

Brave New World:

Building Europe's capacities for defence and security R&D

A public Science|Business conference (10:00 – 17:00 CEST)

Brussels, 17 October 2024

In partnership with:









Brave New World

Building Europe's capacities for defence and security R&D

For the first time since the end of the Cold War, the next period of EU politics and policy-making will be dominated by security issues. Russia's invasion of the Ukraine, and more recently hostilities in the Middle East, has brought an abrupt end to what some have called Europe's post-1991 "peace holiday" and prompted the worst energy crisis since the 1970s. Meanwhile, the potential outcome of November's US presidential election casts a long shadow over the future of NATO and the traditional umbrella protecting European borders and citizens. And lest we forget, COVID-19 exposed the world's vulnerability to deadly viruses and the critical importance of health security within the bigger picture.

As a result, Europe has been forced into a deep rethink of its geopolitical place in the world, its external dependencies and its risk exposure in global supply chains, among others. In parallel, the political rhetoric of "open strategic autonomy" is being put to an existential test: can Europe truly become self-sufficient, not least in critical and emerging technology domains and sectors? If not, where should it turn for partnership and cooperation in an increasingly turbulent world? Will its new defence industrial plan prove to be a game-changer? And how will the status of non-military supply chains, such as food and pharmaceuticals, influence Europe's future security and defence strategy?

The European Council (EUCO) has set out its thinking on these questions, issuing an outline of a new mandate for the EU institutions through to 2029. Among the headlines is a clear recognition that security, defence readiness and autonomy will not be possible without a strong economic base. This in turn implies a coherent strategy and investment plan for the R&D and supply chains that will need to deliver future capabilities and novel technologies – a "whole-of-society" approach ranging from health, cybersecurity and AI, to (aero)space, energy and advanced materials.

Since COVID, approaches to this challenge have tended to be short-term and reactive – securing access to raw materials, stockpiling medicines, reshoring manufacturing facilities, and similar. Looking ahead, however, Europe will require a sustained wave of R&D to modernise current production systems, as well as breakthrough innovation across sectors that boosts competitiveness, preparedness and security levels.

On October 17, Science|Business is convening senior representatives from the worlds of industry, policy and research to discuss how these challenges – and opportunities – might be addressed as the EU transitions into its new mandate.

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10.15 Welcome by Maryline Fiaschi, CEO, Science Business

On high alert: How to define defence tech strategy and policy in an increasingly volatile world?

A panel discussion moderated by Simon Pickard, Network Director, Science|Business

- Michalis Ketselidis, Senior Expert, Defence Industry and Space, General Secretariat, European Commission
- Brian Wells, Chief Scientist & Chair, Science and Technology Board, NATO
- David Luengo, Director Brussels Office, Indra
- Michael Froneberg, Head of NATO and EU Relations, KNDS

11:30 Coffee Break

Health security: Turning strategic autonomy into a driver of innovation?

A panel discussion moderated by Maryline Fiaschi, CEO, Science|Business

- Stine Bosse, Member of the European Parliament
- Wolfgang Philipp, Principal Adviser and Chief Science Officer, DG HERA, European Commission
- Michele Mestrinaro, Global Head, Policy and Growth, Novartis
- Yannick Morel, Project Director for Stockpiling Strategy, Directorate General of Health, Ministry of Health, Government of France
- Łukasz Pronicki, Head, Sponsor Support Center, Medical Research Agency, Government of Poland

13:00 Lunch

Open access: What does the future hold for international cooperation in defence and security R&I?

A panel discussion moderated by David Matthews, International Editor, Science|Business

- Liam Benham, President, EU, NATO and Government Affairs, Boeing International
- **Julie McCann**, Vice-Dean for Research and Head, Adaptive Emergent Systems Engineering, Imperial College London
- **Nynke Tigchelaar**, Head of Unit, European Defence Fund Implementation Defence Technologies and Innovation, DG DEFIS, European Commission

Invisible threats: How will Europe's digital security priorities define future R&I agendas?

