

## Introduction

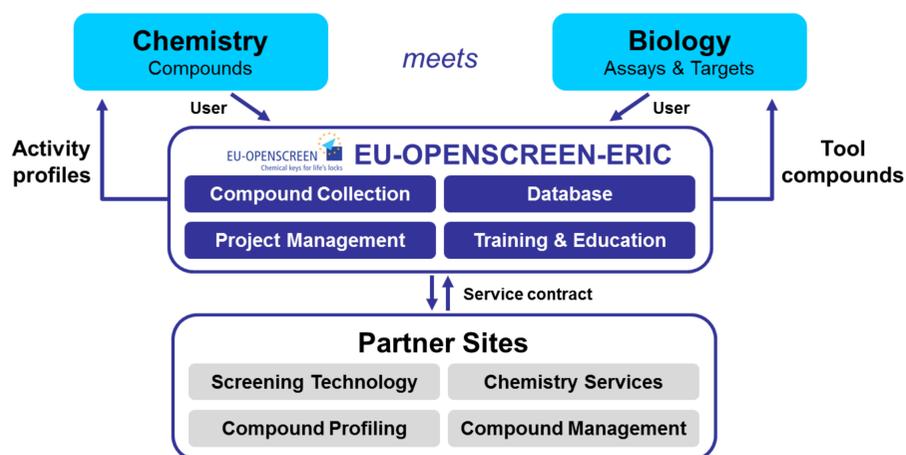
EU-OPENSREEN ([www.eu-openscreen.eu](http://www.eu-openscreen.eu)) is the largest emerging academic chemical biology research infrastructure initiative in Europe.

As a joint effort of national networks in 16 European countries, EU-OPENSREEN will collaboratively develop novel molecular 'tool' compounds (or 'probes') with external life sciences users (cell and molecular biology, microbiology, early drug discovery etc.). It supports all stages of a tool development project, including assay adaptation, high-throughput screening, chemical optimisation of 'hit' compounds, and biological characterisation of the final 'tool' compounds.

By integrating high-capacity screening platforms throughout Europe, which jointly use a rationally selected compound collection (100,000-200,000 compounds), and by making all generated datasets available to the scientific community without restrictions on use, EU-OPENSREEN generates well-annotated, standardised, controlled datasets of biological activities of small molecules with great coverage of chemical space and biological contexts, which are made available in EU-OPENSREEN's freely accessible database.

Pharmaceutical companies have made significant investments in the past decades to improve their own compound collections. Most academic compound collections mainly comprise compounds which are commercially available; however, proprietary compounds synthesized by academic chemists represent a rich, untapped source for novel chemical diversity. Therefore, EU-OPENSREEN will actively source academic compounds in Europe to expose them to a much greater range and number of biological targets beyond the purpose for which the compounds were initially synthesized.

## Distributed pan-European research infrastructure



EU-OPENSREEN is a distributed research infrastructure which integrates high-capacity screening platforms and chemistry groups throughout Europe. EU-OPENSREEN provides access to these resources for external biologists and chemists.

## Cooperation with Industry

**EU-OPENSREEN is open to users from industry for the formation of mutually beneficial partnerships:**

- e.g. target validation with a pharma company
- e.g. co-development of enabling technologies with a discovery tools or instrumentation developer

**'Associate Industrial Partner' membership status for SMEs, biotechnology and pharmaceutical companies:**

- directly engage with EU-OPENSREEN, learn about how to best work together and then advance towards larger research partnerships
- directly interact with individual consortium partners within EU-OPENSREEN's distributed network of chemistry and biology platforms, which may hold unique technologies, software tools, and scientific and technical expertise that might not be available in-house
- respected partners of EU-OPENSREEN and directly report to the Governing Board, the highest governing body of EU-OPENSREEN

## EU-OPENSREEN



EU-OPENSREEN is the largest emerging academic chemical biology research infrastructure initiative in Europe. Start of implementation in 2016.



