NTNU Handbook of participation in European Platforms, Networks and Alliances

EIP-SCC
European Innovation Partnership on Smart Cities and Communities

CESAER
conference of european schools for advanced engineering education and research

EERA
European Energy Research Alliance

EFFRA
EUROPEAN FACTORIES OF THE FUTURE RESEARCH ASSOCIATION

ECS
EUROPEAN CYBER SECURITY ORGANISATION

EASSH
European Alliance for Social Sciences and Humanities

ERCIM
European Research Consortium for Informatics and Mathematics

eit Climate-KIC

NORDIC FIVE TECH

CHALMERS DTU KTH Aalto NTNU

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Introduction

1. What is the purpose?

The NTNU Handbook of European participation aims to provide a quick overview of relevant initiatives at the European level (European Technology Platforms, Alliances, etc., where NTNU is already a member, or a membership would fit the long-term strategy of NTNU.

The Handbook is intended to be a tool for providing referential NTNU entry points to researchers willing to explore European Research Area collaborations in their specific field of interest.

Partnerships, positioning, relevant actors in a specific field can be identified and approached in a direct way and engagement in relevant initiatives can be discussed with the researcher(s) representing NTNU in a specific initiative of interest.

In addition, a secondary goal of the Handbook is to provide information about possible cross-disciplinary activities for administrative staff at NTNU.

2. What type of information is here?

Each Platform/Alliance/etc has a short description about what it is, who the NTNU contact person is, who the administrative contact person is and link to its web page. When it is relevant, it is also stated which TSO or Enabling Technology that is related to it. In the context of this Handbook, the task for the administrative contact person is to stay up-to-date on changes in NTNU contact persons or if memberships are terminated.

Please send corrections and updates to Thomas Sørlie Hansen: thomas.hansen@ntnu.no.

3. Typology of the European platforms in the document

The platforms and alliances are divided in 11 different categories. The numbered list below is the same numbering as the chapters. Input on categorization for future versions is welcome.

1. European Platforms with shadow working groups at NTNU. These platforms (CESAER, EERA and ERCIM) receive extra attention, either at the central level or at a faculty level. NTNU staff is member of several working groups and coordinate their effort.
2. NTNU is a member of 17 out of 41 European Technology Platforms (ETP). The role for ETPs is to develop research and innovation agendas and roadmaps. ETPs are independent and self-financing entities. They conduct their activities in a transparent manner and are open to new members. ETPs are one of the most influential entities in shaping European R&I agendas.
3. NTNU is a member of (at least) 14 University alliances that has a specific European focus. The criteria to be listed is an NTNU institutional membership.
4. ERIC and ESFRI represents two level of maturity of European Research Infrastructures. NTNU is currently a member of, or affiliated with 8 European research infrastructures which are either a ERIC or an ESFRI.

5. NTNU is connected to 3 out of 10 Joint Programming Initiatives. The overall aim of the Joint Programming process is to focus research on a number of key areas for Europe. Participation in JPIs is committed at the national level, not at the institutional level.
6. Partnerships is a way to pool Europe's resources and encourage private investment in research and innovation. The most relevant for NTNU is the Public-Private Partnerships (PPP). NTNU or NTNU staff is currently active in 5 different PPPs.
7. COST funds pan-European, bottom-up networks of scientists and researchers across all science and technology fields (including Social Science and Humanities). COST aims to enable breakthrough scientific developments leading to new concepts and products. For instance, developing a new sub-genre of a research discipline. A secondary goal for COST is to «provide networking opportunities for Early Stage Researchers». COST can fund meetings, workshops, conferences, training schools and dissemination activities. It is possible to apply to join existing COST networks.
8. European Innovation Partnerships (EIP) are stakeholder platforms that bring together representatives from industry, public services, academia and NGOs. The goal is to provide a common platform for the entire value chain of a domain, and correspondingly these EIPs are highly influential in shaping the European research and innovation agenda.
9. The European Institute of Innovation & Technology (EIT) brings together leading higher education institutions, research labs and companies to form dynamic cross-border partnerships.
10. The European Commission out-source most of the policy advice across all sectors. To achieve this with a limited number of staff, the EU Commission has a high number Expert Groups consisting of researchers in all disciplines.
11. In addition, a set of relevant and influential networks have been included in the document. These are listed as «other» in chapter 11.
12. The Annex provide a list of European Platforms that could be of interest for NTNU researchers, where there are currently no active NTNU staff or membership. Please contact your local EU adviser or the Brussels Office if you would like to be involved in any of the listed platforms.

4. List of European platforms with shadow WGs

For the moment, three alliances have shadow working groups within NTNU. These are CESAER, EERA and ERCIM. More information about them is available in chapters 1.1-1.3. There are alliances with national shadow working groups, such as ECSO. In this version of the Handbook, alliances with national or regional shadow working groups are treated as other alliances.

5. List of European platforms, networks and initiatives

We hope that this Handbook can be an inspiration to get involved in one of the European platforms, alliances or initiatives. This also extends to all the European possibilities that is currently not listed in the document.

1.0 List of European Platforms with shadow WGs in NTNU

1.1 CESAER – Conference of European Schools for Advanced Engineering Education and Research

CESAER
conference of european schools for advanced engineering education and research

NTNU Contact Person: Hilde Skeie (hilde.skeie@ntnu.no)

URL: http://www.cesaer.org

Administrative Contact Person: Hilde Skeie (hilde.skeie@ntnu.no)

Administrative unit: Rector's Office

Short description: CESAER is the European association of doctorate-granting specialised and comprehensive universities of science & technology that champion excellence in higher education, training, research and innovation, influence debate, contribute to the realisation of open knowledge societies and deliver significant scientific, economic, social and societal impact.

CESAER Working Groups:

General Assembly – Institutional Liaison	Hilde Skeie	hilde.skeie@ntnu.no
Task Force Research and Innovation Infrastructures	N/A	
Task Force Innovation	Toril Hernes Sølvi Silset	Toril. hernes@ntnu.no Solvi.silseth@ntnu.no
General Assembly	Anne Borg	Anne.borg@ntnu.no
Task Force Competitive Funding	Massimo Busuoli Nina Sindre	Massimo.busuoli@ntnu.no Nina.sindre@ntnu.no
Task Force Benchmarking	Mads Nygård	Mads.nygaard@ntnu.no
Task Force Ethics and Values	N/A	
Task Force Open Science WG RDM	Ingrid Heggland	Ingrid.heggland@ntnu.no
Task Force Mobility	N/A	
Task Force Impact & Outreach	Linn Benedicte Brubakken Øfsteng	Benedicte.brubakken@ntnu.no
Task Force on Costs of STEAM Education	N/A	

1.2 EERA – European Energy Research Alliance

NTNU Contact Persons: Massimo Busuoli (massimo.busuoli@ntnu.no) and Johan Hustad (johan.hustad@ntnu.no)

URL: https://www.eera-set.eu/

Administrative Contact Person: Qiaoqiao Wang (qiaoqiao.wang@ntnu.no)

Administrative unit: TSO Energy

Short description: The European Energy Research Alliance (EERA) is an alliance of European public research centres and universities. It is one of the cornerstones of the European Strategic Energy Technology Plan (SET-Plan).

EERA brings together more than 170 research centres and universities. Actively working together on 17 joint research programmes, they build on national research initiatives. In a Joint Programme a research organisation join institutions in other European countries to work on shared priorities and research projects. The EERA Joint Programmes are aligned with the priorities for low carbon technologies defined in the SET-Plan.

EERA works together with industry stakeholders to align research and innovation priorities. This collaboration aims to foster world-class technology and innovation in Europe's energy sector, and to reduce the time to market for technologies.

EERA Working Groups:

Bioenergy	Edd Anders Blekkan	Edd.blekkan@ntnu.no
Carbon Capture Storage (CCS)	Jana Poplsteinova Jakobsen	Jana.p.jakobsen@ntnu.no
Economic, Environmental and Social Impacts of Energy Policies and Technologies (E3S)	Asgeir Tomasgard	Asgeir.tomasgard@ntnu.no
Energy Efficiency in Industrial Processes	Lars O. Nord	Lars.nord@ntnu.no
Energy Storage	Pål-Tore Selbo	Pal-tore.selbo@ntnu.no
Fuel Cells and Hydrogen	Svein Sunde	Svein.sunde@ntnu.no
Ocean Energy	Ingrid Schjølberg	Ingrid.schjolberg@ntnu.no
Photovoltaic Solar Energy	Marisa Di Sabatino Lundberg	Marisa.di.sabatino@ntnu.no
Energy Systems Integration	Olav B. Fosso	Olav.fosso@ntnu.no
Smart City	Annemie Wyckmans	Annemie.wyckmans@ntnu.no
Wind Energy	Michael Muskulus	Michael.muskulus@ntnu.no
Smart Grids	Kjell Sand	Kjell.sand@ntnu.no

1.3 EMIRI – Energy Materials Industrial Research Initiative

NTNU Contact Person: Fride Vullum-Bruer (fride.vullum-bruer@ntnu.no)

URL: http://emiri.eu/

Administrative Contact Person: Øyvind Sæther (oyvind.sather@ntnu.no)

Administrative unit: Faculty of Natural Sciences (NV), Department of Materials Science and Engineering (IMA)

Short description:

In 2012, following the development of the Strategy Energy Technologies (SET) plan and its associated SET Plan Materials Roadmap, key industrial actors and leading research organizations felt the need to associate under the Energy Materials Industrial Research Initiative (EMIRI) … an industry-oriented grouping complementary to established actors, uniquely positioned to span the innovation cycle and focusing solely on advanced materials for low carbon energy & energy efficiency technologies.

Today, EMIRI has more than 50 members across Europe, of which more than twenty are leading industries sharing a similar vision on driving forward research and innovation and building on a strong industrial sector in Europe on advanced materials for low carbon energy and energy efficiency technologies. Therefore EMIRI's mission is to ensure that such long-term objective is translated into actions through different policies.

EMIRI's strategy encompasses the full Europe-based value chain from the lab (R&I on advanced material) to the end-market development of various low carbon energy & energy efficiency technologies through the development of strategic elements for the competitive manufacturing of advanced materials and derived products.

EMIRI Working Groups (continue on next page)

Technology WG 1	Advanced materials for PV (photovoltaics will include c-Si, thin film PV, OPV, BIPV)	Marisa Di Sabatino Lundberg, Guri Krigsvoll	marisa.di.sabatino@material.ntnu.no guri.krigsvoll@ntnu.no
Technology WG 2	Advanced materials for CSP	N/A	N/A
Technology WG 3	Advanced materials for wind (offshore & onshore)	Jianying He, Zhiliang Zhang, Sotirios Grammatikos	jianying.he@ntnu.no zhiliang.zhang@ntnu.no sotirios.grammatikos@ntnu.no

Technology WG 4	Advanced materials for marine energy	N/A	N/A
Technology WG 5	Advanced materials for the energy performance of buildings (excl. BIPV)	Sotirios Grammatikos, Guri Krigsvoll	sotirios.grammatikos@ntnu.no guri.krigsvoll@ntnu.no
Technology WG 6	Advanced materials for batteries for mobility (focus will be mostly on Li-ion tech)	Fride Vullum-Bruer, Ann-Mari Svensson, Odne S. Burheim	fride.vullum-bruer@ntnu.no annmari.svensson@ntnu.no odne.s.burheim@ntnu.no
Technology WG 7	Advanced materials for batteries for stationary energy storage	Ann-Mari Svensson, Odne S. Burheim	annmari.svensson@ntnu.no odne.s.burheim@ntnu.no
Technology WG 8	Advanced materials for the production of H2 (used for stationary energy storage, for mobility, for chemical conversion)	Jia Yang, Bruno G. Pollet, Svein Sunde	jia.yang@ntnu.no bruno.g.pollet@ntnu.no svein.sunde@ntnu.no
Technology WG 9	Advanced materials for the utilization of H2 in mobility	Jia Yang, Jianying He, Zhiliang Zhang, Bruno G. Pollet, Magnus Rønning, Frode Seland	jia.yang@ntnu.no jianying.he@ntnu.no zhiliang.zhang@ntnu.no bruno.g.pollet@ntnu.no magnus.ronning@ntnu.no frode.seland@ntnu.no
Technology WG 10	Advanced materials to reduce the weight of vehicles (focus in on cars)	Sotirios Grammatikos, Hans Jørgen Roven, Bjørn Holmedal, Knut Marthinsen, Randi Holmestad	sotirios.grammatikos@ntnu.no hans.j.roven@ntnu.no bjorn.holmedal@ntnu.no knut.marthinsen@ntnu.no randi.holmestad@ntnu.no
Technology WG 11	Advanced materials to enable CCS	Jianying He, Zhiliang Zhang	jianying.he@ntnu.no zhiliang.zhang@ntnu.no
Technology WG 12	Advanced materials to enable CCU	Jia Yang, Jianying He, Zhiliang Zhang	jia.yang@ntnu.no jianying.he@ntnu.no zhiliang.zhang@ntnu.no
Technology WG 13	Advanced materials to enable higher efficiency in conventional power generation	N/A	N/A

1.4 ERCIM – European Research Consortium for Informatics and Mathematics

NTNU Contact Person: Lena Haugen (lena.haugen@ntnu.no)

URL: https://www.ercim.eu/

Administrative Contact Person: Lena Haugen (lena.haugen@ntnu.no)

Administrative unit: Faculty of Informatics and Electronics (IE)

Short description:

The main objective of ERCIM is to contribute to a leading role of Europe in ICT:

- by building a European-wide, open network of centres of excellence in ICT;
- by excelling in research and by acting as a bridge to applications;
- by being internationally recognized as a major representative organisation in its field;
- by acting as an interface for the non-EU member institutions within the European Community and other international organisations;
- by cooperating with other international organisations in its field;
- by promoting cooperation in research, technology transfer, innovation and training.

