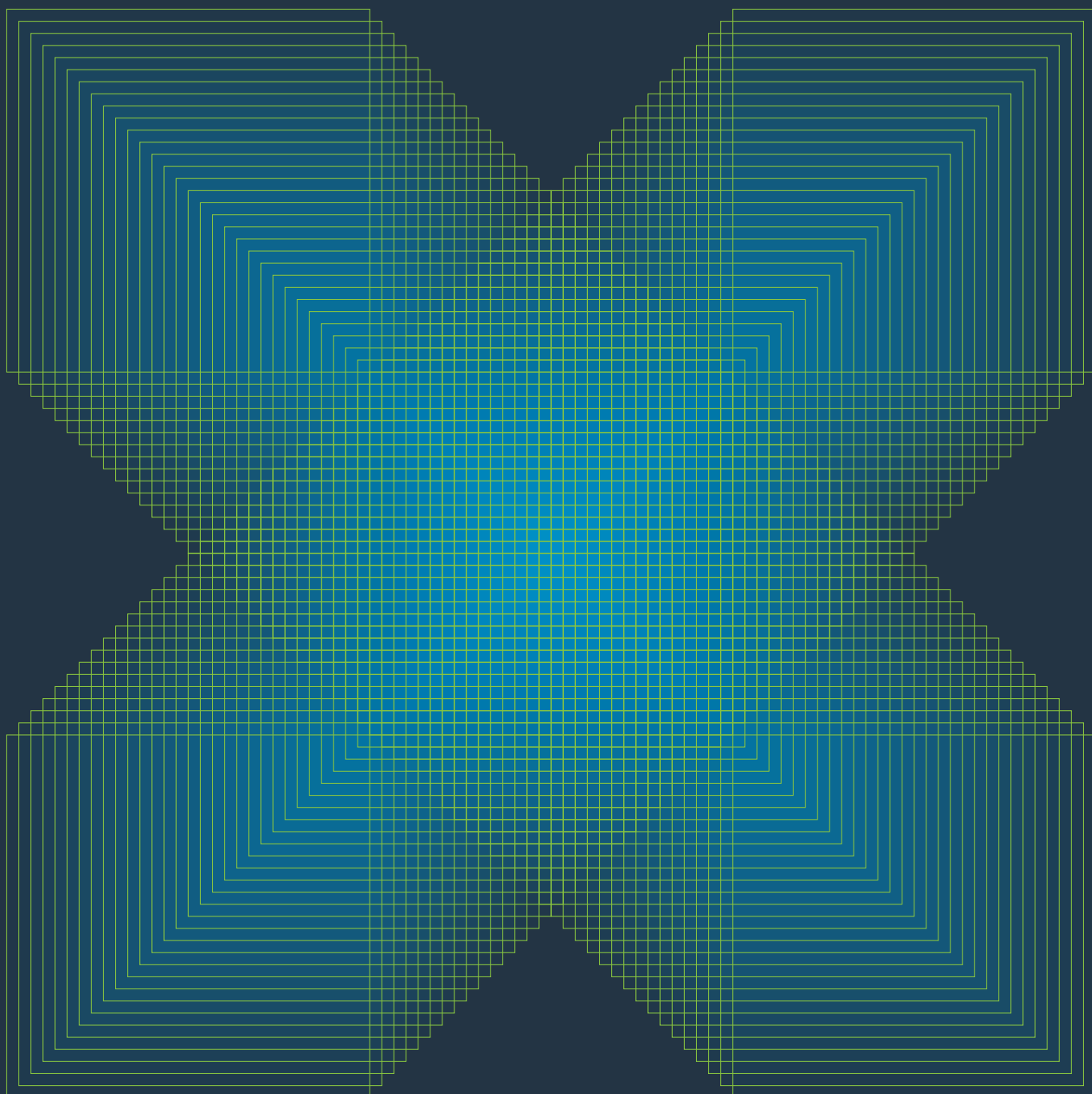




An Roinn Post, Fiontar agus Nuálaíochta
Department of Jobs, Enterprise and Innovation

Inspiring Partnership – the national IP Protocol 2016

Policies and resources to help industry
make good use of public research in Ireland



Foreword



As a country, Ireland has invested significantly in building our research capacity in strategic areas allied to industry needs. We have invested in human capital, in top quality Researchers and in third and fourth level education. We now have excellent physical research infrastructure in place coupled with structures to commercialise research.

We want investment in research to drive innovation and competitiveness in business and the public sector and enable the creation of sustainable jobs, in line with the goals of our Action Plan for Jobs. The research system in Ireland has matured to a level where it is now appropriate to accelerate the return from public investment. This revised and updated national IP Protocol aims to do just that by encouraging innovation from Irish research and the commercialisation of all forms of Intellectual Property arising from the publicly-funded research sector.

This updated IP Protocol is the product of an extensive process of consultation between the Department of Jobs, Enterprise and Innovation and Knowledge Transfer Ireland (KTI), and people working at the industry-research interface. This includes industry (large and small), the venture capital community, Research Performing Organisations (RPOs), Technology Transfer Offices (TTOs), the enterprise agencies, State research funding organisations and the Irish Universities Association. We would like to thank all those who contributed to shaping this new text.

The Government's objective for the IP Protocol is to support all enterprises from small businesses to multinationals to engage with publicly-funded research with ease and certainty. This happens through enterprise collaboration with Ireland's universities, institutes of technology and other publicly-funded research institutions. The Protocol underpins this by creating a mutually beneficial environment in which enterprise and Researchers can access and share knowledge, expertise, technology and IP. This in turn supports innovation in products, services and processes leading to more competitive companies able to scale and grow, and to deliver products and services for the global marketplace.

The IP Protocol sets out the Government's policies to encourage industry to benefit from publicly-funded research and describes the practical arrangements for this to happen. Since the formation of KTI, as mandated in the first protocol, industry now has a range of resources at its disposal to make the process of engagement with RPOs clear and swift. This second iteration of the protocol reflects our commitment to ensuring that the knowledge transfer system continues to be agile and responsive to change and growth in both enterprise and research.

Damien English, TD
Minister for Skills, Research and Innovation

Introduction

Ireland's research and innovation strategy actively promotes close working relationships between industry and the public research system. It aims to provide a world-leading environment in which industry – both local and from abroad – enthusiastically uses Irish public research for discovery and innovation.

The IP Protocol 2016 is an update to the original IP Protocol which was published in 2012. It is about helping industry – from start-ups and small and medium enterprises to multinational corporations – to access the research and development carried out in Ireland's universities, institutes of technology and other public research institutions (collectively termed 'Research Performing Organisations' or RPOs¹). It sets out the Government's policies to encourage industry to benefit from this research and development and describes the practical arrangements for this to happen. The IP Protocol also sets expectations – on RPOs and on industry parties wishing to engage with RPOs.

The IP Protocol was always intended as a living document, its evolution and updating being informed by practice. Knowledge Transfer Ireland (KTI, the government's central technology transfer office) has responsibility for this. The updated version of the Protocol is based on extensive consultation with people involved in the commercialisation of research in Ireland from across the ecosystem comprising industry (small and large), investors, Research Performing Organisations (RPOs) and State Agencies funding research and innovation. The vast majority of those consulted valued the national IP Protocol as a very useful framework to articulate the rules of engagement for Collaborative Research between RPOs and industry. The revision aims to strike the balance between the removal of ambiguity in certain areas while retaining flexibility.

The focus of the Protocol is primarily on Collaborative Research: where industry and RPOs work together on a Programme of research. Industry and the State may share the cost of the research or it may be fully funded by the company. This latter situation is sometimes referred to as "contract research". The Protocol also deals with industry access to the results of research that is funded entirely by the State. It encompasses all forms of research and development activity - from pure and applied research through to incremental and near-market development.

It is complemented by a suite of Model Agreements and associated Practical Guides which can be used as a starting point for drafting and negotiating the contracts that underpin IP arrangements between industry and the research base.

More information about how to work with the research base in Ireland, including information on research, expertise and IP available and downloadable template Model Agreements, can be found at www.knowledgetransferireland.com/Model-Agreements

Throughout this document, the following words have the following meanings:

- "shall" is a mandatory principle that may not be varied by negotiation.
- "should" implies good practice that will normally be followed. Industry and RPOs are free to adopt a different approach where this is in the best interests of successful relationships and research commercialisation.
- "may" implies a practice that the party concerned can follow if it chooses.

¹ Any organisation that performs research and development funded at least in part by the State. Please see Appendix A for a more complete definition of the term RPO.

Contents

Page	Index	Topic
03		Foreword
05		Introduction
07		Contents
09	Chapter 1	Policy
12	1.1	Implementation of the IP Protocol
15	Chapter 2	Framework
17	2.1	Principles applicable to research funded 100% by the State
18	2.2	Principles applicable to research funded 100% by industry
18	2.3	Principles applicable to research funded partly by industry and partly by the State
21	Section A	Access to IP in wholly State-funded research
22	Section B	Access to IP in Collaborative Research wholly funded by industry
24	Section C	Access to IP in Collaborative Research partially funded by industry
25	2.C.1	Intellectual Property
27	2.C.2	Programme Plan
27	2.C.3	Publication rights
28	2.C.4	Governance arrangements
28	2.C.5	Additional principles that apply to Multi-party Collaboration Agreements
29	2.C.6	Obligations of each RPO participating in Collaborative Research
29	2.C.7	Obligations of an industry party participating in Collaborative Research
30	Section D	Licensing
32	2.D.1	General principles in IP licensing
33	2.D.2	Fee-bearing Exclusive or Non-exclusive licences
34	2.D.3	Non-Exclusive Royalty-Free licences (NERFs)
34	2.D.4	Assignment
35	2.D.5	Retained rights
36	Section E	Costs and contributions towards research
37	2.E.1	State Aid
38	2.E.2	European Competition Law
39	Section F	IP Management
40	Section G	The Irish Knowledge Transfer system
41		Appendix A
43		Appendix B

