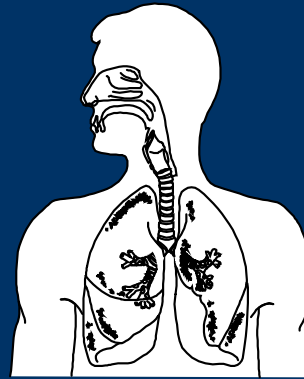# Priorities & Roadmap of WG3: Environmental measurements and Air Pollution modelling

Ole Hertel, DSc, PhD, MSc & EBA

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COST TD1105 workshop at ENEA 4-6 December 2012

Acute death

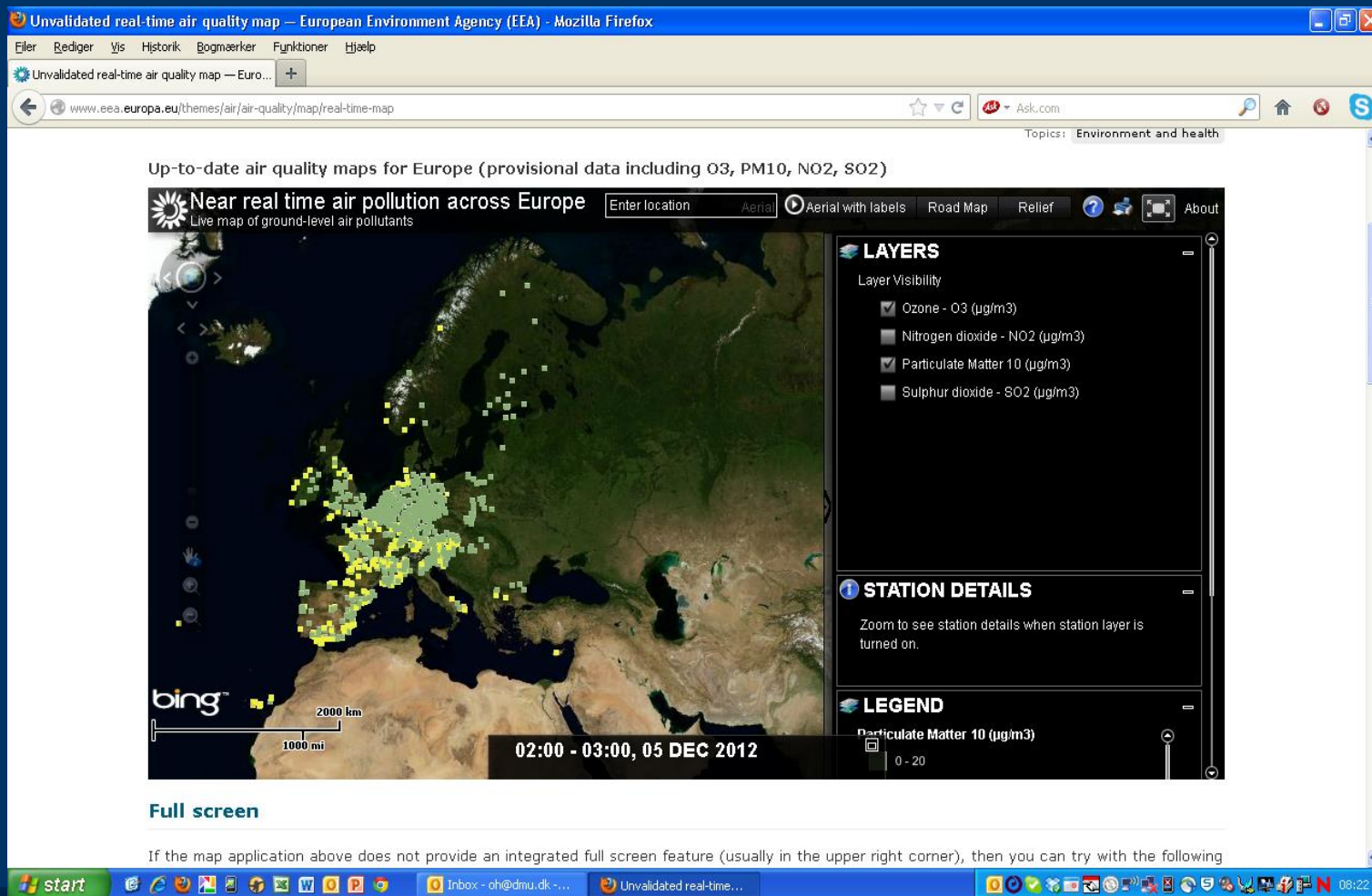# Death appearing after episodic event of elevated pollutant concentrations

Chronic death

Death that may be related to being exposed to generally high levels of pollution over long time

