



European Union - New Zealand

SCIENCE AND TECHNOLOGY COOPERATION ROADMAP

2014-2016

Research and Innovation Priorities

Update for 2015

INTRODUCTION

The European Community and New Zealand signed an S&T Cooperation Agreement in July 2008, which entered into force on 30 January 2009 in order to reinforce and enhance cooperation in areas of mutual importance such as Food, Agriculture and Fisheries, Biotechnology, ICT, Health and others. The agreement provides for a regular meeting of senior officials through a Joint Science and Technology Cooperation Committee (JSTCC).

The primary functions of the JSTCC are to: regularly exchange views and information on scientific and technological policy issues; make recommendations on the implementation of the Agreement; and review and report on the status of collaboration. Three JSTCC meetings have taken place to date, the most recent on 19-20 June 2013 in Brussels.

Under FP6, 27 New Zealand participants were involved in projects. New Zealand participation in FP7 has shown a significant increase with 166 participants in Marie Curie Actions, 42 in Food, Agriculture and Fisheries, Biotechnology, ten in ICT and nine in Health.

The advent of the European Union's new Framework Programme for Research and Innovation (Horizon 2020), combined with significant changes in the New Zealand research and innovation landscape, provide a timely opportunity to re-examine and re-align collaborative mechanisms to maximum mutual benefit.

Both systems have, for example, recently increased their focus on addressing societal challenges, as well as on coupling research to innovation.

The recent establishment in New Zealand of a new "one-stop" business R&D support agency, Callaghan Innovation, provides a natural platform, which hitherto did not exist, for connecting New Zealand SMEs to existing European networks.

The development of National Science Challenges in New Zealand, many in areas that overlap with Horizon 2020 Societal Challenges, will provide further natural platforms for strategic engagement between Europe and New Zealand over the course of the next 2-3 years.

The recent 3rd JSTCC Meeting provided an excellent opportunity to take stock of these various changes and jointly determine the way forward, in traditional fields of cooperation such as Bio-economy and Health, as well as in the newly-agreed spheres for cooperation of Resilient Cities, Research Infrastructures, and Building Innovation Linkages.

The three-year bilateral Facilitating Research and Innovation in Europe and New Zealand (FRIENZ) project, which commenced in November 2012 and is jointly funded by the European Commission and the New Zealand Ministry of Business, Innovation and Employment, will provide a useful means for advancing along the path laid out in this new Roadmap.

With the 4th JSTCC Meeting tentatively scheduled to take place in two years' time, senior officials responsible for the relationship will hold interim meetings on average every six months by video-conference, to review and adjust settings as necessary.

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The 3rd European Union-New Zealand Joint Science and Technology Cooperation Committee (JSTCC) Meeting was hosted by the European Commission in Brussels on 19-20 June 2013. The New Zealand delegation was led by Minister of Science and Innovation Hon Steven Joyce, and included the Prime Minister's Chief Science Advisor, Professor Sir Peter Gluckman, representatives of New Zealand's science and innovation funding and policy agencies, the Royal Society of New Zealand, research organisations and universities. The European delegation comprised representatives of the European Commission Directorate-Generals for Research and Innovation, Enterprise and Industry, Education and Culture, and Communications Networks, Content and Technology.

The formal JSTCC officials' plenary meeting on 20 June was opened by Deputy Director General of DG for Research and Innovation, Rudolph Strohmeier. It was preceded by seven productive thematically-focussed workshops on 19 June. The two-day programme focused on enhancing cooperation in the following areas: Bio-economy, Health, Resilient Cities, Research Infrastructures, and Building Innovation Linkages.

The plenary meeting was chaired by New Zealand's Ministry of Business, Innovation and Employment General Manager for Science Investments, Dr Prue Williams, and the European Commission's Research and Innovation Director for Health, Dr Ruxandra Draghia-Akli. Actions were identified and provided the basis for an updated Science and Technology Cooperation Roadmap.

Both delegations affirmed the importance of science and innovation ties in addressing shared economic, environmental and social challenges and underlined the relevance of a consistent and continuous investment in Research and its long term impact.

Both Parties confirmed they will continue working together to strengthen the relationship during an important transition phase for both sides' science and innovation systems. The next JSTCC meeting will be held in New Zealand in 2015.

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4TH EU-NZ JOINT COMMITTEE MEETING ON SCIENTIFIC AND TECHNOLOGICAL COOPERATION
JOINT COMMUNIQUÉ
9 DECEMBER 2014

The 4th European Union-New Zealand Joint Committee on Scientific and Technological Cooperation meeting was hosted by the Ministry of Business, Innovation and Employment (MBIE) in Wellington on 8-9 December 2014. The meeting was co-chaired by Dr Prue Williams, General Manager, Science Investments (MBIE) and Ms Maria Cristina Russo, International Cooperation Director, DG Research & Innovation, European Commission.