ERCIM Working Groups:

Board of Directors	Geir Egil Øien	Geir.oien@ntnu.no
Editor	Poul Heegaard	Poul.heegard@ntnu.no
Executive Committee	Finn Arve Aagesen	finnarve@ntnu.no
Fellowship Programme	Lena Haugen	Lena.haugen@ntnu.no
Human Capital Task Group	Harald Lenschow	Harald.lenschow@ntnu.no
PhD Education	Harald Lenschow	Harald.lenschow@ntnu.no

2.0 European Technology Platforms (ETP)

European Technology Platforms (ETPs) are industry-led stakeholder fora recognised by the European Commission as key actors in driving innovation, knowledge transfer and European competitiveness.

ETPs develop research and innovation agendas and roadmaps for action at EU and national level to be supported by both private and public funding. They mobilise stakeholders to deliver on agreed priorities, share information across the EU and help deliver solutions to major challenges of key concern to citizens.

2.1 ARTEMIS – Actors in Embedded Intelligent Systems

NTNU Contact Person: TBC

URL: https://artemis-ia.eu

Administrative Contact Person: Sina Therese Blix Prestmo (sina.prestmo@ntnu.no)

Administrative unit: Faculty of Informatics and Electronics (IE)

Short description:

ARTEMIS Industry Association is the association for actors in Embedded Intelligent Systems within Europe. As private partner, the association represents its members - industry, SMEs, universities and research institutes - in ECSEL Joint Undertaking.

ARTEMIS Industry Association continuously promotes the R&I interests of its members to the European Commission and the Public Authorities of the participating states.

The association strongly believes that the continued success of the Embedded Intelligent Systems sector in Europe depends on one coordinated, pan-European strategy. Forming this strategy is a part of the ARTEMIS European Technology Platform, which is developed & executed by the ARTEMIS Industry Association, and results in 4 core values: European Competitiveness, Innovation, Global impact, Improve day-to-day life.

2.2 EATIP – European Aquaculture Technology and Innovation Platform

NTNU Contact Persons: Alexandra Neyts (alexandra.neyts@ntnu.no) and Yngvar Olsen (yngvar.olsen@ntnu.no)

URL: http://eatip.eu/

Administrative Contact Person: Maria Azucena Gutierrez Gonzalez (mariaazucena.gutierrez@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

Short description:

EATIP is an international non-profit association dedicated to developing, supporting and promoting aquaculture and, especially and specifically, technology and innovation in aquaculture in Europe so as to:

- Establish a strong relationship between aquaculture and the consumer
- Assure a sustainable aquaculture industry
- Consolidate the role of aquaculture in society

EATIP has been designed to include all members of the European aquaculture value chain, from suppliers through producers to processors within the profession, accompanied by leading research groups and key representative organisations.

2.3 ECTP – European Construction Technology Platform

NTNU Contact Person: TBC

URL: http://www.ectp.org/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

Short description:

The main mission of ECTP and its committees is to develop new R&D&I strategies to improve competitiveness, meet societal needs & take up environmental challenges through an Innovative Built Environment.

ECTP recognises the need for research to make strategic decisions today and to future proof industry for tomorrow. We use our strategic research agenda to determine the challenges and issues facing the Built Environment in Europe, helping to lead the way to industry growth and a more sustainable future.

Through major programmes launched in partnership with the European Commission and/or other sectors, we are able to tackle the societal challenges and industrial leadership ambitions of the European Union, and meet the Horizon 2020 agenda.

2.3.1 ECTP – ECTP Committee for Innovative built environment

NTNU Contact Person: TBC

URL: http://e2b.ectp.org/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Civil and Environmental Engineering (IBM)

Short description:

E2B's vision is to drive the creation of a knowledge-based building industry which turns energy efficiency into sustainable business, within the PPP EeB under Horizon 2020.

The general objectives of E2B are:

- Develop technologies and solutions enabling to speed up the reduction in energy use and GHG emission in line with the 2020 goals, e.g. through a higher renovation rate of the building stock at lower cost and to meet regulatory needs;

- Develop energy efficiency solutions in order to turn the building industry into a knowledge-driven sustainable business, with higher productivity and higher skilled employees;

- Develop innovative and smart systemic approaches for green buildings and districts, helping to improve the competitiveness of EU building industry by providing cost-effective, user-friendly, healthy and safe products for smart cities.

This would ultimately create a solid foundation for continuous innovation in the building sector through sustainable partnerships, fostering an innovative eco-system across value chains which is not project based with episodic innovation activities as current practices.

Using Horizon 2020 to realise our vision and produce innovative solutions

Under the new EU framework programme Horizon 2020, a contractual PPP on Energy-efficient Buildings aims to develop cost effective innovative solutions for buildings and districts.

During Horizon 2020 the E2B Committee is looking forward to realising the vision of creating a high-tech building industry that turns energy efficiency into sustainable business.

2.4 ETIP RHC – Renewable Heating & Cooling

Renewable Heating & Cooling

European Technology and Innovation Platform

NTNU Contact Person: Mathias Haase (matthias.haase@sintef.no)

URL: http://www.rhc-platform.org/

Administrative Contact Person: N/A

Administrative unit: N/A

Short description:

Renewable energy technologies for heating and cooling are safe, clean, efficient and increasingly cost-competitive. The European Technology and Innovation Platform on Renewable Heating and Cooling, officially endorsed by the European Commission since October 2008, aims at playing a decisive role in maximising synergies and strengthening efforts towards research, development and technological innovation which will consolidate Europe's leading position in the sector. As a result, the whole society will benefit from the increasing contribution of renewable heating and cooling to the European Union's 20/20/20 targets by 2020.

The European Technology Platform on Renewable Heating and Cooling (RHC-Platform) became a European Technology and Innovation Platform (ETIP) on 26 January 2016.

The Board of the RHC-ETIP met at the EUREC premises on the date and unanimously agreed that the Platform, as it currently is, respects the points addressed by the European Commission (EC) in the document "New SET-Plan governance structure" and will therefore be called, from this day on, an ETIP.

2.5 ETPIS – European Technology Platform on Industrial Safety

NTNU Contact Person: Magnus Langseth (magnus.langseth@ntnu.no)

URL: http://www.industrialsafety-tp.org/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department Structural Engineering (KT)

Short description:

ETPIS is an open cross ETP initiative focusing on industrial safety. It facilitates cooperation and enables constructive exchanges between industry, regulators in charge of health, safety and environmental protection, NGOs, trade unions and other social partners, and the research and innovation community. In the case of industrial safety, the research and innovation community comes from various disciplines ranging from engineering sciences, human sciences, law, economics. It is active in various fields of application such as manufacturing, chemicals, energy, construction, materials, mines, and transport.

With its SafeFuture initiative “Safety for sustainable and competitive future”, ETPIS has adapted its operational structure to better address the societal challenges. With SafeFuture, ETPIS intends to develop the solutions (technological and non-technological – regulatory, public acceptance, cultural) that the industry needs to operate a sustainable business based on innovation (new products, new technologies with adequate management of residual risks).

2.6 Food for Life – Food for Life

NTNU Contact Person: Turid Rustad (turid.rustad@ntnu.no)

URL: http://etp.fooddrinkeurope.eu/

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences, Department of Biotechnology and Food Science

TSO/ET: Biotechnology

Short description:

The Vision: Step-change the innovation power and impact of the European food industry to the benefit of a sustainable society.

The Mission: Deliver a pre-competitive research strategy and ensure a collaborative approach in the execution of the implementation agenda for the European food industry, targeted towards:

- A sustainable food supply, including food processing, new technologies, and consumer acceptance through a food chain approach
- The prevention of the rise in non-communicable diseases, focusing on nutrition and behaviour changes

ETP 'Food for Life': Deliverables

The ETP 'Food for Life' aims to deliver:

- A platform for quicker and more effective, consumer-oriented food innovation, by enabling the appropriate environment for pre-competitive research and competitive consortium establishment;
- A forum for ensuring an effective multidisciplinary/integrating approach and exchange of best practices;
- An effective means of generating and leveraging funding;
- Better education and training of persons in various disciplines;
- Durable career opportunities within the European food and drink sector.

2.7 Manufuture – Manufuture

NTNU Contact Person: Kristian Martinsen (kristian.martinsen@ntnu.no)

URL: http://www.manufuture.org/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Manufacturing and Civil Engineering (IVB)

Short description:

The mission of the European Technology Platform Manufuture is to propose, develop and implement a strategy based on Research and Innovation, capable of speeding up the rate of industrial transformation to high-added-value products, processes and services, securing high-skills employment and winning a major share of world Manufacturing output in the future knowledge-driven economy.

The ManuFuture National/Regional Technological Platforms (NRTPs) are created in EU member states and adopt the main strategic and development goals defined by the EPT in its main documents: ManuFuture Vision 2020 and Manufuture Strategic Research Agenda.

2.8 Nanofutures – Nanofutures

NTNU Contact Persons: Kay Gastinger, John de Mello (kay.gastinger@ntnu.no)

URL: http://nanofutures.eu/ and https://twitter.com/nanofutures

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV)

TSO/ET: Nano

Short description:

Nanofutures consists of 11 working groups:

- Communication
- Critical Raw Materials
- Industrialisation/Nanomanufacturing
- Networking
- Regulation
- Research/Technology
- Safety
- Skills and Education
- Societal Engagement
- Standardization
- Technology Transfer and Innovation Financing

2.9 Nanomedicine – Nanomedicine

NTNU Contact Persons: Toril Hernes (toril.hernes@ntnu.no), Catharina Davies (catharina.davies@ntnu.no), Hanna Gautun (hanna.gautun@ntnu.no), Olav Haraldseth (olav.haraldseth@ntnu.no)

URL: https://www.etp-nanomedicine.eu/public

Administrative Contact Person: TBC

Administrative unit: TBC

Short description:

The ETP Nanomedicine, an initiative led by industry and set up together with the European Commission is addressing the application of nanotechnology to achieve breakthroughs in healthcare.

Nanomedicine exploits the improved and often novel physical, chemical and biological properties of materials at the nanometer scale. Nanomedicine has the potential to enable early detection and prevention, and to essentially improve diagnosis, treatment and follow-up of diseases.

The ETP supports its members in coordinating their joint research efforts and improving communication amongst the members as well as towards the European Commission and the European Member States.

2.10 NEM – New Electronic Media

NTNU Contact Person: Andrew Perkis (andrew.perkis@ntnu.no)

URL: https://nem-initiative.org/

Administrative Contact Person: Ida Kallmyr Lerheim (ida.lerheim@ntnu.no)

Administrative unit: Faculty of Informational Technology and Electrical Engineering (IE), Department of Electrical Systems (IES)

Short description:

The NEM Initiative (New European Media Initiative) was established as one of the European Technology Platform under the Seventh Framework Programme, aiming at fostering the convergence between consumer electronics, broadcasting and telecoms in order to develop the emerging business sector of networked and electronic media. In order to respond to new need and requirements of the Horizon 2020 programme, the NEM initiative enlarged its focus towards creative industries and changed its name from Networked an Electronic Media Initiative to New European Media, dealing with Connected, Converging and Interactive Media & Creative Industries, driving the future of digital experience.

The NEM constituency includes all major European organisations working in the networked and electronic media area, including content providers, creative industries, broadcasters, network equipment manufacturers, network operators and service providers, academia, standardisation bodies and government institutions. Those actors share a common Vision and have been producing a Strategic Research and Innovation Agenda (SRIA) as well as position papers, in order to accelerate the innovative development of the new sector in a harmonised and fruitful way and to place European industry at the forefront of the information era.

2.11 Networld2020 – Networld2020

NTNU Contact Persons: Odd Myklebust (SINTEF) (and Ilangko Balasingham, ilangko.balasingham@ntnu.no via Oslo University Hospital)

URL: https://www.networld2020.eu/

Administrative Contact Person: TBC

Administrative unit: Faculty of Information Technology and Electrical Engineering (IE)

Short description:

NetWorld2020 is the European Technology Platform for communications networks and services. Communications networks enable interaction between users of various types of equipment, either mobile or fixed. They are the foundation of the Internet. The NetWorld2020 European Technology Platform gathers players of the communications networks sector: industry leaders, innovative SMEs, and leading academic institutions.

On 29 October 2013 the new ETP NetWorld2020 has been founded by the former Net!Works and ISI ETPs. The launch event took place in Brussels and was attended by 160 participants. In the morning of the day, directly before the launch event, the last GAs of Net!Works and ISI took place, after which both ETPs were closed down. The membership of all Net!Works and ISI members has been transferred and they became automatically member of the new ETP. At the launch event also the 30 members of the Steering Board of NetWorld2020 for the period 2014-15 have been successfully elected.

2.12 Photonics21 – Photonics21

NTNU Contact Persons: Mikael Lindgren (mikael.lindgren@ntnu.no), Irina Sorokina (irina.sorokina@ntnu.no), Steinar Bjørnstad (steinar.bjornstad@ntnu.no), Morten Kildemo (morten.kildemo@ntnu.no), Kay Gastinger (kay.gastinger@ntnu.no)

URL: https://www.photonics21.org/

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV), Department of Physics (Fysikk)

Short description:

Photonics21 aims to establish Europe as a leader in the development and deployment of photonics technologies within the various applications fields such as ICT, lighting, industrial manufacturing, life science, safety as well as in education and training.

The ETP Photonics21 coordinates photonics research and innovation priorities and provides input to the European research framework programme Horizon 2020.

