ANNUAL REPORT 2022

DIMECC

Content

DIMECC

Sustainable and resilient growth

The long-lasting march of democracies in setting up the developmental path of societies took a big step backward and turned us to remember how terrorists have for centuries tried to tyrannize the free world. Energy crisis, one of the outcomes of the Russian aggression, made it very clear, that green transition is needed. In addition, despite of the acute lack of energy, high prices, and limitations to the use of energy consumption, the crisis will evidently speed up the transition of getting rid of fossil fuels and energy sources. This will be a big booster to European research and innovation work.

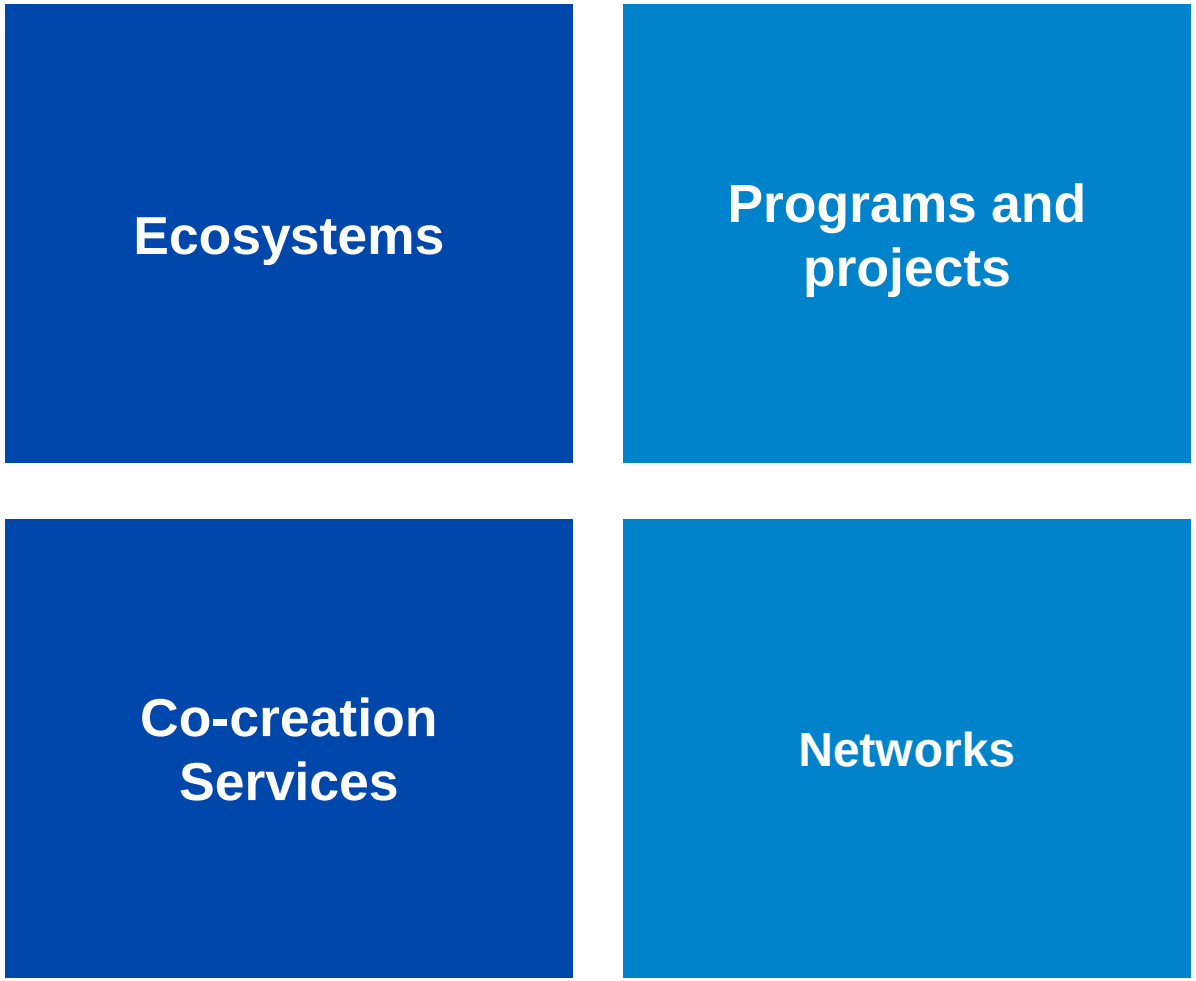
Within DIMECC, the year 2022 continued our path of growth. The 15 per cent growth in operations of DIMECC derived from three major sources: First, the digital and green transition significantly increased the material and immaterial investments of our customers, and they continued increasing the use of our co-creation and innovation services as well. Secondly, we were able to launch two new business ecosystems in 2022: VAMOS (Autonomous mobility in smart spaces) and SW4E (Software engineering ecosystem for efficiency, excellence, experiments). Thirdly, the EU project portfolio of DIMECC was enlarged to all-time-high size with four new EU projects, all of them specialized in speeding up the digitalization of SMEs.

In 2023, we will continue supporting the growth of the most advanced innovation players. We will increase machine learning and 3D-printing content and services in our portfolio and we will organize the Manufacturing Performance Days in June 5-7 under the theme “Sustainable and resilient growth”. We expect the twin transition not only to continue, but to significantly change the ways how we use new technologies and how we make business out of them. Future will be co-created and DIMECC is the impactful and efficient co-creation hub for digitalization.

I would like to thank DIMECC’s customers, shareholders, stakeholders, service suppliers, personnel, and board of directors for the very resilient year of 2022!