Policy

Chapter



1.0 Policy

- 1** Ireland aims to provide an exemplary innovation ecosystem that creates economic and societal benefits. This includes the promotion of entrepreneurship, high potential start-ups and job creation by new and established firms. An essential condition for this is a user-friendly system that enables industry and the public research sector to work well together and which encourages the commercialisation of all forms of Intellectual Property ('IP') arising from publicly-funded research.
- 2** In encouraging industry and RPOs to work together, the State's aims are:
 - For Ireland and its centres of research excellence to be the partner of choice and to be optimally attractive for industry to engage with the academic community in research Programmes.
 - For such Programmes to assist enterprises in researching, developing, validating and testing new technologies/products/platforms in ways that will lead to commercialisable assets.
 - To deepen industry's R&D base in Ireland.
 - To engage Ireland's SMEs in innovation to ensure their long-term sustainability.
 - To grow and develop the research excellence and expertise of Ireland's academic research community.
 - Ultimately to deliver a return to the Irish economy, aligned to evolving national priorities.
- 3** Where commercially exploitable IP arises as a result of State funding for research and development, the opportunity shall be taken to commercialise the IP in all possible Fields, applications and territories where it is consistent with achieving Ireland's objectives.
- 4** The purpose of this commercialisation, from Ireland's point of view, is to maximise the economic and societal benefits and returns to Ireland from its public investment in research.
- 5** The primary objective of commercialisation is the creation of sustainable jobs in Ireland. This is the most important form of economic and societal benefit.
- 6** Where the potential for job creation in Ireland is limited or non-existent, the aim is commercialisation elsewhere that will lead to wealth flows and benefits to Ireland.
- 7** All enterprises, from start-ups and small and medium enterprises ('SMEs') to multi-national corporations, can easily access this IP. Companies and research performers should be able to access and exploit IP quickly, on terms that provide fair value to all parties, and in ways that are predictable and consistent from one negotiation to the next.
- 8** Commercialisation shall also, as far as possible without compromising these policy statements, benefit the Higher Education Institutes and State-funded Research Organisations ("Research Performing Organisations", RPOs) and provide incentives to the Researchers involved in creating the IP. These benefits include not only opportunities for RPOs to share financial rewards but also the promotion of greater industry involvement in RPO research, leading to new research Programmes, increased funding for RPOs and the stimulus of greater industry interaction for individual Researchers.
- 9** All those involved in commercialisation of IP, RPOs and industry alike, should seek to build networks of long term knowledge sharing relationships, reflecting the ecosystem nature of innovation.
- 10** Where there are opportunities to commercialise the IP arising from RPO research, then all parties shall pursue commercialisation of that IP in a timely manner.
- 11** RPOs shall pursue commercialisation, keeping in mind the objective to create economic and societal benefit for Ireland through the creation of sustainable jobs. This can be achieved in a number of ways, including:
 - Creating licensing opportunities for all types of enterprise, thereby creating employment and a more competitive and sustainable economy in Ireland.
 - Supporting the creation of spin out companies, with the potential for job creation in Ireland.
 - Attracting and maintaining foreign direct investment in Ireland, with its potential for economic growth and job creation.
- 12** In some situations, RPOs will need to decide which of these three mechanisms takes precedence, making informed judgments about which specific approach will maximise overall economic and societal benefits for Ireland.

- 13** RPOs shall aim to maximise the benefits of commercialisation to Ireland rather than focusing exclusively on the benefits to the RPO. They should build relationships with industry that will support a sustainable flow of commercialisation outputs, rather than seeking to maximise the returns from individual transactions.
- 14** RPOs shall have policies and procedures in place that are publicly published and enable them, to the extent that is reasonable, to give industry an acceptable and consistent level of confidence around the management of IP arising from their research. These policies and procedures shall include arrangements for good planning, governance and execution of research Programmes and publications, with particular attention to the management and commercialisation of IP.

1.1 Implementation of the IP Protocol

- 15** In support of this policy, a Framework for industry engagement with public research, in Chapter 2, provides detailed requirements, guidelines and procedures for commercialisation of IP in line with this policy.
- 16** Where research is funded by the State or owned by the State, it should benefit the State. It therefore follows that all RPOs shall:
- Apply this Policy and the Framework in Chapter 2, to ensure consistency and predictability of approach.
 - Within the requirements of this Policy and of the Framework, be flexible in negotiating individual Commercialisation agreements, in order to obtain the best result for all parties.
 - Have procedures in place to ensure their staff, contractors, consultants and students understand the principles of this policy, the options available for commercialising IP arising from their research, and the benefits of commercialisation.
 - Have arrangements in place to enable them to meet these requirements.
- 17** The State research funding organisations have diverse objectives for their research funding, reflecting their differing missions. However, all these organisations share a common interest in commercialising IP arising from the research they fund whenever this is possible, and, accordingly, shall implement this policy.
- 18** Knowledge Transfer Ireland (KTI) has responsibility for setting direction for RPO best practice to enable compliance with the policy and procedures set out in this document and a consistent interpretation and adoption of the policy and procedures by the State research funding organisations.

Framework

Chapter



2.0 Framework

- 19** This chapter sets out the standards for all industry-RPO negotiations of Collaborative Research contracts, so as to support speed, consistency and predictability of outcomes in the negotiation process. It describes how industry can benefit from access to IP arising from Collaborative Research which it undertakes with an RPO which is funded wholly or in part by the company, and how it can also access IP where it has had no research involvement with the RPO.
- 20** In this chapter what is mandatory and what is not is described. It is appropriate, in some situations, that there is a degree of flexibility, so that the parties can negotiate the most pragmatic agreement. This approach recognises differing sectoral characteristics and the different forms which IP may take. This chapter does not aim to discuss legal concepts of the factors influencing decisions taken in IP management in every detail and, in particular, is not a comprehensive treatment of all legal issues.
- 21** The principles for industry-RPO research engagement cover the different types of research to which access is given by industry and the RPOs to industry which are:
- **Wholly State-funded Research:** This is where a State research funding organisation has paid 100% of the costs of the research.
 - **Collaborative Research: wholly industry-funded:** This is where the industry party has a specific need and where it meets the full economic cost of carrying out the Programme of work.
 - **Collaborative Research: part industry-funded:** This is where an industry party partially funds and works with an RPO on a Programme of mutual interest. There will be an element of State research funding meeting part of the cost of the Programme of research. This type of Collaborative Research may involve two or more parties as follows:
 - **Bilateral Collaborative Research: part industry-funded:** one industry party works with one RPO.
 - **Multi-party or consortium-based Collaborative Research: part industry-funded:** several industry parties and RPO(s) working together.

2.1 Principles applicable to research funded 100% by the State

- 22** When research by an RPO is wholly funded by the State, the RPO shall own any IP arising from the research. The RPO shall then be free to negotiate arrangements for other organisations to access the IP to maximise the benefits of commercialisation for Ireland.
- 23** The RPO shall be free to publish the results of its research, provided it first follows the procedures in place within the RPO to ensure, where appropriate, IP is properly protected before anything related to that IP is published.
- 24** Access by industry to IP owned by an RPO will normally be by the granting of licence(s) on fair commercial terms by the RPO on an exclusive or non-exclusive basis requiring that:
- The licensee(s) shall pursue commercialisation of that IP in a timely manner; and
 - The licensee(s) shall acknowledge and agree that the RPO shall be free to use the IP to continue its research and teaching in any Field covered by the licence to the licensee.
- 25** In exceptional circumstances, an RPO may agree to transfer or assign ownership of its IP, subject to compliance with EU State Aid obligations and to the assignment being consistent to this policy's objectives.

2.2 Principles applicable to research funded 100% by industry

- 26** When the full economic cost of research by an RPO is wholly funded by industry, the industry party shall be entitled to a Non-Exclusive Royalty-Free (NERF) licence, an exclusive licence or an assignment of any IP arising from the research Programme.
- 27** Where an exclusive licence or assignment of any IP arising from the research Programme is agreed, the RPO may request access to this IP for teaching and research purposes and the industry party shall give due consideration to this request.

2.3 Principles applicable to research funded partly by industry and partly by the State

- 28** Industry parties who contribute to the cost of a research Programme that is partially funded by the State shall be entitled to benefit from the IP arising in that Programme by way of a licence. Such a licence shall contain, or be consistent with, the following principles:
- The licensee(s) shall pursue commercialisation of that IP in a timely manner.
 - Licences shall be granted on fair and reasonable commercial terms (subject to compliance with EU State Aid obligations) which provide opportunities for economic and societal benefits for Ireland.
 - Where the RPO licenses the IP to an industry party, the RPO shall retain the right to use that IP for its research and teaching.
 - The RPO shall be free to publish results of the research Programme, including those that relate to the IP, provided it first follows an agreed process to notify the industry party of its intention to publish and to agree any restrictions on publication.
- 29** An industry party shall be entitled to negotiate an exclusive licence or assignment rights to specific improvements to certain Background IP or other proprietary assets which that industry party has introduced to the Programme.
- 30** In certain situations a Non-Exclusive Royalty-Free (NERF) licence of IP created during a research Programme may be negotiated, subject to compliance with EU State Aid obligations.
- 31** In exceptional circumstances, RPOs may agree to transfer or assign ownership of its IP to the industry parties subject to compliance with EU State Aid obligations.
- 32** IP that is jointly owned by an industry party and an RPO involves complex management arrangements and should be avoided.

Table 1: Summary of the ways in which industry can access IP from the RPO sector



33 This Chapter 2 describes the types of research and access to IP in more detail:

- Research wholly funded by the State – Section A
- Collaborative Research: wholly industry-funded – Section B
- Collaborative Research: part industry-funded – Section C

34 It also discusses:

- IP Licensing – Section D
- The costs of research and the implications of State Aid legislation – Section E
- The management of IP, including governance – Section F
- The knowledge transfer system and the role of RPOs and other organisations in supporting the IP Protocol – Section G

35 The IP Protocol Resource Guide (Section 1) discusses National IP Management Requirements in detail and provides links to all supporting documents and contracts which include:

- Template Model Collaborative Research Agreements that may be used as the basis for industry-RPO contracts.
- A Decision Guide which assists in selection of the appropriate template to use and which also explains essential elements of the contracts.
- Template Licence Agreements and Practical Guides to their use which cover a variety of IP-types and exclusive and non-exclusive arrangements.
- See also www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements.