The entry into the "photon century" requires a shared European initiative that enables industry and research to uphold their outstanding initiatives to explore the nearly limitless future applications of light and to reap the expected benefits in terms of creating both jobs and wealth. Many important European industries, from chip manufacturing and lighting, health care and life sciences, to space, defence and the transport and automotive sectors rely on the same fundamental mastery of light. Without strong European leadership in photonics technologies, these industries will be left vulnerable to strong competition from the USA and Asia.

To achieve this leadership for the benefit of Europe and our citizens, an ambitious programme is required to:

- Supply the necessary research environment capable of supporting the visionary and industrially relevant R&D activities for photonics components, systems and their application over a broad range of industry sectors;
- Establish strategic links between mainly SME-based photonics industries and principal user industries to share their long term vision and to mobilise a critical mass resources;
- Foster co-operation and smooth out the current fragmentation of national and European R&D activities.

2.13 SMR - European Technology Platform on Sustainable Mineral Resources

NTNU Contact Person: Maria Thornhill (maria.thornhill@ntnu.no)

URL: http://www.etpsmr.org/

Administrative Contact Person: Kristoffer Lund Vik-Langlie (kristoffer.langlie@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Geoscience and Petroleum (IGP)

Short description:

The European Technology Platform on Sustainable Mineral Resources (ETP SMR) is an Association of subjects operating in the Mineral Resources Industry at a wide scale (coal, metal ores, industrial minerals, ornamental stones, aggregates, smelters as well as technology suppliers and engineering companies) **in different sectors along the value chain, from exploration to extraction, processing, recycling**. ETP SMR is covering the entire range of mineral resources production in Europe. However, the production and tailored provision of mineral raw materials needs more than exploitation and/or recycling. **Technology and knowledge is the key to success.** Therefore, ETP SMR has also integrated many of Europe's very strong equipment and technology providers. Those organisations are usually part of every development process and necessary to be successful.

The ETP SMR was launched on March 2005 and officially recognized by the European Commission in September 2008. In 2013 the ETP SMR was born as a legal entity International Association without lucrative purpose.

The ETP SMR focuses its activities on **creating sustainable resources potential, access to, and supply of, essential and critical raw materials through research, development and innovation**, perfectly in line with the European Innovation Partnership on Raw Materials proposed by EU, based on three pillars: fostering sustainable supply within the EU, boosting resource efficiency and recycling as well as international collaboration.

The ETP SMR has become over the years a **reliable interlocutor of European Institutions**, a process that has brought the ETP SMR members to contribute to the SIP for EIP on Raw Materials, develop a Strategic Agenda and commit with the European Commission on the raw materials.

Today the ETP SMR members are 40 located in 16 countries in Europe and beyond. The ETP SMR members are major players from Industry, Research Institutes, Geological Surveys, Academia, and National and European Associations. They are united to address the future technological and societal challenges of the mineral sector, in order to jointly act towards a common vision.

2.14 SusChem - European Technology Platform for Sustainable Chemistry

NTNU Contact Person: Øyvind Mikkelsen (TBC) (oyvindm@ntnu.no)

URL: http://www.suschem.org/

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV), Department of Chemistry (Kjemi)

Short description:

SusChem's **vision** is for a competitive and innovative Europe where sustainable chemistry and biotechnology together provide solutions for future generations.

SusChem's **mission** is to initiate and inspire European chemical and biochemical innovation to respond effectively to societal challenges by providing sustainable solutions.

SusChem was officially launched in 2004 as a European Commission supported initiative to revitalise and inspire European chemistry and industrial biotechnology research, development and innovation in a sustainable way.

At SusChem we believe that sustainable chemistry can inspire a change of pace and the new mind-set that society needs in order to become(more) sustainable, smart and inclusive.

In partnership with European and national public authorities, SusChem contributes to initiatives that aim to provide sustainable solutions to society's big challenges. Together we develop and lead large-scale, integrated research and innovation programmes with chemical sciences at their core. These public private initiatives link research and partners along the value chain to real world markets through accelerated innovations.

SusChem is also a network of national platforms as the European vision needs to be firmly rooted in the national strategies.

SusChem depends vitally on the partnerships with member states to provide information on national strategies and priorities. The national platforms work on initiatives within their own countries and also in joint NTP initiatives through the network organisation.

2.15 TP OCEAN – Ocean Energy Europe

NTNU Contact Person: Ingrid Schjølberg (ingrid.schjolberg@ntnu.no)

URL: https://www.etipocean.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

TSO/ET: Ocean

Theme/research area: Energy

Short description:

ETIP Ocean is a recognised advisory body to the European Commission, part of the EU's main Research and Innovation policy the Strategic Energy Technology Plan (SET-Plan).

ETIP Ocean brings together around 250 experts from 150 organisations covering the entire European ocean energy sector.

In November 2016, ETIP Ocean published a first Strategic Research Agenda for the Ocean Energy sector. This document prioritises research topics and is the industry's main input into European and national research programmes.

ETIP Ocean was also entrusted by the European Commission to work on the technological aspects of its Ocean Energy Forum. It's main output is a Roadmap to commercialisation with concrete recommendations for policy makers and industry.

Building on its work and on the Ocean Energy Forum Roadmap, ETIP Ocean continues to bring together knowledge and expertise. Proposing solutions to accelerate the development of the ocean energy sector and set it along the pathway to commercialisation.

2.16 WssTP – Water Supply and Sanitation Technology Platform

NTNU Contact Persons: Sveinung Sægrov (sveinung.sagrov@ntnu.no), Tone Merete Muthanna (tone.muthanna@ntnu.no)

URL: http://wsstp.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

Short description:

As the officially recognized European Technology Platform for Water by the EC, WssTP has substantially contributed to the development and improvement of the water sector in Europe through its key activities and its members' presence as active players of the water sector.

Additionally to WssTP's success in projects, WssTP has developed a **Water Vision**, a **Strategic Research Agenda** and an Implementation Document, by many reports on specific challenges and technologies, describing the state of the art, technological challenges, the barriers to innovations, and making suggestions on how to address these. **WssTP's reports** have served amongst others as input for the definition of the research priorities under the Research Framework Programme.

WssTP has also acted as an initiating catalyst for many EU projects among them E4Water, **TRUST, Prepared, ChemWater** and ZELDA and is involved in communication at policy, regulation, strategy and technical detail levels such as: Inputs on the Strategic Implementation Plan for the **EIP on water**, Barriers to innovation and examples of solutions including the role of standardisation, financing innovation in the European water sector etc.
Bringing together a broad range of actors from the water industry, universities, RTO's and water users, WssTP has been the 'spokesperson' for those organizations when it comes to liaison with different DGs of the European Commission (DG Environment, DG Research & Technology Development, DG Regio, DG Connect, DG Development), the European Parliament and other European stakeholder organizations.

WssTP also liaises with the DG's / Parliament to ensure the state-of-the-art views on and possibilities of water innovation are taken up in processes as the Blue Print on EU's water, the implementation of Horizon2020, the Cohesion Package, the EIP Water, EIP Raw materials, the EIP SMART Cities and Communities and other relevant policy dossiers.

2.17 ZEP – Zero Emissions Platform

NTNU Contact Persons: Christian Skar (christian.skar@ntnu.no) and Asgeir Tomasgard (asgeir.thomasgard@ntnu.no)

URL: http://www.zeroemissionsplatform.eu

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics, Department of Industrial Economics and Technology Management

Short description:

Founded in 2005, the European Technology Platform for Zero Emission Fossil Fuel Power Plants (ZEP) is a unique coalition of stakeholders united in their support for CO_2 Capture and Storage (CCS) as a key technology for combating climate change. ZEP serves as advisor to the European Commission on the research, demonstration and deployment of CCS.

The European utilities, petroleum companies, equipment suppliers, scientists, academics and environmental NGOs that together form ZEP have three main goals:

1. Enable CCS as a key technology for combating climate change.
2. Make CCS technology commercially viable by 2020 via an EU-backed demonstration programme.
3. Accelerate R&D into next-generation CCS technology and its wide deployment post-2020.

ZEP was born out of the EU's recognition of CCS as a key component of any future sustainable energy system. Its mission: to identify and remove the barriers to creating highly efficient power plants – with near-zero emissions.

The first research initiative on CCS can be found as far back as the EU's Third Framework Programme (FP3), 1990-1994 – its main financial tool for supporting Research and Development activities for almost all scientific disciplines. Subsequent programmes – which in 2006 became seven-year programmes – have given increasing weight to CCS-related projects.

As the EU moves closer towards the deployment of CCS, ZEP will continue to serve as:

- CCS Advisor and Facilitator - expert advice on all technical, policy, commercial and other related issues.

- CCS Technology Contributor - input on all technology issues, including recommendations for next-generation CCS technologies, taking into account experience gained from the EU CCS Demonstration Programme.
- Respected Communicator - educator and source of information, including engaging internationally on CCS.

In the autumn of 2005, the ZEP Advisory Council and Coordination Group – along with four Working Groups and a Mirror Group – were established and ZEP published a Vision Paper the following May. The Working Groups were later renamed Taskforces, while the Mirror Group became the Government Group.

3.0 Alliances

NTNU is a member of (at least) 9 University alliances that has a specific European focus. The criteria to be listed is an NTNU institutional membership.

3.1 ATHENS – Athens Network

NTNU Contact Person: Wolfgang Laschet (wolfgang.laschet@ntnu.no)

URL: http://www.athensnetwork.eu/

Administrative Contact Person: N/A

Administrative unit: International Relations

Short description:

Created in 1997, the ATHENS Network (Advanced Technology Higher Education Network / SOCRATES) is made up of 14 European technological universities and nine ParisTech Graduate Schools of Engineering, which coordinates the programme.

The principal goal of the Network is to facilitate the exchange of students, teachers and researchers from major European technological universities and to participate together under European technological development and training programmes.

One of the Network's first and most particular actions concerns the organisation of an intensive programme of coursework taught at each member institution during one or two sessions in November and March. This activity is called the ATHENS week.

3.2 COPERNICUS – Copernicus Academy

NTNU Contact Person: Francesca Verones (francesca.verones@ntnu.no)

URL: http://copernicus.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Energy and Process Engineering (EPT)

Short description:

Copernicus is the European Union's Earth Observation Programme, looking at our planet and its environment for the ultimate benefit of all European citizens. It offers information services based on **satellite Earth Observation and in situ (non-space) data**.

The Programme is coordinated and managed by the European Commission. It is implemented in partnership with the Member States, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for Medium-Range Weather Forecasts (ECMWF), EU Agencies and Mercator Océan.

Vast amounts of global data from satellites and from ground-based, airborne and seaborne measurement systems are being used to provide information to help service providers, public authorities and other international organisations improve the quality of life for the citizens of Europe. The information services provided are **freely and openly** accessible to its users.

3.3 EASSH – European Alliance of Social Science and Humanities

NTNU Contact Person: Marit Reitan (marit.reitan@ntnu.no)

URL: http://www.eassh.eu/

Administrative Contact Person: Bård Li (bard.li@ntnu.no)

Administrative unit: Faculty of Social and Educational Sciences (SU)

Short description:

The "European Alliance for the Social Sciences and Humanities" promotes the importance and value of the social sciences and humanities (SSH) at all pertinent levels and through all relevant actions in Europe and beyond.

The aims are:

- to promote European social sciences and humanities as a resource for Europe and the world;
- to provide a contact point for national, European and international SSH organisations, and pertinent policy- and decision-makers;
- to provide a forum for the discussion of matters of common interest;
- to further the interests of its members with respect to the institutions of the European Union and other European and international bodies in all fields relevant to SSH;
- to promote ethically justified and responsible SSH research at all levels;
- to ensure that proper attention is paid to SSH at all levels of education.

3.4 ECSO - European Cyber Security Organisation

NTNU Contact Person: Nils Kalstad Svendsen (nils.svendsen@ntnu.no)

URL: https://www.ecs-org.eu/

Administrative Contact Person: Sina Therese Blix Prestmo (sina.prestmo@ntnu.no)

Administrative unit: Faculty of Informatics and Electronics (IE), Department of Information Security and Communication Technology (IIK)

Short description:

NTNU is together with SINTEF and SIMULA member of a Norwegian ECSO shadow organisation.

The European Cyber Security Organisation (ECSO) ASBL is a fully self-financed non-for-profit organisation under the Belgian law, established in June 2016.

ECSO represents the industry-led contractual counterpart to the European Commission for the implementation of the Cyber Security contractual Public-Private Partnership (cPPP). ECSO members include a wide variety of stakeholders such as large companies, SMEs and Start-ups, research centres, universities, end-users, operators, clusters and association as well as European Member State's local, regional and national administrations, countries part of the European Economic Area (EEA) and the European Free Trade Association (EFTA) and H2020 associated countries.

The main objective of ECSO is to support all types of initiatives or projects that aim to develop, promote, encourage European cybersecurity, and in particular to:

Foster and protect from cyber threats the growth of the European Digital Single Market;

Develop the cybersecurity market in Europe and the growth of a competitive cybersecurity and ICT industry, with an increased market position;

Develop and implement cybersecurity solutions for the critical steps of trusted supply chains, in sectoral applications where Europe is a leader.

