



Aerosol, Clouds and Trace gases Research Infrastructure

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Session #2: How ongoing projects pave the way to Horizon Europe

III RICH Symposium
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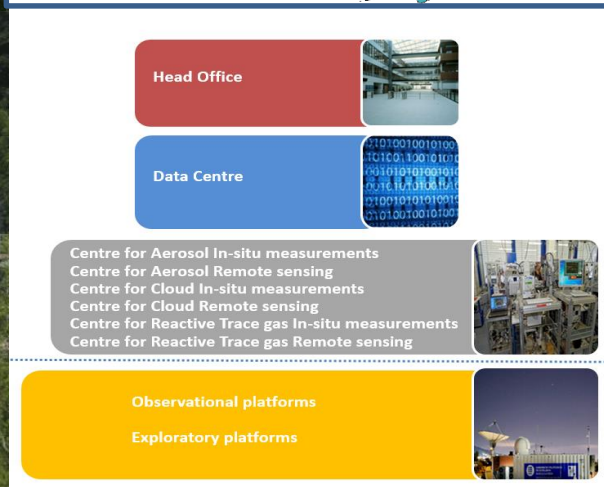
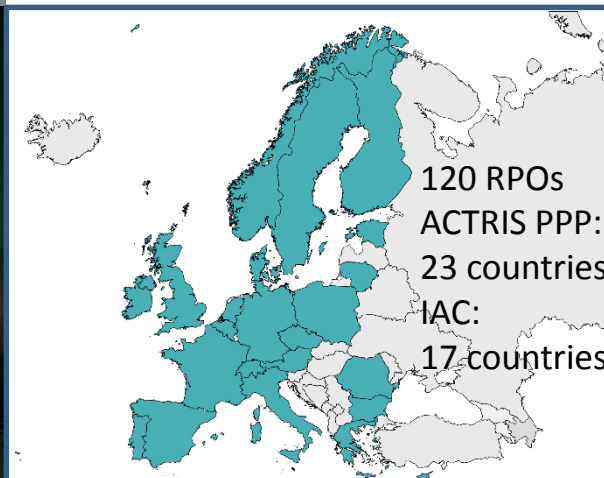


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ESFRI project since 2016
ACTRIS PPP 2017-2019





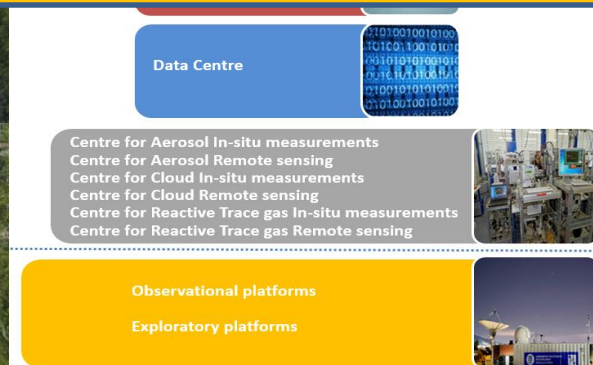
ESFRI

ESFRI project since 2016
ACTRIS PPP 2017-2019



Target timeline:
Preparatory phase 2017 – 2019
Implementation phase 2020 – 2024
Operational phase 2025 ->