36 Irish law should govern all RPO contracts relating to Collaborative Research or the exploitation or Commercialisation of IP owned or created by the RPOs, including any IP licences, IP assignments or Collaborative Research Agreements.

Section A

Access to IP in wholly State-funded research

-
- 37** This Section applies when an industry party seeks access to IP that has arisen from past or current research by an RPO which was or is wholly funded by the State.
- 38** It is helpful to read this Section in conjunction with other parts of this Chapter, particularly:
- Section D – Licensing
 - Section E – Costs and contributions towards research
 - Section F – IP Management
- 39** When research by an RPO is wholly funded by the State, the RPO shall own any IP arising from its research. The RPO shall then be free to negotiate arrangements for other organisations to access the IP in order to maximise the benefits of knowledge transfer and commercialisation for Ireland.
- 40** Access to IP owned by an RPO created in wholly State-funded research will be by way of the granting of exclusive and/or non-exclusive IP licence(s) by the RPO on fair commercial terms.
- 41** While an RPO will not normally consider assigning ownership of its IP, it may in exceptional circumstances once IP has been created, agree to transfer or assign ownership of the IP, provided that it receives fair value in return, is able to continue its research and teaching in the Field, and satisfies itself that the assignment is the best route to generate maximum benefit for Ireland.
- 42** Notwithstanding the provisions of this Section, special provisions applicable to IP may apply in situations where one of the explicit objectives of the State funding was or is to generate research outputs that can be preserved for sharing and informed use, beyond the originating research team and RPO, by the scientific or academic community and/or for policy and practice purposes. Publicly-funded research outputs within this description might include anonymised datasets from population and patient-based studies; genotypic and phenotypic information; samples linked to cohort and population surveys and broadly enabling research tools.
- 43** When the State research funding organisation expects such datasets and samples to have Unrestricted Availability or be Independently Available, this will be stated in the contract under which it awards funding for the research to the RPO. In such cases, access should be without unreasonable restrictions so as to enable wide scientific and public benefit. Licences granted to individual industry parties should not compromise this access model.
-

Section B

Access to IP in Collaborative Research wholly funded by industry

- 44** This Section applies when an industry party commissions an RPO to carry out research on its behalf and pays the full economic cost of that research.
- 45** It is helpful to read this Section in conjunction with other parts of this Chapter, particularly:
- Section D – Licensing
 - Section E – Costs and contributions towards research
 - Section F – IP Management
- 46** A Collaborative Research Agreement shall be negotiated and signed by both parties prior to the work commencing. A Collaborative Research Agreement template, covering this full industry funding situation, can be found on the KTI website (www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements).
- 47** The Collaborative Research Agreement should include the terms and conditions that relate to:
- Details of the research Programme and who will carry it out (Programme Plan).
 - Mechanisms for the identification and protection of IP developed during the Programme.
 - Management of IP, including payment of associated costs.
 - Licensing and/or assignment of IP arising in performance of the Programme (often called “Foreground IP”).
 - Licensing of pre-existing IP introduced into the collaboration and owned or licensed by the RPO and/or the industry party (usually called “Background IP”).
 - Publication of research results.
 - Management and oversight of the Programme.
- 48** The industry party shall be entitled to the following rights to the Foreground IP:
- Assignment
 - Exclusive licence
 - Non-Exclusive Royalty-Free (NERF) licence
- 49** Even in the case of an exclusive licence of IP or an assignment of IP, the RPO retains the option to negotiate access to the Foreground IP to use it for teaching and research purposes and the industry party shall give due consideration to this request.
- 50** As Background IP may be required to carry out a Collaborative Research Programme, a party which introduces its Background IP into such a Programme should grant to the other party a non-exclusive royalty-free licence to use that Background IP for the sole purposes of, and to the extent necessary, to carry out its work on the Programme.
- 51** As Background IP may be required in the future for the commercialisation of IP arising from a Collaborative Research Programme, any Background IP to be introduced into the Programme by a party shall be detailed in the Collaborative Research Agreement.
- 52** The introducing party shall state in writing whether its Background IP will be available for license by the other party at the end of the Programme and whether there are any restrictions attached to the use of that Background IP.
- 53** Where an RPO confirms at the time it introduces Background IP, that the Background IP is available for use or commercialisation by the industry party after the end of the Programme, it will not, until the expiry of the Programme, enter into any contracts which would further limit its ability to grant those access rights to that Background IP which have been offered without the industry party’s consent.
- 54** Prior to contractually agreeing to introduce Background IP to a research programme the RPO will need to consider whether committing such Background IP into a Programme is essential to that Programme and, if not, whether introduction is likely to prevent or delay alternative commercialisation of the Background IP, bearing in mind the objective to deliver optimum social and economic benefit to Ireland.

-
- 55** Where any RPO Background IP is so confirmed as being available for use by an industry party after the end of the research Programme, then the industry party(s) shall have a right to negotiate a non-exclusive licence to this Background IP. This licence:
- Will only be for the purposes of, and to the extent required to, commercialise the IP arising from the Programme.
 - Will be on such terms and conditions as would be found in a usual arm's length commercial licence, to be agreed between the parties in good faith.
- 56** In exceptional circumstances, the industry party may have a right to negotiate an exclusive licence to Background IP, subject to compliance with EU State Aid obligations, if the RPO agrees this at the time it commits to introduce the Background IP to the Programme.
- 57** Notwithstanding the provisions in the preceding paragraphs an RPO shall retain its rights in respect of Non-Severable Improvements to any Significant Background which the RPO has introduced to the Programme, unless agreed otherwise.
-

Section C

Access to IP in Collaborative Research partially funded by industry

- 58** This Section describes how industry can benefit from access to IP where it is partially funding a Programme of Collaborative Research at an RPO. It applies when one or more industry parties and one or more RPOs are working together in a Collaborative Research Programme that is funded partly by the State and partly (in cash and/or in kind, including participation in the research itself) by the industry party(s).
- 59** It is helpful to read this Section in conjunction with other parts of this Chapter, particularly:
- Section D – Licensing
 - Section E – Costs and contributions towards research
 - Section F – IP Management
- 60** A Collaborative Research Agreement, shall be negotiated and signed by the parties prior to the commencement of the Collaborative Research Programme. A template covering this situation can be found on the KTI website (www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements).
- 61** RPOs, industry parties and State research funding organisations shall meet their obligations in Collaborative Research Agreements to ensure the effective and timely commercialisation of IP.
- 62** As a prelude to negotiating a Collaborative Research Agreement, the parties may negotiate and agree a non-binding term sheet that defines the core terms relating to the Programme, and upon which the detailed Collaborative Research Agreement will be based. In some cases, State research funding organisations may make the signature of a term sheet addressing certain key topics a requirement of grant of funding.
- 63** Where a State research funding organisation permits commencement of a Collaborative Research Programme on the basis of a signed term sheet, the RPO and industry party should aim to convert all terms agreed between them into a fully executed binding Collaborative Research Agreement within 90 working days following the date on which the first part of the funding awarded by the State research funding organisation is drawn down.
- 64** The Collaborative Research Agreement shall include terms and conditions that address:
- Details of the Programme and who will carry it out (Programme Plan).
 - Mechanisms for the identification and protection of IP developed during the Programme.
 - Management of IP, including payment of associated costs.
 - Licensing of IP arising in the performance of the Programme (often called “Foreground IP”).
 - Licensing of pre-existing IP introduced into the collaboration and owned or licensed by the RPO and/or industry party (usually called “Background IP”).
 - Licensing of industry introduced Background IP where necessary to allow exploitation of Foreground IP by the RPO.
 - Publication of research results.
 - Management and oversight of the Programme.
- 65** The Collaborative Research Agreement shall comply with the mandatory principles regarding professional IP management, as described in further detail in the IP Protocol Resource Guide at Section 1 National IP Management Requirements.
- 66** Before the research Programme starts, the parties should discuss in confidence the different exploitation routes and the associated issues of commercialisation, risk and appropriate rewards. They should agree arrangements for IP access by each of the parties that are appropriate to the specific collaboration and that will allow exploitation to be maximised. This should take into account such matters as what each party is bringing into the collaboration, what rights will be essential to allow a party to commercialise results, what rights are desirable or where freedom to operate is more important than obtaining exclusivity. It is reasonable to expect that rights to Foreground IP may be divided up according to core business interests of the parties – industry and the RPO.

2.C.1 Intellectual Property

- 67** The industry party shall be entitled to negotiate and conclude a licence to Foreground IP on fair commercial terms, within a pre-agreed period (such as six months) starting on the date on which the RPO formally notifies the industry party of the creation of the IP. After this time if a licence is not concluded, the RPO shall be free to negotiate arrangements for other organisations to access the IP in order to maximise the benefits of commercialisation for Ireland.
- 68** IP licences of IP arising from Collaborative Research shall be granted by the RPO to the industry party subject to the industry party making at least the minimum contribution to the cost of the research Programme. The minimum contribution shall be determined by the State research funding organisation (see Section E Costs and contributions towards research).
- 69** Choosing the form of IP licence shall be based upon legitimate academic and business considerations of the parties giving due regard to this Policy. The form of IP licence that applies during and after the research Programme should ideally be identified and agreed by the parties before the Programme starts and before the Collaborative Research related agreement is entered into.
- 70** In some situations, a Non-Exclusive Royalty-Free (NERF) licence to Foreground IP may be granted by the RPO to the industry party following completion of the research Programme, subject to compliance with EU State Aid obligations. This is subject to the industry party contributing minimum amount, see Section E.
- 71** There are two ways in which a NERF licence should be made available:
- When negotiating the Collaborative Research Agreement the parties may agree that the industry party may have a right following completion of the research Programme to a NERF licence to use the Foreground IP arising from the Programme in which the industry party is involved, for defined purposes, Fields and/or territories. Such a licence will not provide access to any other RPO IP. The parties may make separate arrangements for access to other IP (such as Background IP required to use the Foreground IP).
 - During the Programme and within six months following the RPO notification to the industry party that Foreground IP has been created, the industry party may be granted a NERF licence for use of this Foreground IP for defined purposes, Fields and/or territories. During this six month period or until such a licence is granted or until the industry party declares its intention not to apply for such a licence, whichever occurs first, the RPO shall not enter into any contracts which would limit its ability to grant to the industry party such a licence in the Field. After the end of the six month period, the industry party may still apply for a NERF licence at any time but the grant of such a licence shall be at the discretion of the RPO.