ECSO is engaged in taking concrete actions to achieve these objectives by:

Collaborate with the European Commission and national public administrations to promote Research and Innovation (R&I) in cybersecurity;

Propose a Strategic Research and Innovation Agenda (SRIA) and a Multiannual Roadmap with its regular updates;

Foster market development and investments in demonstration projects and pilots to facilitate bringing innovation to cybersecurity market;

Foster competitiveness and growth of the cybersecurity industry in Europe (large companies and SME) as well as end users / operators through innovative cybersecurity technologies, applications, services, solutions;

Support the widest and best market uptake of innovative cybersecurity technologies and services for professional and private use;

Promote and assist in the definition and implementation of a European cybersecurity industrial policy to encourage the use of cybersecurity solutions as well as secure and trustworthy ICT solutions to increase digital autonomy;

Support the development and the interests of the entire cybersecurity and ICT security ecosystem (including education, training awareness, etc.);

Areas of interest

- ICT Infrastructure (including cloud, mobile, networks, etc.)
- Smart Grids (Energy)
- Transportation (including Automotive / Electrical Vehicles)
- Smart Buildings and Smart Cities
- Industrial Control Systems (Industry 4.0)
- Public Administration and Open Government
- Healthcare
- Finance and Insurance

3.5 EFFRA - European Factories of the Future Research Association

NTNU Contact Person: Olav Egeland (olav.egeland@ntnu.no)

URL: https://www.effra.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Mechanical and Industrial Engineering (MTP)

Short description:

The European Factories of the Future Research Association (EFFRA) is a non-for-profit, industry-driven association promoting the development of new and innovative production technologies. It is the official representative of the private side in the 'Factories of the Future' public-private partnership.

The key objective of EFFRA is to promote pre-competitive research on production technologies within the European Research Area by engaging in a public-private partnership with the European Union called 'Factories of the Future'.

EFFRA was established jointly by the MANUFUTURE technology platform and key industrial associations to shape, promote and support the implementation of the ‘Factories of the Future’ public-private partnership.

The partnership aims to bring together private and public resources to create an industry-led programme in research and innovation with the aim of launching hundreds of market-oriented cross-border projects throughout the European Union. Such projects will produce demonstrators and models to be applied in a wide range of manufacturing sectors.

3.6 EUA – European University Association

NTNU Contact Person: Nina Sindre (nina.sindre@ntnu.no)

URL: https://www.eua.eu/

Administrative unit: N/A

Short description:

Who we are

The European University Association (EUA) represents more than 800 universities and national rectors' conferences in 48 European countries. EUA plays a crucial role in the Bologna Process and in influencing EU policies on higher education, research and innovation. Through continuous interaction with a range of other European and international organisations, EUA ensures that the independent voice of European universities is heard.

What we do

EUA provides unrivalled opportunities for members to share best practices by participating in projects, events and other mutual-learning activities involving a wide range of universities. The Association also provides members with unique opportunities to shape European policies and initiatives affecting higher education and research.

3.6.1 EUA-EPUE - European Platform of Universities in Energy Research & Education

NTNU Contact Person: Torbjørn Digernes

URL: N/A

Administrative Contact Person: N/A

Administrative unit: N/A

Short description:

EUA-EPUE aims at being a central forum in Europe for universities to share ideas for new research and education projects and find interested partners in the field of energy. It intends to strengthen the voice of the university sector in European policymaking in energy by reinforcing the dialogue with its universities and by providing an interface between European universities and European institutions.

EUA-EPUE, therefore, seeks to:

- Pool the richness and diversity of university expertise to direct efforts towards addressing the EU challenge for the transition to a low-carbon society.
- Make visible the substantial contribution of European universities in the implementation of the SET-Plan and EU energy strategies.
- Give to universities the opportunity to have a collective voice in consultations on European energy matters.
- Act as a sustainable open platform that facilitates the creation of synergies between universities and fosters intra-European and multi-disciplinary collaboration.

3.7 EuroHealthNet

NTNU Contact Person: Bård Li (bard.li@ntnu.no)

URL: https://eurohealthnet.eu/

Administrative Contact Person: N/A

Administrative unit: Faculty of Social and Educational Sciences (SU), Faculty administration

Short description:

Based in heart of Brussels' European quarter, EuroHealthNet brings together partners operating at EU, national, regional, and local levels. This partnership model strengthens the voice of and approaches to health promotion and prevention in the EU, and stimulates action at all levels of government.

The office monitors, influences, analyses, and explains EU policy and action related to health inequalities and determinants. The expertise and experience of the partners is amplified and shared, helping to influence change at European, National, and sub-national levels.

EuroHealthNet also has an important role in facilitating information exchange between partners through study visits, capacity building actions and technical working groups. This helps them to build capacity and knowledge, so they can build on the best that Europe has to offer in the field of public health and health promotion.

STRUCTURE

EuroHealthNet seeks to find links and synergies between fields of expertise and sectors, and to stimulate interaction between policy makers, researchers and practitioners.

Many EuroHealthNet activities take place across three platforms covering policy, practice, and research. Close interaction between the platforms, and unification through a core team and activities, ensures that each field builds on the work of the others, and that actions are aligned.

3.8 HiPEAC – European Network on High Performance and Embedded Architecture and Compilation

NTNU Contact Person: Magnus Själander (magnus.sjalander@ntnu.no)

URL: https://www.hipeac.net/

Administrative Contact Person: Ida Kallmyr Lerheim (ida.lerheim@ntnu.no)

Administrative unit: Faculty of Information Technology and Electrical Engineering (IE), Department of Computer Science (IDI)

Short description:

HiPEAC's mission is to steer and increase the European research in the area of high-performance and embedded computing systems, and stimulate cooperation between a) academia and industry and b) computer architects and tool builders.

As part of the research coordination program, HiPEAC includes a new instrument, called Thematic Sessions. A Thematic Session is a natural evolution of the clusters and task forces in HiPEAC2, but more reactive and self-organized. In HiPEAC, any partner or member can propose a thematic session, on condition that it is related to the HiPEAC vision. A thematic session is comparable to an informal workshop. As an organizer, you will have to solicit contributions, but there should be no formal call for papers, neither a formal reviewing of the contributions. Proposers of a thematic session are encouraged to involve the FP7 projects and HiPEAC companies in the session they propose.

Collaboration and networking between member institutions and across the different disciplines: computer architects, design tool builders, compiler builders, system designers, between researchers from academia and industry, between European and non-European institutions. This collaboration between best of breed must lead to more European excellence in the HiPEAC domain. Collaboration and networking is stimulated by means of the various networking events, and the small collaboration incentives like collaboration grants, mini-sabbaticals, internships,...

HiPEAC is an open network. This means that all activities are open to the public. Active professionals in the domain of high-performance and embedded computing systems can apply for HiPEAC membership. HiPEAC members can enjoy the membership benefits, such as networking, newsletters, and mobility support, without any legal obligations. However, HiPEAC does expect that members actively contribute to the community, e.g. by participation in meetings, joint publications, etc.

Valorisation of research results in the form of highly visible publications and commercialization of research results by existing companies or by newly created companies. The goal is to help companies

to achieve world-leading positions in the computing systems and computing products, and to further increase Europe's worldwide visibility in the HiPEAC domain via the HiPEAC conference, the ACACES summer school, the HiPEAC journal, a newsletter, a website, seminars, technical reports, workshops, and awards.

3.9 Magalhães network

NTNU Contact Person: Nina Moxnes (nina.moxnes@ntnu.no)

URL: http://www.magalhaesnetwork.org/

Administrative unit: International Relations

Short description:

NTNU's membership in the Magalhães Network is active from 19.11.2018. It is a network consisting of 20 European and 15 Latin American universities. The network focus on student exchanges in the field of engineering and architecture.

3.10 N5T – Nordic Five Tech

NTNU Contact Person: Kristin Wergeland Brekke (kristin.brekke@ntnu.no)

URL: N/A

Administrative Contact Person:

Administrative unit: Rector's office

Short description:

Nordic Five Tech (N5T) is a strategic alliance of five Nordic polytechnic universities.

NTNU participate in three N5T groups.

N5T Secretariat	Kristin Wergeland Brekke	Kristin.brekke@ntnu.no
N5T Committee	Anne Borg	Anne.borg@ntnu.no
N5T Rectors Meeting	Gunnar Bovim	Gunnar.bovim@ntnu.no

3.11 NORDTEK

NTNU Contact Person: Nina Moxnes (nina.moxnes@ntnu.no)

URL: http://nordtek.net/

Short description:

The leader of FUS (Executive Committee of Engineering Education, see Innsida for more information) usually represent NTNU at NORDTEK meetings.

NORDTEK is a network of the Rectors and Deans of the Technical Universities in the five Nordic countries. Membership requires that you have to have a background in advanced engineering up to the Master's level and PhD in a technical research field. The members represent 27 universities, more than 120,000 students, teachers and researchers.

NORDTEK shall through exchange of *experience*, *collaboration* and *cooperation*:

- Develop the comparative strengths of the member schools
- Maintain and strengthen the international position of Nordic advanced engineering education
- Maintain and strengthen the international position of Nordic engineering research and research training
- Enforce youth interest in studying advanced engineering
- Be a potential **Pressure Group** – nationally, in the Nordic context, and internationally
- Represent the **Nordic perspective** in relevant European and International forums.

NORDTEK's prime activities are the *Mobility program for students and teachers, the annual Rectors' Conference*, *Projects, incl*. *Annual Benchmarking of the member schools*.

3.12 S Group – European Universities Network

NTNU Contact Person: TBC

URL: http://sgroup.be/

Administrative Contact Person: Nina Moxnes (nina.moxnes@ntnu.no)

Administrative unit: International Relations

Short description:

S Group Liaison Officer	Wolfgang Laschet	wolfgang.laschet@ntnu.no
S Group General Assembly	Anja Valberg	Anja.valberg@ntnu.no

Vision

The SGroup European Universities' Network aims to strengthen the institutional capacities of its member universities to reinforce their international visibility, to expand their collaboration opportunities in education and research and to improve the quality of their governance, teaching, research and administrative practices. It seeks to achieve this through the transfer of knowledge, the development of strategic alliances and the improvement of intercultural understanding.

Mission

The SGroup Network is a dynamic platform for university collaboration among European and non-EU institutions to develop the internationalisation of its members, to foster university excellence in education and research and to promote continuous adaptation to educational and societal needs in a creative and innovative way.

3.13 TIME Association – Top Industrial Managers Europe Association

NTNU Contact Person: Wolfgang Laschet (wolfgang.laschet@ntnu.no)

URL: http://www.time-association.org/double-degrees/

Administrative Contact Person: N/A

Administrative unit: International Relations

Short description:

T.I.M.E. Double Degrees

T.I.M.E. Double Degrees are organised under bilateral agreements between two of the Association's members.

In principle, voluntary bilateral agreements may be signed between any two T.I.M.E. members.

However, to support our goal of cultural and linguistic diversity, the two signatories may not be from the same country.

What are the main characteristics?

During your study period abroad as a T.I.M.E. student, you will experience:

- High-level education in a different cultural context, educational system and (usually) language.
- Projects in research laboratories.
- International team-working.
- Development of interpersonal and intercultural skills.
- Language learning.
- In-depth cultural and international exposure.
- Opportunities of Internships in companies.

3.14 WEGEMT – European Association of Universities in Maritime Technology and Related Sciences (West European Graduate Education in Marine Technology)

NTNU Contact Person: Bjørn Egil Asbjørnslett (bjorn.e.asbjornslett@ntnu.no)

URL: http://www.wegemt.com/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Marine Technology (IMT)

Short description:

WEGEMT is a European Association of 40 Universities in 17 countries. It was formed in 1978 with the aim of increasing the knowledge base, and updating and extending the skills and competence of practicing engineers and postgraduate students working at an advanced level in marine technology and related sciences.

It was established as a "stichting" under Dutch law with its registered office in Delft. At present, the Associates are drawn from universities in Europe, including Scandinavia, the former Eastern Europe and the CIS. They have in common, a capability, expertise and experience to teach and carry out research in marine technology and related sciences.

Status, Structure and Management

WEGEMT is a not for profit organisation which is contribution based. Each University Associate is invited to make a contribution once a year. In addition to this, the organisation is supported by miscellaneous sales of publications and by work under contracts. Any contracts must however, further the aim of the Association. The Association is governed by an Executive Committee made up of fourteen elected representatives from within the Associates. Representatives are permitted to have a seat on the Executive Committee for a period of three years. They are re-electable once, for a period of a further three years. No individual university is permitted to be represented on the Executive Committee for a period of more than six years consecutively. The Executive Committee governs the organisation by setting policy and identifying priorities, usually looking 3 – 5 years in advance. They have the power to establish ad-hoc Working Groups to look at special areas of interest and to invite further representation from within the Associates. Day to day running of WEGEMT activities is carried out through its Secretariat which is based at 10 Upper Belgrave Street London at the offices of The Royal Institution of Naval Architects.

The Associates have at least one general assembly each year, usually hosted by one of the Universities. The Secretariat's role is key to the organisation, providing information to the Associates

about WEGEMT activities, and encouraging and supporting their involvement in new initiatives. the Secretariat also undertakes the management of many of WEGEMT's activities, it supports the Executive Committee and acts as a first port of call for customers.

It should go without saying that WEGEMT openly collaborates with organisations outside its Association. It is keen to work with industry, professional bodies, classification societies, and other organisations and societies who are involved with marine technology. In a similar vein, WEGEMT is particularly keen to support and encourage the programmes of Research and Development (R&D), Education and Training (E&T), and Information Exchange and Dissemination, of the European Commission where they target marine technology.

4.0 ERIC and ESFRI

4.1 BBMRI – Biobanking and Biomolecular resources research infrastructure

BBMRI-ERIC
Biobanking and
BioMolecular resources
Research Infrastructure

NTNU Contact Person: Kristian Hveem (kristian.hveem@ntnu.no)

URL: http://www.bbmri-eric.eu/

Administrative Contact Person: Yngve Sommervoll (yngve.sommervoll@ntnu.no)

Administrative unit: Faculty of Medicine and Health Sciences (MH), Department of Public Health and Nursing (ISM)

Short description:

BBMRI-ERIC shall establish, operate and develop a pan-European distributed research infrastructure of biobanks and biomolecular resources in order to facilitate the access to resources as well as facilities and to support high quality biomolecular and medical research. BBMRI-ERIC operates on a non-economic basis.