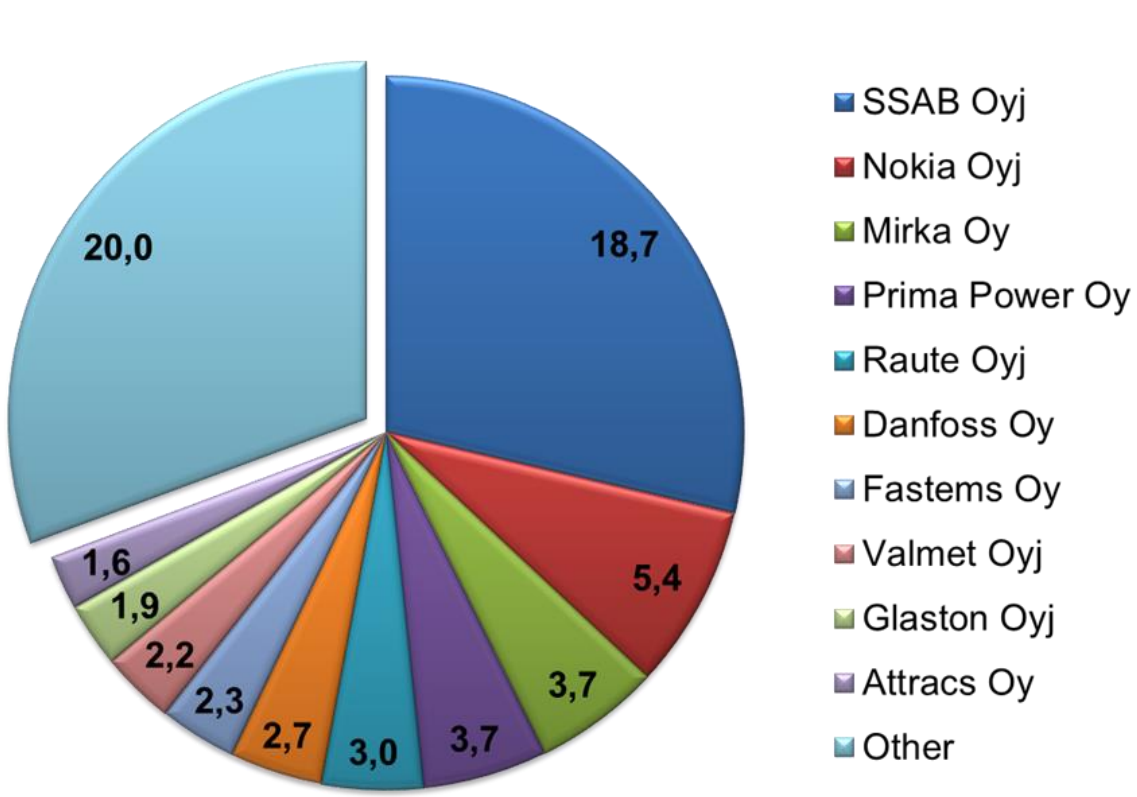
Harri Kulmala, CEO

DIMECC operational model

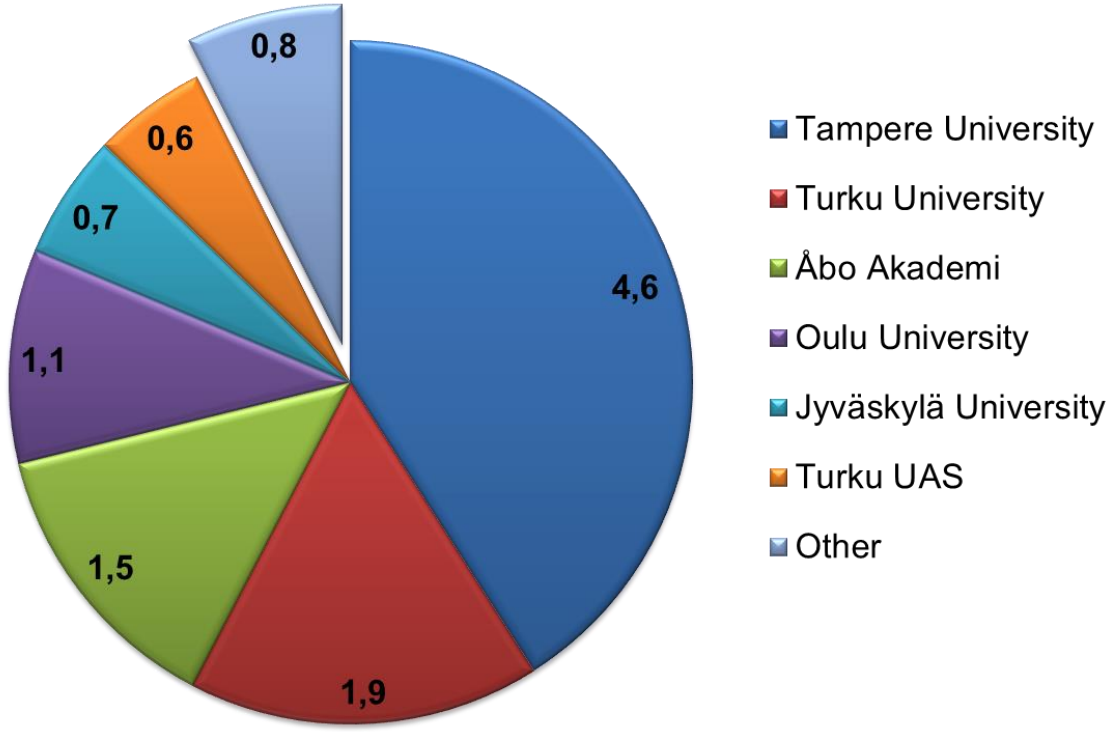


DIMECC Program portfolio

Private investment in programs, M€ (2022)