Example of when a NERF licence might be appropriate:

During a targeted Collaborative Research Project between a multinational ICT company and a university, IP was created. In this case, copyright in computer software. Under the terms of the collaborative agreement, the company had the option to request a NERF and to negotiate an exclusive royalty bearing licence. The company chose the NERF right as this satisfied its business needs by providing freedom to operate. The university was able to pursue additional licence opportunities in areas where there were several potential licensees.

- 72** While an RPO will not normally consider assigning ownership of its IP, it may in exceptional circumstances, once Foreground IP has been created, agree to transfer or assign ownership of the Foreground IP, provided that it receives fair value in return, is able to continue its research and teaching in the Field, and satisfies itself that the assignee is in a position to commercialise the IP for the benefit of Ireland.
- 73** Notwithstanding the provisions in the preceding paragraphs an industry party shall have the right to negotiate the assignment of Non-Severable Improvements to any Significant Background which that industry party has introduced to the Programme. This includes situations in which an industry party may introduce a proprietary confidential asset into a Collaborative Research Programme as Background IP. The question of whether any particular Foreground IP constitutes a Non-Severable Improvement to any Significant Background will be agreed by the parties and will usually be determined by the proprietary nature of the Significant Background.
- 74** As Background IP may be required to carry out a Collaborative Research Programme, a party which introduces its Background IP into such a Programme should grant to the other party a non-exclusive royalty-free licence to use that Background IP for the sole purposes of, and to the extent necessary, to carry out its work on the Programme.
- 75** As Background IP may be required in the future for the commercialisation of IP arising from a collaborative Programme, any Background IP to be introduced into the Programme, by a party, shall be detailed in the Collaborative Research Agreement.
- 76** The introducing party shall state in writing any restrictions attaching to the use of that Background IP, including any restrictions on its use by a party after the end of the research Programme.
- 77** Where an RPO confirms at the time it introduces Background IP that the Background IP is available for use or commercialisation by the industry party after the end of the Programme, it will not, until the expiry of the research, enter into any contracts which would further limit its ability to grant those access rights which have been offered without the industry party's consent.
- 78** Prior to contractually agreeing to introduce Background IP to a research Programme the RPO will need to consider whether committing such Background IP into a Programme is essential to the Programme and, if not, whether introduction is likely to prevent or delay alternative commercialisation of the Background IP bearing in mind the objective to deliver optimum social and economic benefit to Ireland.
- 79** Where any RPO Background IP is so confirmed as being available for use by the industry parties after the end of the Programme, then the industry party(s) shall have a right to negotiate a non-exclusive licence to this Background IP. This licence:
- Will only be for the purposes of, and to the extent required to, commercialise the IP arising from the research Programme.
 - Will be on such terms and conditions as would be found in a usual arm's length commercial licence, to be agreed between the parties in good faith.
- 80** In exceptional circumstances, the industry party may have a right to negotiate an exclusive licence to Background IP, subject to compliance with EU State Aid obligations, if the RPO agrees this at the time it commits to introduce the Background IP to the Programme.
- 81** Notwithstanding the provisions in the preceding paragraphs an RPO shall retain its rights in respect of Non-Severable Improvements to any Significant Background which the RPO has introduced to the Programme, unless agreed otherwise.

2.C.2 Programme Plan

- 82** The Programme Plan should include all the technical aspects of the research Programme and the deliverables.
- 83** If the parties wish to make substantial changes to the Programme Plan, they shall request prior agreement from the State research funding organisation. Such approval shall be considered within 30 working days of request and not unreasonably withheld or delayed.
- 84** The relevant parties should receive payments on a schedule agreed with the State research funding organisation. Payments will be linked to achievement of the milestones in the Programme Plan and to compliance with the funding contract.
- 85** The parties should be aware that the State research funding organisation may terminate the funding for a Collaborative Research Programme or terminate a party's involvement in the Programme in the event of:
- A failure to meet Programme milestones contained in the funding contract.
 - Any other material breach of the contract under which the State research funding organisations providing funding for the Programme, which cannot be remedied within a timescale acceptable to the State research funding organisation notifying the RPO of the breach.
 - Any material breach of any other contract signed by the parties in respect of the research Programme.
- 86** A Programme Plan template can be found on the KTI website at www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements.

2.C.3 Publication rights

- 87** The ability of RPOs to further their mission of teaching and research and to maintain an open academic environment that fosters intellectual creativity is important. Publication of research results is often a condition imposed by non-commercial funding bodies.
- 88** Publication of results from research collaboration aided by funding from State research funding organisations enables compliance with State Aid legislation.
- 89** In principle, RPOs may publish results from a Collaborative Research Programme including those relating to Foreground IP. However, premature publication may disclose confidential, proprietary and/or commercially sensitive information and either prevent the further protection of any IP arising from the research Programme or prevent the value and benefit of Foreground IP from being maximised. The Collaborative Research Agreement shall contain clauses that detail how publication of Foreground IP and related information shall be handled by the parties.
- 90** Each party intending to publish shall submit the proposed publication to the other party before submitting it for publication.
- 91** The parties may agree to set up a publications review committee to manage the process of giving permission to publish Foreground IP and related information arising from the Collaborative Research Programme.
- 92** Review times shall be 30 calendar days from submission of the proposed publication to the Publications Review Committee or the other party for permission, during which a party may object in writing to publication. In this event the party may withhold permission for up to 90 calendar days from the date the proposed publication was submitted to them or until any affected IP is properly protected, whichever occurs first. If no written objection is received by the party intending to publish within the 30 days, then permission to publish shall be deemed to have been given.
- 93** RPOs shall have procedures in place to manage publication of Foreground IP, in line with the National IP Management Requirements summarised in the IP Protocol Resource Guide, Section 1.

2.C.4 Governance arrangements

- 94** Successful collaborations are those that benefit every collaborating party and have due regard for each party's contributions, objectives and desired outcomes. It is important to establish consistent governance arrangements that can oversee day-to-day activities in collaborative Programmes.
- 95** The parties should each appoint a single point of contact for the research Programme to ensure day-to-day adherence to the direction and scope of the Programme and simple communication between the parties. This programme management governance arrangement should be set out in the Collaborative Research Agreement. Clear lines of communication to the accountable individuals in both RPO and industry party should be established to ensure any unforeseen issues are dealt with.
- 96** Each party should develop appropriate delegations of authority, administrative guidelines and accountability measures to support their participation in Collaborative Research Programmes.

2.C.5 Additional principles that apply to Multi-party Collaboration Agreements

- 97** Multi-party Collaborative Research is where more than two parties come together (e.g. one or more industry parties and one or more RPOs) in a Collaborative Research Programme that is funded partly by the State and partly (in cash and/or in kind, including participation in the research itself) by the industry party(s).
- 98** In addition to the conditions described in Sections 2.C.1-2.C.4, above, the following principles (99-104) apply:
- 99** In order to effectively manage the negotiation of the Multi-party Collaborative Research Agreement, where there is more than one RPO party, the collaborating RPOs should appoint one of their number to be the Lead RPO. The Lead RPO should have authority to negotiate the terms and conditions associated with the Collaborative Research Programme on behalf of all RPOs involved, so that the industry party or parties only have to deal with one RPO. The parties in the collaboration should agree a dispute resolution mechanism for inclusion in the agreement addressing any matters needing resolution.
- 100** Multi-party Collaborative Research Agreements must adequately and fairly address the interests and objectives of each of the collaborating parties. When negotiating to set up a new Collaborative Research Programme, the parties should make sure the proposed arrangements will benefit them all.
- 101** Co-exclusive licences to Foreground IP may be available to the industry parties.
- 102** The parties may agree that separate Bilateral Collaborative Research Agreements may exist within the multiparty collaboration. In this case, these agreements, between two of the parties to the research Programme, shall deal with specific pieces of research, related to, but distinct from the rest of the Programme. The agreements should include terms and conditions dealing with access to Background IP and Foreground IP relating to that piece of research specific only to the two parties involved.
- 103** In all Multi-party Collaborative Research Agreements, a Programme Steering Committee should be established, involving representatives from all the parties in the collaboration.
- 104** The parties should set up a mechanism to review publications in order to manage the process of giving permission to any party's proposal to publish Foreground IP and related information arising from the Collaborative Research Programme. This should take the form of a Publications Review Committee or an IP Review Committee. This is particularly important in Multi-party Collaborative Research, where clear processes and accountability and timely decision making is essential.

2.C.6 Obligations of each RPO participating in Collaborative Research

105 Each RPO shall ensure that it has entered into appropriate written agreements with its employees and non-employees (such as contractors, consultants and students) that grant it ownership of inventions and other IP arising from their work (as part of a Research Programme), while providing for appropriate recognition, incentives and reward for those involved.

106 Each RPO participating in a Collaborative Research Programme shall:

- Provide the resources which the Programme Plan says that it will use in implementing the Programme.
- Carry out that part of the Programme allocated to it in the Programme Plan.
- Comply fully with its IP management system (IP Protocol Resource Guide Section 1) in respect of its activities under the Programme.
- Be responsible for the actions of all its employees and non-employees (such as consultants, contractors and students) involved in the Programme on behalf of the RPO and for any failure by them to comply with its IP management system or with any terms and conditions of the Collaborative Research contract.

107 The RPO, its Researchers and students shall not be restricted from carrying out future research in the same area as that of the Programme, provided that they comply at all times with the provisions of the RPO's IP management system and the terms of the Collaborative Research contract.