As a joint effort of national networks in 16 European countries, EU-OPENSREEN will collaboratively develop novel molecular tool compounds with external users from various disciplines of the life sciences (microbiology, cell and molecular biology, early drug discovery etc.).



EU-OPENSREEN supports all stages of a tool development project, including assay adaptation, high-throughput screening, and chemical optimisation of 'hit' compounds.

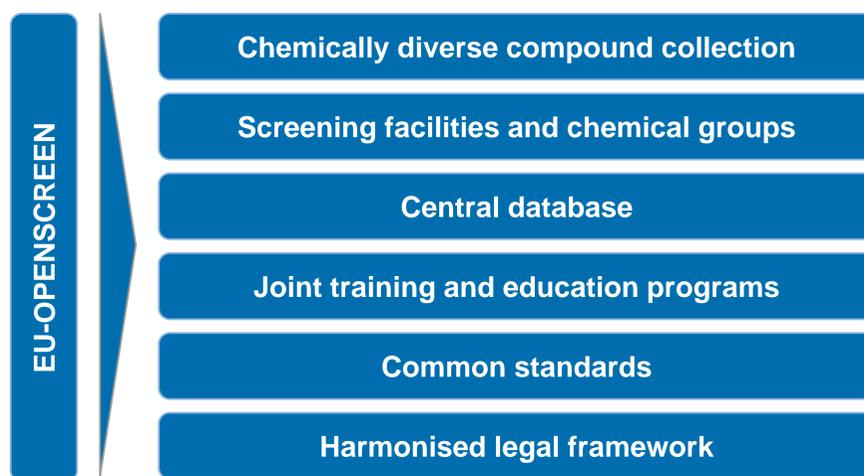
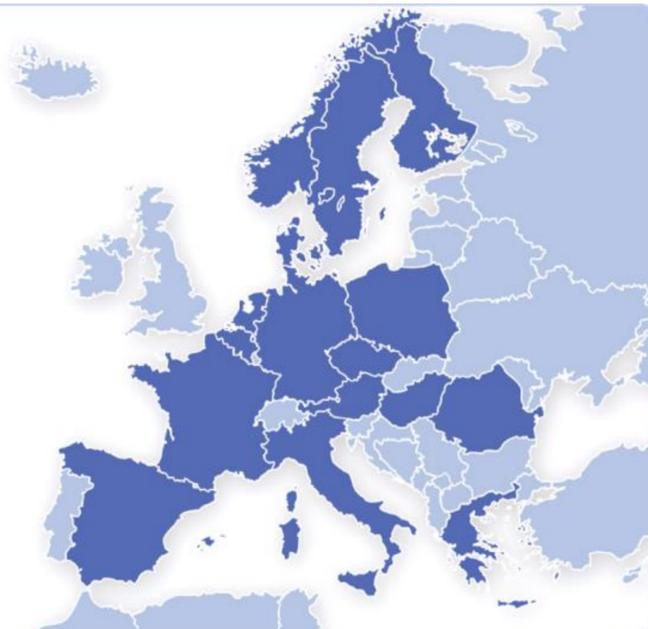


EU-OPENSREEN integrates high-capacity screening platforms throughout Europe, which jointly use a rationally designed, chemically diverse compound collection, comprising commercial as well as proprietary compounds collected from European chemists.



All generated tool compounds and data will be made available to the scientific community without restrictions on use.

Austria  
Belgium  
Czech Republic  
Denmark  
Finland  
France  
Germany  
Greece  
Hungary  
Italy  
Netherlands  
Norway  
Poland  
Romania  
Spain  
Sweden



## Timeline



EU-OPENSREEN is an emerging research infrastructure. It is currently in its 'Transition Phase', during which future member countries agree on a common funding model, user access policy etc. During the Construction Phase, the compound collection, database and central office will be established. Projects will be implemented during the Operation Phase, starting in 2017.