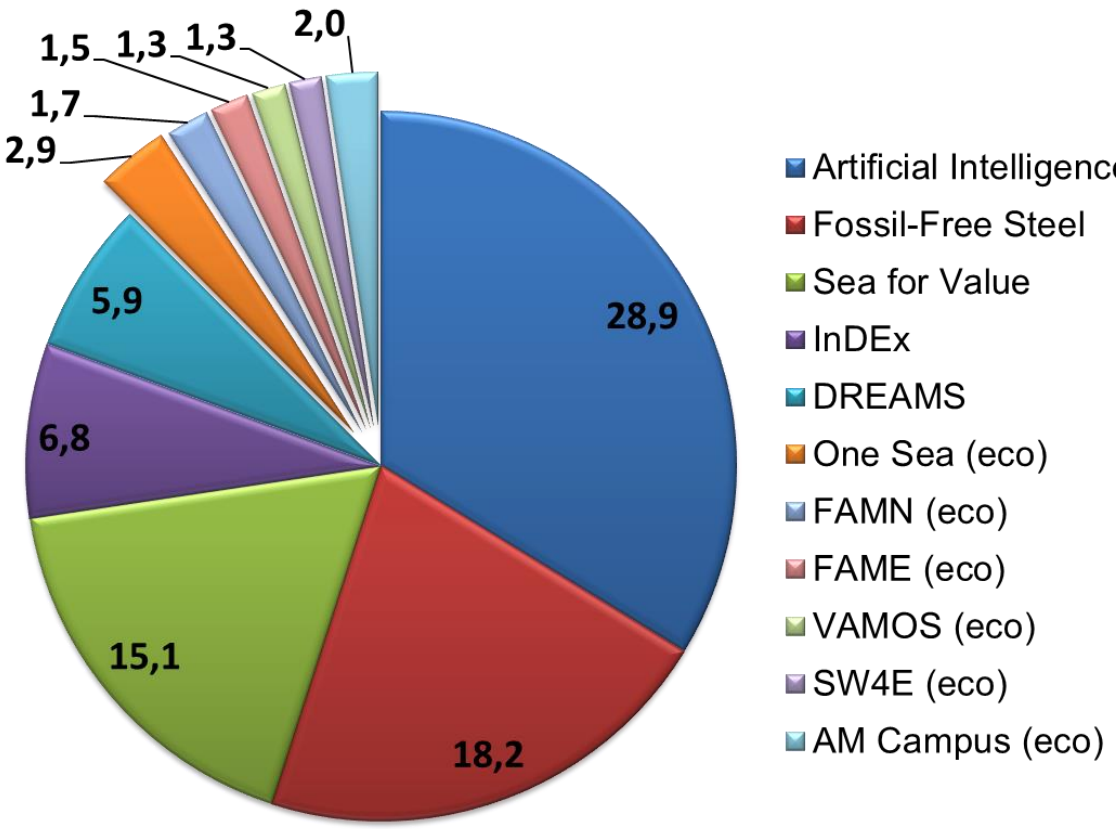


Research institute budgets, M€ (2022)

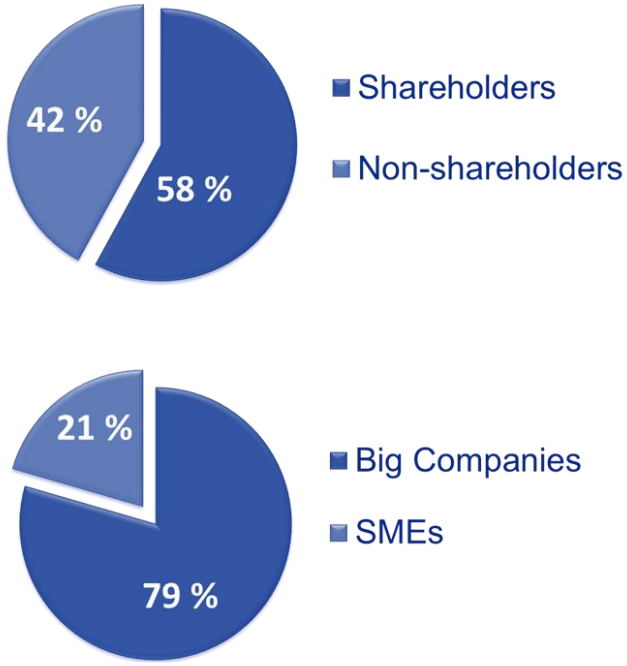


Budgetary division of program portfolio

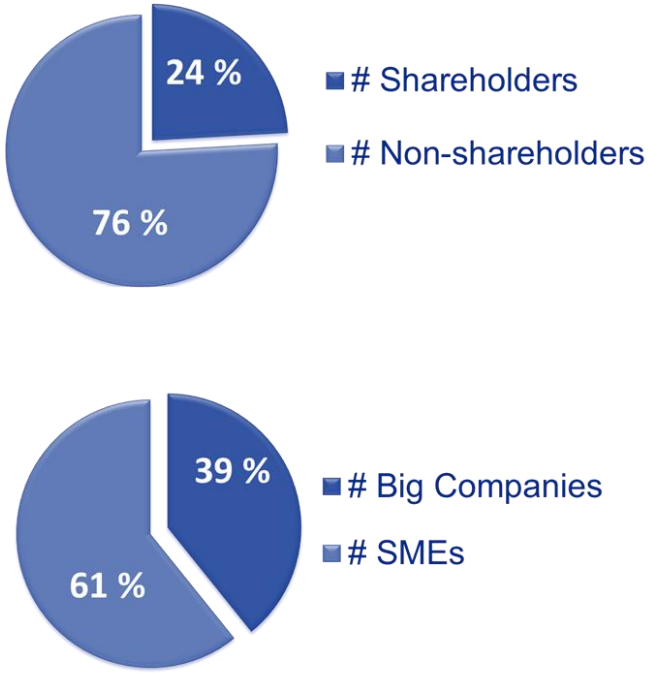
Program budgets, M€ (2022)



Share of program budgets



Number of companies



ONE SEA

ABB

Avikus
MARITIME AUTONOMOUS PIONEER

CARGOTEC
KALMAR
HIAB
MACGREGOR

FINNPILOT

Fintraffic

Haltian

KONGSBERG

Monohakobi
Technology Institute

ORCA AI

SEA MACHINES

tietoevry

WÄRTSILÄ

BUSINESS
FINLAND

One Sea is leading the way towards an automated and autonomous maritime transport system.

www.one-sea.org

DIMECC

One Sea Highlights 2022

One Sea is a unique non-profit alliance that aims to lead the way towards automated and autonomous maritime systems by promoting the creation of necessary conditions and supporting the development of the international legal framework.

