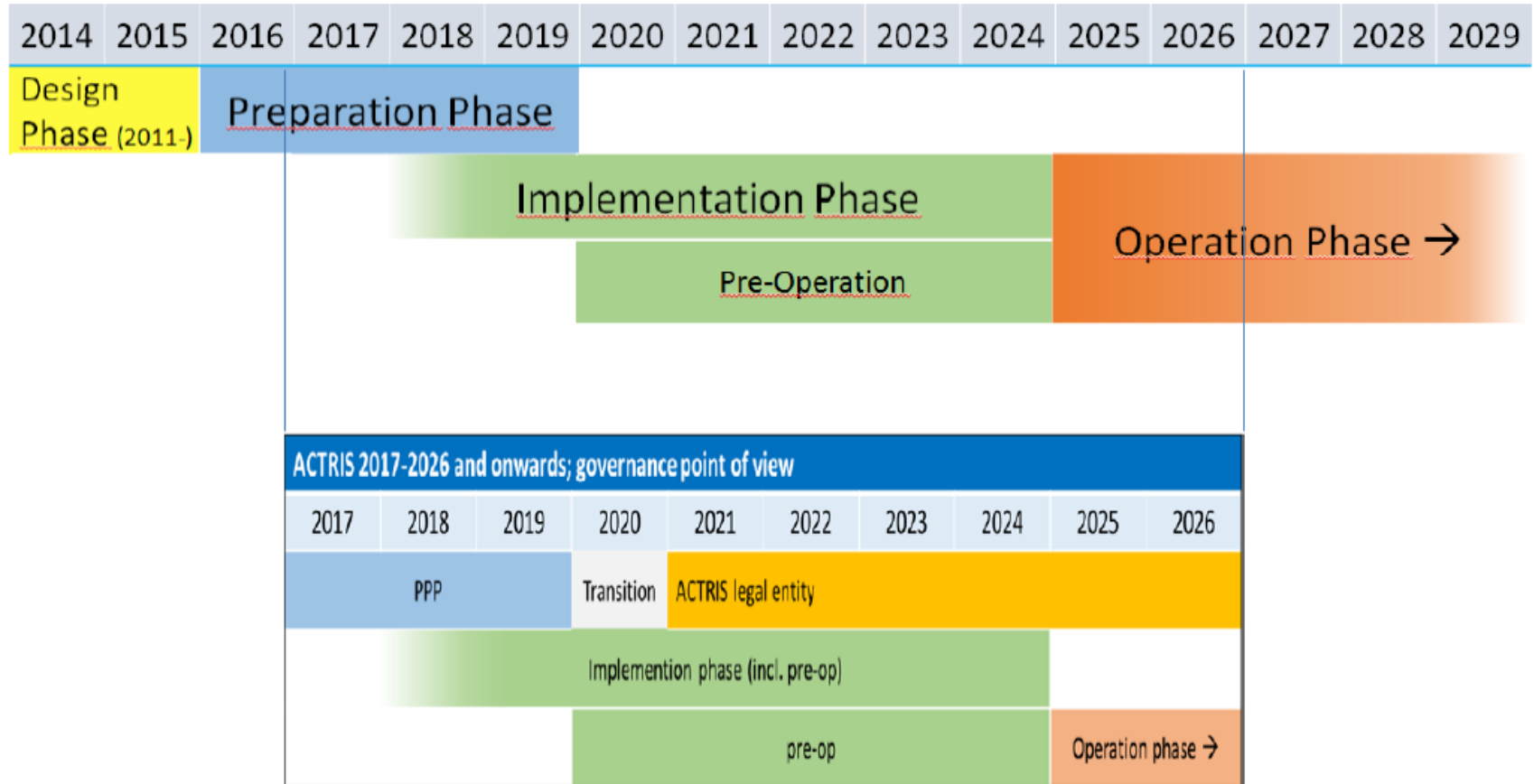


ACTRIS phases

ACTRIS Lifecycle Phases



ACTRIS structure



Head Office

- Coordination and Management
- Service Access Management unit



Central Facilities

- ACTRIS Data Centre
- Topical Centres for aerosols, clouds and reactive trace gases, both in-situ and remote sensing



National Facilities

- Observations
- Exploration

National Facilities

```
graph TD; A[National Facilities] --> B[Observational Platforms]; A --> C[Exploratory Platforms];
```

Observational Platforms

Stations providing long-term data on regular schedule and following common operation standards

Exploratory Platforms

Laboratories/chambers and mobile facilities operating on campaign basis and following common standards

Do we want to participate in ACTRIS with an Aerosol NF in Austria?

Where ? Sonnblick, Vienna, Mobile ?

Aerosol *in situ* observations

1) Instrumentation and calibration

- **Particle number size distribution**

Instrument: MPSS. *Size range:* Minimum requirement: 10-500 nm; optimum 10-800 nm). *Calibration:* PSL latex and Intercomparison with reference system at ACTRIS CFs.

- **Particle light scattering & backscattering coefficient**

Instrument: Integrating nephelometer. *Sampling head:* PM10. *Calibration:* CO₂, air and intercomparison with reference system at ACTRIS CFs.

