TECHETHOS

FUTURE ○ TECHNOLOGY ○ ETHICS

Welcome to TechEthos

We are a new EU-funded project on the Ethics for Technologies with High Socio-Economic Impact. Read on to find out more!

TechEthos in short

Some facts and figures about us

- Coordinator: AIT Austrian Institute of Technology, Austria
- Team: 16 organisations spanning 13 countries
- Start date: 1 January 2021
- Duration: 36 months
- Funding programme: H2020 Research and Innovation Programme
- Topic: SwafS-29-2020 - The ethics of technologies with high socio-economic impact

www.techethos.eu

The challenge

How can we prioritise ethics and societal values in the design, development and deployment of new and emerging technologies, particularly those with high socio-economic impact?

New and emerging technologies are expected to generate new opportunities and offer a wealth of socio-economic benefits. However, in the early stages of their development, these technologies also pose a number of potential ethical challenges and societal consequences.

The vision

Ethics by design, or in other words, bringing ethical and societal values into the design and development of technology from the very beginning of the process.

With this principle in mind, TechEthos will produce ethics guidelines for three to four technologies, ensuring that they work for different actors in the field such as researchers, research ethics committees and policy makers.

To reconcile the needs of research and innovation and the concerns of society, TechEthos will explore the awareness, acceptance and aspirations of academia, industry and the general public alike and reflect them in the guidelines.

The approach

1 Scan

2 Analyse

3 Enhance

4 Utilise

5 Cooperate

1. Scan

Technology Horizon

TechEthos will scan the horizon for new and emerging technologies with high socio-economic impact. The most impactful three to four technologies will be selected for our project work.

Technology ecosystems

The unique mix of people, institutions, regulations and cultural practices that surround each technology will be explored, grounding our future work on a solid, holistic understanding of each technology.

Past research and results

TechEthos will carefully scan past activities and research in this field, in order to build on already existing, high quality results.

2. Analyse (1/2)

Ethical issues

TechEthos will identify potential ethical issues – such as privacy and gender bias – and ethical principles that might be challenged by our selected technologies.

Expert perspectives

We will ask researchers, innovators, as well as technology, ethical, legal and economic experts to consider future scenarios, and contribute with their attitudes, proposals and solutions.

Societal perspectives

A series of events such as science cafés and workshops with local research and technology players will also ask the public about the attitudes, values and concerns triggered by those future scenarios.

2. Analyse (2/2)

Media discourse

The way media tackles technology topics both reflects and shapes, public opinion.
TechEthos will analyse me dia sources in 13 countries for insights into trends and issues.

Legal implications

TechEthos will consider the state of existing law and regulation currently in place for our selected technologies, and identify areas for improvement such as ensuring fundamental human rights and freedoms.

The needs of the R&I community

Active dialogue and workshops with different stakeholders in the Research & Innovation Community will allow us to understand
how TechEthos can best support their needs.

3. Enhance

Ethical and legal frameworks

We will consider the implications of our analysis for existing ethical and legal frameworks and outline a framework for how ethics can be included effectively in governance.

Operational guidelines

We will help the Research and Innovation community integrate the ethics of emerging technologies in their existing or new research protocols, and test and pilot them in the field.

Research integrity

We will make sure that all our work is in line with the European Code of Conduct for Research Integrity and that our work can contribute to its future revisions with novel insights.

4. Utilise

Ethical sensitivity tools

Researchers, innovators and regulators need tools that can strengthen their capacity for ethical decision making and sensitivity to ethical issues raised by new and emerging technologies.

Engagement tools

Exhibition content, scenarios, and games will be shared with science engagement professionals so that a dialogue with the broader public can continue after the project's lifetime.

Advocacy

A mix of high-level events, Policy Briefs, and ad-hoc support will be put in place to support policy makers in engaging with our recommendations for an ethically-informed decision making process.

5. Cooperate

Advisory and Impact Board

Throughout TechEthos, professionals will enrich the work of the project and ensuring we meet the highest
scientific standards and impact.

Synergies

TechEthos will collaborate with ongoing projects – such as the Sherpa project – and initiatives to act in synergy for activities, events and policy advice.

The team: Project coordinator

AIT – Austrian Institute of Technology, Austria

AIT is the largest research and technology organisation (RTO) in Austria, with over 1,400 employees, and a specialist in the key infrastructure issues of the future: health & bioresources, information technology, energy, mobility systems & transport, technology experience and innovation systems. The AIT Center for Innovation Systems & Policy is a central node in national and international research and innovation networks and an important partner for public administration, companies, universities and research institutes. It is a think tank and advisor for the Austrian and European policy. Our scientists are dedicated to addressing current and future challenges for research and innovation systems.

Contact: Eva Buchinger, Thematic Coordinator Societal Futures, eva.buchinger@ait.ac.at

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The team

Airi – Associazione Italiana per la Ricerca Industriale, Italy

Airi is a private non-profit association representative of a national network of about 100 members: large companies, SMEs's, research organisations, public research bodies and universities, financial institutions and industrial associations. Airi's mission is to promote industrial research. Its activity concerns technology assessment and foresight, dissemination, promotion of cooperation between industry and public research, multi-stakeholder dialogues and technology transfer, with a strong focus on Sustainability and Responsible Research and Innovation.

