1. SCIENCE PLAN & THE CONTINUATION OF THE SCIENCE PROCESS

- Science Plan Proof available is https://www.atm.helsinki.fi/peex/. Editing of the proof is in process and the final version will be released in March 2015.
- Hard copies are available in spring/summer 2015 and the translations in Russia and in Chinese will be made in 2015.
- In addition to pees research projects the science process continues via PEEX special issues
  - the PEEX special issue will include papers on the topics such as
    - Overview of the relevant research needs for the arctic-boreal regions (PEEX Science program in detail) (RESEARCH AGENDA)
    - Modelling Platform (MODELLING)
    - Conceptual design of PEEX observation network (manuscript) (INFRA)
    - PEEX observation network (INFRA)
    - etc...
  - Identification of PEEX Special Issue Editors under discussion by the PEEX Preparatory Committee

2. PEEX ORGANIZATION

- PEEX program the organization structure has been establish (see Science Plan); bodies are:
  - PEEX Prepratory Phase Committee
  - PEEX Offices:
    - Helsinki HQ - Program coordination (Univ.Helsinki and FMI)
    - Moscow offices (MSU and Aerocosmos)
    - PEEX Beijing (RADI) and PEEX Nanjing (Univ.Nanjing)
  - PEEX Nations segments (in process)
3. BUILDING THE PEEX COMMUNITY - Becoming conferences, WS and PEEX sessions

3.1 International Geographical Union (IGU) Regional Conference in Moscow, 17-21 August 2015
   • SESSIONS: Pan-Eurasian Experiment (PEEX) – A Research Initiative Meeting The Grand Challenges Of The Changing Environment Of The Northern Pan-Eurasian Arctic-Boreal Areas
   • Chair Persons: Markku Kulmala, Sergej Zilitinkevich, Tuukka Petäjä, Hanna K. Lappalainen, Natalia Chubarova

3.2 European Aerosol Conference (EAC) September 6-11, 2015, Milan Italy
   • Abstract Submission Deadline February 27th, 2015
   • PEEX special session organized by Kostas Eleftheriadis [elefther@ipta.demokritos.gr](mailto:elefther@ipta.demokritos.gr)

3.3 3rd CRAICC – PEEX Workshop: Climate Change for Arctic Seas and Shipping 9-10 March 2015 in Copenhagen, Denmark
   • The topics of this workshop are:
     - estimating consequences of climate change for the Arctic region on seas and shipping and effects of ship emissions on the environment and climate
     - estimating frequency, spatio-temporal distribution and impact of extreme weather events on shipping traffic
     - improving satellite monitoring and modelling of ice formation and movement in areas of the Arctic shipping routes
     - developing approaches to environmental challenges due to possible increase in Arctic shipping
     - We invite all doing research in fields related to these topics to deliver a presentation at the workshop.
   • Abstract deadline (short – max 250 words) February 20th 2015 (Annabelle Lund [ase@dmi.dk](mailto:ase@dmi.dk)).
   • Registration deadline February 25th 2015

4. BUILT ON EXISTING – PEEX-ACTIVITIES

4.1 Establishing the PEEX observation network
   • The aims of the PEEX metadata base are
PRACTICAL AIMS
(i) to add new stations, which are interested into take part of the PEEX network
(ii) to update/complete/check the existing station information
   specific actions here;
   a. RAS stations (Nina Zaitzeva)
   b. University hosted stations in Russia (Pavel Kostantinov MSU (Russia)
   c. China Flux stations; Prof. Guirui YU & Leiming ZHANG, Inst. of Geographic Sciences and
      Natural Resources Research, CAS & Joni Kujansuu Uni.Helsinki