108 If the industry parties, or any other organisation, take a licence of or an assignment of the Foreground IP arising from the Programme, the Researchers should be required to give such assistance to the RPO and to the licensees/assignees as is reasonably necessary to enable the licensee (or assignee) properly to use and commercialise the IP, in accordance with the terms and conditions agreed in the Collaborative Research contract or related agreement.

2.C.7 Obligations of an industry party participating in Collaborative Research

109 Each industry party participating in a Collaborative Research Programme shall:

- Provide the contributions and other resources as set out in the Programme Plan.
- Carry out that part of the Programme allocated to it in the Programme Plan.
- Be responsible for the actions of all its employees, sub-contractors and other non-employees (e.g. students) involved in the Programme on its behalf and for any failure by them to comply with any terms of the Collaborative Research contract.
- Not use any funding or IP from other sources in the Programme which may have any terms or conditions attached which conflict with the terms (particularly IP terms) agreed with the RPO(s).
- Comply with the other terms and conditions agreed with the RPO(s) in relation to IP used in or created as a result of the Programme.

Section D Licensing

- 110** An IP licence agreement is a contract under which an owner or licensee of Intellectual Property Rights (the licensor) permits another person (the licensee) to engage in activities that, in the absence of the licence agreement, would infringe the Intellectual Property Rights.
- 111** There is no ‘official’ definition of Intellectual Property (IP), and for this reason it is often defined specifically in licence agreements. There are many different types of IP. Depending on the subject matter of the licence agreement, IP may be defined as including patents, copyright, database rights, unregistered and registered designs, trade marks, domain names and similar property rights.
- 112** IP licences are sometimes granted to permit a licensee to use, make and/or sell products that use the licensed IP, often in a specific Field and/or territory.
- 113** In return for the grant of an IP licence from an RPO, the licensee will typically make payments to the RPO in respect of its use of the RPO’s IP – a fee-bearing licence. In some situations a licence may be granted by an RPO to a licensee with no such requirements.
- 114** Key terms of a typical IP licence agreement will usually include the following points:
- Detailed definitions of the subject matter of the licence agreement and key terms used in the licence agreement, including definitions used to elucidate the parameters of the licence, such as Licensed IP, Territory, Field, Licensed Product, Net Sales Value, Valid Claim, etc.
 - A ‘grant’ clause which describes the scope of the licence being granted, for example, the revocability of the licence, whether the licence is exclusive or non-exclusive, whether the licensee is permitted to grant sub-licences and, if so, any conditions for sub-licensing, etc.
 - Provisions governing confidentiality and publications.
 - Obligations of the licensee, particularly in exclusive IP licence agreements, to develop and commercialise the IP, with provisions stating what is to happen if the licensee fails to comply with these obligations.
 - Warranty, liability and indemnity clauses.
 - Protection of IP and infringement claims.
 - Duration, termination and consequences of termination.
- 115** Fee-bearing licences will include detailed payment terms, which may include, for example, terms covering lump sums, royalties, frequency and time of payments, reports, record-keeping, audit rights, tax issues, etc.
- 116** The type of licence that might be used to licence IP from an RPO will depend on the commercial and other needs or objectives of the respective parties, the best licence model to optimise benefit and value for Ireland and the type of research engagement (where one took place). IP licences granted by the RPO to industry should be specific to the target market at which the product or service that utilises the IP is aimed and the market sector standards that typically apply to those products and services. By way of example the following IP licences are possible:

Table 2: Licence types

Licence type	Associated payments	Source
Exclusive licence	May be fee bearing. Patent and other IP management costs should be transferred to licensee.	Unrelated to any research engagement. Or Arising from Collaborative Research: wholly industry-funded (full economic cost paid by the industry party). Or Arising from Collaborative Research: part industry-funded.
Non-exclusive IP licence	May be fee bearing. Patent and other IP management costs should be included in licence.	Unrelated to any research engagement. Or Arising from Collaborative Research: wholly industry-funded (fully paid by the industry party). Or Arising from Collaborative Research: part industry-funded.
Non-Exclusive Royalty-Free (NERF)	Free. Patent and other IP management costs should be included in licence.	Arising from Collaborative Research: wholly industry-funded (full economic cost paid by the industry party). Or In certain circumstances only for IP arising from Collaborative Research: part industry-funded.
Co-exclusive	May be fee bearing. Patent and other IP management costs should be included in licence.	Only applicable in certain circumstances to IP arising from Multi-party Collaborative Research: part industry-funded.
Assignment	May be fee bearing. Patent and other IP management costs should be transferred to assignee.	Arising from Collaborative Research: wholly industry-funded (full economic cost paid by the industry party). Or Subject to a milestone trigger in respect of: IP unrelated to any research engagement. Or IP arising from Collaborative Research: part industry-funded.

117 Even in a situation where a licence does not require up-front or other payments, a licence agreement should be signed by the industry party with the RPO to ensure rights to the IP are contractually managed appropriately.

2.D.1

General principles in IP licensing

- 118** IP licences granted by RPOs shall be for defined purposes, fields, duration and territories and on fair commercial terms.
- 119** All licences should provide for their termination (for example, in the case of a material breach of the licence terms by the licensee or the insolvency of the licensee), so as to enable the RPO owning the IP to seek further commercial opportunities for that IP.
- 120** Know-how, research tools and other broad enabling technologies owned by the RPO should be very clearly described in licence agreements, so that they are clearly identifiable and ring-fenced from other Background IP of the licensing RPO.
- 121** IP rights in such know-how, research tools and technologies owned by the RPO should normally not be assigned or licensed exclusively and should only be licensed on a non-exclusive basis, as assignment or an exclusive licence may preclude the RPO from undertaking further teaching, research or commercialisation activities in connection with the IP in the know-how, research tools and technologies in question. They should only be licensed on an exclusive basis where:
- The licensee can reasonably demonstrate to the satisfaction of the RPO that an exclusive IP licence is essential for the licensee properly to commercialise the IP it wishes to license from the RPO.
 - The RPO is satisfied that the exclusive nature of the licence will not restrict its ability to continue its teaching, research and commercialisation activities in the field in question.
 - The know-how, research tools and other broad enabling technologies are very clearly described in such detail and manner as would allow the RPO to ensure compliance with the exclusive IP licence.
- 122** The costs of applying for a patent or other protection by way of registration for foreground IP owned by an RPO should be met by that RPO up to the grant of any licence relating to that IP. When an exclusive IP licence is granted, the licensee should meet all subsequent patent costs or other IP protection costs from the grant of the licence. Reimbursement of prior patent costs may be included in the licence fee. When a non-exclusive IP licence is granted, subsequent patent costs and other IP protection costs should be shared equitably by the RPO and the licensee(s).
- 123** The RPO should agree the patent and other registered IP strategy with any licensees or other parties who have exclusive rights or options to negotiate exclusive licences with the RPO.
- 124** The RPO should remain the ‘client of record’ for any agents or lawyers prosecuting patents or other protection for IP owned by the RPO.
- 125** As part of its IP management system, an RPO shall take reasonable steps to ensure that it keeps a record of any written notice or claim received by the RPO that the use of the IP in question is infringing, or could infringe, any third party Intellectual Property Rights.
- 126** Action against any alleged infringement of patents owned by an RPO should initially be taken by the RPO, if it chooses to do so. Where an exclusive licence has been granted for the field and territory in which the alleged infringement is taking place and the licensee(s) is diligently commercialising the IP in that field and territory and can provide prima facie evidence of the infringement, if the RPO chooses not to act, it should promptly notify the licensee(s) of that choice and permit them to take action at their own cost, provided that they indemnify the RPO against any costs, claims or damages that the RPO may incur as a result of the action. In the case of non-exclusive licence grant, if the RPO chooses not to act it should promptly notify any licensee(s) of that choice and grant them the right to take action in its place.
- 127** As the licensee has control over the development and ultimate use, commercialisation and translation into products of any IP it licenses from an RPO, the licensee shall assume any liability which may arise in respect of these activities and shall indemnify the RPO against any such liability.
- 128** In view of the open and academic nature of RPOs and the many research activities that they carry out, it is recognised that RPOs are not in a position to give the same assurances in respect of IP management as a commercial organisation could give. RPOs therefore should not offer warranties or representations or assume liabilities concerning IP management or protection. An organisation contemplating the commercialisation of IP provided by an RPO should itself take whatever steps it considers necessary to satisfy itself as to the condition or level of protection of the IP.

2.D.2

Fee-bearing Exclusive or Non-exclusive licences

- 129** The RPO will seek to maximise other opportunities to commercialise IP for the benefit of Ireland. Therefore, the same IP will at all times also be available for licensing by the owning RPO to other interested parties, on terms which the RPO is free to negotiate with the other interested parties, except to the extent, if any, that an industry party has an option to take or has taken a non-exclusive licence or has an option to take or has taken an exclusive licence, as described below.
- 130** Further detailed guidance on licensing is provided in the KTI Practical Guide to Licence Agreements at www.knowledgetransferireland.com/Model-Agreements/KTI-Practical-Guides.
- 131** Template Licence Agreements are available to download from the Knowledge Transfer Ireland website at www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements.
- 132** Exclusive and non-exclusive licences may be negotiated with an RPO which, unless specific circumstances apply, will involve financial terms.
- 133** The types of payments that may be made in a licence may include one or more of:
- Upfront Fees
 - Milestone Payments
 - Success Payments
 - Royalties
- 134** Exclusive licences may also include reimbursement of patent costs or other costs incurred securing protection for licensed IP.

2.D.3 Non-Exclusive Royalty-Free licences (NERFs)

135 In respect of IP arising in a research collaboration (Foreground IP), a Non-Exclusive Royalty-Free (NERF) licence may be granted by an RPO to an industry party that is contributing at least the minimum payment (see Section E in this Chapter), subject to compliance with EU State Aid obligations. Grant of the NERF provides the industry party with the comfort that it has the right to use the RPO's IP as described in the NERF. This may be important in certain sectors where speed to market is important and/or where a broad range of Intellectual Property Rights (IPR) are needed to support a product or service and where taking a commercial IP licence is not compatible with business models in the sector or with the objects of the RPO.

