



Welcome to the 2nd European Exposure Science Strategy Workshop of ISES Europe

Yuri Bruinen de Bruin, Jos Bessems, Tanya Dudzina, Natalie von Goetz, Peter Fantke, Urs Schlueter, Alison Conolly

European Commission – DG JRC
Knowledge Management

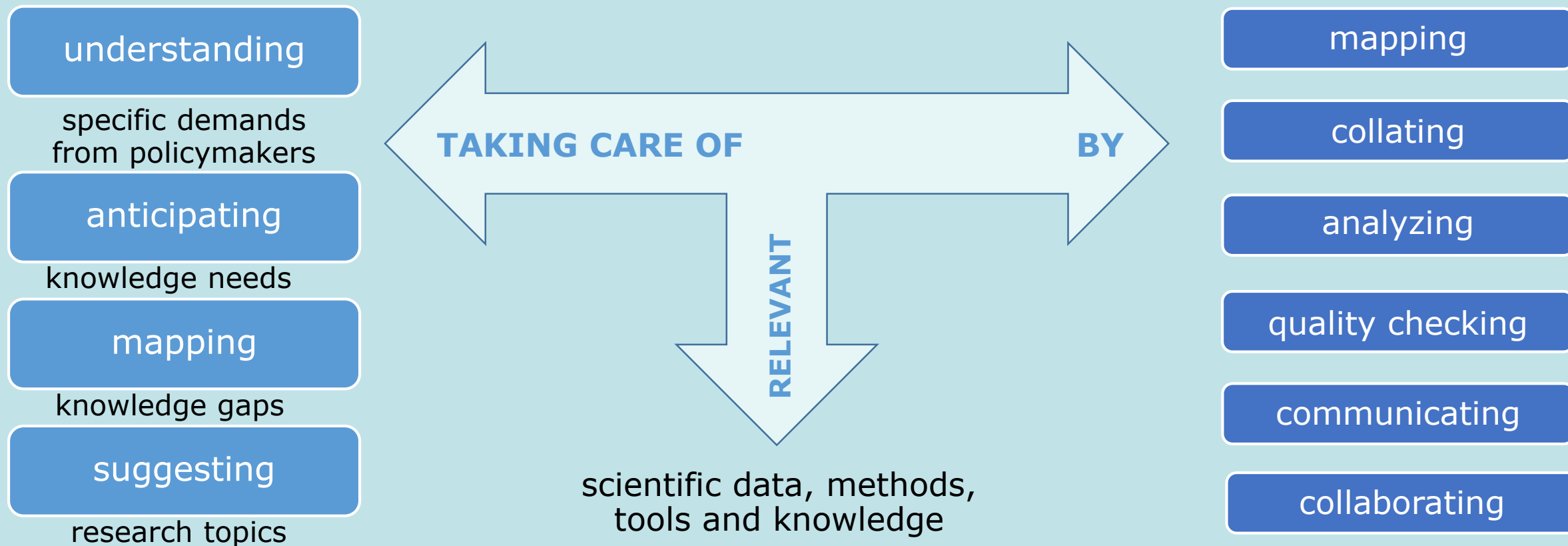
EU CoE on CBRN Risk Mitigation
Strategic Foresight on Safety and Security for Policy and Research

ISES-Europe 2019

4-5 July 2019 | RIVM, Bilthoven (Netherlands)

