



Putting public research to work for Ireland

Policies and procedures to help industry make good use of Ireland's public research institutions





Foreword

As a country, we have 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 have now got excellent physical research infrastructure in place and structures to commercialise research. The research system in Ireland has matured to a level where it is now appropriate to accelerate the return from our investment in this area.

The new national IP Protocol is part of a suite of actions being taken which will improve economic return from State investment in research, by encouraging the commercialisation of all forms of intellectual property arising from research in the publicly funded research sector. The key objective of this is to maximise the economic and societal benefits from Government investment in Research Performing Organisations, in particular the creation of sustainable jobs. This is a key part of our Action Plan for Jobs which commits us to using research and innovation to drive job creation.

This new IP Protocol has whole of Government endorsement. It was prepared by the Department of Jobs, Enterprise and Innovation working with other Government Departments and informed by a dedicated group of experts from industry (large and small), the venture capital community, Research Performing Organisations, Technology Transfer Offices ('TTOs'), the Enterprise Agencies, State research funding organisations and the Irish Universities Association.

The IP Implementation Group, chaired by Jim Mountjoy, has done an excellent job in devising a system that will make it easier and faster for entrepreneurs and companies to negotiate a commercial arrangement with research performing organisations for intellectual property arising from State-funded research. We would like to extend a sincere thank you to the Chairman and the group for delivering on this mandate and for harnessing the expertise of a wide range of sectoral interests to support the delivery of this Protocol.

This Government is committed to driving change to make Ireland the best small country in the world in which to do business. The new protocol for the management of IP associated with State funded research will help deliver on this agenda by ensuring that all enterprises – from small businesses to multinationals - can avail of the ideas emanating from publicly funded research with greater ease and certainty.

The IP Protocol marks a major evolution of Ireland's approach to industry engagement with public research. It is about encouraging industry – both indigenous and FDI companies – to collaborate with Ireland's universities, institutes of technology and other publicly funded research institutions; to access and commercialise the IP generated from such research and turn it into products and services for the global marketplace.

It sets out, in a single reference document, the Government's policies to encourage industry – from start-ups and small and medium enterprises to multinational corporations – to benefit from this research and describes the practical arrangements for this to happen.

The policies set out in the IP Protocol also aim to support the building of relationships with industry that will support a sustainable flow of commercialisation outputs and build networks of long-term knowledge sharing.

This will be an ongoing process. The establishment of a central Technology Transfer Office will provide an effective interface between industry and the research community and will drive a world class technology transfer system in Ireland, ensuring it is responsive to the needs of both industry and academia.

Richard Bruton, TD.

Minister for Jobs, Enterprise & Innovation

Seán Sherlock, T.D.

Minister for Research and Innovation

What this document is about

This document is about helping industry – from start-ups and small and medium enterprises to multinational corporations – to access the research and development done 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.

It deals primarily with collaborative research, where industry and RPOs work together and, in particular, where industry and the State share the cost of the research. It also deals with industry access to the results of research that is funded entirely by the State; and contract research where industry pays the full cost of the research it commissions. Throughout, it applies equally to all forms of research and development activity, from pure and applied research through to incremental and near-market development.

It is in three Parts:

Accompanying **Appendices** set out more detailed provisions.

- **Part 1:** Highlights of this document, especially the benefits to industry of engaging with Ireland’s research performing organisations.
- **Part 2:** Ireland’s national policy on the commercialisation of the results of public sector research.
- **Part 3:** Framework for industry engagement with public research, which outlines requirements, guidelines and procedures.

Who should use this document

Industry leaders and others who want an overview of Ireland’s favourable environment for accessing public research should read the Highlights in Part 1. They may also find the policy statement in Part 2 helpful as a description of the Government’s intentions to encourage this favourable environment.

Managers in industry, the RPOs and the State research funding organisations² should read Part 2 to see the policy context and Part 3 for a high level description of the requirements and guidelines for research collaboration and for industry access to the results of research.

Specialists in research commercialisation and technology transfer who need to go beyond the overview in Part 3 should also read the Appendices. These provide fuller details of the procedures and document templates for industry engagement with the RPOs.

¹. Any organisation that performs research and development funded at least in part by the State. This includes universities, institutes of technology, Teagasc, NIBRT, clinical research facilities or translational medicine facilities based at hospitals and other publicly funded research institutions.

². Organisations which distribute funding provided by the State, including but not limited to Enterprise Ireland, Health Research Board, Higher Education Authority, Industrial Development Agency, Irish Research Council for Science Engineering and Technology and Science Foundation Ireland.

What this document replaces

This document builds on earlier guidelines and codes of practice, using the lessons learned from their use. It now replaces these earlier documents, in particular:

- *National Code of Practice for Managing Intellectual Property from Publicly Funded Research* (Irish Council for Science, Technology and Innovation, January 2004).
- *National Code of Practice for Managing and Commercialising Intellectual Property from Public-Private Collaborative Research* (Advisory Council for Science, Technology and Innovation, November 2005).
- *Funding Agency Requirements & Guidelines For Managing Research-Generated Intellectual Property* (February 2006).

What is mandatory and what is not

Throughout this document,

- “shall” implies a mandatory principle that may not be varied by negotiation. The Government’s central technology transfer office may, after due consultation, introduce variations to these mandatory requirements which shall then apply to all future industry – RPO relationships. Those principles which are mandatory are highlighted throughout this document.
- “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.

Who prepared this document

This document was prepared by The Government, through the Department of Jobs, Enterprise and Innovation, working with other Government Departments and informed by a dedicated group of experts from industry, the venture capital community, RPOs and their technology transfer offices (‘TTOs’), the Irish Universities Association and the State research funding organisations.