136 A NERF licence should include reimbursement of ongoing patent costs or other costs incurred securing protection for licensed IP in an equitable manner between RPO and other licensees.

2.D.4 Assignment

137 While an RPO will not normally consider assigning ownership of its IP, it may in exceptional circumstances, once IP has been created, agree to transfer or assign ownership of the IP, provided that it:

- Satisfies itself that the industry party will commercialise the assigned IP for the benefit of Ireland.
- Receives fair value in return.
- Is able to continue its non-commercial research and teaching in all Fields and to use the assigned IP for those research and teaching purposes.

138 The costs of applying for a patent or other protection for IP owned by an RPO should initially be met by that RPO up to the grant of any assignment relating to that IP. When assignment is granted, the assignee should meet all subsequent patent costs or other IP protection costs and may be requested to include historic patent and IP protection costs as part of an upfront assignment fee.

139 The RPO should agree the patent and IP protection strategy with any potential assignee who has rights or options to negotiate an IP assignment.

140 Action against any alleged infringement of patents or other IP assigned to an industry party should be taken by the industry party whether or not the alleged infringement occurred before or after assignment, if it chooses to do so.

141 As the assignee has control over the development and ultimate use, commercialisation and translation into product or services of any IP it is assigned from an RPO, the assignee shall assume any liability which may arise in respect of these activities, products and services, and shall indemnify the RPO against any such liability.

2.D.5 Retained rights

142 Where an RPO has granted an exclusive or non-exclusive IP licence or has assigned IP to an industry party, the RPO shall retain the right to use that IP in all Fields or applications for internal research and teaching purposes.

143 Where an exclusive licence has been granted to an industry party for defined Fields or applications, the RPO shall retain the right to commercialise the IP and to use it for Collaborative Research Programmes with other RPOs and industry parties in all other Fields or applications.

144 Where a non-exclusive licence has been granted the RPO shall retain the right to commercialise the IP and the right to use it for collaborative Programmes with other RPOs and industry parties in all Fields and applications.

145 Table 3 summarises these rights.

Table 3: RPO retained rights

	IP licensed non-exclusively to industry party	IP licensed exclusively to industry party	IP assigned to industry party
Use for teaching and research within the RPO.	Yes, for all Fields or applications.	Yes, for all Fields or applications.	Yes, for all Fields or applications.
Use in Collaborative Research Programmes with other RPOs and industry parties, including Programmes sponsored by industry parties.	Yes, for all Fields or applications.	No, not in the licensed Field or application (unless by prior agreement with industry party). Yes, in all other Fields or applications.	No (unless by prior agreement with industry party).
General right to use and commercialise.	Yes, for all Fields or applications.	Only outside of the licensed Field or application.	No.
Right to sub-license IP (including transfer of tangible research materials) to third parties (industry or other RPOs) for research or commercial purposes.	Yes, for all Fields or applications.	Only outside of the licensed Field or application.	No.

Section E

Costs and contributions towards research

- 146** Industry may add significant value to Programmes through intellectual, cash, and/or in-kind contributions.
- 147** It is important to detail costs and contributions to research Programmes. This determines the appropriate and fair access that an industry party should expect to research results and IP, and has a bearing on the rights which can be conferred to the industry party under State Aid legislation.
- 148** The cost and contributions to a Collaborative Programme shall be set out in the Programme Plan (see Access to IP in Collaborative Research wholly funded by industry in Section B and Access to IP in Collaborative Research partially funded by industry at Section 2.C.2 in this Chapter and the KTI website www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements) before the contract or Collaborative Research Agreement is agreed and signed.
- 149** For Collaborative Research Programmes partially funded by industry, industry contributions need to demonstrably benefit the Collaborative Research Programme to be considered as eligible contributors by State research funding organisations. The values ascribed by an RPO to any industry contributions should be documented for independent audit and shall be reasonable, necessary, allowable and allocatable under the Programme.
- 150** Such contributions by industry to a specific Collaborative Research Programme, and the value given to them by an RPO, will be agreed with the respective State research funding organisation as part of the negotiations prior to the establishment of the particular Programme. Allowable contributions from industry should be linked intimately to the research being supported in the Programme in question. The Programme Plan and the contributions will usually be documented in the Programme proposal submitted for review by the State research funding organisation.
- 151** The following represents a non-exhaustive list of industry contributions that may be recognised:
- Cash contributions towards the Programme budget.
 - Industry in-kind contributions including, but not necessarily limited to, the following items:
 - Industry scientists, engineers and technicians assigned to working on Programme.
 - Personnel exchange or secondment, from industry to the RPO or vice versa.
 - RPO student placements with industry parties.
 - Access to unique facilities, instrumentation, test-beds.
 - Access to software, data, databases, reagents, biologics or similar precursors.
 - Provision of materials and/or consumables.
 - Quantifiable industry know-how, such as advanced project management capabilities.
 - IP maintenance/protection contributions.
- 152** Consideration may also be given to the ability or willingness of the industry party to introduce further Background IP, such as IP know-how, trade secrets, proprietary materials or similar 'assets' into the Programme over its expected lifetime.
- 153** In-kind contributions are considered eligible when they offset specific, quantifiable and necessary Project costs. For instance, data or software would only be considered eligible in-kind contributions if they are specifically required for the Project and would have a quantifiable cost to obtain elsewhere. Justification of essential nature of in-kind contributions and their quantifiable value to the Programme must be provided to the relevant State research funding organisation as part of the funding application process.
- 154** Industry contributions cannot be committed multiple times as cost-sharing contributions (e.g. the same piece of equipment cannot be included as a cost-share on multiple State-funded (or part-funded) Programmes simultaneously). However, such an in-kind contribution may be apportioned to multiple Programmes, for example in the same proportions as the time allocated for the use of a piece of equipment by each Programme.

2.E.1 State Aid

- 155** The State research funding organisations will, over time, adopt a common definition of each type of eligible cost and clearly identify which contributions are recognisable upfront, on a Programme-by-Programme basis.
- 156** To qualify for certain benefits of participation, the industry party shall contribute at least a minimum amount towards the total costs of a research Programme. This minimum financial or non-financial contribution varies and is defined separately for each Programme by the State research funding organisation funding that Programme.
- 157** Setting the minimum contributions will take into account factors such as:
- The types of contribution.
 - The size of the company involved in the research.
 - What other sources of funding are contributing.
 - The type of research (e.g. basic vs. applied) and industry sector involved.
- 158** The following shall not count as part of an industry party's minimum contribution:
- Any post-programme activities.
 - Contributions to the indirect costs of research, such as secretarial or accounting services.
 - The industry party's general overhead costs.
 - Other indirect costs.
- 159** A methodology for Full Economic Costing (FEC) is now available in the universities which enables robust determination of the indirect costs of all activities undertaken by the universities, including research and consultancy. KTI will work with RPOs and State research funding organisations to encourage consistent approaches to costing, charging and funding of the indirect costs of research and innovation.
- 160** State Aid law regulates both direct and indirect State Aid to a company.
- 161** State Aid may be given indirectly to a company where, for example:
- it does not pay the full economic cost of contract research carried out on its behalf by a publicly-funded RPO; or
 - it collaborates on a research Project with a publicly-funded RPO, and it acquires a commercial benefit other than in one of the ways permitted by the State aid rules.
- 162** Collaborative Research Projects involving an industry party and an RPO in which IP is transferred (by licence or assignment) to the industry party must adhere to State Aid legislation. This legislation includes measures to prevent State resources or public economic support from unfairly favouring a business concern, the production of certain goods, or the provision of particular services and distorts or threatens to distort market activity or competition in Ireland or in Europe, whether directly or indirectly.
- 163** Concerns can sometimes arise in Collaborative Research, particularly those where there is a State research funding organisation involved and where the market value of the Foreground IP is not yet known, and so determining the market value or price for a licence or assignment cannot be determined. In certain cases grants of licences and/or assignments of IPR from RPOs may, themselves, be considered State Aid. Where RPOs secure market rate payments from industry in relation to Collaborative Research Agreements for research conducted or in return for RPO IP use then State Aid is not likely to be an issue for the Project.
- 164** Full details on State Aid policy in Europe can be found at ec.europa.eu/competition/state_aid/overview/index_en.html. State aid as it applies to Research and Development and Innovation is addressed in detail in the European Commission Communication "Framework for State aid for research and development and innovation", (C(2014)3282) and can be found at ec.europa.eu/competition/state_aid/modernisation/rdi_framework_en.pdf.

2.E.2 European Competition Law

-
- 165** Industry parties and RPOs should consider EU competition rules, particularly in cross-border collaborations and restrictive licences of IP. There are competition laws in both Ireland and the EU which prohibit agreements that affect trade between member states and competition within the EU to an appreciable extent if the agreement has the object or the effect of preventing, restricting or distorting competition in a relevant market. Certain categories of agreements pertaining to IP have been expressly stated to fall outside of these competition prohibitions, and reference should be had to the Technology Transfer Block Exemption (see: ec.europa.eu/competition/antitrust/legislation/transfer.html for further information).
- 166** Collaborative Research Agreements to license IP often contain terms dealing with exclusivity, Field restrictions, territorial restrictions and obligations regarding use that may, depending upon all the terms and conditions, potentially restrict competition and so RPOs and industry parties alike should consider these laws when deciding on the structures for accessing IP owned or created by an RPO.
-

Section F IP Management

- 167** The State requires that each RPO shall have an IP management system in place that meets the National IP Management Requirements to ensure that IP arising from research taking place in Ireland's RPOs is managed professionally.
- 168** The National IP Management Requirements are described in the IP Protocol Resource Guide at Section 1 with links to the supporting template documents. The most up to date version of the IP Protocol Resource Guide is maintained on the KTI website www.knowledgetransferireland.com/ManagingIP.
- 169** Every RPO undertakes to have in place an IP management system meeting the National IP Management Requirements.
- 170** However, in view of the open nature of RPOs and the many research activities that they carry out, it is recognised that RPOs are not in a position to give the same assurances in respect of IP management as a commercial organisation could give. RPOs therefore should not offer warranties or representations or assume liabilities concerning IP management or protection. An organisation contemplating the commercialisation of IP provided by an RPO should itself take whatever steps it considers necessary to satisfy itself as to the condition or level of protection of the IP.
- 171** RPOs shall have published policies and/or procedures in place that cover, at a minimum:
- Timely identification of IP arising from research, protection of this IP including the maintenance of laboratory records and the ways to mitigate premature public disclosure of IP.
 - Recording of this IP and of the associated commercialisation activities and outcomes.
 - Management of potential or actual conflicts of interest concerning the commercialisation of IP.
 - Sharing of royalties and other income from the commercialisation of IP amongst the RPO itself, the department(s) involved in the research and the individual Researchers, inventors or creators.
 - Reporting on all commercialisation activities to the appropriate State agencies and, in particular, to KTI which is charged with delivering the national Annual Knowledge Transfer Survey (AKTS).
- 172** RPOs should ensure that their staff, contractors, consultants and students are aware of, and follow, these policies and procedures.
- 173** RPOs shall encourage their Researchers to participate in commercialisation, joint R&D Programmes with industry and consultancy, through financial and non-financial incentives and rewards.
- 174** RPOs shall protect and manage IP through their TTOs, with the aim of effective commercialisation.
- 175** KTI is responsible to ensure independent audit of the IP management system to be operated by each RPO to ensure that such a system is in place; to evaluate the ability of the RPO to comply with the National IP Management Requirements; and to support the RPO to achieve compliance with this Policy and the National IP Management Requirements.