In 2022 One Sea focused on advancing and contributing to the development of international regulations.

In spring, One Sea published an industry white paper, “Autonomous Ships: Terms of reference for rule development”, which received wide international acceptance and was submitted to the IMO by Finland.

In autumn, One Sea organised a discussion event for the IMO member states in London to shed light on the views and interpretations of why and how a ship should be considered as a system when developing a legislative framework. Besides IMO member states, the event attracted several relevant stakeholders.

One Sea participated as an invited speaker at the IMO MASS Seminar and the EMSA's newly established MASS expert working group.

One Sea strengthened its position as a recognised expert organisation and successfully continued building its thought leader role.

FAMN
Finnish Advanced Manufacturing Network

ABLOY · advan · BECKHOFF · Danfoss · DELFOI · elekmerk · ELEMATIC · 8760 Fastems · HTT LASER · KONECRANES · KEMPPI · Metsäteho · NOKIA · Prima Power · RAUTE · SIEMENS · tietoevry

Technology Industries of Finland

BUSINESS FINLAND

FAMN improves the global competitiveness of industrial companies and accelerates their sustainable renewal and digitalisation.

www.famn.fi

DIMECC

FAMN Highlights 2022

The Finnish Advanced Manufacturing Network (FAMN) is a company-led business-driven open ecosystem that was established in December 2021 together with the Technology Industries of Finland. FAMN was created by enlarging and enriching the Intelligent Industry ecosystem, that has been operated since 2017.

2022 was the ramp-up year for FAMN and by the end of the year already 17 companies had joined.

Machine Learning Academy training was executed during 2022.

Data Accelerator for SMEs was introduced.

Industrial Data Excellence (InDEx) project focusing on industrial data sharing was completed during 2022. FAMN members initiated Industry X project (see page 23) in 2022 and two new co-innovation RDI-project preparations were started during 2022.

FAME

Finnish Additive Manufacturing Ecosystem

Finnish Additive Manufacturing Ecosystem FAME is an industrial ecosystem that increases the role of Additive Manufacturing in Finland and unleashes business potential in AM capabilities.

www.fame3d.fi/

DIMECC

FAME Highlights 2022

First joint research project DREAMS – funding granted and project started (6M€).

FAME Days at Vaasa, open for all main AM entitities – 70 participants. Furthermore FAME Days at Turku and Tampere.

AM Campus 2.0 concept started (additive manufacturing joint facilities) and funding granted (2 M€).

Participation in trade fairs with own booth for the first time (Subcontracting trade fair and Engineering works trade fair, Tampere & Formnext at Frankfurt).

Executed the largest Additively Manufactured Metal Structure (pressure vessel, see page 41) in Finland, recognized worldwide.

111 reported activities.

12 new members and 2 upgrades of membership.

VAMOS AUTONOMOUS MOBILITY IN SMART SPACES

UNIKIE GIM ROBOTICS RIGHTWARE

muRata INNOVATOR IN ELECTRONICS PLUGIT NORDIC INERTIAL

KEMPOWER DEAL DEAL COMP OY Mevea Simulation solutions

IMMERSAL SOLTEQ CARGOTEC

VTT HUAWEI Posiva

BUSINESS FINLAND

Making Finnish companies globally leading solution providers in global autonomous mobility solutions market by year 2029.

vamosecosystem.fi

DIMECC

VAMOS Highlights 2022

VAMOS started in May 2022 with 14 partners, and by the end of the year we had 5 more commitments.

The ecosystem started to organized by-weekly Flash events, i.e., remote presentations covering different aspects of autonomous mobility and smart spaces.

Ecosystem has actively prepared joint research and development projects, by the end of the year one was submitted and three were under preparations.

VAMOS has open cooperation discussions with European assosiations such as EACN and Catena-X.

Management Board decided to start building joint test and demonstration environment.

SW4E SOFTWARE ENGINEERING ECOSYSTEM

Bittium

ERICSSON

F-Secure

M-Files

VISMA

Kela|Fpa

DEMOLA

INNOFACTOR

basware

OP

Aalto University

UNIVERSITY OF TURKU

UNIVERSITY OF OULU

UNIVERSITY OF JYVÄSKYLÄ

Tampere University

HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

BUSINESS FINLAND

Responding to the challenges of growing complexity and demand by strengthening the know-how of software development methods, technologies and tools.

sw4e.fi

DIMECC

SW4E Highlights 2022

The SW4E Ecosystem was established in 2022 by the software industry to develop know-how and tools to increase the productivity of SW development, ant to be internationally attractive.

The share and importance of software in practically all products and services is growing rapidly. In addition, digital systems are becoming more and more complex. The SW4E Ecosystem responds to the challenges of growing complexity and demand by strengthening the know-how of software development methods, technologies and tools, and also culture and leadership.

The first R&D project QLeap was started in 2022. The project is led by the University of Jyväskylä and involves Nokia, Tietoevry, Bittium, M-Files, Solita and Vaadin. QLeap focuses on exploring the various challenges of using containers in software development. The SW4E ecosystem started preparing several similar initiatives.

Work on the Roadmap has already identified 16 R&D projects as well as numerous broader subjects that require attention. Work has already started on the upcoming projects.

Sea4Value: Fairway for Navigation

Schedule: 2020–2022
Volume: 6 M€

DIMECC Program
SEA4VALUE – Fairway

DIMECC

Fairway for Navigation project was part of the Sea4Value program, which focuses on the digitalization of port-to-port logistics chain.

The Future Fairway Navigation project results include a comprehensive description on the future fairway elements and a useable concept for the remote pilotage.

The fairway elements were identified and defined by project partners together with relevant authorities. The elements of the future fairway offered new insights into essential fairway services for both traditional and autonomous vessels. The definitions of the elements of future fairway will be a significant framework for authorities and various fairway ecosystem stakeholders.

