



Sixth
Framework
Programme

KNAPPE

Knowledge and Need Assessment on Pharmaceutical Products in Environmental Waters

Contract n° 036864

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The deliverable authors are responsible for the content

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B. Roig welcomed the participants of the meeting and outlined the agenda of the meeting:

1. Presentation of WP leaders
2. Presentation of the general organisation of the project
3. Discussion of WP organisation
4. Discussion of event planning
5. Other questions

1. Presentation of WP leaders

E. Touraud presented the coordinator Armines-EMA. She and B. Roig are head of the Metrology and Biodiagnostic Department of the Industrial Environmental Research Centre of the Ecole des Mines in Alès (located in the south of France, close to Nîmes and Montpellier). They develop analytical systems for the detection of environmental contaminants in natural and industrial water bodies. After a strong experience in organic pollutants (PAH, pesticides), they are interested in emerging biological (environmental pathogens) and chemical (endocrine disruptors, pharmaceuticals) pollutants. They use physico-chemical tools and develop biosensors based on the coupling of biological recognition elements (molecular, cellular, enzyme) with a transducer (optical, electrochemical, physical, and thermal) allowing assessing either the concentration of a compound, or its effect. The team is composed of 12 persons including chemists, biologists, analysts, and microbiologist.

Armines EMA was involved in previous European project (SWIFT-WFD) dealing with the development and the validation of new devices for water monitoring.

Sebastian Zabczyński presented the Environmental Biotechnology Department of the Faculty of Energy and Environmental Engineering at the Silesian University of Technology.

This department intends to develop the research on membrane techniques and advanced oxidation processes as well as adsorption processes. The main themes of research focus on the wide range of emerging biological and chemical threats in water management.

He participated to POSEIDON project concerning the Assessment of Technologies for the Removal of Pharmaceuticals and Personal Care Products in Sewage and Drinking Water and the facilities to improve the indirect potable water reuse (Contract No. EVK1-CT-2000-00047, 2001 – 2004)

James Clark and Louise Summerton presented the Green Chemistry Centre. J. Clark is the Director and also Chair of Industrial and Applied Chemistry. The centre has a multidisciplinary and multifunctional approach concerning clean synthesis of special chemicals and pharmaceuticals, the use of renewable resources for sustainable chemical manufacturing based on benign extraction technologies, the design and application of novel biomaterials, and the clean chemical transformation of platform molecules.

A lot of collaboration with other universities, industry and government bodies in Europe, USA and Asia are on going.

He is the Director of the Green Chemistry Network that currently has more than 1000 members worldwide, promotes awareness and facilitates education, training and practice of Green Chemistry in industry, commerce, academia and schools.

Dirk Löffler and Thomas Ternes presented the Federal Institute of Hydrology. Researches in hydrology, water resource management, ecology, and water conservation are the main topics of this institute.

Thomas Ternes is working on trace analysis and environmental fate studies. He was the coordinator and manager of research projects in particular in the field of the removal of pharmaceuticals and personal care products (PPCPs) in wastewater and drinking water treatment (POSEIDON EU project EVK1-CT-2000-00047).

Dirk Löffler is more dedicated to the analysis of organic contaminants such as pharmaceuticals, endocrine disruptors, PAHs, and semi-volatile chlorinated compounds in environmental matrices using LC tandem MS and GC techniques. He is also specialised in the investigation of fate processes and was involved in various national projects and the EU-Projects Erapharm, Poseidon and Triton.

Thomas Dworak is working at Ecologic (Institute for International and European Environmental Policy) which is a private not-for-profit think-tank for applied environmental research, policy analysis and consultancy with offices in Berlin and Brussels. He has a multi disciplinary research and policy consulting approaches in the technical, social and environmental domains. He will lead the WP3 concerning regulatory aspect related to the pharmaceuticals in the environment and he will need some help in the technical aspect of this topic.

B. Roig thanks again all the partners for their contribution during the preparation of the proposal and their help during the negotiation step.

2. Presentation of the general organisation of the project

B. Roig explained the general organisation of the project in terms of coordination team. The European Affair Department of Armines Paris will take in charge all administrative and financial aspect. Concerning the contract, B. Roig indicated the last email exchange with the scientific officer indicated that the contract was in their legal services, meaning that in a frame period of two weeks the contract will get for signature. In spite of this short delay, the official signature will be 1 February 2007.

The scientific, management and organisation aspects will be managed by Benoit Roig and E. Touraud. On another hand, B. Roig highlighted the short duration of the project and the need to be very strict on the respect of all timing. WP leaders need to check their WP milestones very well in order to avoid delay or postponement of some deliverable.

B. Roig presents the Executive Committee. The EC is an operational group of experts established to take an active part in the project by participating to the meetings, discussions and checking the programme strategy and evolution. It is made up of each work package leaders and external members identified as main stakeholders and potential beneficiaries of Knappe project.

3. Discussion of WP organisation

Preliminary contacts have been established between the WP leader and the partners involved in each WP. Each WP leaders have determined the tasks to be done and have begun the discussion to attribute it to each partner.

