

# Current activities, ICP IM

## ICP Integrated Monitoring of Air Pollution Effects on Ecosystems -

### ICP IM

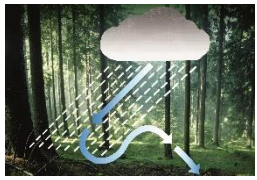
Ulf Grandin, Salar Valinia & Martin Forsius

Maria Holmberg (presenter)

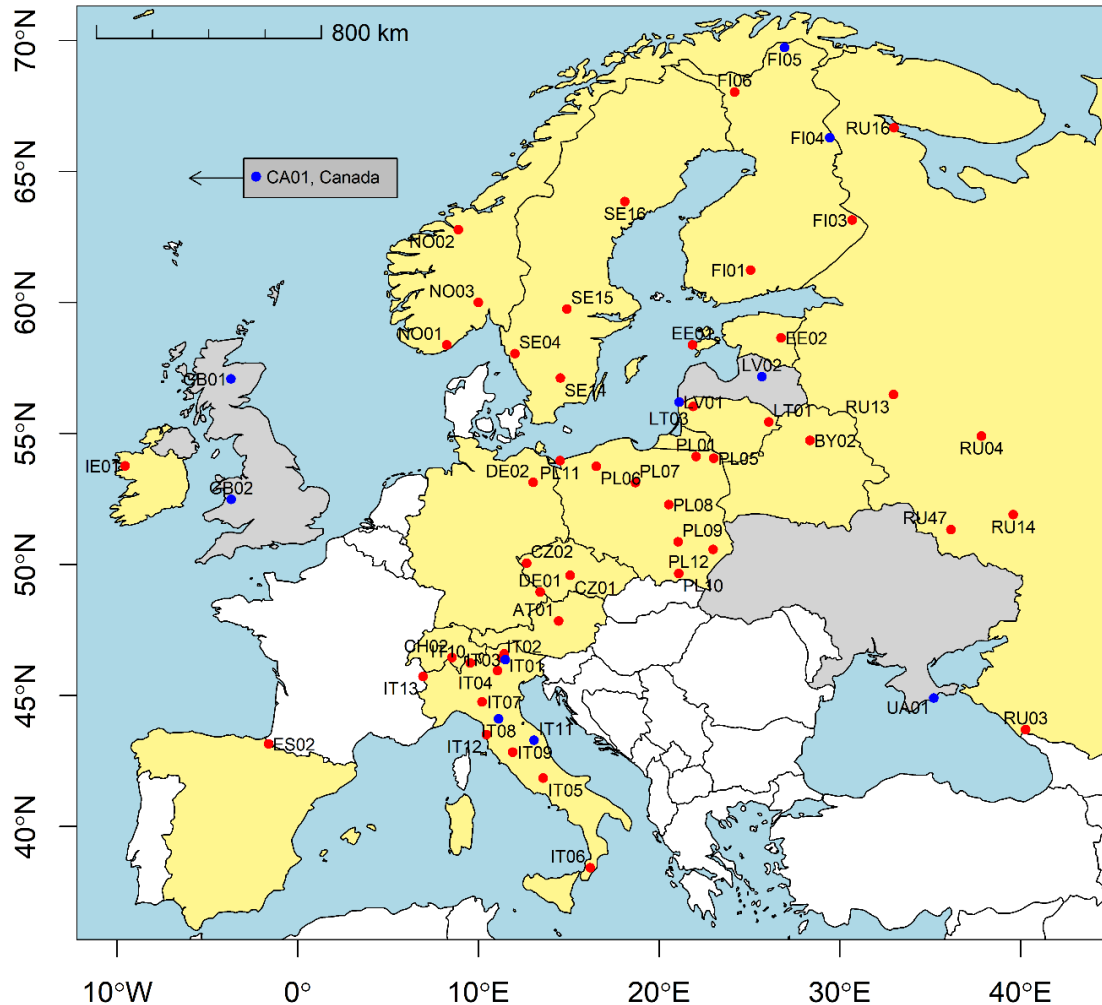


SWEDISH ENVIRONMENTAL  
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# The current ICP IM network



15 active countries

48 active sites

New interest from Canada

● Active IM site

● Inactive IM site

Country with active IM sites

Country with only inactive IM sites

Country without IM sites



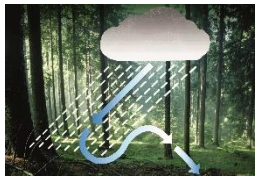
# Status for LRTAP 2020-21 work plan items

Activity	Status
<b>1.1.1.15 Scientific paper on the impacts of internal catchment-related nitrogen parameters to TIN leaching</b>	To be submitted summer 2021. Study lead by Jussi Vuorenmaa
<b>1.1.1.16 Scientific paper on HM trends in concentrations and fluxes across ICP IM sites in Europe</b>	Draft MS, by Karin Eklöf et al.
<b>1.1.1.17 Scientific paper on the effects of N enrichment on forest bryophyte vegetation. A co-operation between ICP IM and ICP Forests.</b>	James Weldon et al. Submitted to Annals of Forest Science



## Other scientific activities 2020-21

Activity	Status
<b>Scientific paper on the lack of recovery in the epiphytic lichen community after the decrease in S deposition</b>	Published: Weldon, J., & Grandin, U. (2021). Weak recovery of epiphytic lichen communities in Sweden over 20 years of rapid air pollution decline. <i>The Lichenologist</i> , 53(2), 203-213. doi:10.1017/S0024282921000037
<b>Scientific paper on the relationship between CL exceedances and empirical ecosystem impact indicators</b>	Published: Forsius et al. (2021). Assessing critical load exceedances and ecosystem impacts of anthropogenic nitrogen and sulphur deposition at unmanaged forested catchments in Europe. STOTEN 753. <a href="https://doi.org/10.1016/j.scitotenv.2020.141791">https://doi.org/10.1016/j.scitotenv.2020.141791</a>
<b>Continued work on mercury and other heavy metals</b>	Ongoing



## Other activities during 2021

### Other important activities

**Finalization and launch of “IM light”:** *extended monitoring strategy for ICP IM:*

- *simplified protocol*
- *integrated with other ICPs under WGE*
- *Reflecting current and future environmental problems*
- *Cooperation also with EU-NECD, eLTER, LifeWatch and others*
- *Opening for other ecosystem types than forests, and for higher number of sites*

**Migration of ICP IM database and its operation from SYKE (Finland) to SLU (Sweden)**

**Contribute to the review of the Gothenburg protocol**



Thanks for your attention!