



FAIRMODE

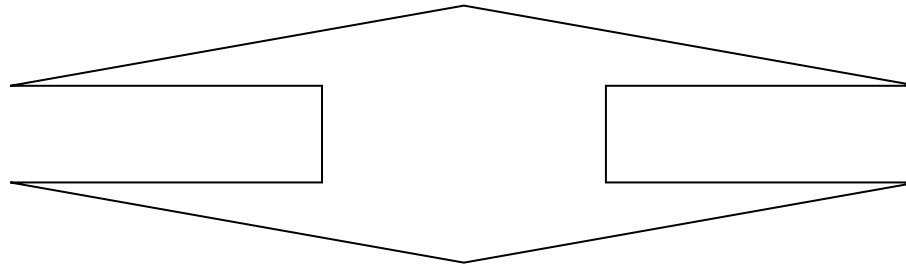
Structure & Workplan

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A. Miranda



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WG1: GUIDANCE (EEA)



WG2: QUALITY ASSURANCE (JRC)



What do we intend by benchmarking?



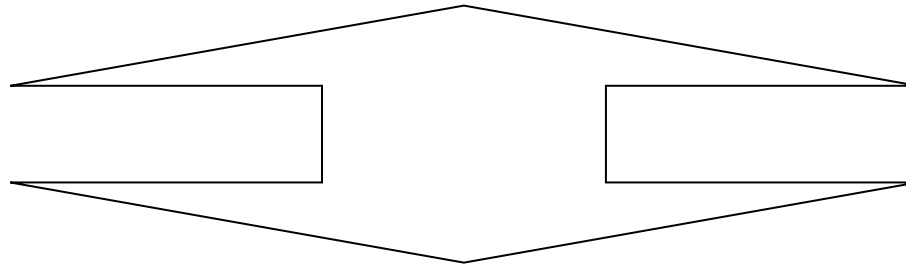
- a **standardized method** for collecting and reporting model outputs in a way that enables relevant comparisons, with a view to **establishing good practice**, diagnosing problems in performance, and identifying areas of strength;
- a self-improvement tool allowing model validation and model inter-comparison regarding some aspects of performance, with a view to finding ways to improve current performance;
- an on-going, systematically oriented process of continuously comparing and measuring models performance provides modelers with an **external reference** and best practices on which to base evaluation of the results and future developments.

Benchmarking can be seen as a diagnostic instrument, an aid to judgments on quality.



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WG1: **GUIDANCE** (EEA)



WG2: QUALITY ASSURANCE (JRC)

SG
Spat. Repres.

SG
Emissions

SG
Source App.

SG
Benchmarking

SG
Urban

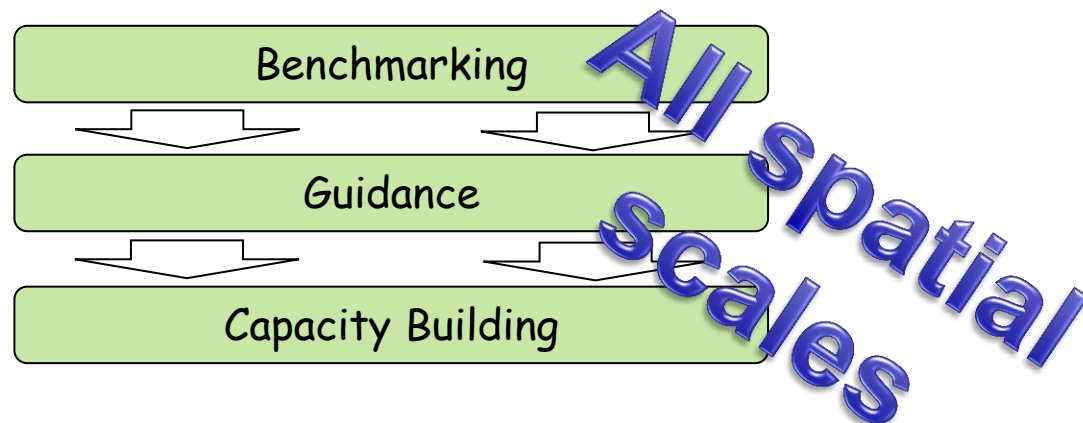
Monit. & Model.



