRS-INSU, Université PSL, Universités Cergy-Pontoise, Lille1, Orléans, Paris-Diderot, Sorbonne Universités

Previous directions: William Thuillot, Jean Aboudarham, Marie-Lise Dubernet

Paris Astronomical Data Centre

Missions

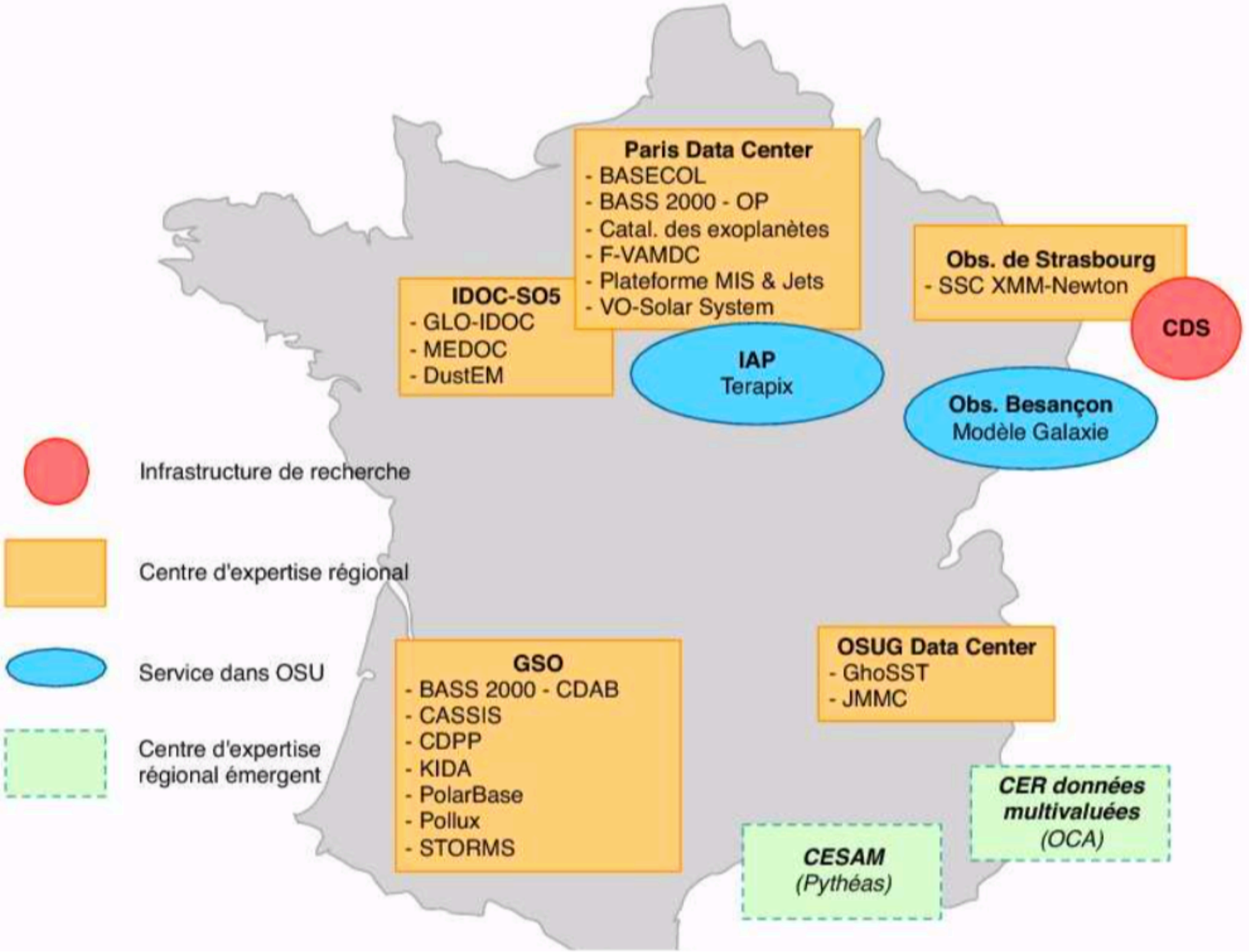
- Support the policy of data distribution / sharing + preservation/sustainability
  From science projects + Historical data

- Support/spread VO techniques and knowledge
  In particular interoperability aspects
  Favor usage of these techniques in other projects
  (e.g. operation of space instruments, data-oriented ground-based projects…)

- Support the data-oriented services in Obs Paris (themselves certified by INSU/CNRS)
  This is the critical aspect in terms of national visibility
  (reason for certification of PADC by INSU)

- Reach / maintain a critical mass to answer various calls (national / European)
  Background activity => extra fundings in topical areas

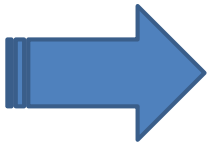
Centres d'Expertises Régionaux (2015)