The meeting also included officials from the European Commission, MBIE, the New Zealand Ministry of Primary Industries, and Callaghan Innovation, as well as representatives from the New Zealand research sector, the Royal Society of New Zealand and several European Joint Programming Initiatives.

Reflecting Europe's continued importance as a trade and diplomatic partner, there is extensive collaboration across all fields between Europe and New Zealand in research and innovation. MBIE has identified that 40 per cent of MBIE-funded research projects involving international partners involve partners from Europe. Both sides regard research and innovation as a core area of cooperation within the broader EU-New Zealand relationship.

A key pillar of the European Union's current seven-year research and innovation programme, Horizon 2020, addresses the "Societal Challenges" which face Europe. These priorities correspond closely with the National Science Challenges being implemented by the New Zealand Government. Against this background, both parties agreed on the need to focus cooperation on key strategic areas of mutual benefit.

During the 9 December Plenary Meeting, the framework conditions for cooperation in research and innovation were discussed. Both parties noted the general openness of their respective programmes, and the absence of any significant barriers to co-operation. They also welcomed the action-oriented approach taken by the New Zealand funders and research communities towards financially supporting New Zealand researchers' participation in Horizon 2020.

The plenary meeting was preceded by three thematically-focussed workshops on 8 December on the topics of Sustainable Agriculture (including climate change), Food & Health, and Sustainable Seas. These workshops were followed by a wider discussion on Grand Challenges Cooperation and the Horizon 2020 Programme.

During the plenary, both parties confirmed they would continue working together in a co-ordinated fashion, through the mutually-agreed 2014-16 'Roadmap' for science and innovation co-operation, to strengthen the relationship in the priority areas of Bio-economy, Health, Resilient Cities, Research Infrastructures and Building Innovation Linkages. In the field of health the European Commission reiterated its invitation to New Zealand to join GloPID-R (Global Research Collaboration on Infectious Diseases preparedness) and GACD (Global Alliance for Chronic Diseases). It also raised the possibility of cooperation in the field of sustainable energy, in particular on renewable/geothermal energy.

It was further noted the importance of developing an international bio-economy, building on the efforts to date under the International Knowledge-based Bio-Economy (KBBE) Forum.

It was also agreed that greater efforts should be made to support the involvement of New Zealand and European industry partners in bilateral research projects, building on Callaghan Innovation's recent successful application to join the Enterprise Europe Network, and the MBIE counterpart fund for New Zealand participation in the Horizon 2020 Research and Innovation Staff Exchange (RISE) scheme.

Both parties also undertook to explore the potential for greater co-operation in the domain of global earth observation.

The next meeting will be held in Brussels in 2016.

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Building Innovation Linkages

Areas of Common Interest

- SME internationalisation
- Entrepreneurship
- Encouraging linkages between research, business and education
- Building a culture of innovation

Future actions

- Callaghan Innovation to submit a proposal to join the Enterprise Europe Network in the next call for third countries (2nd quarter, 2014)
- Callaghan Innovation to formally submit an expression of interest in enhanced cooperation with EUREKA
- Callaghan Innovation to participate in a forthcoming call for projects in the EraSME network
- European Commission (EC) and New Zealand Ministry of Business, Innovation and Employment (MBIE) to share information on New Zealand's National Science Challenges and the European Institute of Innovation and Technology's (EIT) Knowledge and Innovation Communities (KICs)
- EC and MBIE to share information and consider the best means for New Zealand's future involvement in Research and Innovation Staff Exchange (RISE) - the EC's planned successor programme to IRSES, including industry – taking account of support available for industry-academic pairings under the FRIENZ BILAT project
- EC and MBIE to share information on entrepreneurship development, including in the education sphere

Bio-economy

Areas of Common Interest

- Enhancing primary sector production and productivity while improving land and water quality
- Developing high-value foods with validated health benefits
- Unlocking the potential of aquatic living resources within environmental and biological constraints
- Sustainable agriculture

Future actions

- EC and MBIE to work closely together to increase the impact of the Knowledge-based Bio-economy (KBBE) Forum, including by:

- Identifying major initiatives for programme-level cooperation, to tackle common challenges with scale and scope
- Involving Member States, e.g. Joint Programming Initiative (JPI) Healthy Diet for a Healthy Life
- Enlarging cooperation to other countries which have agricultural production systems aligned to those of current members (e.g. temperate; central to their economies), by inviting them to join existing projects
- Linking with international initiatives, e.g. OECD Global Science Forum initiative on sustainable temperate agriculture
- Potentially joining efforts on a Bio-economy Observatory, with a need to clearly define the benefits of data collection
- EC and MBIE to consider promoting the addition of biomarkers as a topic for the KBBE Forum
- FRIENZ study tours in the area of food, agriculture and biotechnology to begin with a focus on food and health
- EC and MBIE to identify potential opportunities for project cooperation in Horizon 2020 Societal Challenges and New Zealand research programmes
- EC and MBIE to share information and consider potential linkages between New Zealand National Science Challenges in the bio-economy area and similar related initiatives in the EU, e.g. JPIs, EIT KICs

Update of future actions for 2015:

- Explore future New Zealand participation in the activities of the JPI on Agriculture, Food Security and Climate Change (FACCE-JPI), including Knowledge Hubs, Expert Workshops, and ERA-NET Co-funds, in particular on topics relating to sustainable intensification of agriculture and the measurement and mitigation of agricultural greenhouse gas emissions.
- Explore future New Zealand participation in the JPI A Healthy Diet for a Healthy Life, including alignment of research programmes, and mobility support.
- Explore alignment of research programmes in areas of common interest between New Zealand's National Science Challenge Sustainable Seas and the JPI Healthy and Productive Seas and Oceans.

Health

Areas of Common Interest

- Personalised health and care
- Diabesity (diabetes and obesity)
- Bioinformatics and biomathematics for health
- Promoting good health throughout life
- Rapid response to epidemics

Future actions

- FRIENZ study tours in the area of health to begin with a focus on personalised health and stratified medicine
- EC and MBIE to consider promoting the addition of biomarkers as a topic for the KBBE Forum
- EC and MBIE to identify potential opportunities for project cooperation in Horizon 2020 Societal Challenges and New Zealand research programmes

- EC and MBIE to share information and consider potential linkages between New Zealand National Science Challenges in the health area and similar related initiatives in the EU, e.g. JPIs, EIT KICs

Resilient Cities

Areas of Common Interest

- Hazard prevention and reduction of impact – forecasting, decision support systems, and communication techniques
- Risk transfer and insurance
- Use of scientific knowledge in decision-making
- Alternative urban growth options
- Economics of infrastructure
- Urban regeneration
- Sustainability of housing, transport and energy
- Youth unemployment
- Migrant populations

Update of areas of common interest for 2015:

- Urban regeneration, city growth and shrinkage
- Sustainable transitions – transport, energy and housing
- Infrastructure innovation, sustainability and resilience
- Engaging communities – participatory approaches, communication techniques and decision-making
- Governance and new business models
- Migrant populations
- Hazard impacts including climate change – forecasting, decision-making, mitigation and adaptation

Future actions

- EC and MBIE to review existing related FP7 projects in Environment, Security, and Social Sciences, to better understand current areas of common interest
- MBIE to compile list of New Zealand experts for inclusion in Horizon 2020 database
- EC and MBIE to identify conferences and workshops of mutual interest in EU and New Zealand
- EC and MBIE to identify potential opportunities for project cooperation in Horizon 2020 Societal Challenges and New Zealand research programmes
- Exchange experts for the comprehensive exploration of forward-looking activities
- FRIENZ study tours focussing on resilient cities
- EC and MBIE to share information and consider potential linkages between New Zealand National Science Challenge Lead in the area of disaster resilience and similar related initiatives in the EU, e.g. JRC, EIT KICs.

Update of future actions for 2015:

- Encourage programme-to-programme collaborations in areas of mutual interest.
- Explore New Zealand involvement in JPI Urban Europe, including potential participation in the JPI's research alliance, and the ERA-NET Co-fund on Smart Urban Futures.

Research Infrastructures

Areas of Common Interest

- Big data management/utilisation – genomics, biotechnology
- Governance of (global) research infrastructures
- Innovation potential

Future actions

- EC and MBIE to meet at Research Infrastructure workshop in November 2013 in Australia
- EC and MBIE to cooperate and contribute to the 2nd International Conference on Research Infrastructures (ICRI 2014), to be held in Athens on 2-4 April 2014
- GEANT and REANNZ to enhance cooperation further
- DANTE and REANNZ to continue discussing the feasibility of joint technology procurements
- EC and MBIE to consider possible involvement of experts on research infrastructures in FRIENZ study tours
- MBIE to consider active participation in the Research Data Alliance (RDA)
- NZ confirmed their strong interest in cooperating with Trans-Eurasia Information Network (TEIN)-after they have ensured their upgraded international connectivity (i.e. within the next 18 months).
- In the context of TEIN further science cooperation activities between the EU and NZ are expected to be facilitated.