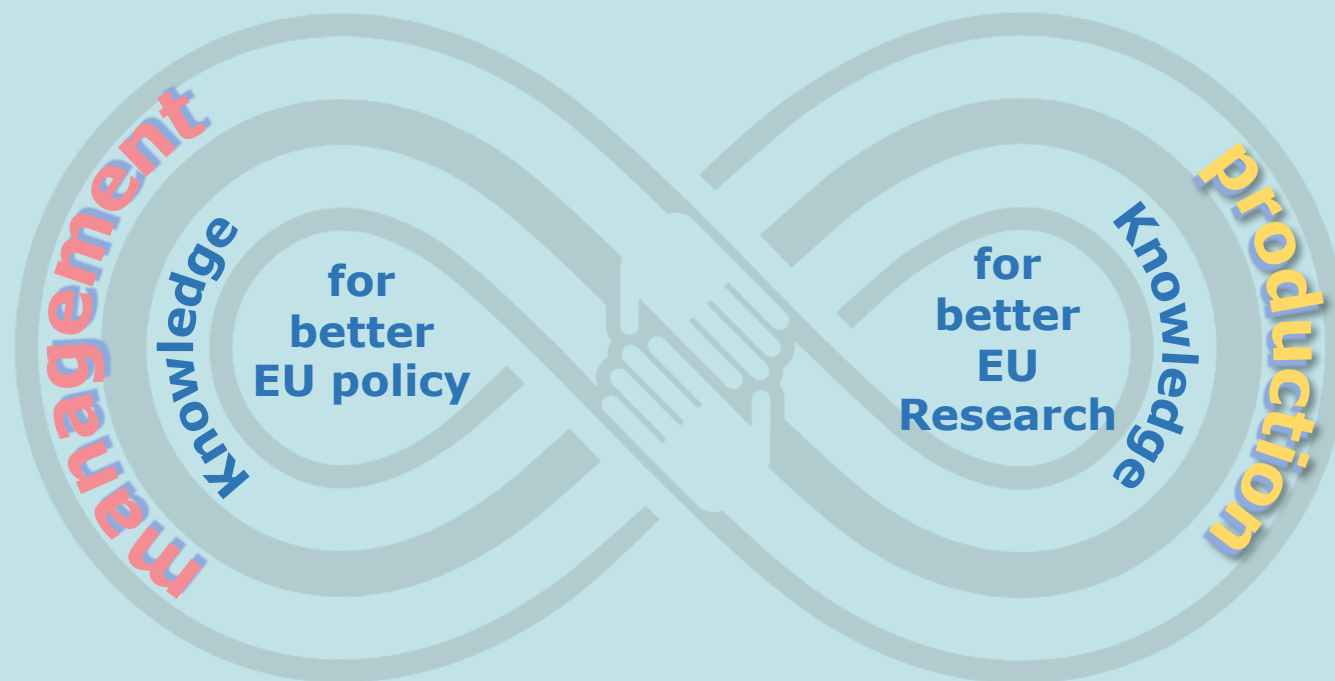
2nd European Exposure Science Strategy Workshop
RIVM, National Institute for Public Health and the Environment
Bilthoven, The Netherlands





ISES Europe Strategy 2030

- More selective in defining priorities
- Have a multidisciplinary approach
- Coordinate demand for knowledge and actions
- Provide solid & collective guidance for stakeholders in the field of exposure science



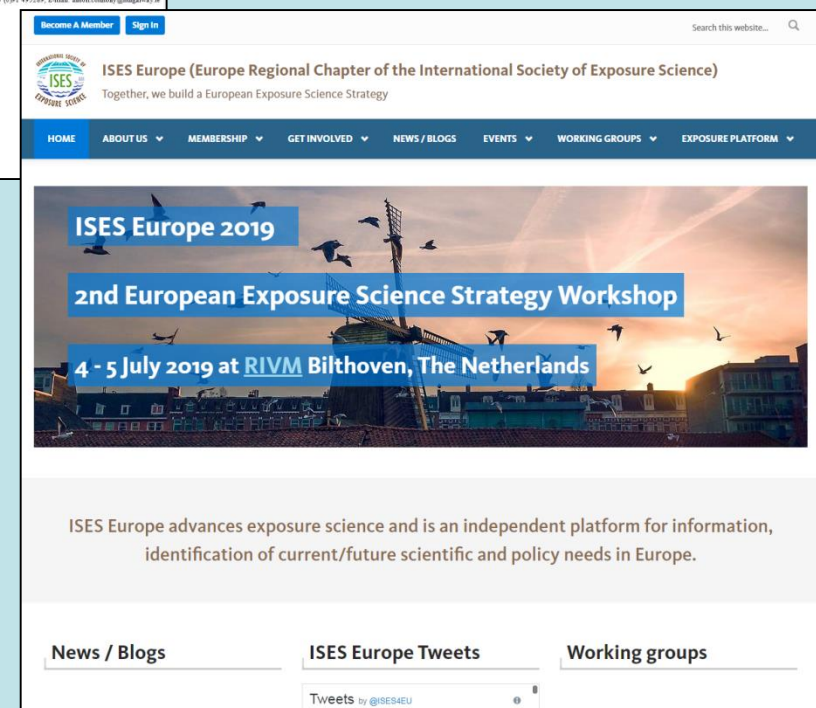
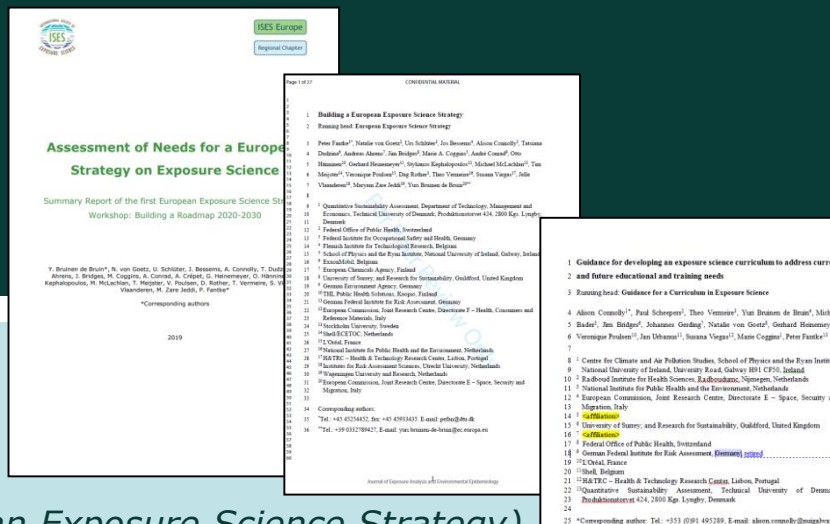
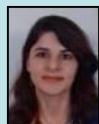
- Involve strategic partners in Europe
- Enlarge the exposure science stakeholders' community
- Consolidate knowledge from across the scientific community
- Develop a stronger anticipation culture