Section G

The Irish Knowledge Transfer system

- 176** The Irish knowledge transfer system involves many actors, including the State research funding organisations and innovation agencies, the RPOs, investors, industry, entrepreneurs and individual Researchers. They need to work together under the national policy to ensure an effective system for industry-RPO engagement and commercialisation.
- 177** The State research funding organisations have different objectives for their funding reflecting their differing missions. However, all these organisations share common interest in the commercialisation of the results of research, including commercialisation of IP, whenever this is possible.
- 178** Since initial publication of the IP Protocol, RPOs have used the document as a reference and have sought to implement this policy. This includes that the RPO shall make provision for the support of research engagement with industry and for the commercialisation of the outputs from State investment in research, including the commercialisation of IP.
- 179** The State directly supports a network of Technology Transfer Offices (TTOs) in most of the RPOs through the national Technology Transfer Strengthening Initiative which is managed by KTI on behalf of Enterprise Ireland. The primary goal of the TTOs is to maximise the economic and societal benefits to Ireland of RPO engagement with industry, in general, and of IP commercialisation, in particular.
- 180** Contracts underpinning Collaborative Programmes with industry should be negotiated within the Research Support Services department (or other designated officer) of the RPO with input from the TTO. In some cases, the RPO may require the TTO to negotiate such contracts.
- 181** The TTO or other designated officer of the RPO shall be responsible for negotiating licensing, assignment and other IP access agreements between industry and that RPO. Within any limits set by its parent RPO, the TTO shall have authority to negotiate and sign IP access arrangements with industry.
- 182** The State also supports a central technology transfer office, Knowledge Transfer Ireland (KTI), which provides a unique portal for industry to navigate across the entire RPO sector; takes responsibility to ensure the ease of industry-RPO contracting and is responsible for monitoring and reporting the performance of the national knowledge transfer system using appropriate key performance indicators.
- 183** KTI is responsible for ensuring the continuous improvement of the national IP Protocol and for publishing updated versions as required, including keeping this framework and its resources up to date and ensuring that the resources are deployed consistently across the RPOs.
- 184** The IP Protocol Resource Guide, Section 2, describes the national technology transfer system and the roles and functions of KTI and the TTOs in more detail.

Appendix A

Meaning of terms

Annual Knowledge Transfer Survey (AKTS)	The national survey which collects, collates and summarises the outcomes of Commercialisation activity from State-funded research.
Background IP	Any Intellectual Property, including in any Material, (regardless of the form or medium in which they are disclosed or stored) (i) licensed or owned by any party to a research contract prior to the beginning of any Programme; or (ii) generated or licensed independently of the Programme by that party; and which is brought into or used as part of the Programme and excluding (for the avoidance of doubt) any IP created by any party to a research contract during the performance of the Programme.
Bilateral Collaborative Research	A research collaboration Project between one industry party and one RPO party.
Collaborative Research	Work involving research of mutual interest where an industry party works with an RPO.
Collaborative Research: part industry-funded	Collaborative Research in which the Programme is funded partly by the State and partly (in cash and/or in kind, including participation in the research itself) by the industry party(s); Collaborative Research may involve two or more parties.
Collaborative Research: wholly industry-funded	Collaborative Research in which the industry party meets the full economic cost of carrying out the Programme.
Commercialisation	The use of IP to create, conduct or develop a commercial activity. This may involve exclusive or non-exclusive licensing or assignment of the IP, may lead to new company formation or the introduction of new or improved products or services. In the higher education sector, commercialisation is a part of the “third mission” within the institutions’ functions of teaching, research and contribution to industry.
Enterprise	A commercial or not-for-profit legal entity, including but not limited to a start-up, spin-out from an RPO, a small or medium enterprise, a large national corporation and a multi-national corporation headquartered inside or outside Ireland.
Field	Field of use/area of application.
Foreground IP	IP which comes into existence in the course of performance of the Programme.
Independently Available	Availability in principle of data for use by independent new, bona fide research, within the terms of participant consent and not restricted by IPR, prior collaborations or other reasons, and for which the necessary metadata are well documented and available.
Industry	A collective term for commercial or “for profit” enterprises.
Industry party	A commercial or “for profit” enterprise engaging with an RPO in a Programme.
Intellectual Property, IP or IPR	Patents, trade marks, service marks, registered designs, drawings, utility models, design rights, business ideas, concepts, inventions, discoveries, breeders’ rights, copyright (including the copyright in software in any code), database rights, know-how, trade secrets and other confidential information, technology, business or trade names, goodwill and all other rights of a similar or corresponding nature in any part of the world, whether registered or not or capable of registration or not, and including all applications and the right to apply for any of the foregoing rights.
Knowledge Transfer Ireland (KTI)	The central office responsible for the knowledge transfer (KT)/technology transfer (TT) system in Ireland. In the previous iteration of the national IP Protocol it was known as the Central Technology Transfer Office (CTTO).
Materials	Any and all works of authorship and materials, including, without limitation, data, any functional, technical and/or performance specification, devices, machinery, samples, products, sensors and data derived therefrom, biological materials, software programs, any other inanimate or animate matter, any and all reports, studies, data, diagrams, drawings, charts, specifications, and such other materials in whatever medium (including without limitation, written or printed, electronic or otherwise, computer discs, floppy discs, CDs, diskettes, tapes or other formats).

Appendix A

Meaning of terms

Model agreements	A set of template agreements maintained by KTI, and updated from time to time, which can be found at www.knowledgetransferireland.com/Model-Agreements/Catalogue-of-Model-Agreements
Multi-party Collaborative Research	A multi-party collaboration is one in which one or more industry parties and one or more RPOs are parties in a Programme. It is funded partly by the State and partly (in cash and/or in kind, including participation in the research itself) by the industry party(s).
Non-Exclusive Royalty-Free (NERF) licence	A licence to use IP under which the licensee is not required to pay any amounts (whether initial recurring royalties or milestone payments). Except that the licensee may be required to pay some or all of any costs for prosecution, maintenance and defence of any patent or similar granted IP rights.
Non-Severable Improvement	IP that, at a minimum: <ul style="list-style-type: none"> – Was created using Significant Background introduced to the Programme. – Cannot be used or commercialised without infringing on the Significant Background.
Project or Programme	A set of agreed research activities.
Programme Plan	A description of the Programme of work and who will carry it out. The Programme Plan should include all the technical aspects of the Programme and the deliverables.
Publication	The publication of research results or of any part of IP resultant from any Programme, in any public format or fora, including (without limitation) journals, conference proceedings, conference abstracts, conference presentations, Ph.D./M.Sc./B.Sc. thesis, website.
Research Performing Organisation or RPO	Any organisation that performs research funded at least in part by the State; the term includes universities, institutes of technology, Teagasc, NIBRT, clinical research facilities or translational medicine facilities based at hospitals and other publicly-funded research institutions.
Researcher	A Researcher named in a Programme Plan/Programme and such other employees (part time or full time), Post Doctoral fellows, visiting scholars, Ph.D. and other students, visiting Researchers, as well as consultants, hospital consultants, subcontractors, and any other individuals engaged or involved in the Programme at any time, for or on behalf of the RPO (whether or not engaged by contract). Researchers involved in a Programme may also be from the industry party.
Significant Background	Background IP introduced to a Programme where: <ul style="list-style-type: none"> – the Background IP is the subject of a granted patent, and/or – the Programme substantially relies on this Background IP and without it the Programme would be difficult or impossible to carry out.
State research funding organisations	Organisations which distribute funding provided by the State to RPOs, including but not limited to the Health Research Board (HRB), Higher Education Authority (HEA), Irish Research Council (IRC), Science Foundation Ireland (SFI), Enterprise Ireland (EI), IDA Ireland and other government funding agencies.
Technology Transfer Office or TTO	A team within an RPO which leads work to identify and commercialise IP arising from research by that RPO and is empowered, within limits of authority set by the RPO and subject to supervision by KTI as to its compliance with the requirements of this document, to select the optimum commercialisation strategy in each case, conduct negotiations with external organisations (including industry parties) and conclude agreements with those organisations. The primary goal of the TTOs is to maximise the economic and societal benefits to Ireland of RPO contributions to industry, in general, and of IP commercialisation.
Unrestricted Availability	The availability of anonymised data (e.g. summary tables) for which the risk of disclosure (identification of individual participants) directly or through association with other data sources is extremely low, which can safely be made readily accessible without restriction (“public”).
Wholly State-funded research	Research for which a State research funding organisation has paid 100% of the economic costs of the research.