A panel discussion moderated by Raffaele Guerini, International Editor, Science|Business

- Irina Kupiainen, Director for Public Affairs, CSC IT Center for Science
- Kia Slaebaek Jensen, Counsellor for Cyber Security, Permanent Representation of Denmark to the EU
- Dan Nechita, Founding Partner, Vanguard Europe

15:30 Coffee Break

Brothers in arms: How can European R&I help Ukraine in its fight for survival?

A spotlight interview moderated by Goda Naujokaityte, EU Funding Editor, Science|Business

 Vitalii Cherniuk, Head of Innovation Development Policy Expert Group, Ministry of Defence, Government of Ukraine

The road ahead: What implications for defence and security R&I within the EU's next strategic mandate?

A panel discussion moderated by Goda Naujokaityte, EU Funding Editor, Science|Business

- Luca Bedon, Head, Research & Technology, Avio Aero
- Catherine Bender, Head, Security and Defence Office, European Investment Bank
- Signe Ratso, Deputy Director-General, DG RTD, European Commission

17:00 Networking reception



LUCA BEDON

HEAD, RESEARCH & TECHNOLOGY, AVIO AERO

Luca Bedon is an executive engineering manager with more than 25 years' experience in the aerospace business, particularly in the field of advanced technology and new product introduction. Currently, as Avio Aero's research and technology leader, he coordinates the company's advanced technology development activities in Europe and serves on the governing board of Clean Aviation and the ASD Civil Aviation Research Committee. Avio Aero is a business of GE Aerospace, a world-leading provider of jet and turboprop engines.



CATHERINE BENDER

HEAD, SECURITY AND DEFENCE OFFICE, EUROPEAN INVESTMENT BANK

Catherine Bender has recently assumed the position of head of the security and defence office at the European Investment Bank, following her position as head of unit for digital, space, and life sciences finance advisory. In her current role, she leads a team of senior experts aiming to increase EIB financing in the sectors of security and defence. She has been at the EIB since 2006, working on topics ranging from renewable energy to space, quantum, semiconductors and life sciences. Before the EIB, Catherine was a government affairs specialist as Dupont de Nemours. Catherine has a bachelor's degree in European politics and law, and a master's degree in finance and banking from EM Normandy.



LIAM BENHAM

PRESIDENT, EU, NATO AND GOVERNMENT AFFAIRS, BOEING INTERNATIONAL

Liam Benham was appointed president of EU, NATO and government affairs Europe at Boeing Global in December 2022. As the senior Boeing representative in France and Southern Europe he is responsible for expanding Boeing's presence and pursuing new growth opportunities. As head of the Boeing Brussels office, he also represents the company's interests with key EU institutions, European regulators and NATO. Liam brings over 25 years of senior government relations experience stemming from his work for global enterprises, having served as vice president for government and regulatory affairs at IBM Europe for over a decade; he also held senior government relations positions for 15 years at the Ford Motor Company. He is the current board chair of the American Chamber of Commerce to the European Union.



STINE BOSSE

MEMBER, EUROPEAN PARLIAMENT

Stine Bosse is a newly elected Danish MEP for Moderaterne. Prior to going into politics, Stine was a board member in various industries and a business leader most known for her work as a former chief executive officer of Tryg, a major Nordic insurance company. She is known for her focus on digitalization and innovation within the insurance sector, as well as her commitment to promoting equality and diversity in the workplace. Stine has received several awards for her leadership and contributions to the industry.



VITALII CHERNIUK

HEAD OF INNOVATION DEVELOPMENT POLICY EXPERT GROUP, MINISTRY OF DEFENCE, GOVERNMENT OF UKRAINE

Vitalii Cherniuk is currently head of the innovation development policy expert group in Ukraine's Ministry of Defence. Vitalii has extensive experience in government affairs, having previously served as the head of the investment advisory department of the Ukraine Investment Promotion Office and head of the expert group on communications and strategic planning at the Ministry of Education and Science. In parallel, Vitalii has build a career outside government, as a general director of Kiev National University Science Park and in management roles in industry such as nanoelectronics and nanophotonics.