Contact: Andrea Pocari, Project Manager, porcari@airi.it

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The team

ALLEA – All European Academies, Netherlands & Germany

ALLEA is the European Federation of Academies of Sciences and Humanities, representing more than 50 academies from over 40 countries in Europe. Since its foundation in 1994, ALLEA speaks out on behalf of its members on the European and international stages, promotes science as a global public good, and facilitates scientific collaboration across borders and disciplines. Jointly with its Member Academies, ALLEA works towards improving the conditions for research, providing the best independent and interdisciplinary science advice, and strengthening the role of science in society.

Contact: Camilla Leathem, Science Policy Officer, leathem@allea.org

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The team

CEA – Commissariat à l'énergie atomique et aux énergies alternatives, France

CEA (Atomic & Alternative Energies Commission) is a French Governmental Research Organization devoted to both fundamental and industrial R&D. Through fundamental research in physics and chemistry, the Fundamental Research Division strongly contributes to all of CEA research programs in many fields of expertise, from renewable and nuclear energy, to health, lasers, micro and nanotechnology. The "Laboratory of Philosophy of Science" (CEA/DRF/IRFU/Larsim) is devoted to researching the relationship between science and society, focusing on the ethics of new technologies, such as nanotechnology, synthetic biology, robotics and artificial intelligence, and on education about the risks and benefits of science and technology for different audiences.

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The team

DMU - De Montfort University, United Kingdom

DMU is a leading younger university in the UK with approximately 21,300 students and 2,950 staff. DMU's School of Computer Science and Informatics (SCS&I) includes teaching, learning and research/commercial activities that broadly span computer science, computer security, information systems as well as games programming and artificial intelligence. The Centre for Computing and Social Responsibility (CCSR)is the only research centre in the UK specialising in the ethical and social issues of computing and information systems. It has a vibrant community of active researchers, participates in a number of EU funded projects and offers organisations independent advice on areas such as computer ethics, and Responsible Research and Innovation (RRI).

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The team

Ecsite – European Network of Science Centres and Museums, Belgium

ecsite

EUROPEAN NETWORK
SCIENCE CENTRES & MUSEUMS

Ecsite is the only Europe-wide network organization that links science centres and museums, natural history museums, zoos, aquariums, universities and research organisations among its 350 active members. The common thread uniting these organisations is a commitment to public engagement: pursuing the vision of fostering creativity and critical thinking in European society and emboldening citizens to engage with science and technology issues. Ecsite facilitates cooperation among Europe's science centres and museums – establishing standards, sharing expertise, disseminating best practice, encouraging collaboration and developing training programmes.

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The team

EUREC – European Network of Research Ethics Committees Office, Germany

EUREC Office is a European non-profit organisation whose purpose is to promote cooperation between national networks of research ethics committees (RECs) in Europe and to provide a platform of exchange on research ethics. The network interlinks European RECs with other bodies relevant in fields of research involving human participants, like national ethics councils and the European Commission's ethical review system. EUREC provides a sustainable infrastructure for cooperation among RECs and raises awareness of specific working practices across Europe. In this way, EUREC strives to enhance the shared knowledge base of European RECs, to support coherent reviews and opinions, and to help RECs meet new challenges and address emerging ethical issues.

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The team

TRI – Trilateral Research, United Kingdom & Ireland

Trilateral Research, with branches in both the United Kingdom and Ireland, specialises in research and the provision of strategic, policy and regulatory advice on new technologies, privacy, risk, surveillance and security issues. Their focus is on understanding the impacts of new technologies and identifying solutions that enhance innovation whilst ensuring responsible practices. The team collaborates across social science, ethics, legal analysis, and technology development to bring insights from each into supporting innovation respectful of ethical and social values. It has particular know-how on ethics and the law of data protection and is offering its expertise both within research projects and for public and private organisations.

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The team

TUD – Technische Universiteit Delft, Netherlands

TUD is the oldest, largest and most comprehensive university of technology in the Netherlands. With over 21,000 students and 3,000 academic staff (including 400 full professors), it is an establishment of national importance and of significant international standing. The Ethics and Philosophy of Technology Section of TUD is part of the Department of Values, Technology and Innovation at the Faculty of Technology, Policy and Management (TPM). The Ethics and Philosophy of Technology Section of TUD is world-leading in research on ethics of technological risk, design for values and responsible innovation.

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The team

UT – University of Twente, Netherlands

UNIVERSITY OF TWENTE.

UT is an entrepreneurial research university that focuses on technological developments in a social context. The University leads the 4TU.Centre for Ethics and Technology, one of the six Centres of Excellence of the 4TU.Federation. 4TU.Ethics brings together the expertise of the philosophy departments of the four technical universities in the Netherlands (Delft, Eindhoven, Twente, Wageningen) in the field of ethics of science, technology and engineering. The Department of Philosophy at the UT concentrates its research efforts exclusively in philosophy and ethics of technology and has become internationally recognized as one of the leading centers for philosophical and ethical analysis of technology and its role in contemporary society.

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The team

Science engagement organisations

Committed to inspiring people with science and technology and enabling dialogue between science and society, six science engagement organisations will deliver an innovative programme of activities open to the public (including vulnerable groups), including science cafés, dialogue events and exhibitions.

ScienceCenter NETZWERK

Austria

CENTER FOR THE PROMOTION OF SCIENCE

Serbia

iQ LANDIA

Czech Republic

PARQUE de las CIENCIAS
ANDALUCÍA - GRANADA

Spain

8UCHARE5T 5C1ƐNCƐ FƐ5T1VAL

Romania

Vetenskap & Allmänhet
VA – PUBLIC & SCIENCE

Sweden