The activities of BBMRI-ERIC shall be politically neutral and guided by the following values: pan-European in scope, combined with scientific excellence, transparency, openness, responsiveness, ethical awareness, legal compliance and human values.

BBMRI-ERIC is set up as a distributed research infrastructure in most, if not all European Member States. BBMRI-ERIC consists of 19 Member States and one International Organisation, making it one of the largest research infrastructures in Europe.

Members: Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Greece, Italy, Latvia, Malta, the Netherlands, Norway, Poland, Sweden, and the United Kingdom.

Observer: Cyprus, Switzerland, Turkey, IARC/WHO

The Preparatory Phase of BBMRI

In 2008, BBMRI was one of the first projects entering the European Research Infrastructure Preparatory Phase of the ESFRI roadmap funded by the European Commission (GA 212111), lasting for 3 years until January 2011. At this time, BBMRI has grown into a 54-member consortium with more than 225 associated organisations (largely biobanks) from over 30 countries

Awarded ERIC Legal Status on 3 December 2013

This specific legal form is designed to facilitate the joint establishment and operation of research infrastructures of European interest and allows pulling together biobanks and biomolecular resources into a pan-European facility and providing access to collections of partner biobanks and biomolecular resources, their expertise and services on a non-economic basis.

4.2 CLARIN (CLARINO) – Common Language Resources and Technology Infrastructure Norway

NTNU Contact Person: Björn Gambäck (bjorn.gamback@ntnu.no)

URL: https://clarin.w.uib.no/

Administrative Contact Person: Sina Therese Blix Prestmo (sina.prestmo@ntnu.no)

Administrative unit: Faculty of Information Technology and Electrical Engineering (IE)

Short description:

CLARINO is a Norwegian infrastructure project jointly funded by the Research Council of Norway (2012–2019 under contract 208375) and by a consortium of Norwegian universities and research institutions. It is operating the Norwegian part of CLARIN ERIC. The aim is to make existing and future language resources easily accessible for researchers and to bring eScience to humanities disciplines.

Any researcher can, through federated authentication, gain access to a vast body of language resources, including e.g. speech recordings, literary and historic archives, linguistic corpora, etc. In addition, CLARIN offers services for depositing, citing, searching and processing language data.

4.3 DARIAH – Digital Research Infrastructures for the Arts and Humanities

NTNU Contact Person: Andrew Perkis (andrew.perkis@ntnu.no)

URL: https://www.dariah.eu/

Administrative Contact Person: Thomas Sørlie Hansen (thomas.hansen@ntnu.no)

Administrative unit: Faculty of Humanities (HF)

Short description:

DARIAH is a pan-European infrastructure for arts and humanities scholars working with computational methods. It supports digital research as well as the teaching of digital research methods.

People in DARIAH provide digital tools and share data as well as know-how. They organize learning opportunities for digital research methods, like workshops and summer schools, and offer training materials for Digital Humanities.

DARIAH aims at providing what you need. No matter if you are an experienced digital researcher, a scholar seeking to apply digital methods for the first time, or a citizen interested in modern Arts and Humanities research.

4.4 EATRIS – European Infrastructure for Translational Medicine

eatris

European infrastructure
for translational medicine

NTNU Contact Person: Olav Haraldseth (olav.haraldseth@ntnu.no)

URL: https://eatris.eu/

Administrative Contact Person: Yngve Sommervoll (yngve.sommervoll@ntnu.no)

Administrative unit: Faculty of Medicine and Health Sciences (MH), Department of Circulation and Medical Imaging (ISB)

TSO/ET: Health

Short description:

EATRIS helps you de-risk and add value to your drug, vaccine or diagnostic development programme. We do this by providing fast, tailored access to cutting-edge enabling technologies in translational research.

INFRASTRUCTURE

Via our central hub, you can access the vast array of clinical expertise and high-end facilities that are available within the 80+ top-tier academic centres across Europe.

PRODUCT PLATFORMS

EATRIS focuses on preclinical and early clinical development of drugs, vaccines and diagnostics. Solutions are provided in the fields of advanced therapy medicinal products, biomarkers, imaging and tracing, small molecules and vaccines.

The wide-ranging services portfolio focuses on supporting early decision-making and de-risking of projects.
Examples include validation and development of in vitro and in vivo biomarkers for patient stratification, molecular imaging tracers for drug development programmes, GMP manufacturing of cellular therapy products, patient-derived xenograft models, and many more highly specialised capabilities.

4.5 ECCSEL – European Carbon dioxide Capture and Storage Laboratory Infrastructure

NTNU Contact Person: Sverre Quale (sverre.quale@ntnu.no)

URL: http://www.eccsel.org/

Administrative Contact Person: Volker Röhling (volker.rohling@ntnu.no)

Administrative unit: Faculty of Engineering, Department of Energy and Process Engineering

Short description:

The mission of ECCSEL is opening access for researchers to a top quality European research infrastructure devoted to second and third generation CCS technologies in an efficient and structured way to help **enabling low to zero CO2 emissions from industry and power generation** to combat global climate change.

The ECCSEL consortium teams up selected Centres of Excellence on Carbon Capture and Storage research (CCS) from 9 countries across Europe. The mission is to implement and operate a European distributed, integrated Research Infrastructure (RI) initially based on a selection of the best research facilities in Europe for CO_2 capture, storage and transport research. A number of those facilities are planned to be upgraded in the future and later new facilities are planned to be constructed in order to:

- Provide a scientific foundation to respond systematically to the urgent R&D needs in CCS at a Pan-European level, in a short and long term perspective
- Maintain Europe at the forefront of the international CCS scientific community
- Make the European Research Area more attractive for both European and international scientists, reinforce cooperative connections between research institutions and attain greater insight into the social and economic impact of European science.
- Optimize the value of the European Communities financial support through better utilisation of new and existing research infrastructure.

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4.6 ECRIN – European Clinical Research Infrastructure Network

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URL: http://www.ecrin.org/

Administrative Contact Person: Yngve Sommervoll (yngve.sommervoll@ntnu.no)

Administrative unit: Faculty of Medicine and Health Sciences (MH), Department of Mental Health (IPH)

TSO/ET: Health

Short description:

The European Clinical Research Infrastructure Network (ECRIN) is a not-for-profit intergovernmental organisation that supports the conduct of multinational clinical trials in Europe. As of 2013, ECRIN has the legal status of a European Research Infrastructure Consortium (ERIC).

Based in Paris, we work with European Correspondents across Europe, national networks of clinical trial units (CTUs), as well as numerous European and international stakeholders involved in clinical research.

4.7 ELIXIR – ELIXIR

NTNU Contact Person: Finn Drabløs (finn.drablos@ntnu.no) and Stig Omholt (stig.omholt@ntnu.no)

URL: https://www.elixir-europe.org/

Administrative Contact Person: Yngve Sommervoll (yngve.sommervoll@ntnu.no)

Administrative unit: Faculty of Medicine and Health Sciences (MH), Department of Clinical and Molecular Medicine (IKOM)

TSO/ET: Health

Short description:

ELIXIR is an intergovernmental organisation that brings together life science resources from across Europe. These resources include databases, software tools, training materials, cloud storage and supercomputers.

The goal of ELIXIR is to coordinate these resources so that they form a single infrastructure. This infrastructure makes it easier for scientists to find and share data, exchange expertise, and agree on best practices. Ultimately, it will help them gain new insights into how living organisms work.

TeSS is an example of an ELIXIR resource. TeSS is online training portal that gathers life science training materials and training courses from across Europe, and allows you to search it in one website. This makes it easier for scientists to find the training they need, and gives the training courses wider publicity.

ELIXIR includes 21 members and over 180 research organisations. It was founded in 2014, and is currently implementing its first five-year scientific programme.

4.8 EuBI – Euro-Bioimaging

NTNU Contact Person: Olav Haraldseth (olav.haraldseth@ntnu.no)

URL: http://www.eurobioimaging.eu/

Administrative Contact Person: Yngve Sommervoll (yngve.sommervoll@ntnu.no)

Administrative unit: Faculty of Medicine and Health Sciences (MH), Department of circulation and medical imaging (ISB)

Short description:

The European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences (Euro-BioImaging, EuBI or EuBI ERIC) provides open physical user access to a broad range of state-of-the-art technologies in biological and biomedical imaging for life scientists. In addition, EuBI will offer image data support and training for infrastructure users and providers.

The EuBI consists of a set of 29 geographically distributed Node Candidates (specialised imaging facilities) that can grant access to scientists from all European countries and beyond. Currently, researchers can apply to use some of 36 imaging technologies offered through Euro-BioImaging.

EuBI started interim operation in May 2016 and all information about the Interim operation can be found here www.eurobioimaging-interim.eu

The whole infrastructure is supported by the EuBi Hub Candidate, which is the management and coordination part of Euro-BioImaging. EuBI Hub Candidate is composed of three parties: Finland, Italy and EMBL. Finland is managing the User Access to EuBI and will host the ERIC seat and take on the issues of quality control, delivery of service, user satisfaction, and scientific excellence. EMBL will support biological imaging community and provide image data services, while Italy will support biomedical imaging community.

EuBI will continuously evaluate and acquire new imaging technologies to ensure the sustained delivery of cutting-edge services.

Since it started its EC-funded Preparatory Phase I in December 2010, EuBI has been broadly supported by the European research community consisting of national BioImaging chapters in 25 European countries, with over 3000 stakeholders affiliated with major European research organizations and by the official Euro-BioImaging Industry Board.

Currently, the Euro-BioImaging Interim Board (IB) federates 15 member countries and the EMBL, and has created a common European budget from voluntary national contributions to launch the EuBI European Research Infrastructure Consortium (ERIC).

This intergovernmental effort has been boosted by the award of the EC H2020 Preparatory Phase II project, which will deliver turn-key procedures and rules for the operation of the EuBI ERIC. In addition to launching operations in Europe, EuBI is initiating a global research infrastructure collaboration, facilitated by the EC H2020 project Global BioImaging (GBI), designed to integrate with partner research infrastructures for imaging technologies worldwide.

EuBI will initially work together with imaging infrastructure experts from Australia, Argentina, South Africa, India, Japan and the United States of America, to further open and improve the provision of imaging services to biological and medical researchers worldwide.

5.0 JPI (Joint Programme Initiatives)

NTNU is connected to 3 out of 10 Joint Programming Initiatives. The overall aim of the Joint Programming process is to focus research on a number of key areas for Europe. Participation in JPIs is committed at the national level, not at the institutional level.

5.1 HDHL – Healthy Diet Healthy Life

NTNU Contact Person: Eva Falch (eva.falch@ntnu.no)

URL: http://www.healthydietforhealthylife.eu/

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV)

Theme/research area: Health and Food

Short description:

Joint programming of research in the field of nutrition, food and health will provide for coordination of research on the impact of diet and lifestyles on health, contribute significantly to the construction of a fully operational European Research Area on prevention of diet-related diseases and strengthening leadership and competitiveness on the research activities in this field. The ambitious major goals of JPI HDHL are as follows:

1. The coordination of the scope of research programmes across Europe and reducing duplication of efforts.
2. The allowance for easier to address common challenges developing suitable solutions with the same objective concerning food, nutrition and active life policy in the international arena while taking into consideration cultural diversities among countries.
3. The promotion of scientific excellence through joint activities with common funding and peer-review processes to minimise fragmentation of research activities and to use public resources more efficiently and effectively improving the accountability and transparency of public research programmes.
4. The support of cross-border collaboration and facilitation of data pooling and their collection in a uniform and standardised way.

5. The sharing expertise scattered across countries or throughout Europe as a whole promoting creation of a critical mass, cross-border mobility and training to facilitate timely dissemination and translation of research results to inform public health practice and policy.
6. The increase of the scientific, technological and innovative impacts of public investments in research by strengthening the coordination with other related policies through greater programme visibility and promotion of cross-border policy learning.

5.2 JPI Oceans – Healthy and Productive Seas and Oceans

NTNU Contact Person: Anastasios Lekkas (anastasios.lekkas@ntnu.no)

URL: http://www.jpi-oceans.eu/

Administrative Contact Person: Maria Azucena Gutierrez Gonzalez (mariaazucena.gutierrez@ntnu.no)

Administrative unit:

TSO/ET: TSO Oceans

Theme/research area: Ocean

Short description:

The Joint Programming Initiative Healthy and Productive Seas and Oceans (JPI Oceans) is an intergovernmental platform, open to all EU Member States and Associated Countries and with the participation of international partners on actions of mutual interest.

In its role as a coordination platform, JPI Oceans focuses on making better and more efficient use of national research budgets, which represent 88% of the research funding within Europe. One of JPI Oceans' goals is to develop joint research programmes in which countries can be involved on a voluntary basis (variable geometry). Participating countries also decide what contribution to make: this may include institutional, project-related or new funding.

JPI Oceans aims to add value by:

1. avoiding fragmentation and unnecessary duplication,
2. planning common and flexible initiatives,
3. facilitating cooperation and foresight, and
4. establishing efficient mechanisms for interaction and knowledge transfer between the scientific community, industry & services, and policy makers at high level in order to solve the grand challenges more effectively.

JPI Oceans welcomes the opportunity and encourages working with non- EU Countries on research & policy initiatives in order to achieve its objectives and will actively seek out partnerships with non-EU Countries.

The goals and objectives of JPI Oceans address the intersections between the marine environment, climate change and the maritime economy enabled by observations, infrastructure, technologies and human capacities.