Historical facts



Achievements

- Working definition
- Need Assessment Report
- Submitted manuscript (*Building a European Exposure Science Strategy*)
- Draft Guidance for developing an exposure science curriculum
- *Opening bank account*
- Working Groups
 - Exposure models
 - Data Repositories and Analytics
 - Exposure data production: Human data
 - Education, training and communication
 - Frameworks for Integrated Exposures Sciences and Policy Efficiency
- Internet website; <https://ises-europe.org/>
 - Information
 - Membership
 - News/blogs
 - Working groups
 - Exposure platform



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2nd Strategy Workshop



- Hosting institute, National Institute for Public Health and the Environment – RIVM

- Special thanks to

- Prof. Dr. Hans Brug, DG RIVM 
- Dr. Els van Schie, Director Environment and Safety 
- Jan Roels, Centre Head of Expertise Centre for Substances and Products 
- Joke Herremans, Head of the department of Consumer and Product Safety 
- Dr. Theo Vermeire, Deputy Head Expertise Centre for Substances and Products 
- Dr. Femke Affourtit-van Driesten, Expertise Centre for Substances and Products 
- Dr. Gerlienke Schuur, Expertise Centre for Substances and Products 
- Dr. Wouter ter Burg, Expertise Centre for Substances and Products 

Aim and scope

ISES Europe 2019 aims at finalizing all steps and key actions for creating a European Exposure Science Strategy by 2020 with an implementation roadmap and goals for 2020-2030.