MICHAEL FRONEBERG

HEAD OF NATO AND EU RELATIONS, KNDS

After a long time spent in the German military forces, Michael Froneberg has been the head of EU and NATO relation at KNDS since January 2023. Before joining KNDS, Michael worked most recently in the medical service department at the German Federal Ministry of Defence. Previously, barred an experience as a senior advisor on military and security policy for the Greens in the German Parliament, he had spent the most of his career in the German military covering different roles, ranging from medical officer to mobile operations medical company commander and brigade surgeon. Michael has earned his degree in medicine from Ulm University, with a master's degree in disaster medicine from the Università degli Studi del Piemonte Orientale.



KIA SLAEBAEK JENSEN

COUNSELLOR FOR CYBER SECURITY, PERMANENT REPRESENTATION OF DENMARK TO THE EU

Kia Slæbæk Jensen is the cyber attaché at the Danish Permanent Representation to the EU with over six years of cybersecurity policy experience. Kia specialises in cybersecurity preparedness, legislation and international collaboration, and has been closely involved in the negotiation of major EU cybersecurity initiatives including the NIS2-directive, the Cyber Resilience Act and the Cyber Solidarity Act. Prior to joining the Danish Permanent Representation, Kia led the work regarding EU issues and collaboration at the Danish Centre for Cyber Security. With a master's degree in Security Risk Management form Copenhagen University, she is passionate about the relationship between technology and security – and how both can improve each other, especially within the field of cybersecurity.



MICHALIS KETSELIDIS

SENIOR EXPERT, DEFENCE INDUSTRY AND SPACE, GENERAL SECRETARIAT, EUROPEAN COMMISSION

Michalis Ketselidis has been working with the European Commission for 30 years. He holds a master's degree in computer science from Imperial College London and a diploma in electrical engineering from the University of Thessaloniki. He started his career with roles at Intracom in Greece and Ericsson in Ireland before joining the Commission's Joint Research Centre (JRC) in 1994, contributing to space research and project management for Galileo and Copernicus. Between 2002 and 2008, he served as a scientific liaison in the Commission's directorate for external relations, managing crisis response projects worldwide. Since 2008, he has been with the secretariat general of the Commission, where he manages relations with the Council, defence industry, space, economic security, dual use and critical technologies, collaborating closely with other directorates.



IRINA KUPIAINEN

DIRECTOR FOR PUBLIC AFFAIRS, CSC - IT CENTER FOR SCIENCE

Irina Kupiainen is a public affairs director and management group member at CSC - IT Center for Science (CSC), a Finnish research infrastructure provider, hosting the EuroHPC/LUMI supercomputer. Irina has an eMBA from Henley Business School/University of Reading, where she specialised in strategy, and a master's degree in Social Sciences and Political Science from Helsinki University, where she specialised in international and security politics. She has held program director, development manager and specialist positions at CSC. Previously, she worked as a civil servant in the ministries of defence and foreign affairs, as a political advisor in the Finnish parliament, and as a policy specialist in the Helsinki University Student Union.



DAVID LUENGO

DIRECTOR BRUSSELS OFFICE, INDRA

David Luengo is director of Brussels office at Indra, a leading IT services and consulting firm headquartered in Madrid. Since 2014, he has driven strategic initiatives in the IT and security sectors. In addition to this role, David has been chairman of the security business unit at the Aerospace, Security and Defence Industries Association of Europe (ASD) since 2019. He also has served as vice chairman of the board at the European Organisation for Security (EOS) since 2016 as well as advisor at the Spanish Chambers of Commers in Belgium and Luxembourg. since 2015. With a strong background in IT and security, David has extensive experience across various organizations, contributing to Europe's defense and technology sectors.



JULIE MCCANN

VICE-DEAN FOR RESEARCH AND HEAD, ADAPTIVE EMERGENT SYSTEMS ENGINEERING, IMPERIAL COLLEGE LONDON

Julie McCann is professor of computer systems, vice dean for research in the Faculty of Engineering and Women's Ambassador at Imperial College London. She leads the Adaptive Emergent Systems Engineering (AESE) research group, harnessing knowledge of cyber-physical interaction to design better sensor-based systems and communications. With more than 300 peer reviewed papers and a mixed funding portfolio of over £50M, she is currently director of the UK CHEDDAR Hub for communications and 6G research, and until recently she was deputy director of the national PETRAS IoT Cybersecurity Hub, Critical Ecosystems Lead for the Alan Turing Institute. Julie holds the 2018 UKRI Suffrage Science Award for Computing and Mathematics, the President's Medal for Research Excellence 2020, and is an executive on the UK Computing Research Committee.