Goals:

- Enable the advent of a knowledge based maritime economy, maximizing its value in a sustainable way
- Ensure Good Environmental Status of the seas and optimize planning of activities in the marine space
- Optimize the response to climate change and mitigate human impacts on the marine environment

JPI Oceans Strategy

The strategy of JPI Oceans is defined by its Strategic Research and Innovation Agenda (SRIA) which was published in May 2015. The SRIA presents ten Strategic Areas, developed and agreed by JPI Oceans (with the support of CSA Oceans) as strategic priorities for marine and maritime research in Europe. The ten strategic areas are:

1. Exploring Deep Sea Resources
2. Technology and Sensor Developments
3. Science Support to Coastal and Maritime Planning and Management
4. Linking Oceans, Human Health and Wellbeing
5. Interdisciplinary Research for Good Environmental Status
6. Observing, Modelling and Predicting Oceans State and Processes
7. Climate Change Impact on Physical and Biological Ocean Processes
8. Effects of Ocean Acidification on Marine Ecosystems
9. Food Security and Safety Driving Innovation in a Changing World
10. Use of Marine Biological Resources through Development and Application of Biotechnology

In addition to the Strategic Areas, three cross-cutting issues have been identified where JPI Oceans can add value in the European landscape.

1. Science-Policy Interface
2. Human Capacity Building
3. Infrastructures

An overview of all actions and projects initiated by JPI Oceans can be found here.

5.3 Urban Europe – Global Urban Challenges, Joint European Solutions

NTNU Contact Persons: Annemie Wyckmans (annemie.wyckmans@ntnu.no) and Judith Borsboom-van Beurden (judith.boorsboom@ntnu.no)

URL: http://jpi-urbaneurope.eu/

Administrative Contact Person: Tone Woie Alstadheim (tone.alstadheim@ntnu.no)

Administrative unit: Faculty of Architecture and Design (AD)

Theme/research area: Smart Cities

Short description:

JPI Urban Europe was created in 2010 to address the global urban challenges of today with the ambition to develop a European research and innovation hub on urban matters and create European solutions by means of coordinated research.

Currently, JPI Urban Europe has 14 members: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Italy, Latvia, the Netherlands, Norway, Slovenia Sweden and the United Kingdom. Poland, Portugal, Romania, Spain and Turkey are observers, as well as the European Commission.
More countries are involved in specific JPI Urban Europe activities.

A Strategic Research and Innovation Agenda (SRIA) was developed to identify and agree on research priorities and define joint implementation measures. The SRIA thus aims to consider the diversity of urban and regional research and innovation needs across Europe and also opens the door for small and less RTDI intensive countries to work together in JPI Urban Europe's activities. To ensure the highest commitment and relevance for all JPI Urban Europe partners, a co-creative process was applied, involving representatives from all stakeholder groups and regions – scientists, funding agencies, cities, business, industry, and civil society.

As a result, the Strategic Research and Innovation Agenda of JPI of Urban Europe 'Transitions towards Sustainable and Liveable Urban Futures' describes the long-term strategy, the research priorities and outlines the implementation plan for the timeframe 2015 – 2020.

6.0 Public-Private Partnerships (PPP)

6.1 5G – 5G Infrastructure Public Private Partnership

NTNU Contact Persons: Torbjörn Ekman (via COST IRACON)(torbjorn.ekman@ntnu.no) and Ilangko Balasingham (via Telenor)(ilangko.balasingham@ntnu.no)

URL: https://5g-ppp.eu/

Administrative Contact Person: TBC

Administrative unit: Faculty of Information Technology and Electrical Engineering (IV), Department of Electronic Systems (IES)

Short description:

The 5G Infrastructure Public Private Partnership (5G PPP) is a joint initiative between the European Commission and European ICT industry (ICT manufacturers, telecommunications operators, service providers, SMEs and researcher Institutions). The 5G-PPP is now in its second phase where 21 new projects were launched in Brussels in June 2017. The 5G PPP will deliver solutions, architectures, technologies and standards for the ubiquitous next generation communication infrastructures of the coming decade. The challenge for the 5G Public Private Partnership (5G PPP) is to secure Europe's leadership in the particular areas where Europe is strong or where there is potential for creating new markets such as smart cities, e-health, intelligent transport, education or entertainment & media. The 5G PPP initiative will reinforce the European industry to successfully compete on global markets and open new innovation opportunities. It will "open a platform that helps us reach our common goal to maintain and strengthen the global technological lead".

The key challenges for the 5G Infrastructure PPP are:

- Providing 1000 times higher wireless area capacity and more varied service capabilities compared to 2010
- Saving up to 90% of energy per service provided. The main focus will be in mobile communication networks where the dominating energy consumption comes from the radio access network
- Reducing the average service creation time cycle from 90 hours to 90 minutes
- Creating a secure, reliable and dependable Internet with a "zero perceived" downtime for services provision
- Facilitating very dense deployments of wireless communication links to connect over 7 trillion wireless devices serving over 7 billion people

- Ensuring for everyone and everywhere the access to a wider panel of services and applications at lower cost

6.2 BIC – Bio-Based Industries Consortium

NTNU Contact Person: Heinz Preisig (heinz.preisig@ntnu.no)

URL: https://www.bbi-europe.eu/

Administrative Contact Person: Johanne Arff (johanne.arff@ntnu.no)

Administrative unit: Faculty of Natural Sciences (NV)

Short description:

The objectives of the Bio-Based Industries Joint Undertaking (BBI JU) are to contribute to a more resource efficient and sustainable low-carbon economy and to increasing economic growth and employment, in particular in rural areas, by developing sustainable and competitive bio-based industries in Europe, based on advanced biorefineries that source their biomass sustainably and in particular to:

- Demonstrate technologies that enable new chemical building blocks, new materials, and new consumer products from European biomass, which replace the need for fossil-based inputs;
- Develop business models that integrate economic actors along the value chain from supply of biomass to biorefinery plants to consumers of bio-based materials, chemicals and fuels, including through creating new cross-sector interconnections and supporting cross-industry clusters; and
- Set-up flagship biorefinery plants that deploy the technologies and business models for bio-based materials, chemicals and fuels and demonstrate cost and performance improvements to levels that are competitive with fossil-based alternatives.

6.3 ECTP Energy Efficient Buildings - ECTP Committee for Innovative built environment

ENERGY EFFICIENT BUILDINGS
AN ECTP COMMITTEE FOR INNOVATIVE BUILT ENVIRONMENT

NTNU Contact Persons: TBC

URL: http://e2b.ectp.org/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

Short description:

E2B's vision is to drive the creation of a knowledge-based building industry which turns energy efficiency into sustainable business, within the PPP EeB under Horizon 2020.

The general objectives of E2B are:

- Develop technologies and solutions enabling to speed up the reduction in energy use and GHG emission in line with the 2020 goals, e.g. through a higher renovation rate of the building stock at lower cost and to meet regulatory needs;

- Develop energy efficiency solutions in order to turn the building industry into a knowledge-driven sustainable business, with higher productivity and higher skilled employees;

- Develop innovative and smart systemic approaches for green buildings and districts, helping to improve the competitiveness of EU building industry by providing cost-effective, user-friendly, healthy and safe products for smart cities.

This would ultimately create a solid foundation for continuous innovation in the building sector through sustainable partnerships, fostering an innovative eco-system across value chains which is not project based with episodic innovation activities as current practices.

Taking action against climate change and tackling CO2 emissions

Climate change is a reality which is altering the world around us; urgent action needs to be taken now. The construction Industry is a large contributor to CO2 emissions, with buildings responsible for 40% of the total European energy consumption and a third of CO2 emissions.

To help address climate change the European Commission has set specific targets to be achieved by 2020, known as the 2020 targets. Together we want to reduce energy consumption by 20%, reduce CO2 emissions by 20% and provide 20% of the total energy share with renewable energy.

Influencing research and transforming construction to make us a knowledge-intensive industry

E2B connects people in industry to drive EU-wide initiatives and to help set the course of research in order to make positive impact on our environment.

In 2013 we delivered a multiannual roadmap for 2014-2020 setting a vision and a path towards developing a high-tech building industry, which turns energy efficiency into sustainable business. This roadmap outlines research and innovation topics agreed amongst a wide community of stakeholders across Europe.

The roadmap established the backbone of a long term Research and Innovation programme agreed with stakeholders across Europe. In line with Horizon 2020, the EeB PPP aims to develop breakthrough affordable solutions at building and district scale, connecting to future smart cities and major European initiatives to maximise impact for the users and society.

Our Organisation

E2B is one of five Committees run by ECTP. Each Committee is focused on delivering a research agenda, bringing research projects together and engaging industry in order to address different societal and environmental challenges.

E2B is one of the more developed of the five Committees and was set up in order to help the construction industry reach 2020 targets and achieve energy neutral buildings and districts by 2050.

Other ECTP committees:

- Active Ageing & Design
- Heritage & Regeneration
- Infrastructure & Mobility
- Materials & Sustainability

6.4 PHOTONICS PPP

PHOTONICS PUBLIC PRIVATE PARTNERSHIP

NTNU Contact Persons: TBC

URL: https://www.photonics21.org/about-us/photonics-ppp/

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV)

Short description:

The Photonics PPP represents a long-term commitment between the European Commission and the photonics stakeholders to invest in Europe with the aim of securing Europe's industrial leadership and economic growth, a highly skilled workforce, and the capability to generate new jobs that attract young people. A seven years Multiannual Strategic Roadmap – Towards 2020 – Photonics Driving Economic Growth in Europe underpins the proposed activities of this Key Enabling Technology of growing photonics manufacturing and employment and act as a basis of the new Public Private Partnership.

Photonics21 President Michael Mertin, CEO Jenoptik, stressed that: "Boosting economic growth and the creation of jobs in Europe through strengthening its innovation capacity will be the major challenges of Horizon 2020. Through the establishment of a Public Private Partnership the photonics community fully commits to strive for photonics innovation in Europe and to reinforce the cooperation between public and private sectors. Our innovation capacity will substantially contribute to Europe's economy and thus benefit European citizens."

Since 2014 the Photonics21 Association acts as a "mouthpiece" of the European Technology Platform Photonics21 (and its more than 2000 members) towards the European Commission in the Photonics Public Private Partnership.

6.5 SPIRE – Sustainable Process Industry Through Resource and Energy Efficiency

Sustainable Process Industry through Resource and Energy Efficiency

NTNU Contact Persons: TBC

URL: https://ec.europa.eu/research/industrial_technologies/sustainable-process-industry_en.html

Administrative Contact Person: TBC

Administrative unit: Faculty of Natural Sciences (NV)

Short description:

EU process industry is at the core of most industrial value chains and faces the key challenge of having a high dependence on resources (energy, materials and water). An alliance of eight sectors of the European process industry (cement, ceramics, chemicals, engineering, minerals and ore, non-ferrous metals, steel and water) launched a new initiative on Sustainable Process Industry through Resource and Energy Efficiency (SPIRE), which is now becoming a contractual public-private partnership (PPP) under the new EU framework programme Horizon 2020. The sectors united under SPIRE include more than 450.000 individual enterprises, provide jobs for 6,8 million employees and generate annually more than € 1.600 billion in turnover. As such they are vital for Europe, representing 20% of the total European industry, both in terms of employment and turnover.

The SPIRE community has set out a research and innovation strategy reflected in the multi-annual roadmap for 2014-2020, which has been the subject of an extensive public consultation. The research and innovation activities proposed are expected to lead to the breakthrough technologies needed to make the European process industry more sustainable and competitive, through improvements in resource and energy efficiency.

The SPIRE PPP follows a cross-sectorial holistic approach, looking into all the components of the industrial operations, which are clearly identified in the domains covered in the roadmap (Feed, Process, Applications and Waste2Resource), and also addresses the non-technological barriers identified in the horizontal and outreach components. The technologies developed should lead to a decrease of 30% in fossil energy intensity and a reduction of 20% in the use of non-renewable resources; the achievement of these targets will in turn lead to a 40% decrease in CO2 equivalent footprints. With these ambitious objectives, the SPIRE PPP supports the achievement of the goals set out by the Europe 2020 strategy and will contribute to the knowledge based re-industrialisation of Europe, leading to the creation of growth and jobs.

The realisation of the SPIRE objectives is considered essential in order to rejuvenate the European process industry, to make it more competitive and sustainable, and lead to European growth and jobs.

- SPIRE at a glance
- Sustainable Process Industry Association (representing the PPP Private Side)
- SPIRE PPP Partnership Board Members (PDF version, 185KB)(Updated September 2015)

7.0 COST (European Cooperation in Science and Technology)

7.1 ENTER – EU Foreign Policy Facing New Realities – Perceptions, Contestation, Communication and Relations

NTNU Contact Person: Tor Georg Jakobsen (tor.g.jakobsen@ntnu.no)

URL: http://www.cost.eu/COST_Actions/ca/CA17119

Administrative Contact Person:

Administrative unit:

Short description:

7.2 IRACON – The Inclusive Radio Communications

NTNU Contact Person: Torbjörn Ekman (torbjorn.ekman@ntnu.no)

URL: http://www.iracon.org/

Administrative Contact Person: Ida Kallmyr Lerheim (ida.lerheim@ntnu.no)

Administrative unit: Faculty of Informatics and Electronics (IE)

Short description:

The Inclusive Radio Communications (IRACON) concept defines those technologies aimed to support wireless connectivity at any rates, for any communicating units, and in any type of scenarios. The Wireless Internet of Things beyond 2020 will require revolutionary approaches in Radio Access technologies, networks and systems. Some theoretical foundations have to be revisited and breaking technologies are to be discovered during the coming decade.

This COST Action aims at scientific breakthroughs by introducing novel design and analysis methods for the 5th-generation (5G) and beyond-5G radio communication networks. Challenges include i) modelling the variety of radio channels that can be envisioned for future inclusive radio, ii) capacity, energy, mobility, latency, scalability at the physical layer and iii) network automation, moving nodes, cloud and virtualisation architectures at the network layer, as well as iv) experimental research addressing Over-the-Air testing, Internet of Things, localization and tracking and new radio access technologies.