The remote pilotage concept was tested in real conditions successfully in May 2022. The final seminar was held on September 29th in Helsinki

awake.ai, BRIGHTHOUSE INTELLIGENCE, ERICSSON, FINNPILOT, Haltian, MEYER TURKU SHIPYARD 1737, NOVIA UNIVERSITY OF APPLIED SCIENCES, Aalto University, Tampere University, Turun yliopisto University of Turku, UNIVERSITY OF JYVÄSKYLÄ, BUSINESS FINLAND

DIMECC Fairway for Navigation project highlights

The first ship equipped to utilize remote piloting technique was tested at Port of Kokkola

May 18th 2022 was a historical day. The first ship equipped with the technology of future fairway services was directed from the Port of Kokkola to the fairway.

At the same time, the suitability of the technical arrangements for remote piloting was tested. The systems were used in parallel with normal pilotage.

In the test, Viikki was piloted completely traditionally, and the remote piloting technique was tested parallel with it.

ESL Shipping's M/S Viikki transmitted real-time information about the ship's movements and fairway conditions to Novia's remote pilotage center in Turku. The remote piloting used a data acquisition and transmission system as well as remotage pilotage center developed by *Brighthouse Intelligence* and safety contours - visualization of *Awake.ai*. The information about the fairway traffic generated by *Fintraffic VTS's* radars was transmitted to remote pilots via an open interface.

Programs & Projects

Sea4Value: Smart Terminals – Smarter

Schedule: 2021–2023
Volume: 9 M€

DIMECC Program
SEA4VALUE–SMARTER

DIMECC

Smart Terminals – SMARTER project is part of the Sea4Value program, which focuses on the digitalization of port-to-port logistics chain. SMARTER has two main objectives:

- Reduction of emissions by optimizing port logistics. Ports are often located in existing city infrastructure with restricted possibilities of re-design without major investment. The port areas are typically also condensed with limited capacity. SMARTER seeks digital solutions to make notable difference in emissions by smarter logistics.
- Exceptional flow and experience for the passengers and cargo. The project creates replicable models for organizing the passenger and cargo logistics.

Programs & Projects

Industrial Data Excellence InDEx

Schedule: 2019-2022
Volume: 8,5 M€

DIMECC Program
InDEx – Industrial Data Excellence

DIMECC

The vision of the Industrial Data Excellence (InDEx) project was to unlock the value of data as an enabler for the next industrial revolution centered around artificial intelligence in the Finnish manufacturing industry.

InDEx produced several insights into data in an industrial environment, collecting data, sharing data in the value chain and in the factory environment, and utilizing and manipulating data with artificial intelligence. Data has an important role in the future in an industrial context, but data sources and utilization mechanisms are more diverse than in cases related to consumer data. Experiences in the InDEx cases showed that there is great potential in data utilization.

The final seminar was held on May 19th in Tampere

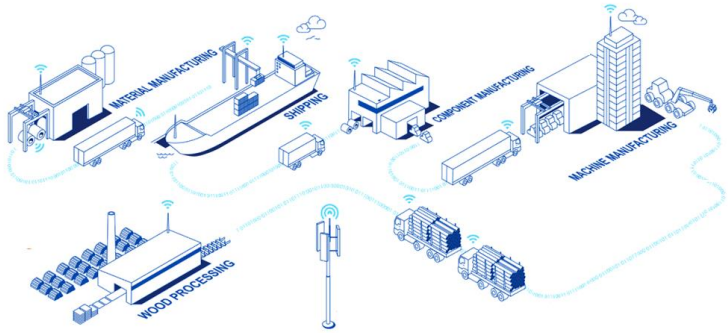
Danfoss, elekmerk, 8760 Fastems, HT LASER, KONECRANES Lifting Businesses, NOKIA, Prima Power, RAUTE, SSAB, tietoevry

Aalto University, Helsingin yliopisto Helsingfors universitet University of Helsinki, Turun yliopisto University of Turku, Tampere University, University of Jyväskylä, University of Vaasa, BUSINESS FINLAND

DIMECC INDEX program highlights

Danfoss developed Early Detection of Bearing Faults Using Neural Networks in InDEx program

Danfoss drives are in all industrial processes. AC drive as a sensor offers accurate insights into customer applications and processes. This allows to develop digital services to optimize the processes. The scope is so much wider than just the drive, it is the entire customer application. Effective condition monitoring and early fault detection and diagnosis is critical for maintaining reliable operation, avoiding unpredicted breakdowns, reducing operating costs and improving productivity.
With Tampere University, Danfoss has been looking at more efficient ways of detecting bearing faults. Based on this study we recommend using one-dimensional self-organized operation neural network with the generative neuron model for bearing fault severity classification.



Konecranes, Danfoss and Fastems Built a Smart Factory Prototype in InDEx program

Konecranes, Danfoss and Fastems implemented the smart factory prototype and tested IDS (International Data Spaces) solution based in practice in the Konecranes' smart factory environment.

Different IoT devices were set to deliver information to the crane control logic which was built to react to the collected information and to serve the factory automatically by commanding cranes to perform material movements when needed.

As a result of this research, we were able to verify the abilities of IDS that is a highly promising approach with several advantages, but some development work is still needed to increase the maturity level of the technology.

AISA – AI for Situational Awareness

Schedule: 2021-2024
Volume: 12,6 M€

DIMECC Program
LIFEX

AISA (AI for Situational Awareness) project focuses on taking AI-assisted situational awareness to the top of the industrial world.

The utilization of situational awareness created by artificial intelligence and versatile sensing – in particular, the processing of video, image and audio data streams using modern machine learning methods – are central to the AISA project.

Leveraging high speed edge computing and the ultra-low latency power of 5G networks will also ensure that industrial applications have rapid response times.

The three-year AISA project, which began in June 2021, is initiated by Nokia and facilitated by DIMECC.