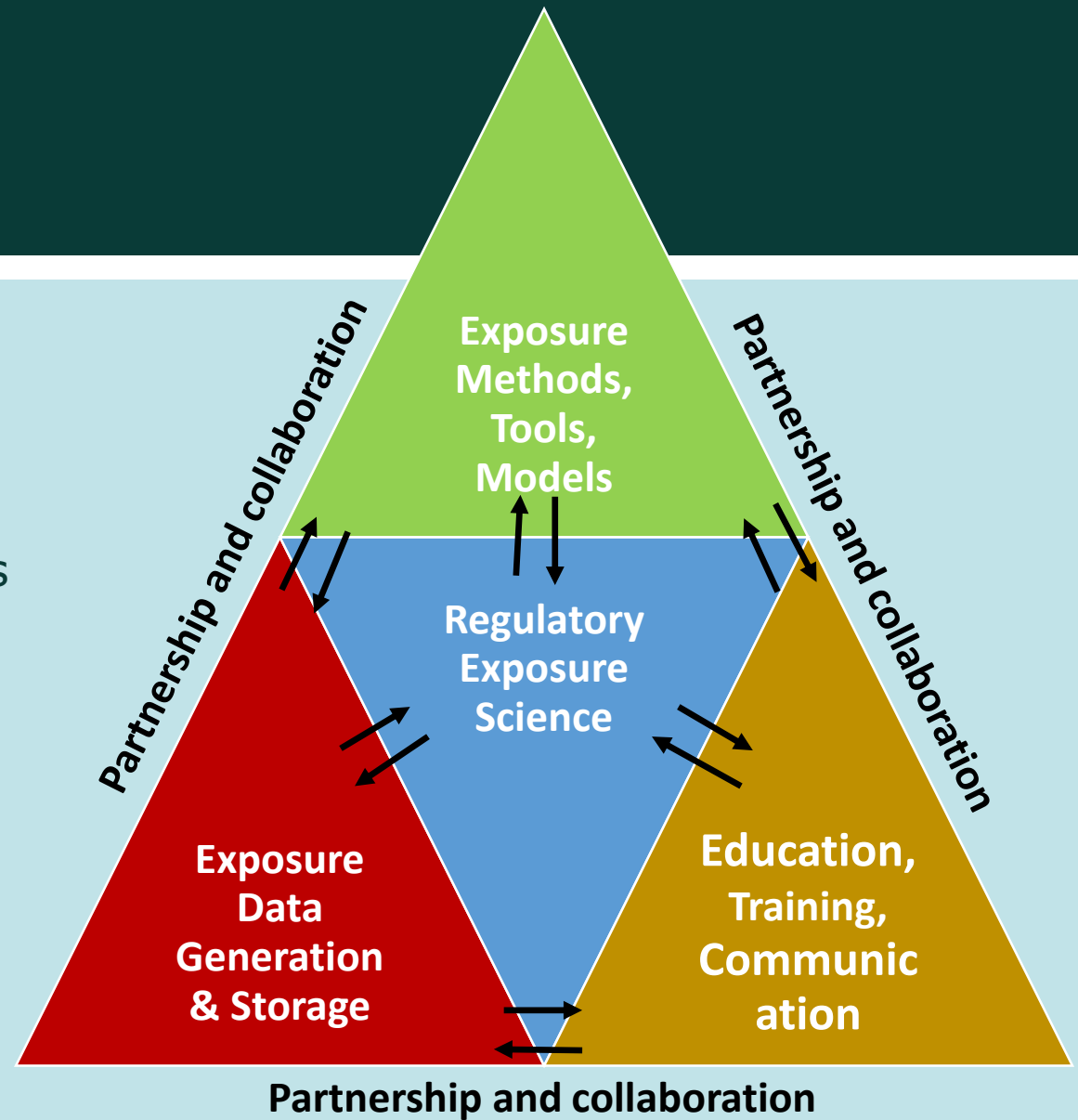
ISES Europe 2019 has 3 goals:

1. Finalise the thematic action plans as input to complete the European Exposure Science Strategy
2. Define ISES Europe working group actions plans and roadmaps for several exposure sub-themes
3. Discuss strategy implementation and way forward for ISES Europe to support European policy & research agendas

Strategy themes

Working Groups

- Frameworks for Integrated Exposure Sciences and Policy Efficiency
- Exposure models
- Data Repositories and Analytics
- Exposure data production: Human data
- Education, training and communication



Strategic cycle of activities



**Fantke, P., von Goetz, N., Schlüter, U., Bessems, J., Connolly, A., Dudzina, T., Ahrens, A., Bridges, J., Coggins, M.A., Conrad, A., Hänninen, O., Heinemeyer, G., Kephelopoulou, S., McLachlan, M., Meijster, T., Poulsen, V., Rother, D., Vermeire, T., Viegas, S., Vlaanderen, J., Zare Jeddi, M., Bruinen de Bruin, Y. Building a European exposure science strategy. Journal of Exposure Science and Environmental Epidemiology, in review.*

European regulations (in force as of 2019)



European strategies and desires

2019: A New Boost for Jobs, Growth and Investment:

1. The Fitness Check of the water framework and floods Directives together with the Evaluation of the urban waste water treatment Directive
2. The Fitness Check of the air quality Directives
3. Evaluation of the Regulation on the shipment of waste
4. Circular economy (water use and plastic)
5. Programme for the Environment and Climate Action (LIFE)