How this document is maintained

Maintenance and further development of this document will be in the hands of the Government’s proposed central Technology Transfer Office (the ‘cTTO’), working closely with the State research funding organisations.

This document marks a major evolution of Ireland’s approach to industry engagement with public research. The Government expects that, in the short term, there will be many further opportunities for improvement. Part of the

role of the cTTO, once established, will be to monitor how these new arrangements are working and to develop this document further.

In the longer term, the cTTO will review and revise this document as required, in consultation with industry, the public research sector and the State research funding organisations, to ensure that:

- It continues to meet the commercial needs of industry, including start-ups, SMEs and large companies;
- It is as simple and as easily accessible by all users as possible, including through the provision of standard forms and templates;
- It is interpreted and adopted in a consistent way by all stakeholders;
- It is delivering the consistent, predictable and fast-tracked approach Ireland is striving towards, in order to make engagement with public research attractive to industry;
- It will continue to give Ireland a competitive advantage on the global stage by promoting, attracting, supporting and sustaining Collaborative Research Programmes;
- It is aligned with the changing objectives of the State in respect of its research funding and of any revisions to existing schemes for State funding of research.

In particular, the cTTO will be tasked with further revising the standard forms and templates contained in this document through consultation with all stakeholders, in particular with the TTOs to ensure consistency and with the Department of Jobs, Enterprise and Innovation where issues require policy or whole-of-Government consideration.

The Government welcomes comments on this document and suggestions for its improvement, at any time and from anyone who is interested. If you would like to contribute to the continuing development of Ireland's environment for industry engagement with public research, please contact the cTTO.

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Part 1: Highlights

Ireland strongly believes that close working relationships between industry and the public research system are good for industry and good for Ireland. It therefore 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 policies and procedures in this document are part of Ireland’s programme to create this attractive environment. They provide valuable benefits to industry:

Commercial agreements are quick and easy to set up

Negotiating a commercial arrangement with one or more of Ireland’s universities, institutes of technology or other public research institutions (‘Research Performing Organisations’ or ‘RPOs’) – such as a Collaborative Research Programme or a licence on research results – is fast, predictable, transparent and consistent. This is thanks to the use of the same standard terms by all RPOs. This helps industry parties to know what arrangements to expect up front, right from the start. However, these policies and structures are not rigid: every case is different, and every industry party has different needs, so there is flexibility to adapt these terms.

The central Technology Transfer Office can act as the first port of call

Ireland’s central Technology Transfer Office (the ‘cTTO’), currently being set up, will connect companies looking for specific expertise with the most appropriate RPO. It will also advise on what intellectual property (‘IP’) is already available for commercialisation. Once established, the opportunity will exist for the cTTO to expand its business-industry outreach role. The cTTO will work closely with the Technology Transfer Offices (‘TTOs’) in individual RPOs, sharing good practice and ensuring consistency between different elements of the technology transfer system and a consistent adoption and interpretation of this policy by all stakeholders.

However, the cTTO will not get in the way. If a company is already interested in a specific RPO, it can and should go directly to that RPO. While the cTTO could, if necessary, support negotiations in a specific case, normally industry will deal directly with the RPO.

TTOs retain the freedom and flexibility to “do a deal” with industry that is in the best interests of both parties

In most RPOs, a TTO with experienced staff who come from industry backgrounds represents the RPO in negotiations. The cTTO will help RPOs to follow the policies and procedures in this document; but the RPOs remain responsible for negotiating individual agreements, including appointing one RPO to lead on their behalf when setting up long term, multi-RPO collaborative programmes and when bundling IP from multiple RPOs.

Commercial terms are generous

Companies who contribute to the costs of collaborative research will have priority over other organisations for access to the IP arising from the research.

Companies who contribute to the costs of collaborative research can, as a minimum, negotiate royalty free access to the results of the research, on a non-exclusive basis, subject to some conditions. Of course, exclusive access is also available if the company prefers it, on reasonable commercial terms.

More open innovation in multi-party collaborations is encouraged

Some State-funded Collaborative Research Programmes are structured in a way which encourages the free flow of new knowledge and information between the partners, whilst ensuring that each collaborating party retains protection of any background IP it contributes to the partnership. The amount which each party contributes to the collaboration is recognised and rewards are fairly allocated.

Intellectual property is managed in a professional way

Companies who licence IP from Irish RPOs can be confident that processes are being put in place to manage that IP in a professional way. Ireland is in the process of introducing and supporting processes throughout the public research sector to ensure that IP is managed in a professional way, building on the current good practice in IP management that exists in many of Ireland's RPOs. Checks and balances are progressively being introduced on a phased basis to ensure that these are working effectively.

Part 2:

Ireland's national policy on the commercialisation of intellectual property arising from public sector research

1. Introduction

- 1 Ireland aims to provide an exemplary innovation ecosystem that creates economic and societal benefits, especially the creation of sustainable jobs. 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 research in the public sector.
- 2 The national policy set out here aims to ensure that all enterprises, from start-ups and small and medium enterprises ('SMEs') to multi-national corporations, can easily access this IP. Enterprises should be able to negotiate access arrangements quickly, on terms that provide fair value to all parties, and in ways that are predictable and consistent from one negotiation to the next. The policy will also help Ireland's Research Performing Organisations ('RPOs') and their Technology Transfer Offices ('TTOs') to further develop their own procedures for the identification, management and commercialisation of IP and to work together more effectively in collaboration with industry, building on their existing expertise.
- 3 This policy will evolve to take into account the experience gained from commercialisation activities.
- 4 A separate *Framework for Industry Engagement with Public Research*, in Part 3 below, provides detailed requirements, guidelines and procedures for commercialisation of IP in line with this policy.