Shared approach to all WGs (I)



- *Benchmarking becomes a methodology shared by all SGs. Benchmarking SG → Assessment SG*
- *Guidance becomes an intrinsic key element of all SGs. (No separate WG on guidance)*
- *Addition of a "capacity-building" dimension*



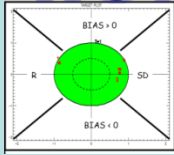

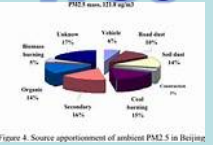

 SG → WG

Major applications of models in the AQD

- I. *Assessment of air quality levels to establish the extent of exceedances and establish the population exposure*
- II. *Forecasting air quality levels for short term mitigation and public information and warnings*
- III. *Source allocation to determine of the origin of exceedances and provide a knowledge basis for planning strategies*
- IV. *Assessment of plans and measures to control AQ exceedances*

WGs and Cross Cutting Activities (CCA)



	 WG1 Assess.	 WG2 Emission	 WG3 Src. App.	 WG4 Planning
CCA1: Spatial Repres.				
CCA2: Forecasting				
CCA3: Monit & Model				

CCA goal: Create / Reinforce links among WGs



Cross Cutting Activities (CCA)



- ✓ **CCA are not WG**
- ✓ **CCA contribute to WG deliverables (not own)**
 - ✓ **by ensuring the CCA topic is covered in the WG**
 - ✓ **by bringing a specific expertise to enrich the WG**
- ✓ **While WG depend on participants contribution, CCA pick in existing participation and material in each WGs.**



