CLAIRE

CONFEDERATION OF LABORATORIES FOR ARTIFICIAL INTELLIGENCE RESEARCH IN EUROPE

Excellence across all of AI. For all of Europe. With a Human-Centred Focus.

claire-ai.org

CLAIRE

"Artificial intelligence has the potential to change the world, more so than almost any other technology. To realise this potential, we need better planning, organisation and funding. To do it in a way that benefits the humanity, a public initiative such as CLAIRE is our best bet."

— Mitja Luštrek, Chair of the Slovenian Artificial Intelligence Society, Head of the Ambient Intelligence Group at the Department of Intelligent Systems, Jožef Stefan Institute, Ljubljana, Slovenia

The Age of AI

- **AI = global "game changer":**

  fundamentally changes the way we live and work,

  addresses society's grand challenges

- **Europe is under pressure:**

  investment in AI talent, research, innovation, technology

  impact on economy and society

  increasing dependence on AI developed elsewhere

- **"AI Made in Europe":**

  reflecting European needs and values

CLAIRE

- bottom-up initiative by the European AI community,
  seeks to strengthen European excellence in AI research
  and innovation

- pan-European Confederation of Laboratories
  for Artificial Intelligence Research in Europe
  that achieves "brand recognition" similar to CERN

Vision:

- Excellence across all of AI

- AI made in Europe, for all of Europe (and the world)

- AI with a Human-Centred Focus

Support for CLAIRE

- 2719 individuals from 63 countries

- 248 research groups and institutions in the CLAIRE Network, representing > 7500 people

- 20 national AI associations, EurAI, AAAI

- DFKI, FBK, Inria, TNO, ESA

- Governments of Italy, Belgium, Czech Republic

"[…] both the research and the educational aspects of the CLAIRE initiative are of critical importance for the interdisciplinary future of medicine."

– Nima Aghaeepour

Assistant Professor

Stanford University School of Medicine,

USA

"AI is a critical new enabling technology for Europe's earth observation sector, whose growth will be accelerated
by Europe strengthening its own AI capabilities.

[…] I strongly support the vision for European AI excellence put forward by CLAIRE."

— Josef Aschbacher

   Director of Earth Observation,

   European Space Agency,

   Italy

Goals

1) **Establish the CLAIRE Hub and network of centres of excellence in AI**

   central facility, critical mass and focal point for European AI;

   network of centres across Europe, increasing production and flow of

   knowledge.

2) **Focus on human-centered, trustworthy AI**

   major increase in funding towards existing scientific strengths in AI;

   novel research opportunities, key European interests.

3) **Work with key stakeholders**

   mechanisms for citizen engagement, industry and public sector collaboration;

   innovation-driven startup and scale-up;

   define and address challenges in various sectors and across a wide range of

   applications.

"The richness of AI methodologies and tools are crucial for conceiving a new generation of data processing systems […].

