NORMAN Association
Network of reference laboratories, research centres and related organisations for monitoring of emerging environmental substances

NORMAN DATABASES
www.norman-network.net (Databases)

Jaroslav Slobodnik
**EMPOMAP**: Database of European leading experts, organisations and projects

<table>
<thead>
<tr>
<th></th>
<th>June 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of registered users</td>
<td>418 (more than 200 different organisations)</td>
</tr>
<tr>
<td>Registered experts</td>
<td>68 (+40 in draft)</td>
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<tr>
<td>Organizations</td>
<td>29 (+250 in draft)</td>
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<tr>
<td>Projects</td>
<td>109 (+16 in draft)</td>
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EMPODAT: Database of occurrence/monitoring data on emerging substances

• NORMAN substances (WG on Prioritisation)

• Three modules:
  – Chemical data including sub-module on nanoparticles
  – Bioassays - monitoring data
  – Bioassays - ecotoxicity studies

• Data entry
  – Excel Data Collection Templates – downloadable
  – Metadata from the Common template for data collection (WFD PS, DG ENV)
  – Matrices: water, sediment, SPM, biota, air
Total number of substances: 260
EMPODAT – Data scoring

NEW!!!

<table>
<thead>
<tr>
<th>QA/QC information about chemical data</th>
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</thead>
<tbody>
<tr>
<td>Limit of Detection (LoD):</td>
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<tr>
<td>Limit of Quantification (LoQ):</td>
</tr>
<tr>
<td>Analytical method/Detection:</td>
</tr>
<tr>
<td>Analytical method/Detection: (other)</td>
</tr>
<tr>
<td>Show only data in the following category (Instructions):</td>
</tr>
</tbody>
</table>

| Limit of Detection (LoD): | < |
| Limit of Quantification (LoQ): | < |
| Analytical method/Detection: | HPLC-MS or MS/MS, GC-MS or MS/MS, HPLC-UV |
| Analytical method/Detection: (other) | GC-AED (atomic emission detection) |

- Adequately supported by quality-related information
- Supported by limited quality-related information
- Minimal quality-related information
- Not supported by quality-related information
EMPODAT

QA/QC category of data

- Adequately supported by quality-related information: 10%
- Supported by limited quality-related information: 2%
- Minimal quality related information: 2%
- 86%

Origin of data

- Monitoring results: 85%
- Research/technical studies: 11%
- Surveys: 4%
EMPOMASS: Mass spectral database of unknown and provisionally identified substances

• Collection of “fingerprints” of unknown substances
• Semi-quantitative estimation of concentrations
• Two modules
  – GC-MS
  – LC-MS-MS
  – including option of accurate mass measurement
    • NORMAN’s WG on Effect Directed Analysis
• Data entry
  – Data Collection Templates for bulk data upload - downloadable
  – Each data entry accompanied with searchable mass spectrum (AMDIS) and raw mass chromatogram
  Matrices: water, sediment, SPM, biota, air
Other considerations

• Inclusion of all river basin specific substances and Annex III (EQS Directive) compounds??

• Agreement with DG ENV and DG RESEARCH to make an upload of all data on emerging substances generated within future EU-funded (e.g., FP) projects mandatory

• Harmonise efforts with:
  – Reporting/upgrade of DWD
  – REACH
  – EEA - WISE
NORMAN Data Exchange Workshop
December 2010, Berlin

Harmonisation of data formats across EU

Towards automated data exchange protocols

Design of user-friendly interface(s) allowing for bringing NORMAN data to the end-users and public

Interested??? slobodnik@ei.sk