Cross Cutting Activity

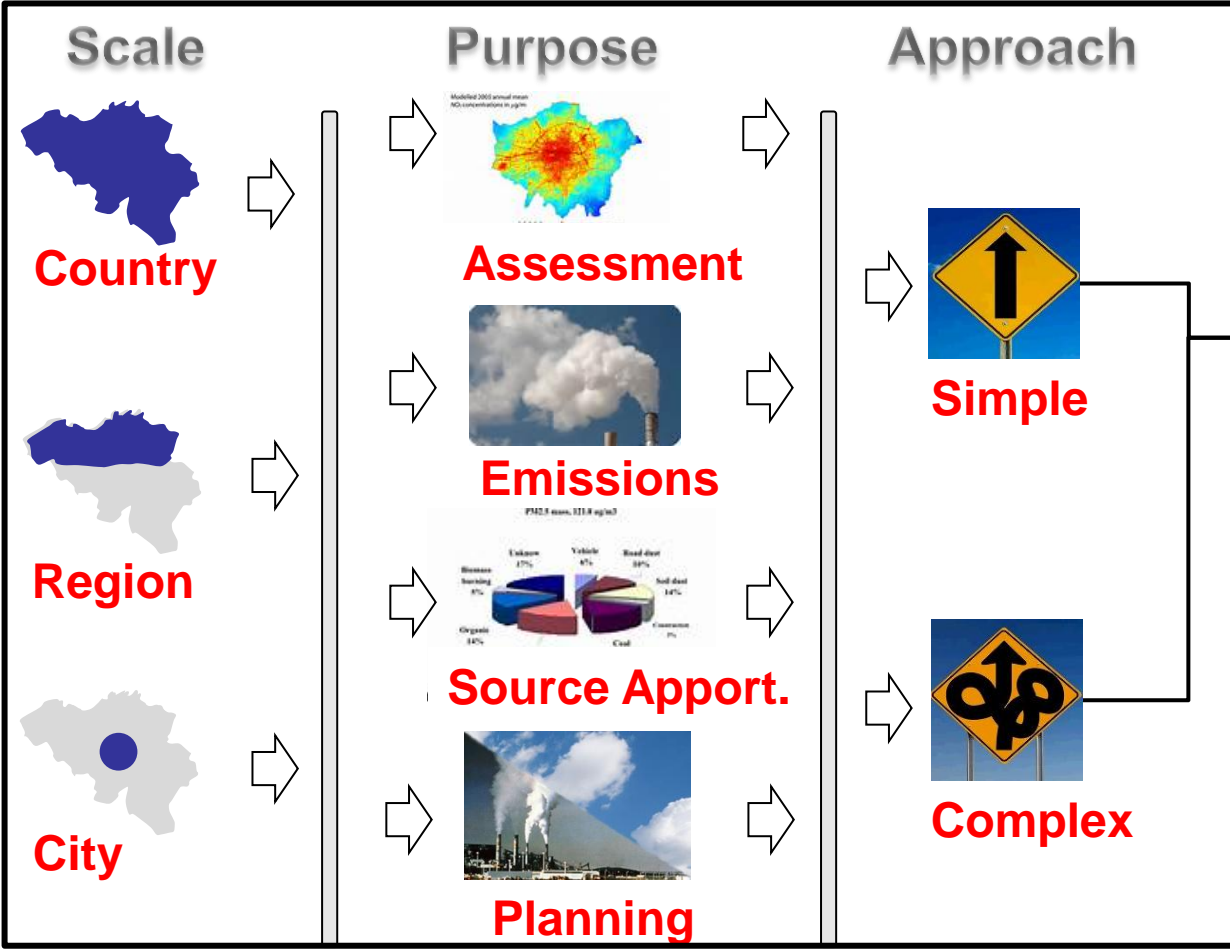


Working Group

Shared approach (II)



Modelling



BENCHMARKING

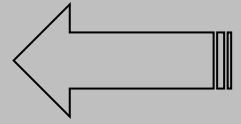
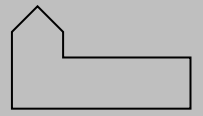
COMMON

- Evaluation Methodology
- Evaluation Tools
- Datasets
- Protocols

Strengths & weaknesses
 Best practices
 Improvements

CAPACITY BUILDING

GUIDANCE



WGs Work-plans



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Benchmark

MQO
Perf. Report Template

Review Methodologies
City Benchmarking

Inter-comp. (incl. CTM)
Common indicators
Common tool

Review methodologies
Common indicators
Common methodology
Template

Guidance

Appl. DB repository
Guidance MQO

Guidance on traffic
urban emissions

Web data repository

Training

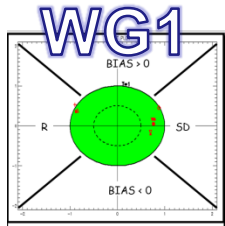


Figure 4. Source apportionment of ambient PM2.5 in Beijing

Structure



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Steering Group [JRC, DG ENV, EEA, WG leaders]

	WG1 Assessment	WG2 Emissions	WG3 Source App.	WG4 Planning
	S. Janssen P. Thunis	L. Tarrason J. Lumbreras	C. Belis	A. Clappier P. Thunis

CCA Spatial Repres.
O. Kracht

CCA Forecasting
F. Meleux

CCA Monit. & Model.
A. Miranda

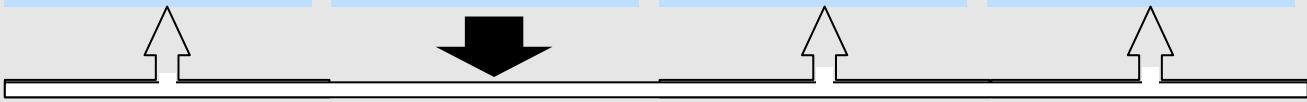
Benchmarking (Methodology)



Guidelines & Guidance



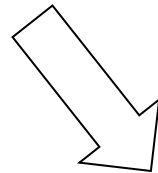
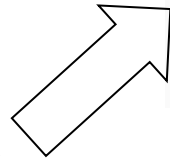
Capacity Building and communication



Meetings: Plenary and technical



- Review WG and CCA status
- Gather info from related projects
- Discussion on Work-plan
- Specific discussion topics
 - Training needs (WG)
 - Standardisation (WG)
 - e-Reporting
 - downscaling