2. Objectives

- 5 The Government, through the State research funding organisations, funds research in many different thematic areas and fields of use across Ireland's RPOs. Much of this research has the potential to create IP that can be commercialised.
- 6 In encouraging industry and RPOs to work together, the State's aims are:
 - For Ireland to be the country of choice and to provide optimal attractiveness for industry to engage with the academic research community in Collaborative Research Programmes;
 - For such Collaborative Research Programmes to assist enterprises in researching, developing, validating and testing new technologies/products/platforms 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 competence and expertise of Ireland's academic research community;

- For Ireland's academic centres of excellence to be the global partners of choice in Collaborative Research Programmes which industry will engage in; and
- Ultimately to deliver a return to the Irish economy aligned to current national priorities.

7 It is Government policy that:

- 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;
- 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;
- The primary objective of commercialisation is the creation of sustainable jobs in Ireland: this is the most important form of economic and societal benefit;
- Where the potential for job creation in Ireland is limited or non-existent, the aim is commercialisation elsewhere that will lead to wealth flows to Ireland.

8 Commercialisation should also, as far as possible without compromising these national objectives, benefit the RPO(s) 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 greater industry involvement in RPO research, leading to increased funding for RPOs and the stimulus of greater industry interaction for researchers. This is fair and helps to stimulate and sustain a healthy public research sector that is motivated to pursue a 'third mission' of support for industry, in addition to teaching and research.

9 RPOs and TTOs should pursue commercialisation, keeping in mind the objective to create economic and societal benefit for Ireland through the creation of sustainable jobs. They should recognise that this can be achieved in a number of ways, including:

- Creating licensing opportunities for all types of enterprises, thereby creating employment and a more competitive and sustainable economy in Ireland;
- Creating 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.

10 When in a specific situation these three mechanisms appear to conflict, RPOs and TTOs should adopt a commercialisation approach which, in their best judgement, will maximise the overall economic and societal benefits to Ireland.

3. Arrangements within Research Performing Organisations

11 Where research is funded by the State, it should benefit the State. It therefore follows that all RPOs shall:

- Apply this policy and the *Framework* in Part 3 in every case, 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, approved by their governing authority, to enable them to meet these requirements.

12 To assist RPOs and their researchers in commercialising the IP arising from their research, Enterprise Ireland supports TTOs in most RPOs. In some instances, a TTO may support several RPOs. TTOs have the sole authority, within any limits set by the RPOs they represent and subject to policy oversight, to negotiate and conclude commercialisation agreements on behalf of their parent RPO.

13 When established, the central Technology Transfer Office (the 'cTTO') will provide support and advice to TTOs, particularly in complex or multi-party situations involving several RPOs. The cTTO will also be responsible for supporting TTO compliance with the policy and procedures set out in this document and a consistent interpretation and adoption of the policy and procedures by all stakeholders.

14 The State research funding organisations have differing 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. All endorse and will implement this policy.

4. Principles for commercialisation

- 15 The following section sets out principles for the various activities involved in the commercialisation of IP arising from research conducted in Ireland's RPOs. Those which are mandatory are highlighted in grey.
- 16 These principles, and the more detailed arrangements that follow in Part 3 of this document, deliberately do not try to be fully prescriptive. They do provide a standard framework for all industry-RPO negotiations, to encourage consistency and predictability; they do set out what is mandatory and what is not, to encourage speed and simplicity; but they also allow some flexibility so that the parties can negotiate the best possible agreement in each case. This recognises that industry sectors differ widely and that IP exists in many forms, from different scientific domains and from early concepts to near-market technology.
- 17 These principles cover research which is fully funded by industry; research which is fully funded by the State; and collaborative research which is funded partly by industry and partly by the State. The principles, and the more detailed arrangements in Part 3, deal most extensively with collaborative research.

4.1 Principles applicable to all forms of research

4.1.1 IP identification

- 18 RPOs shall have procedures in place to identify in a timely manner all IP arising from their research. They shall, together with their TTOs, support their researchers to help them recognise when their discoveries may have commercial value.
- 19 RPOs should work together to identify IP created by different RPOs which, when brought together into a single package, may have commercial value.

4.1.2 IP protection

- 20 RPOs shall make clear to their staff, contractors, consultants and students their responsibilities in relation to the protection of IP including the maintenance of research laboratory records and the prevention of premature public disclosure of IP. RPOs shall as far as possible help their staff, contractors, consultants and students to meet these responsibilities.

4.1.3 IP ownership

- 21 The ownership of IP arising from research performed by RPOs shall at all times be made clear and unambiguous.
- 22 RPOs shall have in place, and enforce, arrangements to ensure that initial ownership of IP arising from their research is clearly and unambiguously defined. In particular, RPOs shall ensure that all employees, and non-employees such as contractors, consultants and students, assign to the RPO all rights to IP arising from their research for or on behalf of the RPO.