The CLAIRE initiative may play a precious role toward this goal, by fostering collaborations among different research groups […]."
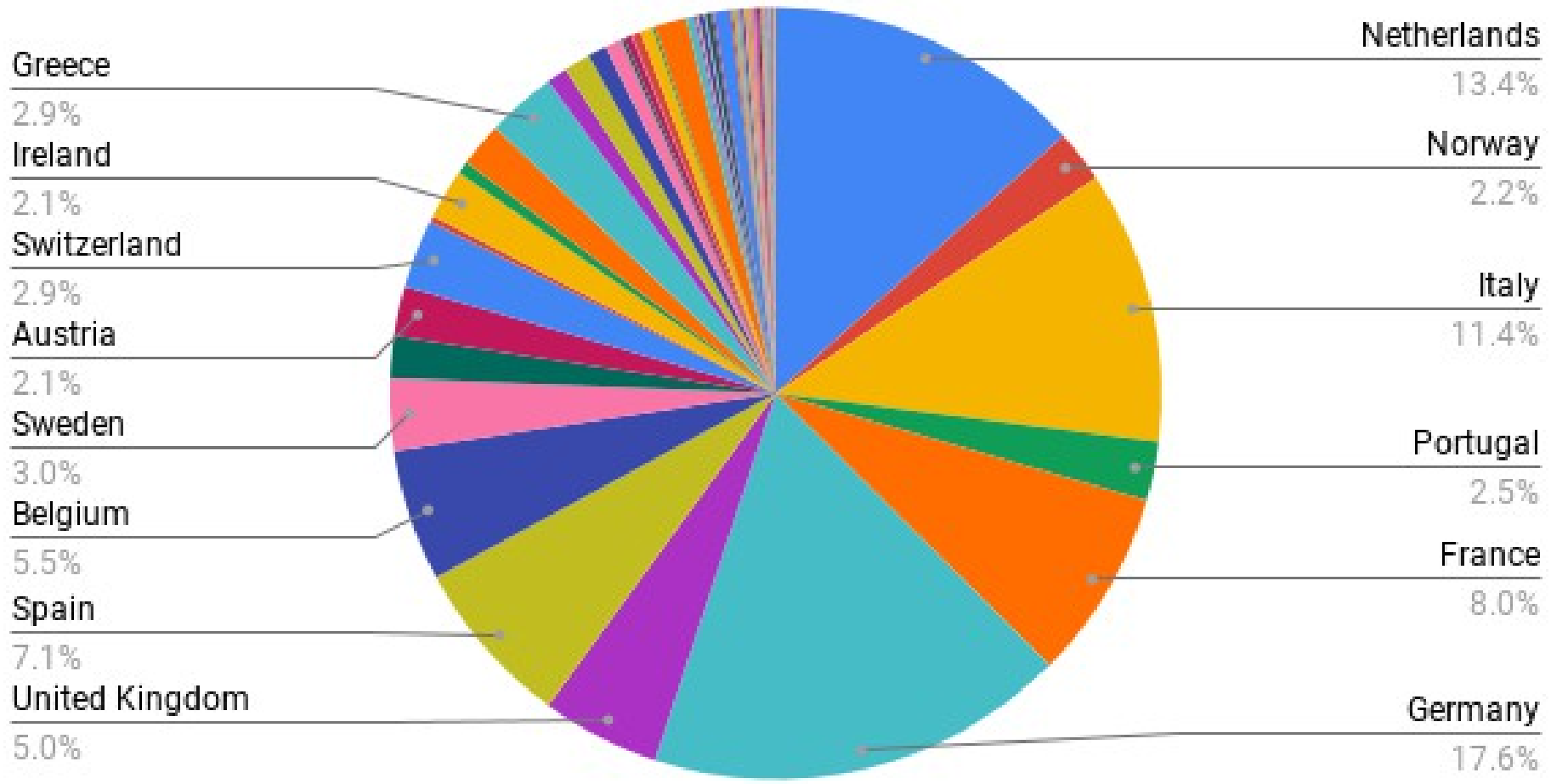