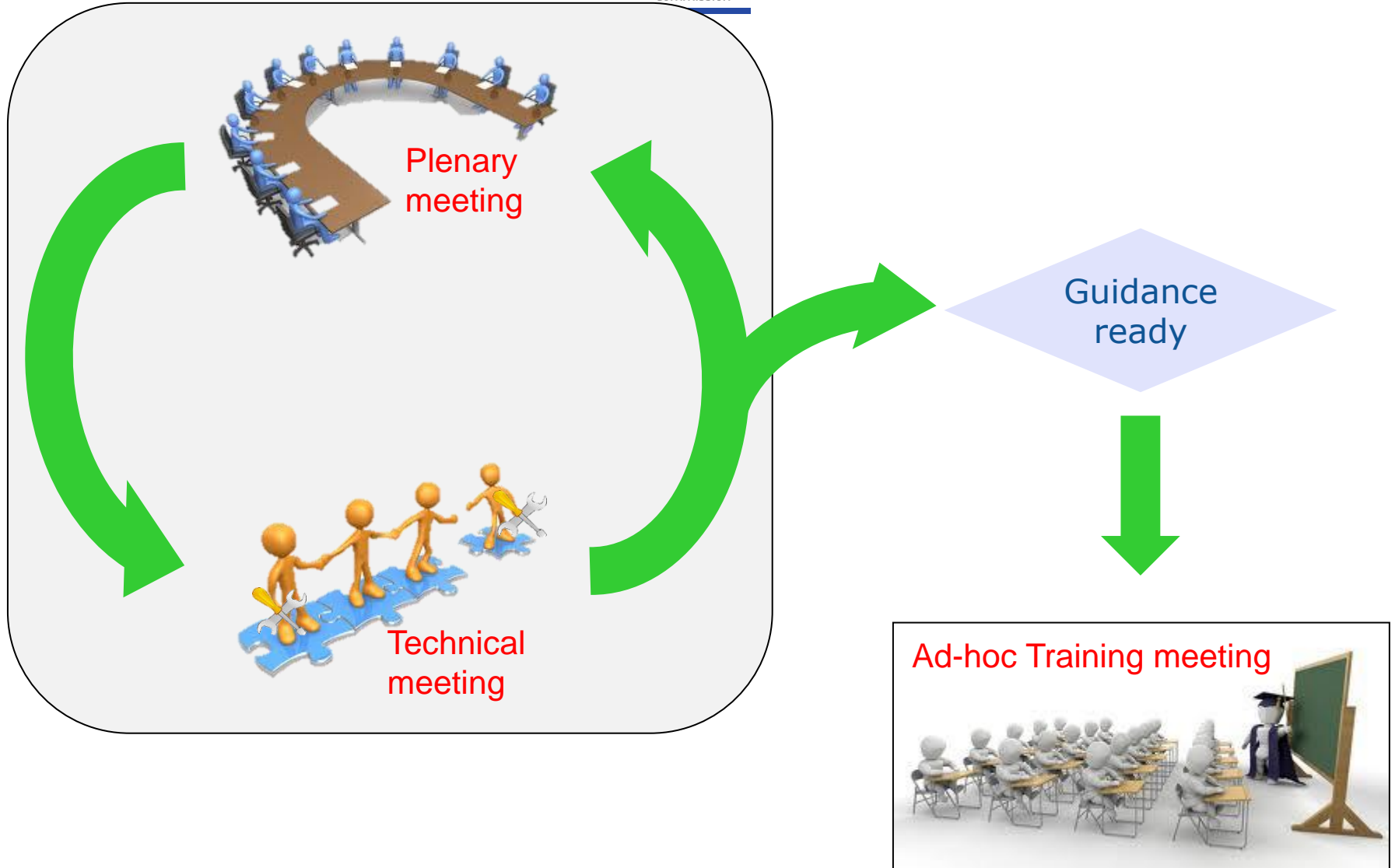
- Identify existing approaches
- Development of benchmarking methods and indicators
- Carry out benchmarking activities
- Formulate good practices in different Tier approaches
- Prepare guidance

Motivations:

- Different communities
- WG & CCA review
- Increase momentum
- Time for discussions...