4.1.4 IP commercialisation and sharing the benefits

- 23 RPOs shall have procedures in place for the regular review of IP arising from their research and of the associated commercialisation activities and outcomes. RPOs shall be in a position to report to the appropriate State organisations on these activities and outcomes.
- 24 RPOs and TTOs shall aim to maximise the benefits of commercialisation to Ireland as a whole rather than focusing 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 negotiations. All those involved in commercialisation of IP should seek to build networks of long term knowledge sharing relationships, reflecting the ecosystem nature of innovation.
- 25 RPOs should share in the benefits of commercialisation of IP arising from their research. The commitment of researchers to commercialisation and their role as entrepreneurs, taking research outcomes to the marketplace, are important and should be incentivised.
- 26 RPOs should encourage their researchers to participate in commercialisation, joint R&D programmes and consultancy, through financial and non-financial incentives and rewards.
- 27 RPOs shall have arrangements in place, agreed by their governing authorities and published, for the sharing of royalties and other income from the commercialisation of their IP. These arrangements should provide that income is shared between the RPO itself, the department(s) involved in the research and the individual researchers or inventors.

4.1.5 IP Management

- 28 RPOs are not in a position to provide warranties on the condition of their IP. An organisation contemplating the commercialisation of IP provided by an RPO should take whatever steps it considers necessary to satisfy itself as to the condition of the IP.
- 29 However, industry is entitled to expect RPOs to have taken reasonable steps to assure that IP offered for commercialisation has been managed in a professional way.
- 30 RPOs shall have policies and procedures in place that 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 with particular attention to the management of publications and IP.

4.1.6 Conflicts of interest

- 31 RPOs shall have policies and procedures in place, agreed by their governing authorities and published, that minimise and manage conflicts of interest concerning the commercialisation of IP and that provide guidance on doing so to their staff, contractors, consultants and students.

4.2 Additional principles applicable only to research funded 100% by industry

32 When research by an RPO is **wholly funded by industry**, the industry party shall own any IP arising from the research. The RPO may request access to this IP for teaching and research purposes. All IP shall be protected by appropriate confidentiality and nondisclosure agreements.

4.3 Additional principles applicable only to research funded 100% by the State

4.3.1 IP ownership

33 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 in order to maximise the benefits of commercialisation for Ireland.

4.3.2 IP access

34 Access by industry to IP owned by an RPO will normally be by the granting of exclusive or non-exclusive licences by the RPO.

35 Licences shall be for defined purposes, fields and territories, and on fair commercial terms which provide opportunities for economic and societal benefits for Ireland.

36 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 that IP, provided that the RPO receives fair value in return, is able to continue its research and teaching in the field, satisfies itself that the assignee is in a position to commercialise the IP for the benefit of Ireland and satisfies itself that there are adequate provisions in place to enable commercialisation to continue in the event that the assignee is unable to commercialise the IP.

37 When the State has wholly funded the research:

- Where there are opportunities to commercialise the IP arising from that research, then the RPO(s) and licensee(s) shall pursue commercialisation of that IP in a timely manner;
- The RPO shall be free to publish, provided it first follows agreed procedures in place within the RPO to manage the publication of IP, to ensure IP is properly protected before anything relating to that IP is published;
- The RPO shall be free to continue its research and teaching in the field. It shall be free to use IP which it owns for those purposes.

4.4 Additional principles applicable only to research funded partly by industry and partly by the State

4.4.1 IP ownership

- 38 When research by an RPO is **partly funded by the State and partly (in cash and/or in kind) by one or more industry parties**, the preferred arrangement for ownership, as a starting position for negotiation, is that the RPO will initially own all IP arising from the research and then licence the IP to the industry parties on preferential terms.
- 39 Notwithstanding the provisions in the preceding paragraph, an industry party shall have the right to negotiate an assignment of Non-Severable Improvements³ to any Significant Background⁴ which that industry party has introduced to the Programme⁵. The question of whether any particular IP constitutes a Non-Severable Improvement to any Significant Background will be agreed by the parties.
- 40 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 that IP, provided that the RPO receives fair value in return, is able to continue its research and teaching in the field, satisfies itself that the assignee is in a position to commercialise the IP for the benefit of Ireland and satisfies itself that there are adequate provisions in place to enable commercialisation to continue in the event that the assignee is unable to commercialise the IP.

4.4.2 IP access

- 41 Industry parties who contribute to the cost of a research programme that is partially funded by the State shall be entitled to negotiate arrangements to access IP arising from that programme and owned by the RPO, ahead of other organisations who may wish to access the IP, within a period of six months starting on the date on which the RPO declares the creation of the IP. After this time, the RPO shall be free to negotiate arrangements for other organisations to access the IP in order to maximise the benefits of commercialisation.
- 42 Access by industry to IP owned by an RPO will normally be by the granting of exclusive or non-exclusive licences by the RPO.
- 43 Licences shall be for defined purposes, fields and territories, and on fair commercial terms which provide opportunities for economic and societal benefits for Ireland.
- 44 As an incentive to encourage partnering between industry and RPOs, an industry party who contributes towards the cost of a research programme shall be entitled to receive, if it wishes, a non-exclusive royalty-free (NERF) licence to the IP arising from the research programme, providing that:

³ . As defined in Appendix IV

⁴ . As defined in Appendix IV

⁵ . As defined in Appendix IV

- The research programme provides for the grant of NERF licences; and
- The industry party has made at least the necessary minimum contribution to the research programme, as defined at programme level; and
- The licence is for defined purposes, fields and territories that are sufficient to protect the industry party's freedom to operate; and
- The license is subject to standard conditions.

NERF and exclusive licences on the same IP may co-exist provided that the defined purposes, fields and territories in each licence do not overlap.

45 Negotiations of licences and of transfers of ownership shall fairly consider the contributions of all parties to the research and to its commercialisation.

46 When the State has partially funded the research:

- Where there are opportunities to commercialise the IP arising from the research, then all parties shall pursue commercialisation of that IP arising from the research in a timely manner;
- The RPO shall be free to publish the IP, provided it first follows a standard process to notify other collaborating parties of its intention to publish and to agree any restrictions on publication;
- Where the RPO licenses or assigns the IP to an industry party, the RPO shall retain the right to use that IP for its research and teaching.

