The threat of synthetic drugs is one of the most significant current drug problems worldwide. Amphetamine-Type-Stimulants (ATS) are the second most widely used drugs. The presence of its precursors (e.g. APAAN, BMK) in the sewage could be used as a marker to account for the location of illicit drug production labs on a given area.

- The aim of this project is to design, develop and test a prototype of a system for legal recording, retrieving and monitoring operations of ATS and ATS precursor laboratories in urban areas.
- The sensor system will be installed within the sewage system in order to track waste associated to ATS production. Criminal investigators and forensic specialists will use the system.

The microMole prototype will contain the following features:
- miniaturized system for DN 200 sewage pipes
- high-specificity electro-chemical sensors
- integrated micro-tanks for sample storage
- secure GSM and radio communications for remote monitoring

Analysis of privacy law, data protection and social acceptance will be carried on at different stages.

Advising partner for wastewater composition, chemical & physical properties and sampling concepts.

Organisation, implementation and monitoring of tests of the (sub-)devices in real-life environment in cooperation with the Kompetenzzentrum Wasser Berlin (KWB).

Sewer network modelling in cooperation with tandler.com (++Systems) in order to have a rough estimation of the drug waste concentration that can be expected at different sites in the sewer system downstream a given site of disposal.

Preliminary study on temperature differences in the sewer system.

There are 11 consortium members within the project:
Warsov University of Technology (Poland), Central Forensic Laboratory of the Police (Poland), Federal Criminal Police Office (Germany), Blue Technolgies (Poland), CapSenze (Sweden), JGK Tech-Pipeferret (Iceland), Fraunhofer Gesellschaft (Germany), Tilburg University (the Netherlands), Ghent University (Belgium), Université Claude Bernard (France), Universität der Bundeswehr München (Germany).

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