Industry X

Schedule: 2022-2025
Volume: 16,3 M€

DIMECC Program
INDUSTRY X

The manufacturing industry's requirements for production flexibility and autonomy are growing at an accelerating pace. Key technologies in the change are artificial intelligence, cloud services, edge computing and ultra-fast wireless communication connections (5G).

In the Industry X project, Nokia Technologies and seven industrial equipment suppliers - Fastems, Glaston, Pemamek, Prima Power, Raute, Vacon and Vaski - strengthen their international competitiveness with pioneer applications that utilize the latest developments in digitalization. The project's research institute partner is Tampere University.

The Industry X project, which began in 2022, is initiated by FAMN member Nokia and facilitated by DIMECC.

FFS Towards Fossil-free Steel

Schedule: 2021-2023
Volume: 10,7 M€

FFS Towards Fossil-free Steel

The Towards Fossil-free Steel research project supports SSAB's strategic goal of gradually transitioning towards fossil-free steelmaking by mapping the solutions and alternatives to replace fossil fuels with renewable energy in steelmaking.

The FFS project's goal is to determine solutions to produce green forms of energy, i.e. hydrogen, biochar and biogas - for the steel industry. In addition, the project will study the smelting of hydrogen-reduced sponge iron in an electric arc furnace, the manufacture of fossil-free lime and new solutions to utilize the by-products created in the steelmaking processes.

DIMECC provides SSAB with the management of research and development projects towards Fossil-free Steel production. FFS started in August 2021.

Project partners include: SSAB, Tapojärvi, Luxmet, Nordkalk, Ovako, Fortum, Valmet, University of Oulu, Åbo Akademi, VTT & other companies supporting the project are Andritz, ABB, and Finnsementti.

Programs & Projects

FOSSA Fossil-free Steel Application

Schedule: 2022-2023
Volume: 7,5 M€

DIMECC

FOSSA Towards Fossil-free Steel

FOSSA project aims to initiate the transition towards carbon neutral Finland and conforms to an essential part of the strategic research agenda (SRA) of the Association of Finnish Steel and Metal Producers. The main topics of the FOSSA project are fossil-free steels' value chain, breakthrough steels and steel applications, and virtual steel production.

DIMECC provides SSAB with the management of research and development projects to fossil-free Steel project, Fossa (Fossil-free Steel Applications) was started in January 2022.

Project partners include are SSAB Europe Oy, HIAB (Cargotec Oyj), Fortaco Oy and Indalgo Oy. The supporting partners include Kemppi Oy, Ponsse Oyj, Rauma Marine Constructions Finland Oy, and Ramboll Finland Oy. Research partners are University of Oulu, Lappeenranta-Lahti Technical University, and Tampere University.

SSAB

PoDoCo – Post Docs in Companies

www.podoco.fi/

PoDoCo
Post Docs in Companies

DIMECC

Post Docs in Companies, PoDoCo™ program, is a joint initiative of industry and foundations.

The aim of the PoDoCo program is to promote academic research supporting long term competitiveness and strategic renewal of Finnish companies, and the employment of young doctors in industry.

Collaboration is based on PoDoCo project that consists of two phases: research period and targeted research period (6-12 months each).

Research period is funded by a foundation and targeted research period by the company.

There are two application rounds each year: Spring (March 1st – April 15th) and Autumn (September 15th – October 31st)

PoDoCo highlights 2022

223 collaborative projects between companies and Postdocs in 6 years since 2015.

In 2022, 22 new PoDoCo projects were funded. PoDoCo plays a significant role in the employment of foreigners with doctoral degrees in Finland in Finnish companies, and in 2022 three out of four applicants had foreign background.

"..With PoDoCo, we can now collaborate in a new way as we work to transform academic knowledge into globally relevant impact business…"

CEO of a startup company about the company's PoDoCo cooperation

"…We noticed quite quickly how good the PoDoCo program is for companies, especially for startups like us, because it is quite risk-free…"

CEO of a startup company about the company's second PoDoCo cooperation

DIMECC

Demobooster

www.demobooster.com/

DIMECC Co-creation
DEMOBOOSTER

DIMECC

Demobooster™ is a customized innovation process that gives companies an opportunity to boost their operations through new ideas and connections. In Demobooster, an Applier company sets a challenge for Producer companies and gets 3-5 pitches for a possible solution on Demobooster Demoday. The producer company that pitches the best solution proceeds to make a Proof of Concept (PoC) with the applier.

In February 2022 Demobooster Tampere was organized in cooperation with Business Tampere, in order to give especially the companies from Tampere region an opportunity to boost their innovation. Challenges were set by Framery and TT Gaskets. TT Gaskets selected Booming Marketing & Strategies as its cooperation partner, and Framery started collaborating with Softlandia.

Since 2015, DIMECC has organized 15 successful Demodays with 48 different challenges and 129 innovative solutions, of which 28 have resulted in a concrete demo. Altogether, 69 companies have participated in Demobooster.

Demola

www.demola.net

Demola is partly owned by DIMECC Ltd.

Demola Global helps businesses and organisations to explore future impacts and driving forces to build future-proof strategies. Since 2011, Demola has worked with more than 1,500 corporations, growth companies and public organisations.

The most significant business of Demola in 2022 took place in Japan.

In 2022, Demola Portugal Initiative was executed together with Portuguese polytechnics, Portuguese government, Finnish ministry for foreign affairs, and Demola Global.

By building a bridge between the decision-makers of today and tomorrow, Demola aims for improved and more democratized ability to react to changes as a society.

Finnish Industrial Internet Forum – FIIF

www.fiif.fi

FINNISH INDUSTRIAL INTERNET FORUM

FIIF is a company-driven match-making forum that boosts sustainable digitalization of companies and their businesses.

The main target of the FIIF is to showcase concrete initiatives and practical actions that turn digitalization visions into business, as well as ensure and enhance the competitive edge of companies.

During 2022, FIIF organized eight events covering the following topics: “Artificial Intelligence in Industry”, “3D Printing”, “Conversational AI”, “CyberFactory #1”, “Finland’s EDIH’s”, “Robotic Operating System”, “OPC-UA” and “International Data Spaces”. There were in total 448 registered participants in these events. There were 353 different names in the registration lists coming from 155 organizations.