The group of experts supporting this proposal comes from both academia and industry, from a wide spread of countries all over Europe, with the support of some non-COST institutions and R&D associations and standardisation bodies worldwide. The proposers have also long experience on COST Actions in the Radio communications field.

7.3 QUALINET – European Network on Quality of Experience in Multimedia Systems and Services

NTNU Contact Person: Andrew Perkis (andrew.perkis@ntnu.no)

URL: http://www.cost.eu/COST_Actions/ict/qualinet

Administrative Contact Person: N/A

Administrative unit: Faculty of Information Technology and Electrical Engineering (IE), Department of Electronic Systems (IES)

Short description:

The goal of this Action is to establish a strong network on Quality of Experience (QoE) with participation from both academia and industry. Its main objective will be to develop and to promote methodologies to subjectively and objectively measure the impact in terms of quality of future multimedia products and services. This network will leverage on QoMEX, an already established international conference on Quality of Multimedia Experience, for researchers and professionals to interact and to report their findings on QoE issues. Observing that there are currently no European networks focusing on the concept of QoE, this Action also aims at bringing a substantial scientific impact on fragmented efforts carried out in this field, by coordinating the research under the catalytic COST umbrella, and at setting up a European network of experts facilitating transfer of technology and know-how to industry, coordination in standardization, and certification of products and services.

8.0 EIP – European Innovation Platforms

8.1 EIP Smart Cities – European Innovation Partnership on Smart Cities and Communities

NTNU Contact Persons: Annemie Wyckmans (annemie.wyckmans@ntnu.no) and Judith Borsboom-van Beurden (judith.boorsboom@ntnu.no)

URL: http://ec.europa.eu/eip/smartcities/index_en.htm

Administrative Contact Person: Tone Woie Alstadheim (tone.alstadheim@ntnu.no)

Administrative unit: Faculty of Architecture and Design (AD), Department of Architecture and Planning (IAP)

Short description:

The European Innovation Partnership on Smart Cities and Communities (EIP-SCC) brings together cities, industry and citizens to improve urban life through more sustainable integrated solutions.

This includes applied innovation, better planning, a more participatory approach, higher energy efficiency, better transport solutions, intelligent use of Information and Communication Technologies (ICT), etc.

8.2 EIP Water – European Innovation Partnership on Water

NTNU Contact Persons: Sveinung Sægrov (sveinung.sagrov@ntnu.no), Tone Merete Muthanna (tone.muthanna@ntnu.no), Cynthia Hallé (cynthia.halle@ntnu.no)

URL: https://www.eip-water.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Civil and Environmental Engineering (IBM)

Short description:

European Innovation Partnerships (EIP) aim to speed up innovations that contribute to solving societal challenges, enhance Europe's competitiveness and contribute to job creation and economic growth. EIPs help to pool expertise and resources by bringing together public and private actors at EU, national and regional level, combining supply- and demand-side measures.

The European Innovation Partnership on Water - EIP Water in short - is an initiative within the EU 2020 Innovation Union. The EIP Water facilitates the development of innovative solutions to address major European and global water challenges. At the same time, the EIP Water supports the creation of market opportunities for these innovations, both inside and outside of Europe.

The EIP Water aims to remove barriers by advancing and leveraging existing solutions. Its implementation has started in May 2013 with the main objective to initiate and promote collaborative processes for change and innovation in the water sector across the public and private sector, non-governmental organisations and the general public. This is mainly done via the establishment of Action Groups.

9.0 EIT – European Institute of Innovation and Technology

The European Institute of Innovation & Technology (EIT) is an independent body of the European Union set up in 2008 to boost innovation and entrepreneurship across Europe. The EIT brings together leading higher education institutions, research labs and companies to form dynamic cross-border partnerships – Innovation Communities - that develop innovative products and services, start new companies, and train a new generation of entrepreneurs.

https://twitter.com/EITeu

https://www.linkedin.com/company/european-institute-of-innovation-and-technology---eit

https://www.facebook.com/EITnews

9.1 InnoEnergy

NTNU Contact Persons: Johan Hustad (johan.hustad@ntnu.no)

URL: http://www.innoenergy.com/

Administrative Contact Person: Arild Smolan (arild.smolan@ntnu.no)

Administrative unit: Pro-Rector for Innovation

Short description:

InnoEnergy is the innovation engine for sustainable energy across Europe supported by the European Institute of Innovation and Technology.

We support and invest in innovation at every stage of the journey – from classroom to end-customer. With our network of partners, we build connections across Europe, bringing together inventors and industry, graduates and employers, researchers and entrepreneurs, businesses and markets.

We work in three essential areas of the innovation mix:

- Education to help create an informed and ambitious workforce that understands the demands of sustainability and the needs of industry.
- Innovation Projects to bring together ideas, inventors and industry to create commercially attractive technologies that deliver real results to customers.
- Business Creation Services to support entrepreneurs and start-ups who are expanding Europe's energy ecosystem with their innovative offerings.

Bringing these disciplines together maximizes the impact of each, accelerates the development of market-ready solutions and creates a fertile environment in which we can sell the innovative results of our work.

9.2 Raw Materials

NTNU Contact Persons: Daniel Beat Mueller (daniel.mueller@ntnu.no - IV-EPT), Gabriella Tranell (gabriella.tranell@ntnu.no - NV-IMA), Steinar Løve Ellefmo (steinar.ellefmo@ntnu.no - IV-IGP)

URL: https://eit.europa.eu/eit-community/eit-raw-materials

Administrative Contact Person: Maria Wallin (maria.wallin@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

TSO/ET:

Theme/research area:

Short description:

EIT Raw Materials was designated as an EIT Knowledge and Innovation Community (KIC) by the EIT Governing Board on 09 December 2014. The below provides some information on the challenges the KIC will address in the field of raw materials (sustainable exploration, extraction, processing, recycling and substitution) and the impact it will generate.

EIT Raw Materials has the ambitious vision of turning the challenge of raw materials dependence into a strategic strength for Europe. Its mission is to boost the competitiveness, growth and attractiveness of the European raw materials sector via radical innovation and entrepreneurship. This KIC will integrate multiple disciplines, diversity and complementarity along the three sides of the knowledge triangle (business, education and research) and across the whole raw materials value chain.

EIT Raw Materials will be the strongest consortium ever created in the world in the raw materials field. The approach will pay particular attention to systemic thinking and de-siloing across the value chain. Novel service offerings will be implemented to empower the EIT Raw Materials community and other stakeholders, including four customised tracks focusing on growth and job creation by boosting start-ups, SMEs, radical innovation and education.

EIT Raw Materials will generate significant impact on European competitiveness and employment. This will be realised through the introduction of innovative and sustainable products, processes and services and well-educated people that will deliver increased economic, environmental and social sustainability to European society.

9.3 Climate-KIC

NTNU Contact Persons: Arild Smolan (arild.smoland@ntnu.no) and Lars Gjølme (lars.gjolme@ntnu.no)

URL: http://www.climate-kic.org/

Administrative Contact Person: N/A

Administrative unit: Pro-Rector of Innovation

Short description:

EIT Climate-KIC is the EU's largest public-private partnership addressing climate change through innovation to build a zero-carbon economy.

We are supported by the European Institute of Innovation and Technology (EIT), a body of the European Union that boosts innovation and entrepreneurship across Europe. The EIT has created numerous "Knowledge and Innovation Communities" (KICs) focused on different societal challenges, and EIT Climate-KIC is the innovation community addressing climate change mitigation and adaptation.

We have brought together a world-class network of partners – from businesses of every size, academia and the public sector – who share a common interest in tackling climate change. We create new partnerships to integrate research, business and technology in order to transform innovative ideas into new goods, services and jobs.

We offer services to entrepreneurs to help them create their businesses, and we train students to use their climate change knowledge in the business world.

10.0 EC Expert Groups

The European Commission uses expert groups and similar entities to provide policy advice. A list of all expert groups is available on http://ec.europa.eu/transparency/regexpert/

10.1 FUTURIUM – European AI Alliance

NTNU Contact Person: Torbjørn Karl Svendsen (torbjorn.svendsen@ntnu.no)

URL: https://ec.europa.eu/futurium/en

Administrative Contact Person: Sina Therese Blix Prestmo (sina.prestmo@ntnu.no)

Administrative unit: NTNU Digital

TSO/ET: NTNU Digital

Theme/research area: Artificial Intelligence

Short description:

The High-Level Expert Group will make recommendations on how to address mid-and long-term challenges and opportunities related to artificial intelligence (AI). The recommendations will feed into the policy development process, the legislative evaluation process and the development of a next-generation digital strategy. The Group will also prepare draft ethics guidelines that will build on the work of the European Group on Ethics in Science and New Technologies and of the European Union Agency for Fundamental Rights in this area. The guidelines will cover issues such as fairness, safety, transparency, the future of work, and more broadly the impact on upholding fundamental rights, including privacy and personal data protection, dignity, consumer protection and non-discrimination. The draft guidelines will be finalised by the end of the year and presented to the Commission at the beginning of 2019.

11.0 Other

Several international networks, alliances, etc. did not fit any of the before-mentioned categories. However, due to their influence they have been added under the category "Other". If you would like to add to the list, please contact Thomas Sørlie Hansen at thomas.hansen@ntnu.no.

11.1 AIB – Academy of International Business

NTNU Contact Person: Richard Glavee-Geo (rigl@ntnu.no)

URL: https://aib.msu.edu/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK)

Short description:

The Academy of International Business (AIB) is the leading association of scholars and specialists in the field of international business. Established in 1959, today AIB is a 501(c)(3) non-profit US corporation. Its current headquarters is on the campus of Michigan State University in East Lansing, Michigan, United States.

AIB currently has 3388 members in 94 different countries around the world. Members include scholars from the leading academic institutions as well as consultants and researchers. We welcome members from developing countries, newly industrialized countries, as well as industrialized countries to join.

11.2 EAERE – European Association of Environmental and Resource Economists

NTNU Contact Person: Anne Borge Johannesen (anne.borge.johannesen@ntnu.no)

URL: http://www.eaere.org/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics and Management (ØK), Department of Economics (Econ)

Short description:

The European Association of Environmental and Resource Economists (EAERE) is an international scientific association whose aims are:

to contribute to the development and application of environmental, climate and resource economics as a science in Europe;

to encourage and improve collaboration and communication between scholars, researchers, policymakers, students in environmental, climate and resource economics in different European countries;

to develop and encourage the cooperation across universities and research institutions in Europe.

Founded in 1990, EAERE has approximately 1200 members in over 60 countries from Europe and beyond, from academic and research institutions, international organisations, the public sector, and the business world. Membership is open to individuals who by their profession, training and/or function are involved in environmental, climate and resource economics as a science, and to institutions operating in fields connected with the aims of the Association.

EAERE has two official Journals: Environmental and Resource Economics (ERE) and Review of Environmental Economics and Policy (REEP). The primary concern of ERE is the application of economic theory and methods to environmental issues and problems across a range of spatial and temporal scales up to the global dimension. REEP aims to fill the gap between traditional academic journals and the general interest press by providing a widely accessible yet scholarly source for the latest thinking on environmental and climate economics, and related policy analysis. REEP is published in cooperation with our sister association in North America (AERE).

Each summer, EAERE organises its Annual Conference, an invaluable opportunity for meeting, exchanging and debating current topics in environmental, climate and resource economics. With approximately 800 individual participants attending from all over the world, international researchers, scholars, economists and students convene to the EAERE Annual Conferences in the spirit of economic discovery, research, analysis and collaboration. Conferences are held in European

countries and unite European participants together with their national and international neighbours. Every four years since 1998, EAERE's Annual Conference is held within the World Congress of Environmental and Resource Economists, an international event organised together with AERE. From 2018, the event is co-organised by AERE, EAAERE and EAERE.

EAERE offers scholars, researchers and students a rich educational outreach portfolio comprised of its annual Summer and Winter Schools. The broader objective of this series of events is to provide advances training for young researchers from all over Europe and beyond on environmental, climate and resource economics.

11.3 EARPA – European Automotive Research Partners Association

NTNU Contact Persons: Magnus Langseth (magnus.langseth@ntnu.no), Anders Hammer Strømman (anders.hammer.stromman@ntnu.no)

URL: https://www.earpa.eu/earpa/home

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering, Department of Structural Engineering (KT)

Short description:

Founded in 2002, EARPA is the association of automotive R&D organisations. It brings together the most prominent independent R&D providers in the automotive sector throughout Europe. Its membership counts at present 53 members ranging from large and small commercial organisations to national institutes and universities.

EARPA is the platform of automotive researchers and is actively contributing to the European Research Area and the future EU RTD funding programmes.

EARPA works in close cooperation with the automotive industry, the automotive suppliers, the oil industry as well as the European Institutions and the EU Member States.

EARPA is independent from any external body or institute and is only funded by its members' fees and is governed by an Executive Board and a General Assembly.

11.4 EGVIA – European Green Vehicles Initiative Association

NTNU Contact Person: Anders Hammer Strømman (anders.hammer.stromman@ntnu.no)

URL: https://egvi.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV)

Short description:

The European Green Vehicles Initiative is a contractual public-private partnership dedicated to delivering green vehicles and mobility system solutions which match the major societal, environmental and economic challenges ahead. With a focus on the energy efficiency of vehicles and alternative powertrains, the EGVI PPP aims at accelerating research, development and demonstration of technologies allowing the efficient use of clean energies in road transport.

The Partnership involves all industry, research and associate members of the European Green Vehicles Initiative Association (EGVIA) and the various Directorates General of the European Commission engaged in the PPP. Public and private partners collaborate to identify research and innovation activities to be proposed for financial support under Horizon 2020 - the EU Framework Programme for Research and Innovation in the period 2014-2020. Three rounds of biennial calls for proposals are expected to be launched within the EGVI PPP.

