

## Proposals for NORMAN Joint Programme of Activities 2026

<b>Title</b>	<b>Adding FAIR-TPs website to NORMAN Database System</b>
<b>Type of activity</b>	Website / service maintenance / development
<b>Leader</b>	Emma Schymanski, Bashir Mayahi (LCSB, University of Luxembourg)
<b>Topic / activities</b>	<p><b>Background / Justification for the proposed activity:</b></p> <p>The NORMAN-SLE (see separate JPA) contains a wealth of transformation product information that is difficult to appreciate and explore. The FAIR-TPs website (<a href="https://fairtps.lcsb.uni.lu">https://fairtps.lcsb.uni.lu</a>) was designed to facilitate browsing TP data available in PubChem (much of which comes from the NORMAN-SLE) and provide users with the option to contribute open TP data to expand this knowledgebase. FAIR-TPs provides visualization of transformation reactions, interactive browsing of reaction networks including multistep pathways and image downloads, CSV/XLSX/patRoon/MetFrag exports to support MS E workflows, thumbnails and identifiers, precursor/TP relationships, and compound-level statistics. An overview of datasets, top mass differences, reaction counts, transformation types, and end-product precursor networks is available at <a href="https://fairtps.lcsb.uni.lu/stats">https://fairtps.lcsb.uni.lu/stats</a>. FAIR TPs links two easily accessible templates: the “transformations” template and the BART template which can both be used to provide data to FAIR-TPs, as described on the website. FAIR-TPs provides an overview of dataset coverage and enables detailed inspection of TP networks and users can explore parent compounds and their transformation products across sources</p> <p><b>Description of the proposed activity and expected outcomes for 2026:</b></p> <p>So that NORMAN members can profit from these developments, we propose to integrate FAIR-TPs as an external database in the NORMAN Database System (similar to MassBank.EU). This will expand the offering of the NDS to cover transformation product functionality – a feature that has been of interest for many years – and prevent the need for parallel development. Since the website already exists, integration in the NDS is the only major task for this JPA.</p> <p>NORMAN have requested a separate JPA for this activity, rather than integrating it in the NORMAN-SLE JPA, so that we can gauge interest in this activity.</p> <p><b>Added value / Link with other NORMAN activities and / or other projects</b></p> <ul style="list-style-type: none"> <li>- New resource with dedicated transformation product functionality</li> <li>- Complement existing databases NORMAN-SLE, NORMAN SusDat, MassBank, etc ...</li> <li>- Content already integrated in PubChem</li> <li>- Discussions undergoing with enviPath team for complementary functionality (hence offering the two template formats).</li> <li>- Possibilities to add data will act as a “test bed” for similar actions for NORMAN-SLE</li> </ul>
<b>Participants</b>	LCSB, EI (and any partners interested in contributing data)
<b>Proposed in-kind contribution</b>	All development of the website by LCSB so far has been in kind; continuing development likewise Server hosting, etc all in kind by LCSB.
<b>Contribution needed from NORMAN Association<sup>1</sup></b>	<p>Small costs may be associated with integration in the NDS, which is hard to scope as NDS2.0 is still under development. We have put a nominal amount to be distributed between EI &amp; LCSB depending on needs. Funds will only be claimed if required.</p> <p>€2,500 for EI/LCSB to support integration in NDS</p>

<sup>1</sup> Please, provide here a transparent justification of the requested resources and of the in-kind contribution, thereby distinguishing between the costs associated with “person-months” for the organisation, the “travelling costs” for invited speakers and the costs for the logistics (e.g. meals, room rental etc.)