Part 3:

A Framework for industry
engagement with public research

How to use this Framework

Does an industrial organisation want to commission research at an RPO and pay the full cost of the research?	YES ➔	This is contract research. Refer to the following Sections, which apply in this situation: A Core principles B Costs and contributions towards research programmes C Ownership and access to IP in contract research H IP management I Supporting institutions
NO ↓		
Does an industrial organisation want to access IP which already exists or is being created as a result of wholly State-funded research?	YES ➔	This will involve negotiating a licence or assignment with the owner of the IP. Refer to the following Sections, which apply in this situation: A Core principles B Costs and contributions towards research programmes D Ownership and access to IP in wholly State funded research H IP management I Supporting institutions
NO ↓		
Does an industrial organisation want to collaborate with an RPO on a new or existing research programme and contribute to the costs of that programme?	YES ➔	This is collaborative research. Refer to the following Sections, which apply in this situation: A Core principles B Costs and contributions towards research programmes E Ownership and access to IP in collaborative research F Principles for the governance of Collaborative Research Programmes G Obligations in Collaborative Research Programmes H IP management I Supporting institutions
Note that this Part 3 provides an overview of the arrangements for industry engagement with public research. It does not aim to discuss every detail and, in particular, is not a comprehensive treatment of all legal issues. The Appendices provide more of this detail.		

Section A: Core principles

- 47 Ireland aims to provide an exemplary innovation ecosystem that creates economic and societal benefits, especially sustainable jobs. 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 research in the public sector.
- 48 Ireland's *national policy on the commercialisation of intellectual property arising from public sector research*, in Part 2 above, sets out the Government's policy on commercialisation of IP. This policy aims to ensure that all enterprises, from start-ups

and small and medium enterprises ('SMEs') to multi-national corporations ('MNCs'), can easily access the IP arising from Research Performing Organisation ('RPO') research. They should be able to negotiate access arrangements quickly, on terms that provide fair value to the parties and in ways that are predictable and consistent from one negotiation to the next.

49 This *framework* sets out further details of how industry can work with Ireland's public research system and can commercialise the IP created in that system. It is built on two core principles:

- **Ensure consistency:** In each case, the *framework* enables all RPOs and State research funding organisations to operate in the same way, using streamlined processes and dealing with access to IP in an up front, transparent way. It sets out mandatory principles around what "shall" be done and other principles for what "should" or "may" be done when commercialising IP. This offers industry a consistent and predictable approach and makes it easy for industry and RPOs to work together;

- **Maintain flexibility:** Whilst providing this consistency, the *framework* recognises that different enterprises (e.g., MNCs, SMEs and spin-out companies) as well as different industry sectors (e.g., ICT and life sciences) may have different requirements for the manner in which they can access IP, especially arising from Collaborative Research Programmes. It also recognises that collaborative research agreements, particularly those involving multiple parties, can be complex to set up and can vary greatly from one agreement to the next. Where this is the case, the *framework* provides flexibility so that the parties may negotiate a mutually acceptable position within certain limits.

50 The *framework* facilitates and supports the development of long-lasting, trusted relationships between industry and the Irish academic research community and RPOs. It fosters the growth of a healthy industry-RPO innovation ecosystem and 'repeat business' between industry and RPOs.

51 The *framework* includes the following sections:

- **Costs and contributions towards research:** What types of contribution an industry party could make when accessing Ireland's public research base: see Section B;

- **Ownership and access to IP in contract research:** This is usually where the industry party has an immediate need, requires a solution quickly and provides 100% of the programme cost. Section C sets out IP ownership rights and access arrangements for contract research;

- **Ownership and access to IP in wholly State-funded research:** This is where a State research funding organisation has paid 100% of the costs of the research. Section D sets out how an industry party can access the IP arising from this research;

- **Ownership and access to IP in collaborative research:** This is where an industry party works with an RPO to meet a particular need, with State research funding organisations meeting part of the cost. In some cases, several industry parties and RPOs may work together on a multi-party collaboration to develop a shared solution of joint interest. Section E sets out a range of IP ownership and access arrangements, suitable for a wide range of collaborations;
- **Governance of collaborative research programmes:** Section F sets out principles for ensuring good Governance of bilateral and multi-party collaborations.
- **Obligations in collaborative research programmes:** Section G provides a summary of what each collaborating party must do in a collaborative research agreement
- **IP management:** section H sets out what each RPO will do to give industry confidence that its IP is managed in a professional way.
- **Supporting institutions:** Section I sets out how the state will support RPO's in delivering the framework, including provisions for Technology Transfer Offices ('TTOs') and the central Technology Transfer Office ('cTTO').

Section B: Costs and contributions towards research

52 This section sets out the principles for the types of contribution an industry party can make towards a programme of research, in order to gain access to the programme and to the related IP. There are essentially three types of research programme:

- **Contract Research:** typically when the enterprise has an immediate need and requires a solution quickly. In this case, the industry party provides 100% of the programme cost;
- **State funded research:** An RPO has already created the IP; the state has already met 100% of the research programme costs. The industry party does not contribute towards research programme costs and accessed IP through arrangements set out in section D;



- **Collaborative research:** This may be:
 - **Bilateral collaborative research**, involving one industry party and one RPO;
 - **Multi-party collaborative research**, where several enterprises come together with shared research interests for which it is in their collective general interests to develop a solution. This may involve multiple industry parties and multiple RPOs.