According to the timetable, the WP2 starts in 1st month of the project and ends in 11th month by the organisation of the workshop. During the discussion, it was decided to merge several

events; the international conference, the WP1 WP2 and WP4 workshop will be organized together. During the presentation of WP2, Thomas Ternes noticed, that the issue concerning stormwater should be also implemented to the WP. Moreover, special attention should be paid to the metabolites of the PPs, which are created during water and wastewater treatment.

Because of the absence of the representatives of the Cemagref, the discussion about sharing the tasks within WP will be done by the email. The table with proposed division of the issues will be sent to the partners in the next days.

J. Clark and L. Summerton asked if it is possible to start WP5 on 1st July rather than 1st September, as the previous timings gave them only 2 months to deliver the 1st discussion document. B. Roig agreed with this proposition and will inform the project officer. Following consultation with the partners, the tasks of WP5 have been divided as follows, although this will be subject to further discussion at the WP launch meeting:

Eco-pharmacostewardship

Activity	Partner
Identify what stewardship approaches are available or could be developed to minimise the environmental impacts of PPs throughout their life cycle	York (CSL)
Investigate the adoption of benign-by-design clean synthesis methods and green production technology to design greener PPs	York (CSL & GreenChem)
Examine the use of Life Cycle Assessment (LCA) as a tool to assess sustainability implications of new and existing drugs, from design and development through to manufacturing, use and fate and to make comparisons between different products including cost benefit analysis	York (Green Chem)
Identify examples of greener drugs and identification of eco-compatibility criteria that can be used as a measure of a PPs overall environmental footprint (including design for degradability)	York (Green Chem)
Examine the use of classification and labelling schemes to allow consumers and practitioners to identify the environmental credentials of drugs and post-pharmacy stewardship approaches such as the development and adoption of drug take-back schemes	Ecologic
Examine approaches to communicate methods of 'good practice' to manufacturers, prescribers and users of pharmaceuticals (including education, advertising, labelling).	Armines

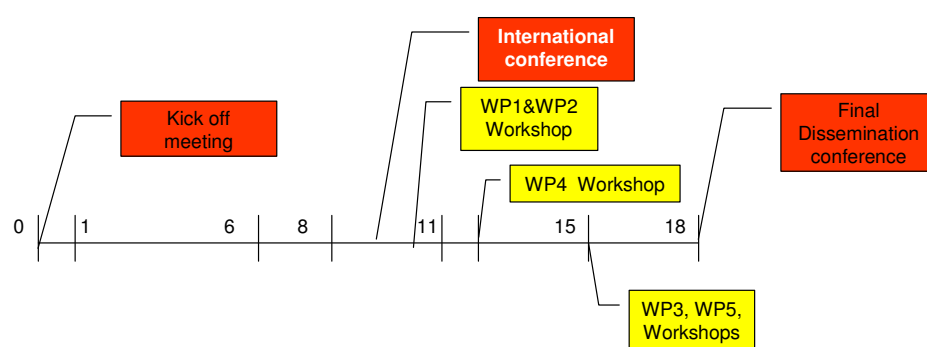
Eco-Pharmacovigilance

Activity	Partner
Identify the substances/scenarios that should be monitored – different strategies will be developed for newly approved medicines, existing medicines and medicines that are identified as a potential high risk during the market authorisation process	York CSL BRGM UoP
Establish how monitoring can be targeted – recommendations will be developed on	BfG

how to design post-authorisation monitoring, including how to monitor, where and when to monitor and how often to monitor and a consideration of the costs of the alternative approaches	BRGM
Identify appropriate post-authorisation monitoring methods – A range of approaches will be considered including chemical, biological (communities, populations, single organisms, biomarkers, genomics) and the use of novel approaches such as the use of web agents to rapidly identify reports of pollution incidents that may be associated with PP use elsewhere in the world.	UoP BRGM Armines

4. Discussion of event planning

The figure above presents the different events planned in Knappe project.



The Scientific Council needs to evaluate the relevance of organising so many events in a few time.

B. Roig exposed some details concerning the International Conference. This event aims to be complementary to the project. Indeed, the project will collect and exploit current available information (data, actions, procedures, ...) concerning the presence of pharmaceuticals in water. The Conference will add to these elements the actions performed at a prospective level. In other words, the conference will be dedicated to future techniques, actions, procedures that are under development and will be the solutions of tomorrow. These actions, procedures, techniques can be related to treatment processes, monitoring, analysis, regulatory aspect, the new industrial synthesis, social attitude, ... B. Roig planned to organise it in October 2007 in Nîmes (South of France). He has already the support of EFPIA and is under discussion with SCI and SETAC.

T. Ternes pointed out the organisation of a congress in September 2007 on a close topic and proposed to postpone Knappe conference at the beginning of 2008. Alistair Boxall is aware about it and B. Roig needs to discuss with him.

Concerning WP1 and WP2 workshop, T. Ternes and S. Zabczyński are under discussion to define the location and the date.

For WP3 workshop, T. Dworak will be supported by Armines that will help him in the selection of experts.

5. Other questions

No other comments were made.