Six issues of FIIF Newsletter and four FIIF Alerts were published. During 2022 FIIF’s web pages attracted 3400 users.

On December 31, 2022 FIIF had 140 partner organizations and 410 names on its mailing list.

High Level Forum

GIANT | HIGH LEVEL FORUM
Leading Innovation Ecosystems

High Level Forum is an international forum devoted to co-learning between the leading innovation ecosystems. It is managed by the Grenoble Innovation Campus GIANT (Grenoble Innovation for Advanced New Technologies).

The High Level Forum was initiated in 2012. In the Forum, high-performance city-based innovation ecosystems are present. Tampere is the Finnish city invited to attend the HLF among more than 30 internationally recognized cities in innovation. CEO Harri Kulmala works at the HLF Steering Committee.

The goal of the High Level Forum is to share policies, strategies and experiences about innovation management and promotion between leading campuses, to encourage and strengthen collaboration between the world's most powerful innovation ecosystems, and to develop common initiatives for maximizing the social and economic benefits of innovation programs from the participating campuses.

High Level Forum organized its Annual Summit 2022 in Finland. DIMECC has in less than ten years with active participation in the Forum brought Finns the opportunity to learn from the best and get the high-performing innovation ecosystem representatives to Finland.

DIMECC's EU activities

Robocoast EDIH

DIMECC is actively participating in the manufacturing European Digital Innovation Hub in Finland.

Robocoast EDIH applies AI and cybersecurity to promote sustainable growth and competitiveness of the Finnish manufacturing industry. Robocoast's core competencies are in robotics, cyber security, data analytics, artificial intelligence and IoT. The goal is to promote the introduction and research of these technologies in companies, and thereby enhance the digitalisation of strong export industry. DIMECC is an associated partner of Robocoast EDIH.

TranS4MErs

Adma TranS4MErs supports ambitious SMEs on their transformation journey and encourages them to become Factories of the Future embracing the ecological, digital, and societal challenges.

A €5.6M project funded by Horizon 2020 Research and Innovation Framework Programme of the European Union, building on the work of ADMA, the European Advanced Manufacturing Support Centre

Launched on 1st October 2021. The project will run for 3 years and will be implemented by a consortium of 38 partners from the 27 European Union member states.

DIMECC is active in international networks

Shareholders 2022

SHAREHOLDER	N. OF SHARES
Aalto-korkeakoulusäätiö	150
ABB Oy	120
Andritz Oy	50
Bittium Technologies Oy	120
Boliden Kokkola Oy	50
Cargotec Oyj	120
Centria Ammattikorkeakoulu Oy	12
CSC-Tieteen tietotekniikan keskus Oy	12
Digita Oy	52
Elisa Oyj	120
Oy L M Ericsson Ab	120
EXFO Oy	12
Fastems Oy Ab	50
FIMA Forum for Intelligent Machines ry	50
Finn-Power Oy	50
F-Secure Oyj	12
Haaga-Helia Oy Ab	12
Helsingin yliopiston rahastot	24
Inno-W Oy	12
Itä-Suomen Yliopisto	12
Juridiska Personen Åbo Akademi	40
Jyväskylän ammattikorkeakoulu	12
Jyväskylän yliopisto	52
Kaakkois-Suomen ammattikorkeakoulu	12
Knowit Cloud Partnerships Oy	12
KONE Oyj	120
Konecranes Oyj	120
Kongsberg Maritime	50
Kumera Oy	50
Lapin Ammattikorkeakoulu Oy	40
Lapin Yliopisto	24
Lappeenrannan teknillinen yliopisto	64
Laurea Ammattikorkeakoulu Oy	52
Medialiitto	12
Metropolia Ammattikorkeakoulu Oy	52
Metso Oyj	120
Meyer Turku Oy	120
Murata Electronics Oy	24
Nokia Oyj	120
Nokia Solutions and Networks Oy	84
Oulun yliopisto	64
Outokumpu Oyj	120
Outotec Oyj	50
Prizztech Oy	12
Rautaruukki Oyj	120
Raute Oyj	50
Reaktor Innovations Oy	12
Sanoma Oyj	120
SSH Communications Security Oyj	12
Stiftelsen Arcada	9
Stiftelsen Svenska Handelshögskolan	40
Suunto Oy	12
Tampereen Ammattikorkeakoulu Oy	40
Tampereen korkeakoulusäätiö	76
Technopolis Oyj	60
Teknologian tutkimuskeskus VTT Oy	210
Teleste Oyj	12
Telia Finland Oyj	120
Tieto Finland Oy	120
Tuotekehitys Oy Tamlink	64
Turun Ammattikorkeakoulu	52
Turun yliopisto	64
Vaasan yliopisto	40
Wapice Oy	50
Wärtsilä Finland Oy	120
Åbo Akademi	24
Älykkään liikenteen verkosto - ITS Finland ry	12

66 shareholders:

Board of Directors

Karno Tenovuo
Chairman of the Board
CEO, **Awake.ai**

Tuuli Ahava
Director, Enterprise Solutions, **Nokia**

Tapani Tilus
CDO, **Raute Oyj**

Markku Haakana
Country Finance Manager, **ABB**

Jari Still
Founder **Still Ventures**

Laura Juvonen
Senior Vice President Strategy, **VTT**

Deputies Tero Hottinen, Jari Hämäläinen

Board of directors was elected in the annual general meeting in April 26, 2021. The board had 8 meetings in 2022.
In 2022, the remuneration paid to board members was 150e/meeting (200e for the chairman).

PricewaterhouseCoopers Oy, and Mr. Tomi Moisio as the auditor in charge, continued as the auditor of the company.