53 In both bilateral and multi-party collaborative research, the State is willing to meet part of the cost of the research programme while the industry party or parties also contribute. The rest of this Section B outlines the various forms of contribution that industry may make to a Collaborative Research Programme and the minimum levels of contribution which they should make.

52 The value of the benefits which an industry party can receive reflects the level of contribution it makes. Benefits may include opportunities for non-exclusive royalty free access and priority access to the IP arising from the research. These benefits are described more fully in Section E, Ownership and access to IP in collaborative research, below.

53 The cTTO and the State research funding organisations will progressively develop further guidance on this topic.

B.1 Types of contribution to Collaborative Research Programmes

54 Industry may add significant value to research programmes through intellectual, cash, and/or in-kind contributions. Contributions need demonstrably to benefit the research programme to be considered eligible. The values ascribed to any industry contributions should be documented for independent audit and should be reasonable, necessary, allowable and allocatable under the programme. 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). 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.

55 The following represents a non-exclusive list of contributions that may be recognised;

- Cash contributions towards the R&D programme budget and/or in-kind contributions;
- Personnel exchange or secondment; from industry to academia or vice versa;
- Access to unique facilities, instrumentation, test-beds, software, 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.

56 The contributions by industry to a specific Collaborative Research Programme, and the value given to them, 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 should be linked intimately to the research being supported in the Programme in question. Consideration may also be given to the ability or willingness of the industry party to introduce further Background IP, such as know-how, trade-secrets or similar 'assets' into the Programme over its expected lifetime.

57 To further ensure consistency:

- A standard mechanism for calculating the total cost of a Collaborative Research Programme will be developed over time and, when available, will be used on a consistent basis across all State-supported programmes. The cTTO will monitor its use and encourage consistent application;
- Collaborative Research Programme participants shall document the total cost of contributions in order to assess the level and nature of the industry party's involvement, the importance of its contribution to the success of the Programme and its value as a contribution to total Programme cost. This information shall be captured as part of the Programme Plan (see Appendix I) before work starts on the Programme.

B.2 Minimum levels of contribution to Collaborative Research Programmes

58 To qualify for certain benefits of participation, the industry party shall contribute at least a minimum amount towards the total costs of the 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.

59 Setting the minimum contributions will take into account factors such as:

- The types of contribution (see the list of contribution types in sub-section B.1 above);
- 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.

- 60 Only those in-kind contributions which are considered essential to carry out the work in question and which have been thoroughly documented and justified shall be counted as part of the industry party's minimum contribution.
- 61 The same in-kind contribution shall not be made multiple times (e.g. the total cost of a piece of equipment cannot be included in full as a contribution to each of several programmes). 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.
- 62 The following shall not count as part of an industrial 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.

Section C: Ownership and access to IP in contract research

- 63 This Section applies when an industrial organisation commissions an RPO to carry out research on its behalf and pays the full cost of that research.
- 64 In this situation, the parties are free to negotiate and agree the commercial terms that are most appropriate in the circumstances, subject to the provisions in this Section C and in the following Sections: Section A: Core principles
Section B: Costs and contributions towards research
Section H: IP management
Section I: Supporting institutions
In particular, Section H contains provisions for warranties, liabilities and publishing.
- 65 The industry party shall own any IP arising from the research.
- 66 The RPO retains the option to negotiate access to this IP to use it for teaching and research purposes.
- 67 In order to introduce Background IP ('BIP') into a contract research programme, the party introducing the BIP shall complete a **Background IP Disclosure Form**. A sample form can be made available from the cTTO, in line with the **National IP Management Requirements** described in Section H and Appendix II.

- 68 Know-how, research tools and other broad enabling technologies belonging to the RPO should be very clearly described in licence agreements, so that they are clearly identifiable and ring-fenced from other IP owned by the licensing RPO.
- 69 Such know-how, tools and technologies owned by the RPO should normally not be assigned and should only be licensed on a non-exclusive basis, as assignment or an exclusive license may preclude the RPO from undertaking further teaching, research or commercialisation activities in the field 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 licence is essential for the licensee properly to commercialise the IP created by the contract research programme; and
 - 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.

Section D: Ownership and access to IP in wholly State funded research

- 70 This Section applies when an industry party seeks access to IP arising from past or current research by an RPO which was or is wholly funded by the State. The following Sections of this framework also apply in this situation:
- Section A: Core principles
 - Section B: Costs and contributions towards research
 - Section H: IP management
 - Section I: Supporting institutions
- In particular, Section H contains provisions for warranties, liabilities and publishing.
- 71 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 in order to maximise the benefits of commercialisation.
- 72 Irrespective of the arrangements made for other organisations to access the IP, the RPO shall always retain the right to continue its research and teaching in the field of the IP and to use the IP for those research and teaching purposes.
- 73 Access to IP owned by an RPO will normally be by the granting of licences by the RPO. 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; and
- Is able to continue its research and teaching in the field of the IP and to use the IP for those research and teaching purposes; and
- Satisfies itself that the industry party will commercialise the IP for the benefit of Ireland; and
- Satisfies itself that there are adequate provisions in place to enable commercialisation to continue in the event that the licensee is unable to commercialise the IP, for example due to the licensee's insolvency.

74 The RPO and the industry party may choose to provide industry access to the RPO IP through **either a non-exclusive or an exclusive licence**.

75 Licences shall be for defined purposes, fields and territories and on fair commercial terms.

76 All licences should provide for their termination (for example, in the case of a sustained 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.

77 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 IP of the licensing RPO.

