

European Web Search Infrastructure: Upholding Values, Boosting Economy

Web search is a backbone of our digital economy and daily lives, but a few big tech gatekeepers control what we can - and cannot - find on the Web. This threatens neutral and transparent access to Web information and results in a huge economic imbalance as well as a lack of information sovereignty.

Currently, there are only four major universal web indices which is the basis for any web search: Google and Bing/ Microsoft (both USA), Yandex (Russia) and Baidu (China). A web index can be seen as a large database that stores and organises up-to-date information about the content of web pages. More than 90 % of all search queries in Europe go through Google. This means that Europe is entirely dependent on non-European search providers and their mainly commercial interests.

This overwhelming reliance on non-European companies for web search and large-scale web analytics is a threat to Europe's sovereignty and values, and has a direct impact on the European economy.

Moreover, global web indices provide the basis for many other digital services that go far beyond search, such as Large Language Model training (e.g. 'ChatGPT') or other forms of generative Al. However, of utmost importance for European research, development and innovation is free access to unbiased information.

What?

Building a cooperative ecosystem for Open Web Search and large-scale Webdata Analysis in Europe

Why?

- 1. Ensuring Europe's strategic autonomy and digital sovereignty
- 2. Strengthening competitiveness and creating opportunities for innovation and business
- 3. Promoting European values, trust and diversity in the Web

How?

Building a European Open Web Search Digital Infrastructure Consortium (EDIC)

New Web Search Solutions for Europe

Europe needs to regain free access to information built on unbiased and transparent access rules, grounded in European law and ethics. EU institutions and member states are striving to control the big tech players through legislation. However, to reclaim sovereignty and diversity in Web search and large scale Web analytics, the EU urgently needs to start building a European Digital Infrastructure Consortium (EDIC) – to create its own technical solutions and alternatives.

The **Open Web Search Initiative** suggests Europe to build, host and maintain a distributed, publicly accessible and democratically curated **Open Web Index (OWI)**, covering the global public Internet.

Ensuring Europe's strategic autonomy and digital sovereignty

A publicly accessible Open Web Index under European jurisdiction and democratic control would be comparable to the Galileo or Copernicus programmes and therefore become the most important asset for Europe's independence in navigating and searching the digital space. Created and maintained as a European infrastructure it will allow the web to be used as a valuable resource on a large scale, significantly strengthening Europe's strategic autonomy.

Building and operating the sustainable, federated infrastructure is in line with the EU's 2030 digital goals and the EU's digital rights and principles for the digital decade.

The Open Web Index Infrastructure will be

- a) a public good,
- b) a federated asset with distributed operation,
- c) designed to protect privacy and personal data,
- d) trustworthy and neutral, and
- e) open for future endeavours.

Strengthening competitiveness and creating opportunities for innovation and business

An Open Web Index will enable European researchers, innovators and companies to systematically tap the web for new web search solutions and innovative business models - without having to incur huge upfront costs for data An Open Web Index will enable all-new public and private web services, boosting innovation Open Web Search Big earth data processing in Europe **Mobility Servic Geo Spatical Services** Artificial Intelligence Large Language Models (ChatGPT) Digital humanities WEB Data Pool Science and R&D OLLLOLLLOLOLOL **Business Intelligence** LLOLOLOLOLOLOL **Online News & Info NEWS O** Internet of things Web Statistics ndustry 4.0 CyberSecurity Commerce

collection and pre-processing. This will help overcome the high barriers to entry that often prevent smaller European companies from developing significant web data-based innovations.

The Open Web Index is particularly crucial for the provision of state-of-the-art web search services and for European innovations, such as AI/Large Language Models. It will thus stimulate the growth and diversity of the internet economy in Europe.

Promoting European values, trust and diversity in the Web

An Open Web Index will also promote an open, humancentred search engine market in Europe. It will thus contribute decisively to a shift from the current monopolised web search to a diverse search engine market.

An Open Web Index will:

- → give Europe's citizens a true choice for selecting search engines fitting their preferences
- → promote European diversity and inclusion by better reflecting European cultures and languages in search and web analytics
- → support participatory and democratic discourse and strengthen the resilience of European citizens through improved access to information and knowledge in the Web
- → help to counter disinformation

The next steps for building a Web Search Ecosystem in Europe

In 2023-2025, the **OpenWebSearch.eu project** is designing the core of the European Open Web Index, based on open source software and deployed across various high performance computing centres in Europe. In addition, a first model for a governance structure and a financial model for the Open Search ecosystem is currently being developed.

Towards a European Digital Infrastructure Consortium (EDIC)

EU Member States and the European Commission need now to prepare the political and organisational conditions for the expansion of such a European digital infrastructure. It is important to quickly put the Open Web Search at the top of the political agenda, initiate discussions with relevant stakeholders, policy makers and technical experts in the Member States and secure the necessary funding.

The funding for the European Open Web Index should come frome a mix of public funding, subscription fees (e.g. freemium model) and private investment.

We call on the EU Member States and the European Commission to establish a European Digital Infrastructure Consortium (EDIC) and to allocate funds for it in the next multi-annual financial framework. This will be an essential step towards an EU programme for a European Open Web Index and web analytics in the coming years.

In order to express your support and to establish a cooperation please contact the OpenWebSearch. eu consortium:

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^{*} The project OpenWebSearch.eu has received funding from the European Union's Horizon research and innovation programme under grant agreement No 101070014.