January 2013

List of scientific activities organised by the NORMAN network in 2013

The Steering Committee has approved a budget of 138 545 € for 2013, based on the expected income from membership fees of the Founding and Ordinary members. These resources will be allocated for scientific and coordination activities (including website), and regular updating and maintenance of the databases.

NOTE: The Joint Programme of Activities of the NORMAN network is financed by the contributions of its members (membership fees and in-kind contributions of the members), always with a view to maximising synergies between research teams in the field of emerging substances.

The list of approved scientific activities for 2013 is as follows:

Databases:

- Further development and maintenance of the NORMAN EMPODAT database (Environmental Institute), including:
  - Maintenance, upgrade and feeding of new data in the database
  - Re-programming of the bioassays data collection module based on the suggestions of WG on Prioritisation
  - Re-programming of Substance Fact Sheets based on the suggestions of WG on Prioritisation.

- Further development and maintenance of MassBank to support storage of mass spectral information and identification of unknowns (as part of EDA Working Group) (UFZ), including:
  - Full integration of NORMAN MassBank in the MassBank consortium
  - Further development of upload tools for other instruments than Orbitrap
  - Development of a quality assurance tool to check provided MassBank records for validity before upload
  - Development of a workflow to process GC-MS data for MassBank upload
  - Further uploading of mass spectra to MassBank
  - Integration of NORMAN MassBank in the Risk-Ident environmental data platform.

Scientific activities:

SWB	NORMAN Bulletin on emerging substances (5th issue) and collaboration with the journal "Environmental Sciences Europe" (ESEU) – submission of high quality manuscripts/contributions from members of the network for publication in ESEU (the aim is to submit two manuscripts in 2013, one on the results of the INORMAN ILS on passive sampling and requirements for future implementation in regulatory framework and a second one on current challenges related with the application of bioassays in water quality monitoring) (coordination by INERIS, with notes contributed by various NORMAN members).
WG-1	Working group N°1: Prioritisation of emerging substances (on-going activity coordinated by INERIS). The work in 2013 will focus on: 1) Updating the NORMAN list of "frequently discussed emerging substances" (INERIS /EI); 2) Revision of current PNECs with a focus on compounds that have so far predicted PNECs (P-PNECs) (UFZ) ; 3) Improvement of Substances Fact Sheets already available in the NORMAN EMPODAT database with inclusion of relevant effect data used for derivation of Lowest PNECs (UFZ); 4) Adaptation of the rules for evaluation of the reliability and relevance of ecotoxicity data, on the basis of the evaluation method described by Ågerstrand et al. (2011) (ITM); 5) Derivation of an exposure index for substances based on production and usage data (SPIN database and IUCLID database) and integration of this

	index in the NORMAN prioritisation methodology (KEMI).
WG-1-DW	Working group N°1-DW: Prioritisation of emerging substances for drinking water production (**new activity**). The aim of this new WG – which is linked to WG-1 – will be to work on a methodology for emerging contaminants that may be relevant for human health with a specific focus on drinking water production (not covered by WG-1) (KWR).
WG-2	Working group N°2: The value of bioassays and biomarkers in water quality monitoring programmes (on-going activity coordinated by RWTH – University of Aachen). The main activity of this WG for 2013 will be the organisation of an interlaboratory study on bioassays (see below).
WG-3	Working group N°3: Effect-directed analysis for hazardous pollutant identification (on-going activity coordinated by UFZ). The main activity of this WG for 2013 will be the validation of a NORMAN methodology for large volume active sampling for effect-based monitoring, chemical screening and EDA (see below).
WG-4	Working Group N°4: Engineered nanoparticles (on-going activity coordinated by EAWAG). The main activity of this WG for 2013 will be the organisation by University of Salento of one-day workshop on "Engineered nanomaterials in the environment: analysis, occurrence and impacts" as part of the ninth edition of Nanoforum (see below).
WG-5	Working Group N°5: Wastewater re-use (**new activity**). The aim of this new WG will be to deal with open questions related to wastewater reuse applications and occurrence of contaminants of emerging concern in order to bring the attention of policy makers to this field of research. This activity will be organised as follow-up of the DARE COST Action TD0803) (NIREAS, University of Cyprus).
AW-1	Workshop N°1: "Engineered nanomaterials in the environment: analysis, occurrence and impacts" organised as part of the 9th edition of Nanoforum (University of Salento, **Rome, September 2013**)
ILS-1	Organisation of an interlaboratory comparison study on *in vitro* bioassays for testing of chemicals in concentrated surface water samples as part of the NORMAN WG on Bioassays (RWTH – University of Aachen).
ILS-2	Organisation of a collaborative trial on non-target screening of selected water samples from the Danube river with the GC-MS and LC-HR-MS(MS) methodologies available in participating laboratories. In 2013, launch of the study, including preparation of the ILS protocol, distribution and analysis of the samples by the participating laboratories. This activity will be pursued in 2014 with treatment of the results, drafting of the report and organisation of a workshop for discussion and dissemination of the results (EI).
ILS-3	Organisation of a proficiency test on sweeteners in drinking and ground water to see how reliable the analysis of these compounds is. The study shall foster the harmonisation of approaches and the validation and comparability of data and also serves as a proof of competence for the participating labs (full in-kind contribution of IWW).
LVS	Development and validation of a NORMAN methodology for large volume active sampling for effect-based monitoring, chemical screening and EDA (UFZ).
PS-1	Development of a NORMAN methodology for continuous screening of large rivers using passive sampling in order to assess the applicability of this temporally- and spatially-integrative sampling approach as a water quality monitoring tool (link to the Joint Danube Survey 3) (RECETOX).
PS-2	Organisation of an expert group meeting combining both eco-toxicology and passive sampling experts to investigate how the passive sampling results relate to EQS values and vice versa. EQS values are derived from exposure experiments but also use relations

	between concentrations in different environmental compartments. The latter may give a good basis to develop EQS values for results of passive sampling or transfer passive sampling results to a compartment that can be tested versus EQS values. The suggested workshop will explore the scientific basis for such conversions (RECETOX).
AW-6	Non-target screening of all JDS 3 surface water samples (68 sites) with routine GC-MS and LC-HR-MS(MS) techniques (full in-kind contribution of Environmental Institute).

The proposed budget will be revised by the Steering Committee in April 2013. All approved scientific activities will be implemented, independently of the revision of the budget.