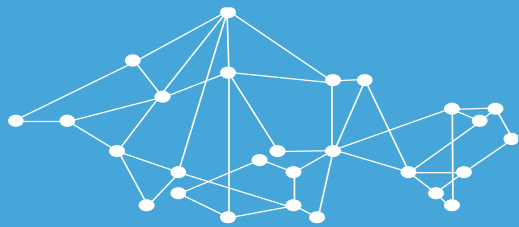**FAIRMODE**

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CT8 – #2: EXCEEDANCE SITUATION INDICATORS

SUMMARY OF THE 16-9-2021 HACKATHON

STIJN JANSSEN, LEONOR TARRASON

Implementing Provisions for Reporting (IPR) – Data flow G:

Information on the attainment of environmental objectives

Where environmental objectives have been exceeded, estimates of the total area, population and road length exposed to levels above the environmental objective shall be reported for each zone as a whole. Associated geometry information (GIS data) shall also be provided. References to the assessment methods observing the exceedances shall also be given e.g. the fixed or indicative measurements, modelling or objective estimation used. Assessment methods are reported within Data flow D.

EXCEEDANCE SITUATION INDICATORS

Objective of the CT8#2 hackathon

- Review how the exceedance situation indicators are currently assessed and reported under the e-Reporting in your region/country
  - What type of methodologies are used?
  - What type of input data is used for population exposure, road length in exceedance…?
- Analyse what problems are encountered in this process
- Identify concrete options for improvement

→Contributions from Sweden, Poland, Italy, German regions, Portugal, Belgium

→½ day hackathon on September 16, 2021

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Positive elements

- Modelling is becoming more and more mature and fit-for-purpose to estimate the exceedance situation indicators

- Modelling is used (in all participating countries and regions) to estimate the exceedance situation indicators → More cooperation between the FAIRMODE and the e-Reporting community than 2-3 years ago!

- Member States are reporting (some of) the indicators via the e-Reporting process

→ see https://discomap.eea.europa.eu/App/AirQualityAttainments/index.html

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Problems & concerns

- The overall purpose of the exceedance situation indicators is not clear
  - Why are these indicators requested?
  → *Indication of the severity of the exceedance (?)*
  → *Input for health impact & epi studies (?)*
  - Who is looking at the data?
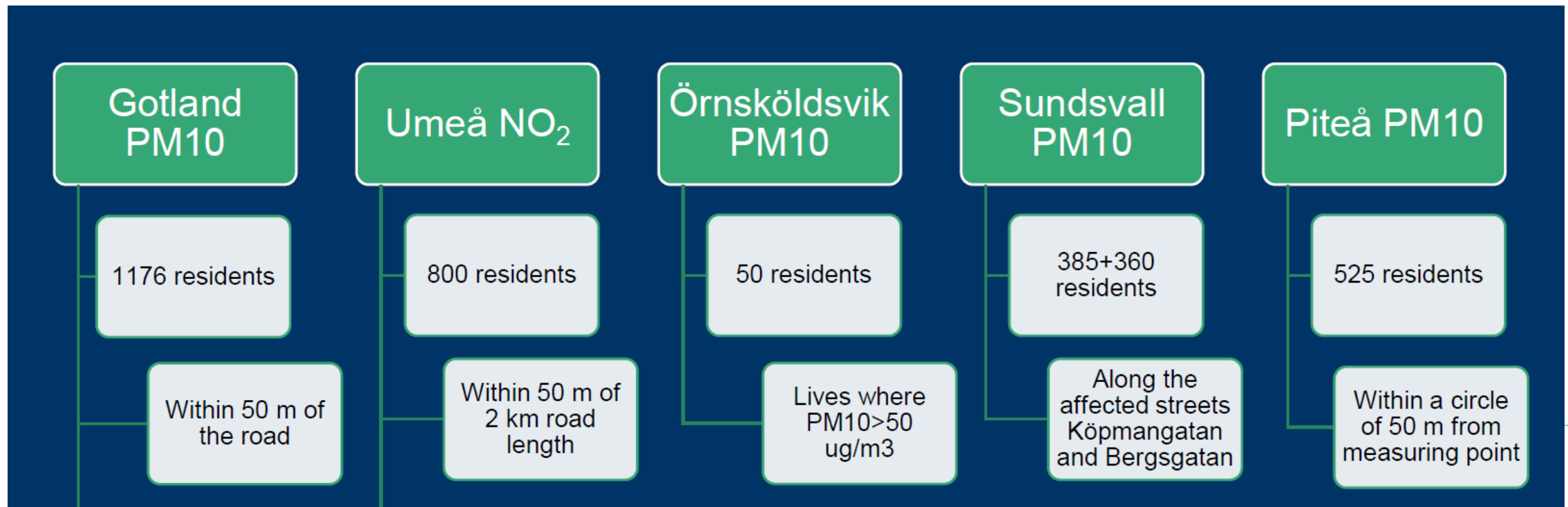 → *(Almost) nobody**

  *after consultantion with the EEA

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Example from 5 Swedish cities

- Within the same countries (Sweden, Germany, Italy…) various methods are used over different air quality zones making a fair comparison impossible

Gotland PM10	Umeå NO$_2$	Örnsköldsvik PM10	Sundsvall PM10	Piteå PM10
1176 residents	800 residents	50 residents	385+360 residents	525 residents
Within 50 m of the road	Within 50 m of 2 km road length	Lives where PM10>50 ug/m3	Along the affected streets Köpmangatan and Bergsgatan	Within a circle of 50 m from measuring point

Problems & concerns

- Lack of a standard method and detailed guidance → varying interpretations & implementation

- The set of indicators could be simplified: area, population, road length above limit value → too many? all of them relevant, robust and useful?

- Threshold indicators are very sensitive (by nature)

- Population exposure → only residents, also commuters, sensitive groups…?

- Indicators only produced and reported during AQ planning process → why not for annual reporting on exceedances?

- Full documentation of e-Reported values is lacking *(although IPR refers to data flow D)*

measurements, modelling or objective estimation used. Assessment methods are reported within Data flow D.

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NEXT STEPS

Towards a FAIRMODE recommendation…

- Further clarify the overall purpose of these indicators *(Q4 2021)*

- Collection of best practices amongst CT8 participants *(Q4 2021, Q1 2022)*

- Drafting of FAIRMODE recommendation on the estimation of exceendance situation indicators *(Q1–Q3, 2022)*

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