— Maurizio Lenzerini, EurAI Fellow, AAAI Fellow, ACM Fellow, Member of Academia Europaea, Univ Roma "La Sapienza", Italy.
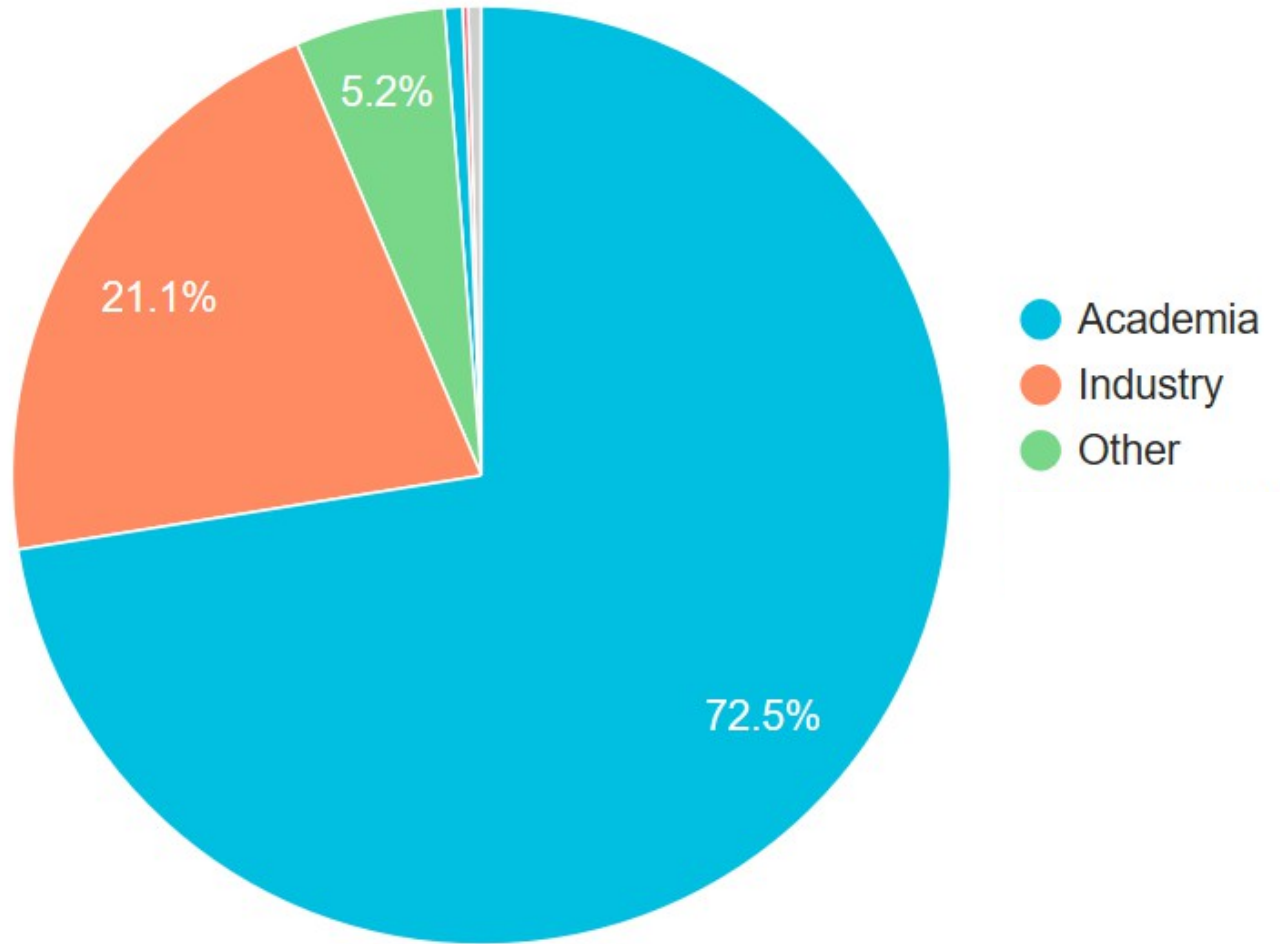
Individual Supporters