MICHELE MESTRINARO

GLOBAL HEAD, POLICY AND GROWTH, NOVARTIS

Michele Mestrinaro joined Novartis in 2018 from the London office of McKinsey and Company, where he focused on healthcare system strengthening across public and private payors, providers and life sciences companies in both Europe and United States. Before joining McKinsey, Michele served as part of the World Health Organization in Geneva and is a graduate of the MBA program at Harvard Business School.



YANNICK MOREL

PROJECT DIRECTOR FOR STOCKPILING STRATEGY, DIRECTORATE GENERAL OF HEALTH, MINISTRY OF HEALTH, GOVERNMENT OF FRANCE

An engineer graduated from Ecole Polytechnique in France, followed by a PhD in molecular biology and a qualification to manage research activities, Yannick Morel's career started in the technical centre of the French Ministry of Defence in charge of CBRN defence, where he later led the biology department. He then was the technical area leader and technical authority for human sciences and protection, covering CBRN aspects, ergonomics and soldier occupational health. He moved to the Ministry of Health in mid-2021, attached to the general director for health in charge of stockpiling strategy, first focusing on face masks and later related to European affairs. He is the project director for the French part of the European rescEU sanitary stockpile, managing a 400 M€ budget.



DAN NECHITA

FOUNDING PARTNER, VANGUARD EUROPE

Dan Nechita is the founding partner of Vanguard Europe. In his previous role as head of cabinet for MEP Dragos Tudorache, Dan was instrumental in drafting the EU's first AI Act, covering also parliamentary work in the fields of foreign affairs and security and defense. Previously, he was a state counselor for Romanian Prime Minister Dacian Ciolos, with a mandate on e-governance, digitalization, and cybersecurity. He worked at the World Security Institute, at the Brookings Institution Center of Executive Education, as a graduate teaching assistant at the George Washington University. He is co-founder of Smart Everything Everywhere, a think tank promoting European digitalization, founder of K Street Consulting, a boutique consulting company for U.S. companies in the EU, and an expert project evaluator for the European Commission.



WOLFGANG PHILIPP

PRINCIPAL ADVISER AND CHIEF SCIENCE OFFICER, DG HERA, EUROPEAN COMMISSION

Wolfgang Philipp is the principal adviser - chief science officer of the new Health Emergency Preparedness and Response Authority (HERA) in the European Commission. HERA's mission is to prevent, detect, and rapidly respond to health emergencies. HERA works to ensure the development, production and distribution of medicines, vaccines, and other critical medical countermeasures in case of health emergencies. Wolfgang holds a PhD in microbiology from the University of Paris, France, and has been working in tuberculosis research at the Institut Pasteur in Paris, at the Universities of Bern and Basel and was a Member of the Basel Institute of Immunology, Switzerland, before joining the European Commission in 2001.



ŁUKASZ PRONICKI

HEAD, SPONSOR SUPPORT CENTER, MEDICAL RESEARCH AGENCY, GOVERNMENT OF POLAND

Łukasz Pronicki is a MPharm working at the Medical Research Agency in Poland, where he focuses on supporting the development of clinical trials within the country. Łukasz collaborates closely with multinational organizations to foster innovation and ensure the efficient execution of clinical studies. Additionally, he contributes to non-commercial clinical research initiatives, aiming to advance medical science and healthcare solutions. His role allows him to merge scientific expertise with regulatory and operational strategies in the dynamic landscape of medical research.



SIGNE RATSO

DEPUTY DIRECTOR-GENERAL, DG RTD, EUROPEAN COMMISSION

Signe Ratso is deputy director-general of the Directorate General for Research and Innovation of the European Commission. She is the chief negotiator for Horizon Europe Association, and responsible for open innovation, citizens' engagement in research and innovation policy, and for overall coordination on international cooperation. Signe joined DG Research and Innovation as Deputy Director General on 1 March 2018. In this function her particular areas of responsibility have included international cooperation in research and Innovation, as well as R&I in industrial technologies and in the area of transport. Before joining DG RTD she worked in different senior management positions in DG TRADE, including director for trade strategy, analysis and market access, and director for WTO, legal matters and food-related sectors, covering also covered OECD issues.