- **Particle light absorption coefficient, equivalent black carbon**

Instrument: Absorption Photometer. *Sampling head:* Preferably PM10, alternatively PM2.5. *Calibration:* CO₂, air, sulfate particles and Intercomparison with reference system at ACTRIS CFs.

- **Particle mass concentration organic & elemental carbon**

Collection on filters. Preferably PM10, alternatively PM2.5. *Operation:* EUSAAR2 method with frequent intercomparison at ACTRIS CFs

Aerosol *in situ* observations

2) Operation

- **Particle number size distribution**
 - *Minimum requirement*: continuous, autonomous operation
 - *Optimum setup*: continuous, autonomous operation and automatic NRT data delivery
- **Particle light scattering & backscattering coefficient**
 - *Minimum requirement*: continuous, autonomous operation
 - *Optimum setup*: continuous, autonomous operation and automatic NRT data delivery
- **Particle light absorption coefficient, equivalent black carbon**
 - *Minimum requirement*: continuous, autonomous operation
 - *Optimum setup*: continuous, autonomous operation and automatic NRT data delivery
- **Particle mass concentration organic & elemental carbon**
 - *Minimum requirement*: 2-3 samples per week
 - *Optimum setup*: Daily samples with coverage > than 90%.

All the above observations should follow GAW or ACTRIS recommendations.

Aerosol *in situ* observations

5) Minimum requirements, optimum setup and complementary measurements

Minimum requirements

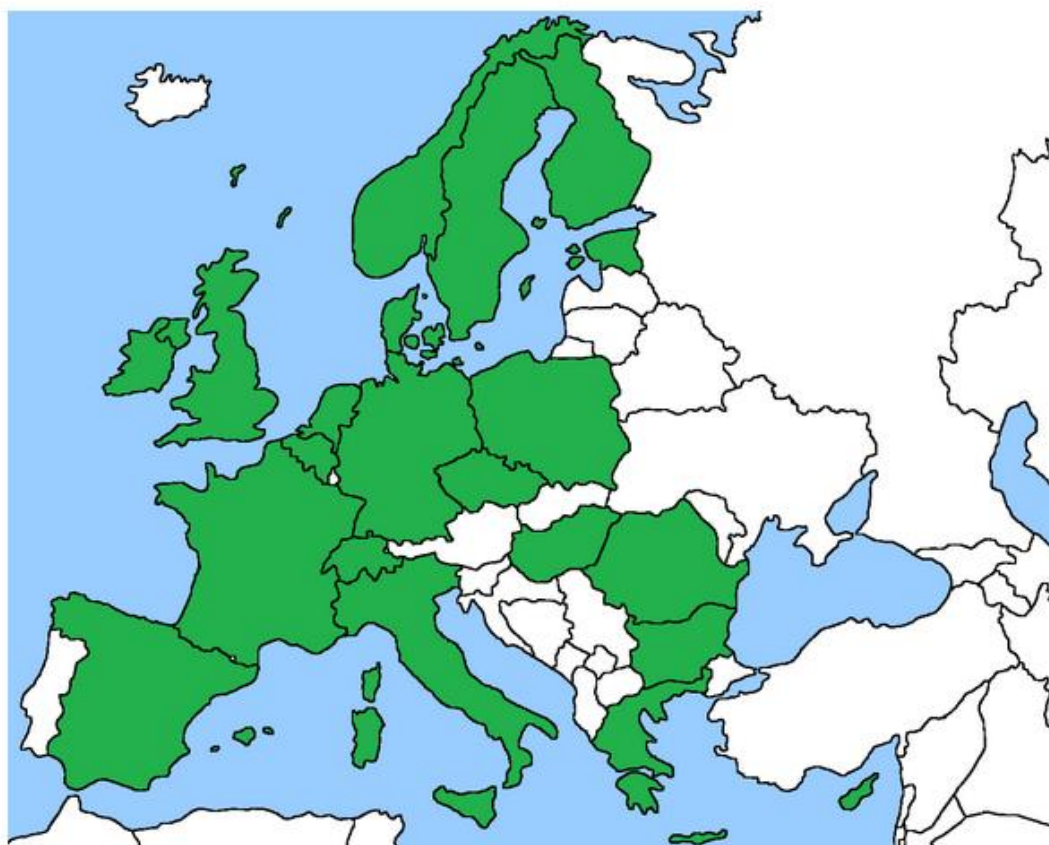
- Particle number size distribution
- Particle light scattering & backscattering coefficient
- Particle light absorption coefficient, equivalent black carbon
- Particle mass concentration organic & elemental carbon
- NRT Level 0 data delivery
- Quality-controlled higher-level products annually

• Complementary observations

Meteorological observations including radiation , AOD



The ACTRIS Community unites partners from 21 countries across Europe and involves more than 100 research institutes and organisations.



The above mentioned countries participated in the ESFRI roadmap.

Interim ACTRIS Council Members



Finland



Italy



France



Romania



Netherlands



Spain



Greece



United Kingdom



Cyprus



Switzerland



Czech Republic

Interim ACTRIS Council Observers



Denmark



Germany



Norway

Other Participating countries



Belgium



Bulgaria



Estonia



Hungary



Ireland



Sweden