# InGOS – Integrated non-CO2 Observing System

Detailed workplan, appendix to the online application. Request for access to an infrastructure (TNA1-TNA2-TNA3). The plan must not exceed 6 pages in 12 pt single line spacing, applications exceeding this limit will not be evaluated. The following information should be included in order to be evaluated:

1. **Project name (acronym), name and contact information of the researcher(s), duration of the project (dates, number of working days), type and name of the infrastructure requested**

Nitrous oxide skills training course.

Period 22.4-25.4 2013

Name of applicant: Andrej Tarnik

Duration of visit: One working day

TNA-site: RISO Willow Field

1. **Background**

A N2O skills training course is performed during 22-25 April 2013 at DTU (Technical University of Denmark). The course has the objective to provide training for students from Eastern Europe and developing nations who needs to achieve skills in measuring soil-atmospheric exchange of N2O in the field using manual gas sampling in static gas-flux chambers. The course is running over three days and include theoretical and practical activities. A key part of this task is to show new users the capabilities of new techniques, and the course will run in parallel to a trans-national field campaign hosted by DTU with participants from research groups in Germany (Karlsruhe Institute of Technology; Thünen Institute; Universität Bremen), The Netherlands (ECN) and Denmark (DTU). This campaign has the objective to compare different approaches for N2O flux measurements including Eddy Covariance and static chambers by application of different analytical instruments (QCL; Off-axis ICOS; FTIR; GC).

1. **Objectives**

The participants in the course will achieve a one-day hands on introduction to the state-of-the-art technologies for N2O GHG observations that are participating in the instrument inter-comparison campaign. At the same time, practical exercises will address sampling, analysis and data-evaluation from static field chambers.

The activity conforms strictly with the objective of InGOS to “Provide capacity building in new member states and countries with inadequate existing infrastructure”.

1. **Methods and materials (legal and ethical issues)**

Visit to field site for instrument demonstration and subsequent work in lab for GHG analysis on GC and final calculations based on spread-sheet models and R.

1. **Implementaton: timetable, budget, distribution of work**

Use of the infrastructure will take place during one working day, 23.4.2013.

No additional budget is requested for.

1. **Expected results and possible risks**

Competence building among a group of 12 young-career scientist from S-America, Asia, Africa and E-Europe within GHG flux measurements.

No data will be derived from this activity

1. **Key literature**

Not applicable