Appendix B IP Protocol 2016 - Membership of advisory groups and stakeholder consultation

Updated version produced by Knowledge Transfer Ireland (KTI) in 2016 based upon the consultation and review process undertaken Q4 2014 – Q1 2015.

Accountable officer: Alison Campbell. Director, Knowledge Transfer Ireland (KTI)

Tom Flanagan was seconded from Dublin Institute of Technology (DIT) to KTI part time from September 2014 to March 2015, to lead the consultation process and prepare summary documents and recommendations for consideration by the Expert Advisory Group, the KTI Industry Advisory Board and the Knowledge Transfer Stakeholder Forum.

Editorial review

Ned Costello	Irish Universities Association (IUA)
Brendan Cremen	University College Dublin (UCD)
Karl Flannery	Storm Technology
Keith O'Neill	Abbott Nutrition
Richard Stokes	Dublin City University (DCU)

IP Protocol 2016 Expert Group

Leo Clancy	Head of Technology, Consumer & Business Services, IDA Ireland
Eadaoin Collins	Assistant Principal Officer, Department of Jobs, Enterprise and Innovation (DJEI)
Ned Costello	Chief Executive, Irish Universities Association (IUA)
Willie Donnelly	President, Waterford Institute of Technology (WIT)
Dara Dunican	Programme Manager, Science Foundation Ireland (SFI)
Karl Flannery	CEO, Storm Technology
Audrey Huggard	Legal Advisor, University College Cork (UCC)
Bill Kearney	Director IBM Ireland Lab, IBM
Eucharia Meehan	Director, Irish Research Council (IRC)
Gearoid Mooney	Director, Research & Innovation, Enterprise Ireland (EI)
Darrin Morrissey	Director of Programmes, Science Foundation Ireland (SFI)
Ciaran O'Beirne	Technology Transfer Manager, University College Dublin (UCD)
Ena Prosser	Partner, Fountain Healthcare Partners
Mary Shire	Vice President Research, University of Limerick (UL)
Malcolm Skingle	Director, Academic Liaison, GlaxoSmithKline (GSK)
Richard Stokes	Director of Innovation, Dublin City University (DCU)

KTI Industry Advisory Board (2014 & 2015)

Eadaoin Collins	Assistant Principal Officer, Department of Jobs, Enterprise and Innovation (DJEI)
Brian Dalton	Assistant Principal Officer, Department of Jobs, Enterprise and Innovation (DJEI)
Mike Devane	Partner, Quilly & American Chamber of Commerce Ireland (AMCHAM)
Karl Flannery	CEO, Storm Technology (Chair)
Barry Kennedy	Research Programme Manager, Intel & CEO, Irish Centre for Manufacturing Research (ICMR)
John O'Sullivan	General Partner, ACT Venture Capital
Alan Phelan	CEO, SourceDogg
Ena Prosser	Partner, Fountain Healthcare Partners
Malcolm Skingle	Director, Academic Liaison, GlaxoSmithKline (GSK)
Keith O'Neill	Director, Regulatory Policy & Intelligence, Abbott Nutrition

Knowledge Transfer Stakeholder Forum (2014 & 2015)

Alison Campbell	Director, Knowledge Transfer Ireland (KTI)
Leo Clancy	Head of Technology, Consumer & Business Services, IDA Ireland
Eadaoin Collins	Assistant Principal Officer, Department of Jobs, Enterprise and Innovation (DJEI)
Ned Costello	CEO, Irish Universities Association (IUA)
Brian Dalton	Assistant Principal Officer, Department of Jobs, Enterprise and Innovation (DJEI)
Dara Dunican	Programme Manager, Science Foundation Ireland (SFI)
Tom Flanagan	Chair, ITTIG, Centre Manager, Hothouse, Dublin Institute of Technology (DIT)
Richard Howell	Head of Research & Codex Division, Department of Agriculture, Food & the Marine
Paul Killeen	Head of Research, Innovation & Enterprise, Athlone Institute of Technology (AIT)
Graham Love	Chief Executive, Health Research Board (HRB)
Eucharia Meehan	Director, Irish Research Council (IRC)
Gearoid Mooney	Divisional Manager, Research & Innovation, Enterprise Ireland (EI)
Darrin Morrissey	Director of Programmes, Science Foundation Ireland (SFI)
Muiris O'Connor	Head of Policy and Strategic Planning, Higher Education Authority (HEA)

External Legal Advisor

Deirdre Kilroy, of LK Shields, provided legal advice to KTI.

Individuals consulted in this review

Christine Alcorn, University College Cork (UCC)
 Doug Beaton, Health Services Executive (HSE)
 Caroline Brennan, University College Dublin (UCD)
 Roisin Cheshire, Science Foundation Ireland (SFI)
 Leo Clancy, IDA Ireland
 Eadaoin Collins, Department of Jobs, Enterprise and Innovation (DJEI)
 Steve Collins, Swrve
 Peter Conlon, Maynooth University
 Eugene Corcoran, Industrial Research and Commercialisation Committee (IRCC) Board Member
 David Corkery, University College Cork (UCC)
 Ned Costello, Irish Universities Association (IUA)
 Peter Cowap, Governance, Risk and Compliance Technology Centre (GRCTC), University College Cork (UCC)
 Pearse Coyle, Corporate Spin-outs
 Brendan Cremen, University College Dublin (UCD)
 Michael Cunningham, Sonex Metrology
 Brendan Curran, Alimentary Pharmabiotic Centres (APC), University College Cork (UCC)
 Maureen Daly, Law Society of Ireland
 Tony Day, International Energy Research Centre (IERC), Tyndall National Institute (TNI)
 Mike Devane, American Chamber of Commerce (AMCHAM)
 Paul Dillon, University of Limerick (UL)
 Willie Donnelly, Waterford Institute of Technology (WIT)
 Tony Donohoe, Irish Business and Employers Confederation (IBEC)
 Cepta Duffy, Enterprise Ireland (EI)
 Dara Dunican, Science Foundation Ireland (SFI)
 Gordon Elliott, Trinity College Dublin (TCD)
 Michael Farrell, University College Cork (UCC)
 Orla Feely, University College Dublin (UCD)
 Peter Feeney, National University of Ireland Galway (NUIG)
 Adam Finlay, McCann Fitzgerald Solicitors
 Karl Flannery, Storm Technology
 Paul Gilson, Veryan Medical
 Deirdre Glenn, Enterprise Ireland (EI)
 Denis Hayes, Industry Research & Development Group (IRDG)
 Richard Howell, Department of Agriculture, Food and the Marine
 Audrey Huggard, University College Cork (UCC)
 Martin Hussey, Enterprise Ireland (EI)

Bill Kearney, IBM
Kathryn Kiely, Waterford Institute of Technology (WIT)
Paul Killeen, Athlone Institute of Technology (AIT)
Owen Laverty, Maynooth University
Pat Layde, Colortrend
Alan Leddy, Alcatel Lucent
Breda Lynch, Athlone Institute of Technology (AIT)
Andrew Marsh, University College Cork (UCC)
Robert McCarthy, IBM
David McDonald, Aperilink
Claire McGee, Irish Business and Employers Confederation (IBEC)
Declan McGee, Enterprise Ireland (EI)
Patricia McGovern, Law Society of Ireland
Ross McKiernan, Irish Research Council (IRC)
Tara McMahan, Intel
David McMunn, Law Society of Ireland
Eucharia Meehan, Irish Research Council (IRC)
Gearoid Mooney, Enterprise Ireland (EI)
Peter Mooney, Dawn Meats Group
Richard Morrison, Enterprise Ireland (EI)
Darrin Morrissey, Science Foundation Ireland (SFI)
Eamonn Morrissey, SPX Flow Technology
Dominic Mullan, Dublin Region Innovation Consortium
Pauline Mulligan, Department of Jobs, Enterprise and Innovation (DJEI)
Richard Murphy, Alltech
John Nolan, Enterprise Ireland (EI)
Ciaran O'Beirne, University College Dublin (UCD)
Paddy O'Boyle, Dublin City University (DCU)
Diarmuid O'Brien, Trinity College Dublin (TCD)
Lily O'Brien, National University of Ireland Galway (NUIG)
Muiris O'Connor, Higher Education Authority (HEA)
James O'Daly, Immucell Ltd.
Tony O'Donnell, SAP
Kieran O'Dwyer, Dublin City University (DCU)
Stephanie O'Keeffe, Health Services Executive (HSE)
Daniel O'Mahony, Seroba Kernel
Josette O'Mullane, Cork Institute of Technology (CIT)
Brian O'Neill, Dublin Institute of Technology (DIT)
Keith O'Neill, Enterprise Ireland (EI)
Pat O'Neill, Midlands Gateway Chamber
John O'Rourke, Boston Scientific
James O'Sullivan, Waterford Institute of Technology (WIT)

Carl Power, NDRC: Making Ventures Happen (previously National Digital Research Centre)
Ena Prosser, Fountain Healthcare Partners
Siobhan Roche, Science Foundation Ireland (SFI)
Tim Roche, University College Cork (UCC)
Colin Rooney, Law Society of Ireland
Miriam Ryan, Maynooth University
Milda Saenz, INSIGHT, University College Dublin (UCD)
John Scanlan, Maynooth University
Dermot Scanlon, Serosep Ltd
Conor Sheehan, Enterprise Ireland (EI)
Mary Shire, University of Limerick (UL)
Malcolm Skingle, GlaxoSmithKline (GSK)
Frank Smyth, Pilot Photonics, Dublin City University (DCU)
Richard Stokes, Dublin City University (DCU)
Dermot Tierney, Hothouse, Dublin Institute of Technology (DIT)
Mary Tracey, Trinity College Dublin (TCD)
Mike Turley, INSIGHT, University College Dublin (UCD)
Paul Tyndall, Maynooth University
Juan Valverde, Monaghan Mushrooms Group
Emily Vereker, Trinity College Dublin (TCD)
Martin Wallace, GlaxoSmithKline (GSK)
John Whelan, Trinity College Dublin (TCD)
Frank Wilson, Ceramicx
Margaret Woods, Trinity College Dublin (TCD)
Tara Woulfe, University College Cork (UCC)