The European Green Vehicles Initiative is established in the continuation of the European Green Cars Initiative (2009-2013). The latter was created in an ad-hoc manner in the 7th Framework Programme, in response to the global economic crisis of 2008, and led to the joint funding of more than 80 collaborative research projects. Although the scopes of the two Initiatives slightly differ – the EGVI PPP specifically focuses on the energy efficiency of vehicles and alternative powertrains and covers additional vehicle types – the approach and working methods developed are similar.

The Multiannual Roadmap for the EGVI Contractual Public-Private Partnership is the document of reference for the implementation of the PPP. It takes into account the roadmaps from the three European Technology Platforms involved - ERTRAC, EPoSS and SmartGrids, and outlines the vision, research and development strategy, as well as the expected impact and governance model of the European Green Vehicles Initiative.

11.5 EIBA – European International Business Academy

NTNU Contact Persons: Richard Glavee-Geo (rigl@ntnu.no) and Siv Marina Flø Grimstad (sika@ntnu.no)

URL: http://www.eiba.org

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics and Management (ØK), Department of International Business (IIF)

Short description:

The **European International Business Academy (EIBA)** was founded in 1974 under the auspices of the European Foundation for Management Development (EFMD) and in close cooperation with the European Institute for Advanced Studies in Management (EIASM). The Academy is a professional society for academics and practitioners with an interest in the growing field of International Business. It is distinct from many other associations in that members come from a wide variety of disciplines and functional backgrounds and share the common purpose of using an international context to cross the intellectual boundaries that so typically divide institutions of higher education.

The aim of **EIBA** is to serve as the core communication network for disseminating information and promoting international exchange in the field of International Business. Membership is open to individuals from Europe and elsewhere. At present, the Academy has more than 500 members from about 50 different countries representing all five continents.

11.6 ENOLL – European Network of Living Labs

NTNU Contact Person: John Krogstie (john.krogstie@ntnu.no)

URL: https://enoll.org/

Administrative Contact Person: TBC

Short description:

The European Network of Living Labs (ENoLL) is the international federation of benchmarked Living Labs in Europe and worldwide. Founded in November 2006 under the auspices of the Finnish European Presidency, the network has grown in 'waves' up to this day.

The European approach to Living Labs was created in the Unit "Collaborative working environments" of the DG INFSO (now DG CONNECT) in close collaboration with an industrial advisory group on Open Innovation (Open Innovation Strategy and Policy group – OISPG) which was founded by Bror Salmelin. The original concept was updated to open innovation environments attracting inwards investment, both intellectual and financial one.

ENoLL counts today over 130+ active Living Labs members worldwide (440+ historically recognised over 12 years), including active members in 20 of the 28 EU Member States, 2 of the candidates and it is present in 5 continents in addition to Europe. Directly, as well as through its active members, ENoLL provides co-creation, user engagement, test and experimentation facilities targeting innovation in many different domains such as energy, media, mobility, healthcare, agrifood, etc. As such, ENoLL is well placed to act as a platform for best practice exchange, learning and support, and Living Lab international project development.

11.7 EONERC – International Energy Cooperation Program

NTNU Contact Person: Stein-Erik Fleten (stein-erik.fleten@ntnu.no)

URL: http://www.eonerc.rwth-aachen.de/cms/E-ON-ERC/Studium/~nnzs/IECP-NEU/?lidx=1

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK), Department of Industrial Economics and Technology Management (IØT)

Short description:

In addition to interdisciplinary research, the E.ON Energy Research Center (E.ON ERC) is distinguished by its strong national and international links with other universities, research centers or similar scientific institutions. With its branch office in Aachen, the ERC represents a central position in the center of Europe.

The International Energy Cooperation Program (IECP) offers students, scientists and researchers the opportunity to participate in research projects, exchange ideas and learn from the experiences of the partners. The closed collaborations between the E.ON Energy Research Center of RWTH Aachen University and foreign universities or institutions are spread all over the world. In terms of content, the research focus is on a different field of energy with each closed collaboration.

11.8 EURAM – European Academy of Management

European Academy of Management
EURAM
A european based community of engaged management scholars

NTNU Contact Person: Trond Stiklestad (trond.stiklestad@ntnu.no)

URL: http://www.euram-online.org/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK), Business School (HHS)

Short description:

The European Academy of Management is a learned society founded in 2001.

It aims at advancing the academic discipline of management in Europe. With members from 49 countries in Europe and beyond, EURAM has a high degree of diversity and provides its members with opportunities to enrich debates over a variety of research management themes and traditions.

11.9 FCH2 – Fuel cells and hydrogen Joint Undertaking

NTNU Contact Persons: Bruno G. Pollet (bruno.g.pollet@ntnu.no)

URL: https://www.fch.europa.eu/

Administrative Contact Person: Andreas Møllerløkken (andreas.mollerlokken@ntnu.no)

Administrative unit: Faculty of Engineering (IV), Department of Energy and Process Engineering (EPT)

TSO/ET: Energy

Short description:

The Fuel Cells and Hydrogen Joint Undertaking (FCH JU) is a unique public private partnership supporting research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Its aim is to accelerate the market introduction of these technologies, realising their potential as an instrument in achieving a carbon-clean energy system.

Fuel cells, as an efficient conversion technology, and hydrogen, as a clean energy carrier, have a great potential to help fight carbon dioxide emissions, to reduce dependence on hydrocarbons and to contribute to economic growth. The objective of the FCH JU is to bring these benefits to Europeans through a concentrated effort from all sectors.

The three members of the FCH JU are the European Commission, fuel cell and hydrogen industries represented by Hydrogen Europe and the research community represented by Hydrogen Europe Research.

11.10 IAEE – International Association for Energy Economics

NTNU Contact Persons: Ruud Egging (ruude@ntnu.no) and Frode Kjærland (frode.kjarland@ntnu.no)

URL: http://www.iaee.org/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics and Management (ØK)

TSO/ET: Energy

Short description:

We are a worldwide non-profit professional organization based in the United States, which has members in over 100 nations, who strive to provide an interdisciplinary forum for the exchange of ideas, experience and issues among professionals interested in energy economics. We actively seek those who are interested in energy economics and those who shape opinions and prepare for events which effect the energy industry.

As our main objective we want to provide for the mutual association of persons interested in energy economics in order to create a forum for professional, multinational discussion and to provide a means of professional communication and exchange for these persons. To achieve this goal, we publish three periodicals. "The Energy Journal" is a quarterly, academic publication available to all members. The "Economics of Energy & Environmental Policy" is a semi-annual publication also available to all members. Both of these publications may be purchased by non-members through our site. The IAEE Energy Forum (newsletter) delivers the latest information on the association, and contains articles that appeal to a general audience interested in the energy field. Both of these publications can be reviewed in greater detail in our publications section.

In order to meet our association's objectives, we also hold an International Energy Conference each year. Past meetings have taken place in cities such as Rome, Quebec, New Delhi, Budapest, Washington D.C. and Copenhagen. These conferences attract delegates and speakers from around the world, and from some of the most influential government, corporate and academic circles.

Membership in IAEE is open to anyone who has an interest in the field of energy economics. You are encouraged to view our site for more information. If you are interested in joining, our membership section will provide answers and has an online application.

11.11 Informs – Institute for Operations Research and the Management Sciences

NTNU Contact Person: Ruud Egging (ruude@ntnu.no)

URL: https://www.informs.org/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics and Management (ØK), Department of Industrial Economics and Technology Management (IØT)

Short description:

INFORMS offers a broad umbrella of services and resources to individuals interested in applying scientific methods to improve operations, analytical decision making, and management. We have become the largest non-profit organization in the world for professionals in operations research, the management sciences, analytics, and related fields within engineering, information science, decision making, quantitative methods, and business intelligence.

11.12 IPSERA – Supply Education and Research Association

NTNU Contact Person: Richard Glavee-Geo (rigl@ntnu.no)

URL: http://www.ipsera.com/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK), Department of International Business (IIF)

Short description:

IPSERA acts as a reference platform for academics and practitioners to exchange ideas, stimulate discussions and reflect on concepts, theories and educational forms and methods in an open and friendly atmosphere. The topics discussed and issues raised should one way or another improve the professional quality of those, active in the field of purchasing and supply management.

Key values of the Association are the following:

- **leading edge research** in the field of purchasing and supply management;
- **innovation** in approaches and methodologies in both research and education;
- **practice oriented** activities having an impact on the purchasing and supply society;
- **environment and social responsibility** related to purchasing and supply fields;
- **transparency and friendliness** among all members.

11.13 NERGY – Hydrogen Europe Research

NTNU Contact Person: Edd Anders Blekkan (edd.a.blekkan@ntnu.no)

URL: https://www.nerghy.eu/

Administrative Contact Person: TBC

Administrative unit: TBC

Short description:

Hydrogen Europe Research (former N.ERGHY) is a research grouping of the Fuel Cells and Hydrogen Joint Undertaking, a unique public private partnership supporting research, technological development and demonstration (RTD) activities in fuel cell and hydrogen energy technologies in Europe. Gathering more than 60 research institutions (universities and research centres), it supports and promotes research interests in the FCH JU and creates a framework for cooperation of science and industry in Europe.

On May 6th 2014, the Council of the European Union formally agreed to continue the Fuel Cells and Hydrogen Joint Technology Initiative under the EU Horizon 2020 Framework Program. The programme (2014-20) has a total budget of €1.33 billion provided on a matched basis between the EU represented by the European Commission, the European Industry and Research.

11.14 NOFOMA – Nordic Logistics Research Association

NTNU Contact Person: Richard Glavee-Geo (rigl@ntnu.no)

URL: http://www.nofoma.net/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK)

Short description:

NOFOMA is a society of Nordic researchers within the logistics field. Besides being a contact network of logistics scientists sharing similar interests, the main activity of the network is to carry out an annual conference where all researchers from the Nordic countries, including Denmark, Finland, Iceland, Norway, and Sweden meet as well as other colleagues from different countries around the world, particularly from USA and Central Europe. In association with the NOFOMA annual conference, the NORDLOG doctoral workshop takes place where Ph.D. Candidates from the Nordic countries get together and discuss their issues as well as to conduct some workshop activities within the field of logistics.

11.15 Nordlys

NTNU Contact Person: Nina Moxnes (nina.moxnes@ntnu.no)

URL: https://www.nordlys.info/english/

Administrative unit: International Relations

Short description:

With its 37 member universities, Nordlys is one of the biggest networks within the Nordplus programme. The main goal for Nordlys is to enable and increase student mobility in the Northern Countries.

What is Nordlys?

NORDLYS is an interdisciplinary network and forms part of NORDPLUS. It was founded in 1995 and currently has 37 members. The objective of the Nordlys network is to facilitate and strengthen the mobility of students within the Nordic countries.

What is Nordplus?

Nordplus programme is the Nordic Council of Ministers' most important programme for Lifelong Learning. More than 10,000 people in the Nordic and Baltic regions participate in the programme each year.

The objective of the Nordplus programme is to strengthen, develop, and maintain Nordic educational cooperation and the Nordic dimension. Nordplus also aims at promoting Nordic languages, culture, and a mutual Nordic-Baltic linguistic and cultural understanding.

More information:

Nordplus Higher Education
http://www.nordplusonline.org/Who-can-apply/Nordplus-Higher-Education

11.16 StoProg – Stochastic Programming Society

NTNU Contact Persons: Ruud Egging (ruude@ntnu.no)

URL: https://stoprog.org/

Administrative Contact Person: Hilde Røysland (hilde.roysland@ntnu.no)

Administrative unit: Faculty of Economics (ØK)

Short description:

The Stochastic Programming Society (SPS) is a worldwide group of researchers who are developing models, methods, and theory for decisions under uncertainty.

SPS promotes the development and application of stochastic programming theory, models, methods, analysis, software tools and standards, and encourages the exchange of information among practitioners and scholars in the area of stochastic programming. The activities of SPS facilitate the advancement of knowledge through its triennial conferences, specialized workshops, and rapid (electronic) dissemination of research via the Stochastic Programming E-Print Series (SPEPS). SPS exists as a Technical Section of the Mathematical Optimization Society(MOS). Until 2012, the precursor of SPS was known as the "Committee on Stochastic Programming (COSP)".

Annex I

List of European platforms NTNU is not a part of:

ACARE - Advisory Council for Aviation Research in Europe

ALICE – Alliance for Logistics Innovation through Collaboration in Europe

BDVA - Big Data Value Association

ConXEPT – The Consumer Goods cross ETP

EPoSS – European Platform of Smart Systems Integration

EPT4HPC - European Technology Platform for High Performance Computing

ERRAC – European Rail Research Advisory Council

ERTRAC - European Road Transport Research Advisory Council

ESTEP – European Steel Technology Platform

ETIP PV - European Technology & Innovation Platform PV

ETIP Wind - European Technology and Innovation Platform on Wind Energy

ETIP SNET – European Technology and Innovation Platform on Smart Networks for Energy Transition

EuMaT - European Technology Platform for Advanced Engineering Materials and Technologies

euRobotics (AISBL)

FABRE TP - Farm Animal Breeding & Reproduction Technology Platform

FTP – Forest-based Technology Platform

FTC - European Technology Platform on Fibres Textiles Clothing

NESSI - The European Technology Platform dedicated to Software, Services and Data

Plant ETP – Plants for the Future

SNETP - Sustainable Nuclear Energy Technology Platform

Waterborne – Waterborne Maritime Activities

Examples of European networks or alliances that NTNU is currently not a part of:

CEPS – Centre for European Policy Studies

EEA – European Economics Association

EMAC – European Marketing Academy

EPC – European Policy Centre

SEUN – Startup Europe Universities network

SESAR – Single European Sky ATM Research JU