Final Training on THOR modelling system and Study Tour for air quality experts on urban transport issues

Copenhagen, Denmark 23-26 September 2014

RPP-3 Development and implementation of an air pollution assessment system to estimate effects of different urban planning and transportation schemes in the partner countries

This 4 day training and study tour is intended to wrap up the operational aspects of the THOR modelling system component of the RPP-3 and additionally provide air quality experts with first-hand experience on management of urban transport development at the national and municipal level in an EU country.

Aarhus University, the RPP-3 implementer, will act as the lead host for the THOR training and will also organize the field visits and presentations from Danish state and municipal authorities. These will be augmented by a final day session at the EEA where the SEIS project will make a series of presentations covering the latest UNECE Joint Task Force emission indicators and the use of economic instruments in urban transport planning.

The format of the four day event is composed of two stages. The first stage will begin with a one day enhanced training course on the THOR modelling system intended as the final follow up to the ones which took place earlier this year in Yerevan and Chisinau. Participants will be required to bring their country lap tops containing the THOR modelling software with which they have been working for the past three months. This will be followed a second day visit to the Risø, Roskilde, to examine the practical application of the THOR modelling system within the larger context of air quality management.

The second stage of this event is designed for a wider category of air quality specialists and policy makers familiar with urban transport issues. These experts will participate in a program of presentations of political initiatives, both national and municipal, which demonstrate the links between the THOR system and urban transport policy in an EU country. The final day will be devoted to SEIS presentations on the latest developments from the UNECE Joint Task Force on indicators which are a fundamental tool used by air quality specialists for high resolution urban air quality modelling and urban planning. Used effectively such systems have the capacity to provide government policy makers with an enlightened set of policy options for air quality management. Taken together the aforementioned activities will enhance the existing outputs under the Project Transport Component Tasks 3.2 (Emission Inventories); 3.3 (Planning tools) and 3.4 (Economic Instruments).

Purpose

Final training of national experts on the THOR system and examination of practical application of urban transport modelling in policy implementation at municipal and national levels in an EU member state..

Objective

Finalize the operational aspects of the THOR modelling component of the RPP-3 and additionally provide air quality experts with first-hand experience on management of urban transport development issues in an EU state.

Participants

Stage 1: The experts invited to participate in Stage 1 are the same operational specialists who participated in the first training course held in Chisinau and Yerevan as mentioned above.

Stage 2: The experts invited to participate in Stage 2 of this event are from a wider category of air quality experts and policy makers from Ministry and Research Institutes who will participate in a program of presentations of political initiatives, both national and municipal, which demonstrate the link between the THOR system and government policy. An accent will be made to encourage the beneficiaries to nominate one representative from a local municipality of the pilot cities.

Methods

Training sessions by RPP3 experts (Aarhus University) in Copenhagen, excursions and presentations by representatives of relevant Danish municipal and national authorities; institutional excursions and presentations by EEA SEIS project.

Background

This training/study tours will address the following tasks planned in the Air Quality Governance Project in the ENPI East Countries project workplan:

Task 3.2 Develop Emission Inventories in Transportation Sector
Task 3.3 Introduction of transport-planning tools
Task 3.4 Introduction of Economic instruments to Reduce Transport-related Emissions

as well as the following tasks of the RPP3 workplan:

Task 3.3 Training workshop of staff expected to operate the system in the future.
Task 4.2 Study tour to Copenhagen for decision makers and governmental officials.

Organization

RPP3 Team Leader Allan Gross and fellow experts (Aarhus University) will be responsible for the organization and conduct of the Training and Study tour. The project team implementing the SEIS project will also host the final session on the last day at the offices of the EEA. Support and administrative assistance in the organization of the four day event will be also be provided by experts from the Air-Q-Gov team.

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Programme of the week

Monday 22 September 2014, Copenhagen	
	Arrival of participants for Stage 1 and transfer to Hotel (no program)
(Day 1) Tuesday 23 September 2014	
	Arrival of participants for Stage 2 and transfer to Hotel (no program) ********** **Stage 1 participants program:** Follow up THOR-AirPAS Training Course on high resolution urban air quality modelling and urban planning. Walk from the Hotel to Universities Denmark, Fiolstræde 44, Copenhagen (1,7 km) 9:00 – 16:00: Follow up THOR-AirPAS Course at Fiolstræde 44, Course will be conducted by Matthias Ketzel and Allan Gross Aarhus University. There will be coffee from 9:00. 9:00 – 10:00: Short presentation (one from each country, max.10 min.): • current status of activities with the THOR-AirPAS in each country; • future plans with THOR-AirPAS in their country. (These presentations will be based on a short document and presentation submitted to the coordinator before September 15, 2014.) 10:00 – 12:00:Training 1 – model evaluation and calibration: How to evaluate and calibrate the models UBM and OSPM based on existing background and street measurements. 12:00 – 12:45: Lunch from

	12:45 – 14:00: Training 2 – air quality mapping, urban background: How to produce contour maps of air pollution simulations and plots for the entire pilot city area. (Annual averages of various pollutants e.g. NO2 CO SO2 PM10…). 14:00 – 14:30: *"Examples for the use of UBM and OSPM modelling for scenario calculations and environmental assessment for various authorities as customers"* presentation by Steen Solvang Jensen, ENVS, AU. 14:30 – 15:00 coffee break 15:00 – 16:00: Training 2 – air quality mapping, urban background (cont.) Outputs: High resolution air quality maps will be ready for project web-side.