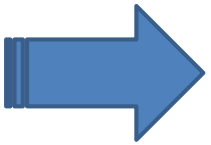
Paris Astronomical Data Centre

~2003 

VO-Paris



2013 VO-Paris Data Centre



2015+

Paris Astronomical Data Centre

Local structure funded at national and local level

Reorganized, as per INSU/CNRS constraints for Expertise centres

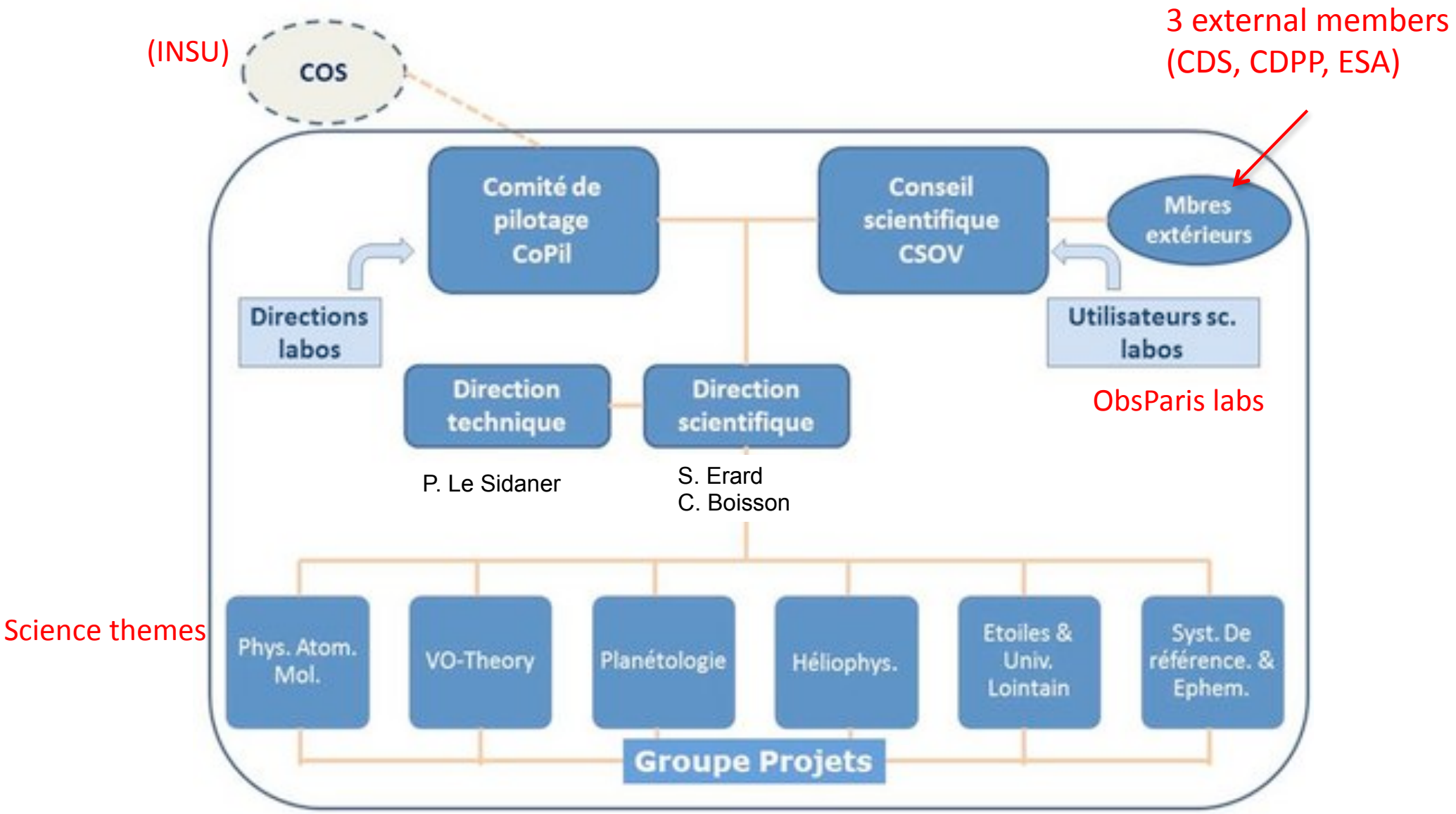
Certified by INSU/CNRS

Carte du Ciel project
(multisite coordinated activity, 1887)

