

COST Action TD1105 EuNetAir

The future of AQ monitoring for assessment and planning activities

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Will we measure with the same instruments ?

Instrument evolution in two directions:

AQ mapping & assessment

- Need for less expensive instruments
- Less maintenance
- Lower detectable limit and traceability
- Need for Equivalence testing



Understand processes and QC

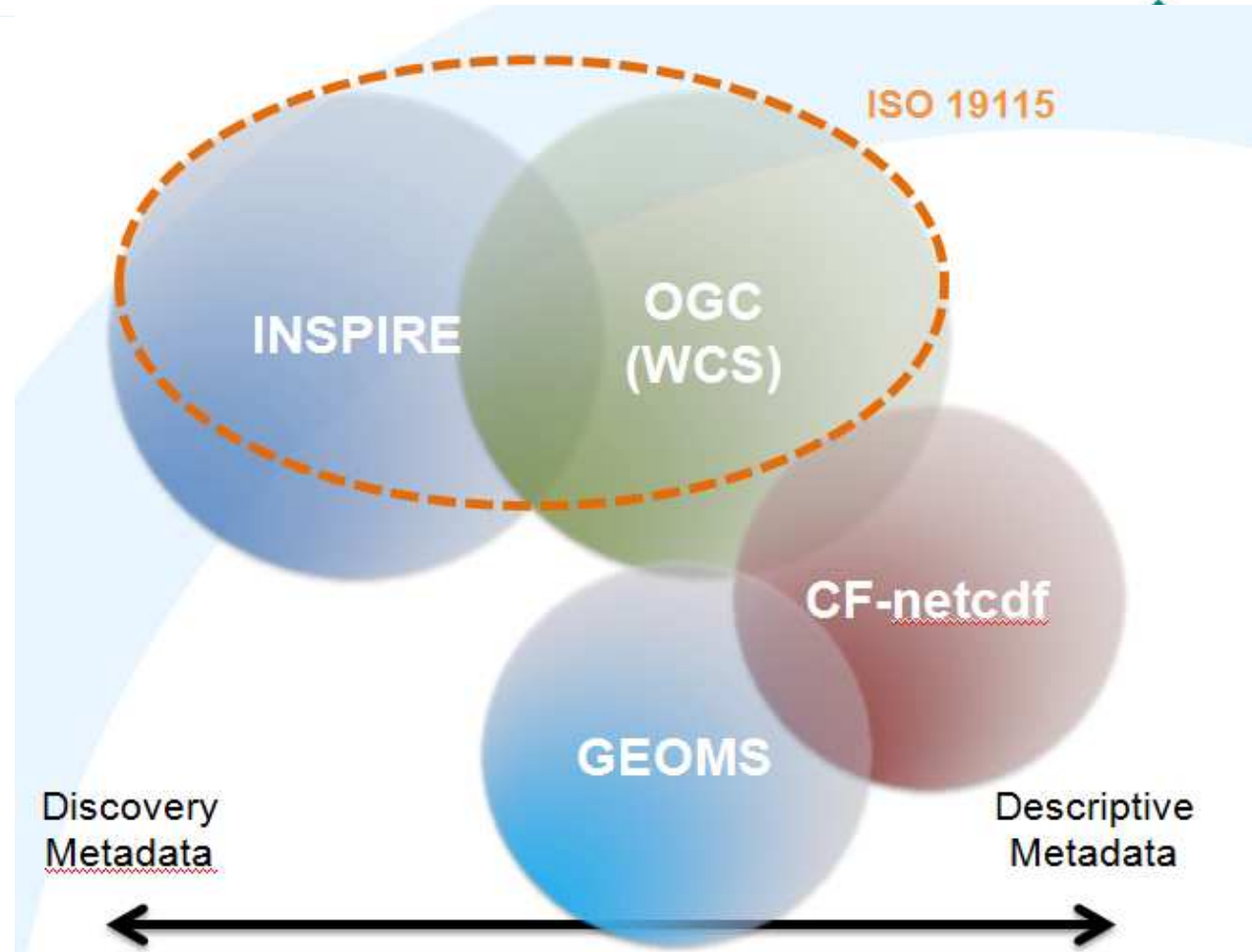
- Need for accurate measurements
- Physical and chemical properties
- Vertical profiles





Metadata spaces and interoperability

- Identify essential metadata elements needed for dataset and service discovery and use
- Advance common understanding of interoperability
- **Formulate best practices for metadata generation and use**
- **Joint approach for emissions, models, ground based and remote observations**



Key points for the future

- Monitoring will become more NRT
- Extended monitoring design that combines ground based and remote measurements, NRT emission data and models using data assimilation techniques
- Future urban networks:
 - **Low cost microsensors for assessment/nowcasting activities**
 - **Urban Supersites for specific microenvironments for understanding processes & QC, support forecasting and planning activities**
 - **More information on physical and chemical speciation of aerosol, specially on SOA and VOC**
- Increased focus on data access and interoperability
- AQ assessment: the combination of different monitoring data and modelling → fewer standard monitoring stations.