- Total number of supporters: 2719

  - from 63 countries

  - 644 from industry

  - 1577 with PhD-level expertise in AI or equivalent

- Support from Inria, TNO, DFKI, FBK

Number of Supporters per Country

Netherlands 13.4%

Norway 2.2%

Italy 11.4%

Portugal 2.5%

France 8.0%

Germany 17.6%

Greece 2.9%

Ireland 2.1%

Switzerland 2.9%

Austria 2.1%

Sweden 3.0%

Belgium 5.5%

Spain 7.1%

United Kingdom 5.0%

Academia — 72.5%
Industry — 21.1%
Other — 5.2%

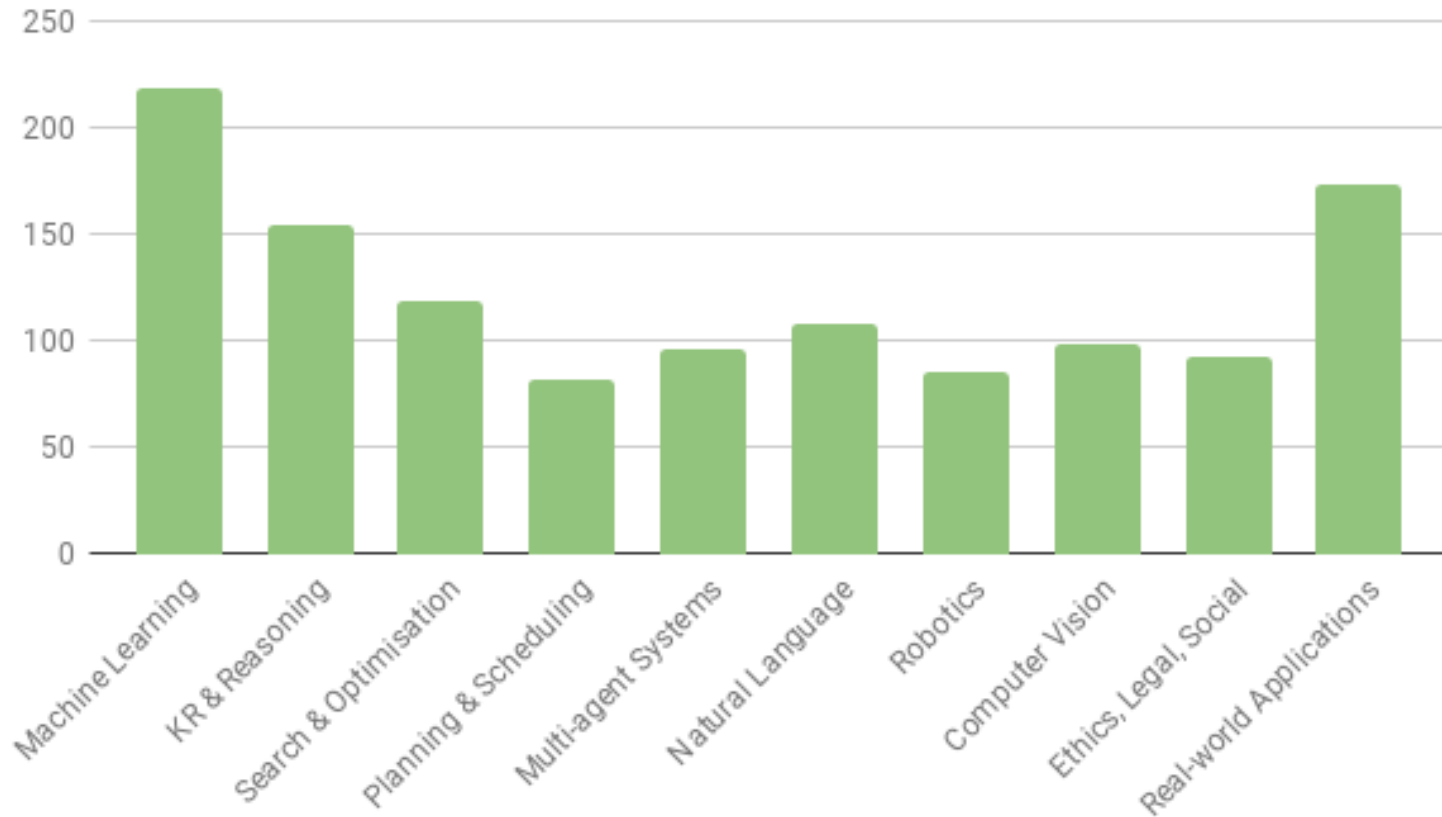MI

CLAIRE Network