Last renewal, early 2017

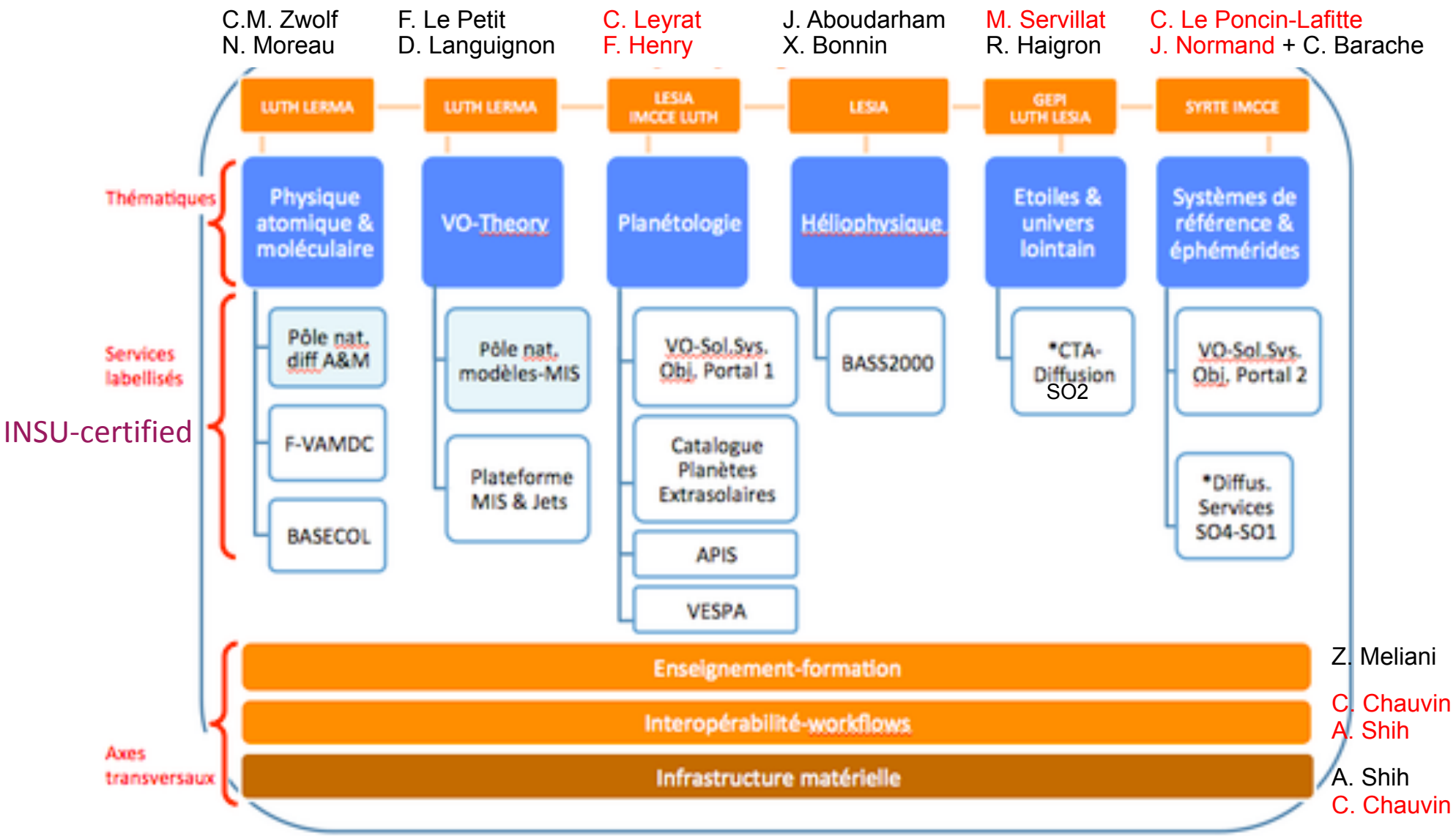
Paris Astronomical Data Centre

Réorganisation – pilotage



Paris Astronomical Data Centre

Project Group - science themes



Paris Astronomical Data Centre

Participants :

Obs labs + DIO (IT dprt)

2018 : 38 researchers & 26 engineers/technicians involved, summing 17,5 FTE

ETP: 7,3 researchers & 10,2 ITA on certified services

2 researchers & 1,3 ITA on non certified services (in preparation)

Functions

storage ~ 50 TB data

Computing on demand on local clusters / grid

Data hosting / distribution / availability (~ 50 VM)

Budget

From ObsParis science council

+ ASOV & (INSU) national science Programmes (distributed to projects)

+ EU programmes + national funding (distributed to projects)

Small funding, but allows background activity and readiness to answer new EU calls

Similar to R&D on instrumental projects

Large EU programmes:

HELIO, VAMCD, etc

Europlanet FP7 => Europlanet H2020 / VESPA => Europlanet H2024 / VESPA (being reviewed)

Large instrumental projects: CTA, GAIA, ALMA-ARTEMIX, SKA simulations, precursor (nenufar), etc

Paris Astronomical Data Centre

Relies very much on:

- Technical manpower in the IT dprt (hardware, network, infra, storage)
- Technical manpower in the labs (instrumental projects + related data handling)
- *Special status af Astronomers in France*
  (researchers with limited teaching duty but 30% time on INSU-certified services)
- Connection of data-oriented services with ground & space experiments