ACTRIS ERIC 2021



Size of the ACTRIS

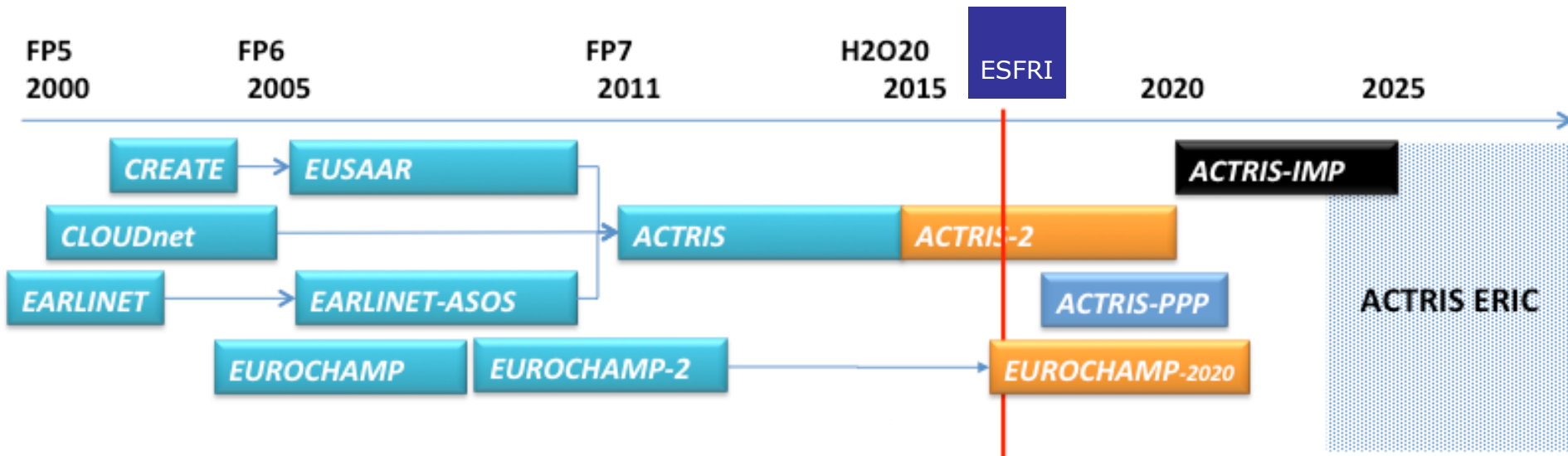
(staff estimation)

- Ca. 100 scientists, technicians and managers will work at the European level Central Facilities
- Ca. 500 – 600 scientists and technician will work at national level (National Facilities and National Consortia)

Access and impact pathway

- Direct impact on the ACTRIS community (RPOs, companies) involved in ACTRIS
- Research communities utilizing the outcomes of ACTRIS;
- Industry and societal actors (local authorities, EPAs, companies, ministries, international organizations, weather services) utilizing ACTRIS outcomes

ACTRIS heritage



**ACTRIS has a project portfolio (national and EU)
to support the activities and development**

Currently access provided via
ACTRIS-2 for observational platforms (ended in April 2019)
EUROCHAMP2020 for experimental platforms

ACTRIS, RI related funding and ERA

RI development and
establishment

SETTING UP RI - INFRADEV 1-4

Design, preparatory, implementation, cluster activities

ACTRIS as global RI

TECHNICAL DEVELOPMENT

National and regional level technical development
(technological development of the national RIs and
Regional Partner Facilities)

Impact on science

ACCESS AND SERVICE DEVELOPMENT

Planning and piloting new access schemes
Catalogue of Services and Virtual Research Environment
User analysis and interactions
COPERNICUS, ESA, EUMETSAT

Impact on human capital
development

Impact on economy

RI STAFF CAPACITY BUILDING

Training for RI leaders, managers, technicians, scientists
Standards and procedures

Impact on society

ACTRIS, RI related funding and ERA

RI development and establishment

ACTRIS as global RI

Impact on science

Impact on human capital development

Impact on economy

Impact on society

INTERNATIONALISATION

Collaboration, partnerships, networking, strategies and policies; Bilateral research activities
GEO/GEOSS, WMO, space agencies

GLOBAL HARMONISATION/ALIGNMENT

Standards, protocols procedures, policies (WMO, metrology institutes); Task sharing, profiling

TECHNOLOGY DEVELOPMENT

Global co-development, task sharing

WIDING THE ACCESS

International access schemes
Global data and e-infrastructure development
GEO and GEOSS