Management

Dr. Harri Kulmala
Chief Executive Officer

External positions in 2022:
• Finnish Academy of Technical Sciences, vice chairman
• Member of The Royal Society of Arts, Manufacturing & Commerce
• Member of high-level group, EU ManuFuture technology platform
• Associate professor (docent), LUT
• Member of innovation and competitiveness council, Finnish Technology Industries
• Demola Global Ltd. member of the board
• Scouter Mobility Ltd. member of the board
• Linz Center of Mechatronics, member of strategic advisory board
• GIANT High Level Forum, member of steering committee

Risto Lehtinen
(M.Sc. Eng.)
Head of Co-creation

External positions in 2022:
• Auditor for KOTEL r.y.

Tomi Kankainen
(M.Sc., M.A.)
Chief Business Development Officer

External positions in 2022:
• Demola Global Ltd. member of the board

Rauno Hatakka
Head of Ecosystems

External positions in 2022:
• Artificial Intelligence 4.0 programme, Thematical Working Group Expert

Personnel (Dec 31st 2022)

Sinikka Hartonen
Senior Ecosystem Lead

Eetu Holstein
(M.Sc. Eng)
Ecosystem Lead

Antti Karjaluoto
(M.Sc. Econ., M.Sc. Admin.)
Disruptive Renewal Officer

Kaisa Kaukovirta
(M.A., BBA)
Communications & Marketing Manager

Markus Korpela
(M.Sc. Eng)
Ecosystem Lead

Anssi Lappalainen
(M.Sc. Econ. & Bus. Adm.)
Senior Project Lead

Marika Moilanen
(BBA)
Manager, Finance & Events

Kari Muranen
(B.Sc. Eng)
Senior Ecosystem Lead

Personnel (Dec 31st 2022)

Dr. Arto Peltomaa
Program Manager

Doris Pryjma
(M.Sc. Eng)
Manager, EU Relations & Collaboration

Marko Rahikainen
(Captain, Master Mariner)
Ecosystem Lead

Dr. Sanni Siltanen
Senior Ecosystem Lead

Dr. Seppo Tikkanen
Senior Ecosystem Lead

Verneri Åberg
Senior Ecosystem Lead

DIMECC Fellows

DIMECC Fellow is a public recognition to a person, who represents the official set of DIMECC values in force at the time of nomination and forwards these with his/her behaviour.
DIMECC values consist of **openness & transparency**, **efficiency & effectiveness** in all activities, and expressed cooperation and **respect and recognition** of competence and expertise.

The person to be nominated as “DIMECC Fellow” must fulfil the following criteria:

- Many years of work for and publicly shown support to DIMECC Ltd. (no need to be formally DIMECC employee).
- Experienced by colleagues and others as a strong supporter for openness, transparency, and renewal.
- Effective and efficient work for the generic and overall success of ICT, manufacturing & engineering industries.
- Willingness and capability to combine scientific and practical interests.
- Positive and open mind towards new, radical, and non-traditional ways to organize R&D&I and management of these.

DIMECC FELLOWS	Nomination year
#1 Pentti Karjalainen, Professor, University of Oulu	2013
#2 Ilkka Niemelä, Director, The Federation of Finnish Technology Industries	2013
#3 Matti Sommarberg, CTO, Cargotec Oyj	2013
#4 Arto Ranta-Eskola, R&D director, SSAB	2015
#5 Ismo Vessonen, Senior Research Scientist, VTT	2015
#6 Janne Järvinen, R&D director, F-Secure	2017
#7 Markku Korkiakoski, Director, Sales and Business Development, Bittium	2017
#8 Sauli Eloranta, EVP, Rolls-Royce	2017
#9 Miia Martinsuo, Professor, Tampere University of Technology	2018
#10 Tomas Hedenborg, President & CEO, Fastems	2018
#11 Yrjö Neuvo, Professor, Aalto University	2018

DIMECC Highlights 2022

Seppo Tikkanen

Connected Safe Industry – 15th Annual Seminar of DIMECC was organized with Business Finland and Nokia at Nokia Executive Experience Center. Panelists included Giuseppe Sarago, Wärtsilä, Jonne Soininen, Nokia and Juha Pankakoski, Konecranes.

Kari Muranen

DIMECC Prize 2022 was awarded to Konecranes for active participation in the InDEx program and exemplary co-creation in programs and ecosystems.. CEO Harri Kulmala (left) and Program Manager Seppo Tikkanen (right) handed over the prize to Research and Innovation Director Matti Kemppainen and Senior Research Engineer Juhani Kerovuori from Konecranes.

Teemu Leinonen/LUT

Andritz Savonlinna Works Oy and the Finnish Additive Manufacturing Ecosystem FAME produced probably the largest 3D printed pressure vessel in Europe. The approximately 300 kg vessel has a diameter of 900 mm and a height of 1600 mm. It was presented at Formnext Frankfurt and Engineering Works Trade Fair.

Key financial information

The financial year 2022 of DIMECC ended December 31st. Due to the special role of DIMECC as a non-profit company, the key financial information is presented in short form and without traditional business performance measures.

Profit and Loss Statement	
Income	
Net sales	1 130 688,05
DIMECC Program management fees	551 000,00
Other income	508 287,42
Total Income	**2 189 975,47**
Expenses	
Materials & services	-86 064,11
Personnel costs	-1 595 894,79
Other expenses of operations	-478 187,65
Total expenses	**-2 160 146,55**
Operating profit	**29 828,92**
Financial income	71 538,15
Profit of the year	**101 367,07**

Balance Sheet	
Assets	
Stocks, shares, and fixed assets	1 119 726,67
Long-term investments	4 003,45
Short-term receivables	1 340 528,27
Cash and bank balances	1 321 150,52
Total assets	**3 785 408,91**
Liabilities and shareholders' equity	
Restricted equity	1 146 500,00
Non-restricted equity	2 302 113,91
Net losses from previous years	-339 228,61
Net profit of the year	101 367,07
Liabilities	574 656,54
Total liabilities and shareholders' equity	**3 785 408,91**

Annual Report 2022

DIMECC Ltd.
Åkerlundinkatu 8
33100 Tampere
Finland
www.dimecc.com
Business ID (Finland)
2179030-4

DIMECC