

NEWSLETTER

LIFE APEX



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WELCOME

By Jaroslav Slobodnik

LIFE APEX started in September 2018 and immediately attracted close attention of European regulators: over the next four years, we will investigate the presence of tens of thousands of chemical substances in various environmental samples on a European scale using cutting-edge analytical methodologies. This will allow us to identify those chemicals, which accumulate in predators at the top of marine, terrestrial and fresh water food chains. Novel prioritization approaches will be developed for regulation and research to screen these data for persistent, bioaccumulative and toxic chemicals.

LIFE APEX brings together regulators, analytical chemists and sample collections from Environmental Specimen Banks, National History Museums and Research Collections. It is our aim to demonstrate that these communities can join forces and unravel the chemical pollution of the environment. 'A dream comes true' was the comment of a high official from DG Environment at our opening presentation of the project in Brussels. With this newsletter we will keep you posted over the upcoming months about LIFE APEX.

TOPIC 01

Presentation of key elements and demonstrators within LIFE APEX

TOPIC 02

Results from the Kick-off Meeting in Berlin, September 2018

TOPIC 03

Upcoming workshop and winter school for project and R&T partners in Bratislava

01: PRESENTATION OF LIFE APEX

LIFE APEX will make use of novel analytical methodologies that allow for screening of several thousands of chemicals substances in each sample and prioritization of frequently occurring pollutants and their mixtures. The project will make a better and more cost-effective use of chemical monitoring data from the large, valuable but underused resources of archived environmental samples across Europe. LIFE APEX responds to needs of regulators for specific regulatory applications in relation to REACH and the Biocidal Products Regulation.

The AIM is to improve systematic use of chemical monitoring data from apex predators and prey for protecting human health and the environment



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KEY ELEMENTS

B1	Engaging key Replication and Transfer (R&T) Partner. Assessing R&T Partners resources	✓	Kick-start R&T Partner engagement
B2	Reviewing and harmonizing quality assurance for Apex predator and prey (AP&P) sampling, processing and archiving	Infos: Winter school	ESB archive build-up, technical operation and sample handling
B3	Enhancing access to relevant AP&P samples and related contaminant data → Apex Knowledge base	08/2019	→ Target&Non-target Screening (NTS) Database

DEMONSTRATORS

B4	Revealing presence of chemical contaminants in AP&P samples through target and NTS analyses	08/2019	→ Targeted and NTS analyses of 100 Tier 1 samples
B5	Prioritisation of the most relevant contaminants in AP&P samples and assessment of applicability of such monitoring data for PBT assessment	11/2021	→ List of top prioritised 300 pollutants and associated PBT assessments
B6	Demonstrating the use of raptor chemical monitoring data to assess impact and effectiveness of risk mitigation measures	08/2019	→ Guidelines for terrestrial pollutant monitoring using raptors
B7	Defining predominant chemical mixtures in AP&P samples	02/2022	→ List of predominant chemical mixtures in AP&P samples

02: KICK-OFF MEETING (BERLIN, SEP 2018)

Agreement on samples species, matrices and sampling year (2015-present)

Predators (liver):

- Harbour seal
- Common buzzard
- Eurasian otter

Sampling countries:

- United Kingdom
- Nordic region
- The Netherlands
- Germany

Prey (muscle):

- Bream/roach/perch
- Eelpout/marine fish

B4 (Tier 1):

5 species x 4 countries
x 5 regions = 100 samples



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C1	Monitoring the impact of the project actions in relation to the specified performance indicators	02/2020	→ Mid-term Monitoring Report on LIFE Performance Indicators
D1	Development of general dissemination and communication strategy and implementation of strategy's actions	Coming soon	→ Project webpage
D2	Networking with key users to promote regulatory and market uptake of LIFE APEX approaches and outputs	✓ News soon	→ Regulatory Advisory Board established
E1	Project management, risk management and administration and After-LIFE Plan	08/2022	→ Development of After-Life Plan

03: WORKSHOP & WINTER SCHOOL (BRATISLAVA, JAN 2019)

Presentation of key elements and demonstrators

- Overview of the project goals and tasks from the Kick-off meeting
- Overview of progress on sub-actions & deliverables
- Project Steering Committee meeting
- Proposal of the Replication and Transfer (R&T) Plan; planning of sample and data exchange with R&T Partners

Winter School for R&T Partners:

- Training on archive build-up, organisation, technical operation and sample handling tasks under cryogenic conditions



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ORGANISATION OF LIFE APEX

PROJECT PARTNERS

 <p>Environmental Institute</p>	 <p>German Environment Agency</p>	 <p>Naturalis Biodiversity Center</p>	 <p>National and Kapodistrian University of Athens</p>
 <p>Fraunhofer Institute for Molecular Biology and Applied Ecology IME</p>	 <p>Natural Environment Research Council</p>	 <p>Università degli Studi di Firenze</p>	

IMPRINT

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