CAPACITY BUILDING

Leveraging the competence and knowledge
Training for scientists and technicians

ACTRIS, RI related funding and ERA

RI development and
establishment

SUPPORT FOR CURIOSITY DRIVEN, EXCELLENT SCIENCE

ERC, large-scale projects
national research funding

ACTRIS as global RI

Impact on science

SUPPORT FOR MOBILITY AND ACCESS

Marie Skłodowska Curie
(Transnational) access programmes and integrated
activities
Multidisciplinary access schemes

Impact on human capital
development

Impact on economy

TEAMING AND NETWORKING

Collaboration, partnerships, networking (RI as
collaborative research platform)
Joint experiments and research activities

Impact on society

ACTRIS, RI related funding and ERA

RI development and
establishment

ACTRIS as global RI

Impact on science

Impact on human capital
development

Impact on economy

Impact on society

RI STAFF CAPACITY BUILDING

Training for RI leaders, managers, technicians, scientists

MASTER AND PhD TRAINING (research)

Master and PhD programmes

Summer and winter schools

ARISING PUBLIC KNOWLEGDE AND EDUCATION (society)

Massive open online courses (for public) climate, air quality, health

REGIONAL AND GLOBAL CAPACITY BUILDING

Leveraging the competence and knowledge

Training for scientists and technicians

ACTRIS, RI related funding and ERA

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establishment

ACTRIS as global RI

Impact on science

Impact on human capital
development

Impact on economy

Impact on society

TECHNOLOGY DEVELOPMENT

Public – private partnerships

Co-development

Industry target access programmes

INNOVATION PLATFORM

Public – private partnerships

Technology transfer

COPERICUS and other downstream activities

Innovation liaisons

BUSINESS OPPORTUNITIES

Exploiting the ACTRIS results

Open interface for ACTRIS data

High-quality research facilities

ACTRIS, RI related funding and ERA

RI development and
establishment

ACTRIS as global RI

Impact on science

Impact on human capital
development

Impact on economy

Impact on society

SOCIETAL CHALLENGES AND MISSIONS

All funding instrument under societal challenges and missions support society driven research and use of RIs

GEO and Copernicus

Joint Programming (JPIs)

HORIZON EUROPE AND RIs



RI FUNDING ALIGNMENT WITH

OTHER HORIZON EUROPE WORK PROGRAMMES
(all Horizon Europe pillars are relevant, GEO, Copernicus)

OTHER FUNDING SCHEMES
(InvestEU, EU Cohesion, Defence funds, Digital EU
JPIs and other joint MS research resources)

Impact on science

- 8,000 scientific papers and 100 book chapters (in last 10 yrs) in Europe
- 55,000 full-text downloads from different sources
- 18,000 yr Copernicus

Impact on human capital development

- 950 Master and Ph.D. students (2008-2016)
- Ca. 2,200 graduates received training

ACTRIS partners has attracted national and international research funding

Ca. 300 M€ has been raised for research (2008-2016)
27 M€ per year

For each 1 M€ already invested in the development, maintenance and upgrading of the research infrastructure, another 0.92 M€ was acquired through research and development programs

- Direct pay, creation of
- contracts
- private sector funding to
- 19 patent applications (12 granted)
- creation of 12 start-ups and spin-offs
- Ca. 140 new methodologies, prototypes (with National Metrology Institutes)

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TRIS

health,..
weather,

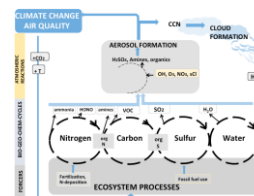
- (M) for cities, early-warning of atmospheric hazards
- contributes to defining mitigation & adaptation strategies, supporting international conventions & protocols

ACTRIS involvement in the EO ERA

- Developing Reference procedures
- Common operations in ENVRI / ESFRI
- Research and Development
- Support to International EO initiatives
- Services incl. Copernicus
- GEO / EUROGEOSS
- Training / Education



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More information

www.actris.eu

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