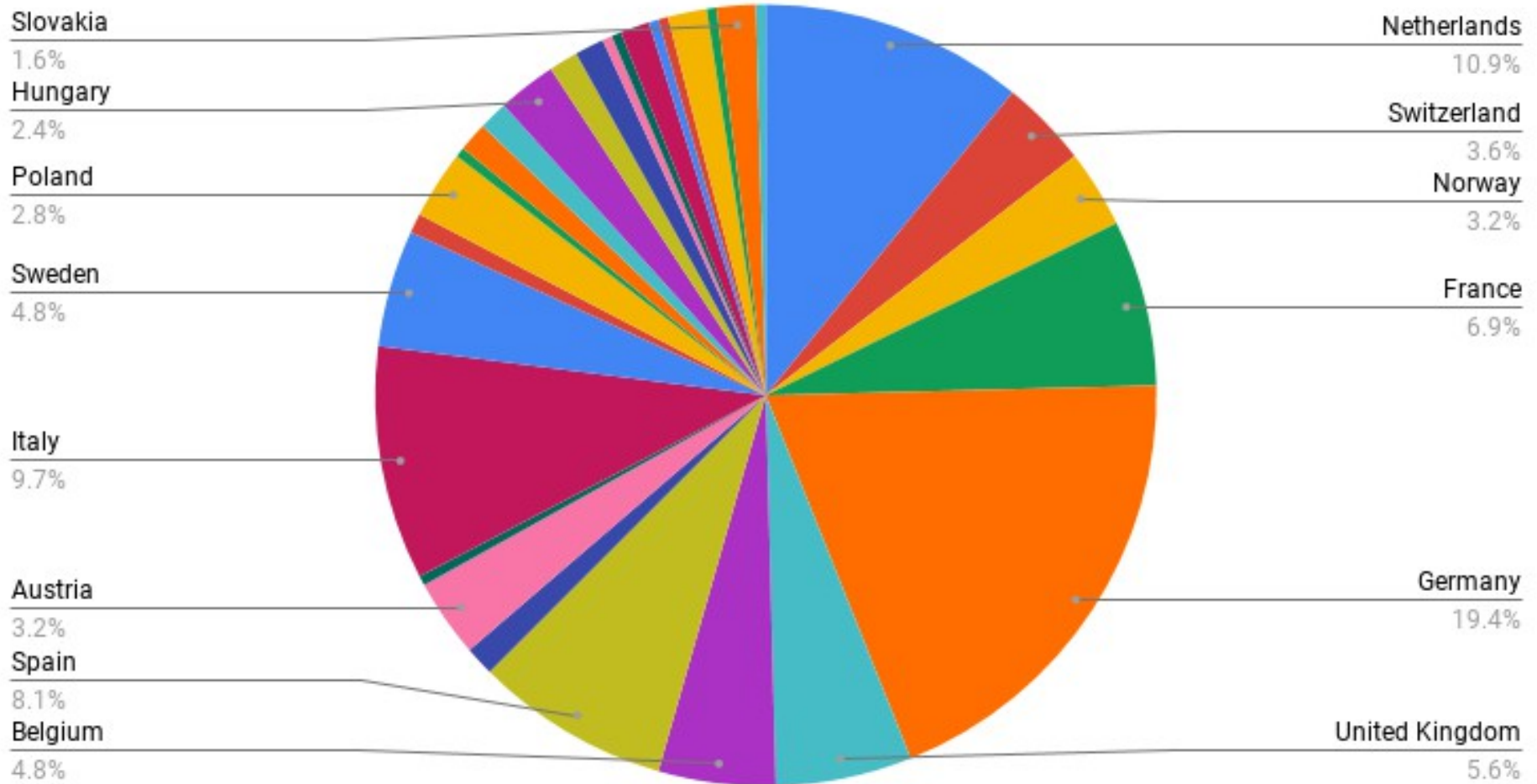started on 10 December 2018

248 research groups and institutions

from 31 countries

spanning all areas of AI

CLAIRE Network
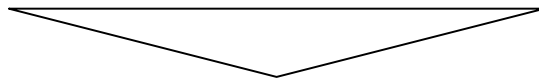

Areas of AI of Labs in Network

Number of labs in CLAIRE Network by Countries

Slovakia 1.6%
Hungary 2.4%
Poland 2.8%
Sweden 4.8%
Italy 9.7%
Austria 3.2%
Spain 8.1%
Belgium 4.8%
Netherlands 10.9%
Switzerland 3.6%
Norway 3.2%
France 6.9%
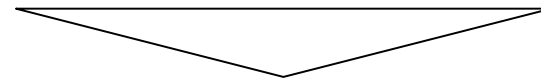Germany 19.4%
United Kingdom 5.6%

