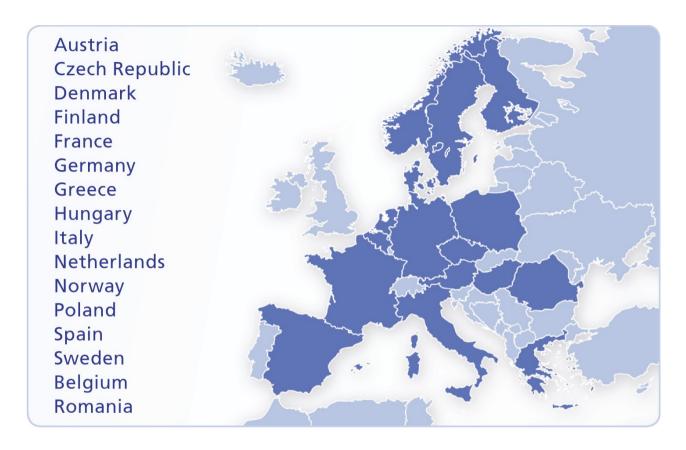
EU-OPENSCREEN

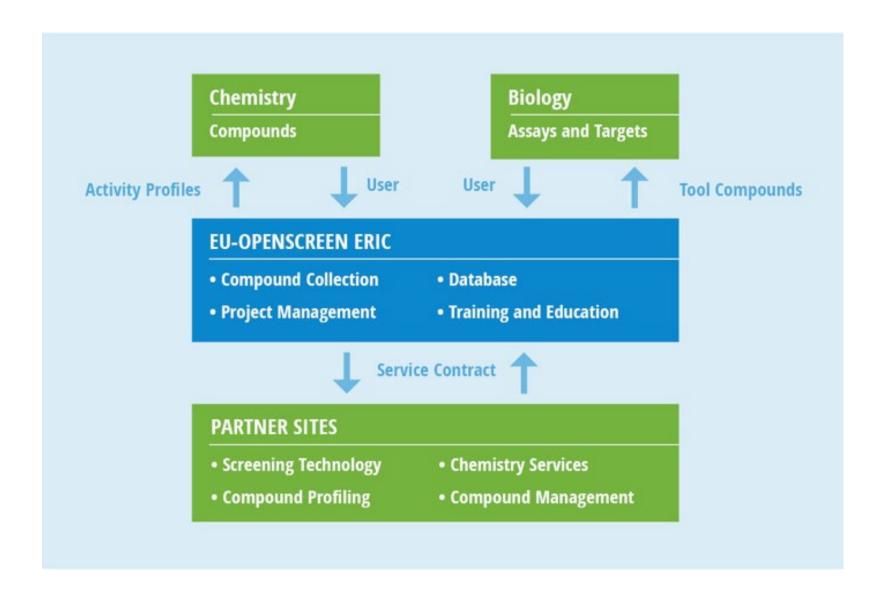


Consortium: National networks in 16 European countries.

Aim: Establishment of a distributed pan-European infrastructure of open-access screening



Az EU-OPENSCREEN koncepció

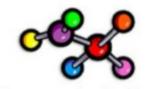


ERIC structure

ERIC

European RI components; core-funding through ERIC-membership fees







Compound collection

Data

Storage, logistics, maintenance etc. of compound collection Curation of database, implementation of data standards, links to other databases, updates Implementation of user projects (screening); initial characterisation/QC of compound collection chemical optimisation of compounds



Central Compound Management Facility



Database host institution



Screening platform



Chemistry groups

Compound Library

The European Chemical Biology Library (ECBL) will be built on the expert knowledge of European chemists.

ECBL will be composed of proprietary compounds collected from European chemists as well as of selected commercial compounds to optimally serve the research community and its needs.

Chemists donating compounds will instantly receive back this information on the bio-profiles of their substances as a fair compensation for their donations.

High throughput screening (HTS)

An EU-OPENSCREEN screening site will take the robust, miniaturised assay together with established orthogonal and counter screens through the high throughput screening process, followed by confirmatory (dose response) and counter screening (identical assay without the target or with non-functional target), until a final list of confirmed hit compounds is established.

Database

All results will be collected and published in a central European Chemical Biology Database (ECBD). ECBD will be a web portal with advanced search and analysis capabilities. In this way users not only exploit the EU-OPENSCREEN infrastructure for their own projects, but directly contribute to the knowledge base of the whole scientific community.

Assay adaptation

The transfer of a bench-top assay to a microplate adapted version is carried out either at the laboratory of the project owner or a nearby assay adaptation site. Scientists of the assigned EU-OPENSCREEN screening site will assist by advice. A pilot screen of about 3000 compounds (max 10 microplates of 384wells) is to be conducted twice and data transmitted to the screening site. The maturity of the assay is then certified by the screening centre.