2019: A Deeper and Fairer Internal Market with a Strengthened Industrial Base:

1. Evaluation of the construction products Regulation
2. Evaluation on maximum residue levels for pesticides and authorisation of plant protection Products
3. Transparency and sustainability of the EU risk assessment in the food chain
4. Unfair trading practices in business-to-business relationships in the food supply chain
5. Supplementary protection certificate for medicinal products



International treaties & policy frameworks

- 1992** Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal
- 1993** ILO's Chemicals Convention concerning Safety in the Use of Chemicals at Work

- 2004** Stockholm Convention on Persistent Organic Pollutants
- 2004** Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
- 2006** Strategic Approach to International Chemicals Management (SAICM)

- 2015** United Nations' Sustainable Development Goals
- 2017** Minamata Convention on Mercury

Plastic packaging waste

A resilient Energy Union with a forward-looking climate change policy

Towards a Non-Toxic Environment in 2050

Towards a new policy on migration

Towards a New Chemical Policy in 2030

Council recommendations to new Commission

Outcomes Need Assessment

1. To establish a common portal on exposure science
2. To build a European exposure science network and partnerships
3. To develop a common framework across policies and regulations making use of exposure science by focussing on the alignment of principles and efficiency enhancement
4. To establish an integrated exposure assessment framework of methods and tools
5. To develop an education and training scheme



Workshop set up

- Science to Strategy sessions
 - Global and European trends, needs and recommendations
 - Exposure Data Generation & Storage
 - Exposure Assessment Methods & Tools
 - Regulatory Exposure Assessment Science
 - Exposure Science Education, Training & Communication
- Action Plan Sessions
 - Towards a Thematic Actions Plan and a Roadmap for Exposure Science in Europe
 - Towards a Working Group Actions Plan and Roadmap
 - Exposure models
 - Data Repositories and Analytics
 - Exposure data production: Human data
 - Education, training and communication
 - Frameworks for Integrated Exposure Sciences and Policy Efficiency
- Session on Strategy Implementation and Institutionalization
- Session on European Policy and Research Priorities and the role of ISES Europe
- Building partnerships and collaboration
 - Exposure Platform and its opportunities

Roadmap template containing Actions, specific tasks, stakeholders and priorities

Action	Specific Tasks	Suggested Lead Stakeholder (not necessarily workshop participants).	Suggested Specific Supporting Stakeholders(not necessarily workshop participants)	Priority	Timeline
The setting up of a platform/network for exchanging about principles, methods and models used under different chemical regulations to better understand the: a. common ground communalities, overlaps and differences in terms of type of use and exposure information required under the different regulatory contexts of safety, security and sustainability assessments, b. consistency of use- and exposure assessment principles across regulatory frameworks c. approaches for avoiding duplication of assessment efforts d. enhance knowledge on the application of models, tools, and successful approaches across regulatory frameworks aiming to bridge gaps in exposure information and methods	1. Creation of a platform/network in which principles, methods and models can be stored used under different regulatory frameworks on chemicals. This platform should store and accommodate the following: a) Mapping of the different chemical regulatory frameworks and their scope (e.g. safety, security, sustainability) that make use of exposure information b) Creation of a template in which the different regulatory exposure requirements comprising the use of the chemicals, models, and methods c) Analysis of the templates to assess the consistency and successful approaches of the use - and exposure assessment principles required by the different regulatory frameworks	☐ European Agency ☐ European Commission ☐ National Authority ☐ Industry (association) ☐ Academia ☐ Scientific Society ☐ Other		☐ H ☐ M ☐ L	☐ 2020-2022 ☐ 2022-2024 ☐ 2024-2026 ☐ 2026-2028 ☐ 2028-2030

Thank you! Questions?

- Board



- Yuri Bruinen de Bruin (JRC) – chair/president
- Jos Bessems (VITO) – secretary/treasurer
- Tanya Dudzina (ExxonMobil Biomedical Science Inc.) – **representative** to ISES board
- Natalie von Goetz (BAG) – **Councilor for** outreach and education
- Peter Fantke (DTU) – **Councilor for** European **exposure science strategy**
- Urs Schlueter (BAuA) - **Councilor for** stakeholder communication & capacity building
- Alison Conolly (NUIG) – student representative/webmaster