NYNKE TIGCHELAAR

HEAD OF UNIT, EUROPEAN DEFENCE FUND IMPLEMENTATION – DEFENCE TECHNOLOGIES AND INNOVATION, DG DEFIS, EUROPEAN COMMISSION

Nynke Tigchelaar is the head of unit for defence technologies and innovation within the European Commission's defence industry and space directorate (DEFIS), where she has previously been deputy head of unit for defence industrial and market policy. She has been working for the European Commission for over twenty years in the defence, internal market and competition directorates, as well as the secretariat general. Before joining the European Commission, from 1999 to 2003, Nynke worked at the Dutch Ministry of Finance as policy advisor on European fiscal affairs. From 1995 to 1999, she worked at the Netherlands Enterprise Agency as project advisor and national focal point for the EU research framework programmes and LIFE. She holds a master's degree in international relations, specialising in European integration.



BRYAN WELLS

CHIEF SCIENTIST & CHAIR, SCIENCE AND TECHNOLOGY BOARD, NATO

Bryan Wells has served as NATO's chief scientist since 1 July 2019. In this role, serves as chair of the NATO Science and Technology Board (STB), as the senior scientific advisor to NATO leadership, and leads the office of the chief scientist at NATO headquarters. Before his appointment, Brian was the UK Ministry of Defence's head of S&T policy, strategic research and international engagement. His responsibilities included the provision of strategic policy advice on the international and research aspects of the Ministry's science and technology programme. Additionally, he has been chair of the European Defence Agency's research & technology steering board. He held a range of other posts including assistant private secretary to the UK Secretary of State for Defence and deputy director of NATO policy.



MARYLINE FIASCHI

CEO, SCIENCE BUSINESS

Maryline Fiaschi joined Science|Business in 2011. Appointed managing director in 2016 and CEO in 2021, she leads the company's operations and growth strategy. Previously, she managed EU education programmes with the European Commission for six years, before entering the media business in 2007. She held business development positions at Shanghai Daily and EU affairs media company EurActiv. She is also an external evaluator for several EU higher education and research and innovation programmes. Maryline holds degrees from Université La Sorbonne, Università di Bologna and Université de Louvain.



RAFFAELE GUERINI

POLICY OFFICER, SCIENCE BUSINESS

Raffaele joined Science|Business in February 2023. He has an academic background in International and European Studies from the University of Trento. Moving to Brussels in 2019 for an internship in the field of education, Raffaele has then spent 3 years at the European Energy Research Alliance as a Policy and Communications Officer.



DAVID MATTHEWS

INTERNATIONAL EDITOR, SCIENCE|BUSINESS

David is international editor at Science|Business. He covers global research and development topics such as artificial intelligence, biosecurity and the geopolitics of science. Previously he was Europe correspondent for Times Higher Education, and has written for publications including Nature, the Guardian and the Register. David holds a degree in modern history from the University of Oxford, a master's degree in journalism from City, University of London, and studied Chinese at Shanghai Jiao Tong University. He lives in Berlin.



GODA NAUJOKAITYTE

EU FUNDING EDITOR, SCIENCE BUSINESS

Goda joined Science|Business in April 2020. Previously, she interned at the Council of the European Union and the Guardian News Media, among other organisations in the UK and Lithuania. Goda holds a bachelor's degree in communication from the University of Nottingham and a master's degree in data journalism from Cardiff University.



SIMON PICKARD

NETWORK DIRECTOR, SCIENCE BUSINESS

Simon Pickard leads on network engagement and development for Science|Business in line with the company's growth strategy. He previously held directorial positions with The Academy of Business in Society (ABIS) network and IDAS Global, a technology solutions provider to the global cash industry. Within these roles, he designed and coordinated a wide range of international projects focused on sustainability-driven innovation, both in research and education. Simon holds master's degrees in modern languages from the University of Oxford and in business administration from HEC Paris School of Management.



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