78 Such know-how, research tools and technologies owned by the RPO should normally not be assigned and should only be licensed on a non-exclusive basis, as assignment or an exclusive license may preclude the RPO from undertaking further teaching, research or commercialisation activities in the field 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 licence is essential for the licensee properly to commercialise the IP it wishes to license from the RPO; and
- 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 licence.

79 Notwithstanding the provisions of this Section D, special provisions may apply in situations where the explicit objective 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 community and 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 and samples linked to cohort and population surveys.

80 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. In such cases, access should be without unreasonable restrictions to enable wide scientific and public benefit. Licences granted to individual industry parties should not compromise this access.

Section E:

Ownership and access to IP in collaborative research

81 This Section sets out ownership and access arrangements for the IP involved in collaborative research. It applies when one or more industrial organisations and one or more RPOs are partners 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 industrial organisation(s). The following Sections of this framework also apply in this situation:

Section A: Core principles

Section B: Costs and contributions towards research

Section F: Principles for the governance of Collaborative Research Programmes

Section G: Obligations in Collaborative Research Programmes

Section H: IP management

Section I: Supporting institutions

82 It is important that State-funded IP is widely available for commercialisation and use in all possible fields and applications throughout the world. The provisions in this Section encourage that wide availability while, at the same time, giving the industry partner(s) the best possible opportunities to benefit from their collaboration.

83 The parties setting up a Collaborative Research Programme, including industry, RPO(s) and a State research funding organisation, should negotiate a collaboration agreement that best meets their needs within the provisions of this framework. The State research funding organisation should provide clear guidance on the application of the non-mandatory provisions of the framework.

84 Sub-sections E.1 and E.2 apply to Collaborative Research Programmes involving one RPO and one industry organisation – a bilateral collaboration. They set out provisions for IP ownership and access.

85 Sub-section E.3 provides guidelines for multi-party collaborations involving several partners. Sub-section E.4 covers the exploitation of IP and applies to both bilateral and multi-party collaborations.

E.1 Ownership of IP in bilateral collaborations

86 Clear and simple terms governing ownership of, access to and management of IP arising from a Collaborative Research Programme are key to ensuring fast negotiations to set up the Programme and sound positions on ownership of and access by the industry partner to IP arising from the Programme.

87 Agreements on ownership and access to IP should deal with IP rights which arise automatically when the IP is created (such as copyright) and with rights which are granted following application (such as patents).

88 Arrangements for ownership of IP should be agreed before work starts.

89 The preferred arrangement for ownership, as a starting position for negotiation, is that **the RPO will initially own all IP arising from the research** and then licence the IP to the industry partner on preferential terms.

90 Notwithstanding the provisions in the preceding paragraph, the industry party shall have the right to negotiate an assignment of Non-Severable Improvements to any Significant Background which that industry party has introduced to the Programme. The question of whether any particular IP constitutes a Non-Severable Improvement to any Significant Background will be agreed by the parties.

91 However, other ownership arrangements are possible:

- **Joint ownership of IP:** Joint ownership involves complex management arrangements and should normally be avoided in favour of RPO ownership. Joint ownership may be appropriate in specific industry sectors but otherwise should be considered only in exceptional cases. When IP is jointly owned, the joint owners of the IP should each be able to use and grant non-exclusive licenses on the jointly owned IP without reference to the other, and should not be required to share revenues from subsequent commercialisation activities with each other. Where jointly-owned IP is assigned to the industry party, subject to the provisions of paragraph 92, the partners may agree to free the industry party from any future obligations to the RPO party in respect of that IP;

- **Assignment of ownership of IP:** 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 that IP, provided that the RPO:

- Receives fair value in return;
- Is able to continue its research and teaching in the field and to use the IP to do so;
- Satisfies itself that the assignee is able to commercialise the IP for the benefit of Ireland;
- Satisfies itself that there are adequate provisions in place to enable commercialisation to continue in the event that the assignee is unable to commercialise the IP.

92 Irrespective of the ownership arrangements, the partners shall always acknowledge inventorship or joint inventorship in accordance with relevant patent laws.

E.2 Access to IP in bilateral collaborations

93 The following paragraphs set out a flexible approach for accessing IP which recognises that different companies (e.g., multinational corporations, SMEs, early-start-up companies) in different sectors (e.g., ICT versus life sciences) may have different access requirements to secure non-exclusive or exclusive licenses to IP arising from a Collaborative Research Programme in order to best protect their interests.

94 Industry party access to IP arising in a bilateral collaboration and owned by the RPO, and to Background IP introduced into the collaboration and owned by the RPO, will normally be by the granting of licences by the RPO. The collaborating industry party will have priority access, ahead of other parties, provided it makes at least the minimum contribution to the costs of the research programme.

95 The process for accessing this IP and BIP is as follows:

- The RPO and the collaborating industry party shall be free to negotiate arrangements for the industry party to access the IP and BIP;
- The RPO shall also be free to negotiate with other organisations for them to access the IP and BIP, in order to maximise the benefits of commercialisation;
- An industry party which makes at least the minimum contribution to the cost of the research programme shall be entitled to negotiate access to the IP and BIP ahead of other organisations who may wish to access it.

96 Access to IP and/or BIP owned by an RPO may be through a range of options, including a non-exclusive royalty-free ('NERF'⁶) licence or an exclusive licence involving fair payment to the RPO. NERF and exclusive licences on the same IP may co-exist, provided that the defined purposes, fields and territories do not overlap. These options are outlined below.

E.2.1 Access to RPO IP through a non-exclusive, royalty free (NERF) licence

97 As an incentive to encourage partnering between industry and Irish RPOs, one option for the industry party in a bilateral Collaborative Research Programme to access IP arising from that Programme and owned by the RPO is a NERF licence.