(Day 2) Wednesday 24 September, 2104

Stage 1 and 2 participants joint program

Stage 1 and 2 participants joint program:

Objective: Use of THOR-AirPAS for integrated monitoring system for air quality surveillance in Denmark.

Transport by Bus from Hotel to Risø, Roskilde

9:00 – 15:00: Visit to ENVS, AU (Former NERI in Roskilde)

9:00 – 10:00: Presentation: *"The concept of integrated monitoring and the role of air quality modeling with the THOR system"* by Jørgen Brandt, ENVS (co-developer of THOR-System).

10:00 – 10:30: Presentation from two of the countries:

(i) short description of experience with the THOR-AirPAS system;
(ii) presentation of obtained results since the training workshop,
(iii) short description of your future plan with the THOR-AirPAS system.

10:30 – 11:00 coffee break

11:00 – 12:00: Presentation on "*Using THOR-AirPAS as air pollution assessment and urban planning system down to the street canyon based on an example from one of the RPP3 pilot city"* by Matthias Ketzel, ENVS.

Lunch from 12:00 – 13:00

13:00 – 14:00: Presentation on *"The links between effective urban modelling systems (THOR) and policy development at the municipal level"* by KE4 Nataliia Ivanenko (The presentation will also accent the use of low-cost economic instruments as an effective implementation measure to reduce air pollution from urban transport.

14:00 – 14:30 coffee break

14:30 – 15:00: Presentation on: *"Design of the Danish air quality monitoring network, pollution trends and experience from air quality management"* by Claus Nordstrøm, ENVS.

15:00 – 16:00: *"Visit to the rural monitoring station at Risø (Roskilde) and Laboratories at ENVS"* by Claus Nordstrøm

Public bus transport to Roskilde city.

18:00 – 21:30: Workshop dinner, Sagafjord.

Bus transport back to hotel.

(Day 3) Thursday 25 September 2014,

Stage 1 participants depart for home.

Stage 2 participants program:

Objective: Political initiatives to make Copenhagen greener.
(Initiatives where AQ modelling are/can be applied)

Pick up at 9:00 at the hotel by Matthias Ketzel.

9:00 – 10:30: Visit the urban canopy measurement station at H.C. Andersens Boulevard (Walk distance 1,8 km):

10:30 – 11:30: Visit to Danish EPA (Located in the center of Copenhagen):
Presentation: *"Air Quality regulation and management in Denmark (How are measurements and model results used in political decision making)"* by Katja Asmussen.
(Danish EPA is frequently contracting ENVS/AU on these issues).

11:30 – 12:15: Lunch at Danish EPA

Walk from Danish EPA to The Technical and Environmental Administration, Copenhagen Municipality (1,9 km).

13:00 – 14:30: Visit to The Technical and Environmental Administration, Copenhagen municipality:
Presentation: *"Copenhagen as Green Capital in 2014 (12 environment indicators - among them air quality and transport, initiatives to improve the environment in Copenhagen)",* by Lene Bjerg Kristensen.
Presentation: *"The Climate Plan 2015 for Copenhagen Municipality (Making Copenhagen fossil free)",* by Morten Højer.

Public bus transport from Copenhagen Municipality to Amagerværket.

15:00 – 17:00: Visit to Amager Resource Center (New energy plant facility in Copenhagen)
Subject of presentation how "Amager Bakke" will be included in the city's cycle with respect to both waste, energy and culture.

Public bus transport back to hotel.

	(Day 4) Friday 26 September 2014,

	Stage 2 participants program:
	
	Session to take place at the offices of the European Environment Agency in Copenhagen, Denmark
	
	ENPI-SEIS project:
	
	- Introduction to SEIS and the ENPI-SEIS project
	- The core set of indicators and status for ENPI-East countries
	
	The work of the EEA:
	
	- Data accessibility at the EEA – "Reportnet"
	- Overview of the work of the EEA in the air-related field: topics/partners/network/activities.
	- Short presentations with overview of thematic trends – key messages e.g.
	  • Air pollution
	  • Transport
	  • Urban development (or could possibly be instead linkages to "green economy" indicators?)
	
	Short session capacity building / future directions / wrap-up:
	
	- Gather input for a regional workshop in November (back-to-back to next UNECE Joint Task Force in Indicators) - on limitations in available methodologies and data validation;
	- Roundtable discussion on remaining key/challenges.

	(Day 5) Saturday 27 September 2014, **Stage 2 participants depart for home**