Exposure assessments: coarse monitoring network or coarse model calculations

Exposure bicycling home & work

shortest & cleanest

Legend

🔴 Workplace

🟦 Homes

━━ Green routes

━━ Direct routes

━━ Highway

━━ Expressway

━━ Major Road

🟨 Land

🟦 Ocean

Human exposure and health effects – COST TD1105 Workshop at ENEA, Rome 4-6 December 2012

Department of Environmental Science, Aarhus University
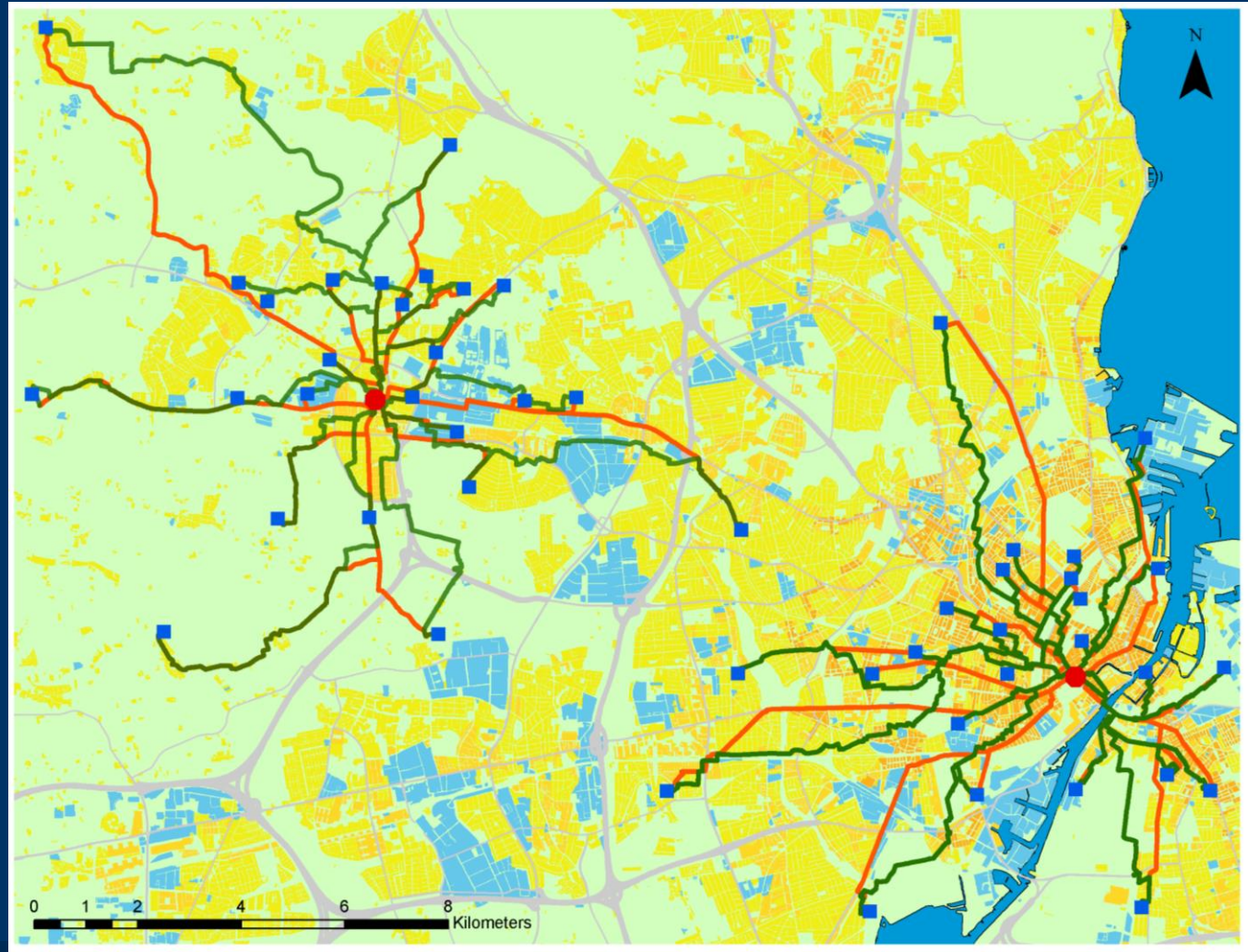
Priorities and roadmap

- **What do we want to provide on the long term – in relation to routine monitoring and public information?**

- **Mikro-sensors should not substitute but supplement routine monitoring devices**

- **Future routine networks may look very different from todays and include low cost sensoring!?**

- **The green route through the city or access to information about pollutant load at address might be future goals**

Priorities and roadmap

- **Still many unknowns in respect to health effects – e.g. what in PM is causing negative health effects – consitutents, ultrafine?**

- **Airborne allergenes may also be an issue of interest – >20% suffer from hay fever but monitoring still based on 1950 technology**

- **Model validation is another issue of high importance – model calculations using CTM's or LUR provides high resolution data of high importance from providing public information, use in health impact assessment and supplementation of routine monitoring**