INFRA- PROGRAM AIMS
i. To establish PEEX observation network
   a. to select stations providing pilot-approach based on Hari et al. Network concept
ii. To distribute PEEX labeled data (long-term aim)
   a. To establish metadatabase on multiscale observations
   b. To facilitate links from metadata to real observations
      i. access to PEEX station data
      ii. links to existing databases
• The stations metadata will be opened in spring 2015 via peex www. Each user will be provided own
   username and password
• The first set of stations providing the PEEX pilot will be determined in detail in spring 2015. The stations
   will be in minimum the exiting SMEAR / SMEAR typed stations (Jarviselja, Nanjing) and some other well-
   equiped stations such as Tiksi, Zotini, Tomsk.
• The discussions how to find synegies and collaboration with the WMO/GAW network is in process.
• Research Infrastructure Roadmap - Implementation Plan; Draft already in process (Petäjä, Lappalainen,
  Baklanov, de Leeuw, Zilitinkevich, Kulmala et al.)

4.2 Knowledge -transfer

**Targeted for Education**
• The first PEEX courses has been announce in [https://www.atm.helsinki.fi/peex/index.php/education](https://www.atm.helsinki.fi/peex/index.php/education)
• New proposals on PEEX labeled courses are welcomed to submit [https://www.atm.helsinki.fi/peex/index.php/submit-courses](https://www.atm.helsinki.fi/peex/index.php/submit-courses)
• Example of new actions, which could be applied to PEEX themes / regions
  Air Quality Education (China) WS in May 2015 in Beijin; contact person is Dr. Taina Ruuskanen,
  taina.ruuskanen(at)helsinki.fi

**Targeted for the General Public & science communities**
• PEEX outreach material (flyer, poster, ppt) in process by the Helsinki HQ

4. NEW PEEX ACTIVITIES - the 1st PEEX labeled projects

**PEEX PROPOSALS**
• Marie-Curie-Gand Challenges PEEX (ca 4 MEURO), CR M. Kulmala Univ.Helsinki; submitted
  in Jan 2015
• Future Arctic – Scenarios & Assessments (FAAS) (cs 3,4 MEURO), CR M. Kulmala Univ.
  Helsinki; to be submitted in March 2015
• Erasmus+ (ca 1 MEURO), CR S. Zilitinkevich; submitted in February 2015

**ON-GOING PROJECTS**
• PEEX – CRAICC –series of workshops (NORDFORSK) (2.750.000 NOK; ca 320 000 EURO)
• FAAS WS (NORDFORSK) (12 000 EURO)
• ABBA (Academy of Finland, ca 500 EUR) supplemented by 5 Russian projects (RFBR, 45 000 RUB)
• AEROCOSMOS-ATM (FCoE) project (BILATERAL COLLABORATION)
  • Development of methods for monitoring of the dynamics of natural and anthropogenic emissions of trace gases and aerosols in the atmosphere based on satellite data and modelling results’’
• Beautiful Beijing- project, University Of Helsinki (TEKES FI)
• CO-DESING Activities; Helsinki HQ together with PEEX Offices in Russia and China continues promoting PEEX program to funding agencies in Europe, Russia and in China.

5. INTERNATIONAL COLLABORATION & PEEX IMPACT ON SOCIETY IN LONGER RUN
• During 2012-2014 PEEX program has established dialog, collaboration or been integrated part of the several large scale networks and programs: GEOSS, IEAS, IASA, FUTURE EARTH, IGBP (iLEAPS), ARCTIC COUNCIL, SAON, WMO GAW, Int. Society of Digital Earth and SILK ROAD
• The work with the specific actions coordinated by the Helsinki-HQ will continue such as
  o providing PEEX labeled Pilot service for GEOSS
  o detailed specifications with PEEX observations network vs. WMO GAW
  o drafting PEEX RI/data policies vs. SAON vs. GEOSS vs. WMO GAW part of the PEEX observation network implementation plan
  o seeking collaborations activities in a frame of IEAS
  o deepen the PEEX agenda and role of P in a frame of SILK ROAD Economic belt –program
  o deepen the PEEX positions as a arctic-boreal node/hub in a frame of Future Earth