Informal Advisory Groups

- Machine Learning (5)
- Knowledge Representation and Reasoning (6)
- Search and Optimisation (5)
- Planning (5)
- Multi-Agent Systems (5)
- Natural Language Processing (4)
- Robotics (4)
- Computer Vision (5)
- Ethics, Legal, Social Issues (9)

Connect to communities within AI

geo balancing constraints

EU High-Level Expert Group

10 members from CLAIRE:

Urs Bergmann	Maria Bielikova
Virginia Dignum	Raja Chatila
Fredrik Heintz	Luciano Floridi
Francesca Rossi	Barry O'Sullivan
Aimee Van Wynsberghe	Philipp Slusallek

Comments on Draft Guidelines for Trustworthy AI:
- Lively discussion within CLAIRE community at large (IAG ELS)
- Resulting in official CLAIRE input to HLG and EC
- Many individual submissions of feedback via AI Alliance

Humane AI Flagship

New Flagship call in 2018
- 1. Phase (successful application)   ☑
  - „Humane AI" proposal submitted by small AI consortium
- 2. Phase (successful application)   ☑
  - Larger preparatory consortium
- 3. Preparatory phase (1 year, 1 M€, starting March 1st)   ☑
  - Open to all; result of this phase will be the final proposal

- **<u>HUMANE AI</u>**, the FET Flagship Project Proposal for New Ethical and Trustworthy AI Technologies to Enhance Human Capabilities and Empower European Citizens and Society, is a key component of the CLAIRE vision for European excellence in Artificial Intelligence.

UK/EU Letter

"We – the researchers and stakeholders comprising
CLAIRE [...] –
believe that, regardless of the future relationship
between the UK and the EU, it is of great importance that
all European nations, including the UK, closely
collaborate on research and innovation
in Artificial Intelligence."

- signed by 462 supporters of CLAIRE

- sent to Presidents of European Parliament, European Council,
  European Commission, governments of UK, EU27, CH, NO

Support from national governments

"The Italian government supports the vision on European AI excellence as outlined by the CLAIRE initiative (...) "

Sen. Andrea Cioffi
Italian Secretary of State for Energy Infrastructure

"Belgium is prepared to support [CLAIRE] and to play a key role in setting up an AI research infrastructure in Europe and a central hub, as a visible beacon for European excellence in research and innovation (...)"

Philippe de Backer
Belgian Federal Minister of Digital Agenda

"We support the key points expressed by CLAIRE, including the key focus on All of AI research, support for AI across of Europe, and a focus on Human-Centered AI."

Karel Havlicek
Vice Chairman of the Research, Development and Innovation Council of the Czech Republic

Further support

"[...] the City of Turin and the industry ecosystem of Turin
strongly support for a European AI Organization
as promoted by CLAIRE [...]"

Paola Pisano
Deputy Mayor of Turin

"[...] strongly support the vision for European AI excellence put
forward by CLAIRE, and look forwards to future collaboration."

Josef Aschbacher
Director of Earth Observation Programmes at ESA

"[…] the AAAI Executive Council has unanimously approved support
for the CLAIRE initiative [...]"

Carol McKenna Hamilton
Executive Director, on behalf of AAAI Executive Council

CLAIRE Offices

Temporary HQ in The Hague, NL

Additional offices

Saarbrücken, DE
Prague, CZ
Rome, IT
Oslo, NO

Centres of Excellence

- Distributed Centres of Excellence in AI should become highly visible and vibrant regional environments

- Excellent scientific personnel and students receive secondary appointments and spend part of their time at the central hub or in other centres of the network

- outstanding research infrastructure

- state-of-the-art collaboration infrastructure

- innovation infrastructure that facilitates industry collaboration and entrepreneurship

The CLAIRE Hub

- Highly visible, vibrant focal point for the CLAIRE network of AI laboratories / institutes

- Aims for impact and brand recognition of CERN

- Outstanding infrastructure for research and innovation "at Google scale"

- ~600 top scientists (visiting for periods of time) + ~400 world-class support staff (permanent)

- ~1B EUR / year budget (hub + network)