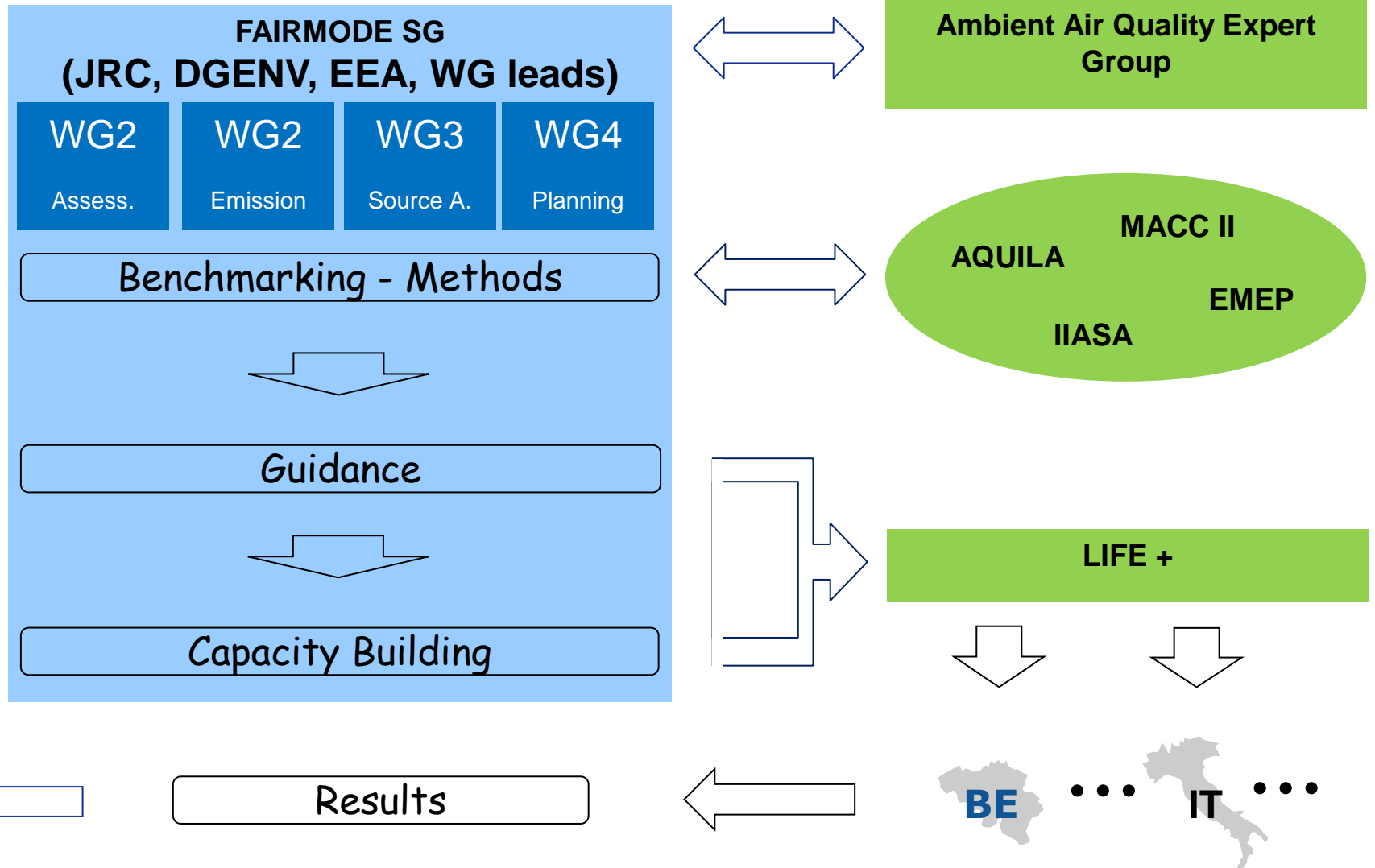
Meetings: Plenary, technical and training

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FAIRMODE in the broader context

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To conclude

- *Little changes in substance (capacity building, downscaling)*

Terms of reference



FAIRMODE is a Forum for Air Quality Modeling created for exchanging experience and results from air quality modeling in the context of the Air Quality Directive (AQD) and for promoting the use of modeling for regulatory purposes in a harmonized manner between Member States. Its main objectives are:

- To provide a permanent European Forum for air quality modelers, particularly addressing model users.
- To study and set-up a system (protocols and tools) on the quality assurance and the continuous improvements of air quality models operating **at spatial scales from national to urban and local.**
- To provide guidance on the use of air quality models and their input (including fitness for purpose) for assessing current and future air quality within the framework of implementing the EU's Air Quality Directives.
- **To promote capacity building activities aiming at ensuring an optimum use of the proposed common methodologies and guidelines and to promote good practice among the EU Member States and the EEA member countries.**
- To make recommendations on future priorities, research activities and other relevant initiatives to secure Air Quality improvements.

To conclude

- *Little changes in substance (capacity building, downscaling)*

- *Changes in form are more important*
 - **Split of meetings**
 - **Cross Cutting Activities**
 - **Planning WG**
 - **Feedback**
 - **Benchmarking & Guidance**
 - ...

To conclude

- *Little changes in substance (capacity building, downscaling)*
- *Changes in form are more important*
 - **Split of meetings**
 - **Cross Cutting Activities**
 - **Planning WG**
 - **Feedback**
 - **Benchmarking & Guidance**
 - ...
- *Changes are probably more demanding*
- *Changes are not written in stone (we need your feedback!)*

National Contact Points (NCP)



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THANK-YOU