98 To qualify for a NERF licence, the industry party must have made or be making a contribution to the costs of the Collaborative Research Programme and the State research funding organisation involved must have declared at the start of the Programme that NERF licences would be available. As described in sub-section B.2 above, the minimum contribution level is determined on a case-by-case basis for each Programme by the State research funding organisation. The RPO and the industry party should agree the industry party contribution as part of the negotiations to set up the Programme.

99 As one way to introduce a NERF licence, the parties may agree at the start of the Collaborative Research Programme that, subject to the qualification criteria above, the industry party may have a perpetual NERF licence to use the IP arising from the Programme and owned by the RPO, for defined purposes, fields and territories and subject to standard conditions. The scope of this NERF licence, to be negotiated by the collaborating partners, may range from a right for the industry party to use the IP for its internal purposes only, to a right for it to use and sub-licence it for commercial purposes. Such a licence will not provide access to any other IP; the parties may make separate arrangements for access to other IP.

⁶. As defined in Appendix IV

- 100 As another way to introduce a NERF licence, also subject to the qualification criteria above, the industry party shall be entitled to receive, if it wishes, a NERF licence on IP arising from the Programme and owned by the RPO, within six months following that IP being declared by the RPO, for use of the IP for defined purposes, fields and territories sufficient to protect its freedom to operate and subject to standard conditions. 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 negotiate exclusive or non-exclusive licences on that IP with other parties. After the end of the six month period, the industry party may still apply for a NERF licence but the grant of such a licence shall be at the discretion of the RPO.
- 101 The RPO will seek to maximise other opportunities to commercialise the 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 the industry party has an option to take or has taken a NERF licence as described above or has an option to take or has taken an exclusive licence in accordance with sub-section E.2.2 below.
- 102 The industry party and the RPO involved in a NERF licence should share the costs of obtaining any patents or other forms of IP protection. The costs should be met by the RPO up to the grant of the NERF licence. When a NERF licence is granted, subsequent patent costs should be shared equitably between the RPO and the licensee(s).
- 103 Control of the strategy for seeking patent protection should always rest with the RPO which owns the IP concerned. The RPO should remain the 'client of record' for patent agents prosecuting patents owned by the RPO. The RPO should agree its patent strategy with any NERF licensees and with any other parties who have rights or options to negotiate NERF licences.
- 104 Action against any alleged infringement of patents owned by an RPO should initially be taken by the RPO, if it chooses to do so. If the RPO chooses not to act, it should promptly notify any NERF licensee(s) of that choice and grant them the right to take action in its place.

E.2.2 Access to RPO IP through an exclusive or royalty-bearing nonexclusive licence

- 105 In addition to the option of a NERF licence, an industry party in a Collaborative Research Programme may at any time choose to negotiate, within the requirements of this *2Framework*, a **royalty-bearing non-exclusive licence** to RPO IP, or an **exclusive licence** to that IP arising from the programme provided that a licence has not already been granted to another party for the same fields or territories.
- 106 Where the industry party is making at least a minimum contribution to the costs of the Programme, as described in sub-section B.2 above, it shall be entitled to negotiate access to the RPO IP arising from the programme ahead of other organisations who may wish to access the IP, for a period of six months following the RPO's declaration of the creation of the IP. During this six month period or until a licence is granted to the industry party or until the industry party declares its intention not to apply for a licence, whichever occurs first, the RPO shall not negotiate exclusive or non-exclusive licences on the IP with other parties.
- 107 Where an industry party negotiates an exclusive or royalty-bearing non-exclusive licence, the licence shall be for defined purposes, fields and territories and on fair commercial terms.

- 108 All exclusive and royalty-bearing non-exclusive licences should provide for their termination so as to enable the RPO owning the IP to seek further commercial opportunities for that IP.
- 109 The costs of applying for a patent for IP owned by an RPO should be met by that RPO up to the grant of any licence or assignment of ownership relating to that IP. When an exclusive licence or an assignment is granted, the licensee(s) or assignee should meet all subsequent patent costs.
- 110 Control of the strategy for seeking patent protection should always rest with the RPO which owns the IP concerned. The RPO should remain the 'client of record' for patent agents prosecuting patents owned by the RPO. The RPO should agree its patent strategy with any licensees or other parties who have rights or options to negotiate licences or take assignments of ownership. Control should pass to the assignee when ownership of the IP is assigned.
- 111 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.

E.2.3 Access to know-how, research tools and enabling technologies

- 112 Know-how, research tools and other broad enabling technologies belonging to the licensing RPO should be very clearly described in licence agreements, so that they are clearly identifiable and ring-fenced from other IP owned by the RPO.
- 113 Such know-how, tools and technologies owned by the RPO should normally not be assigned 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 the field 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 licence is essential for the licensee properly to commercialise the IP created by the Collaborative Research Programme; and
 - 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.

E.2.4 Access to Background

- 114 As Background may be required during a Collaborative Research Programme for the purposes of carrying out that Programme, a party which introduces its Background into the Programme should grant to the other

party a non-exclusive royalty-free licence to use that Background for the sole purposes of and to the extent necessary to carry out its work as part of the Programme.

- 115 As Background may be required in the future for the commercialisation of IP arising from a Collaborative Research Programme, the parties should include in the agreement setting up the Programme the specific arrangements for that Programme under which Background may be introduced and commercialised. The following paragraphs set out the principles to follow in agreeing these Programme-specific arrangements.
- 116 Nothing in these arrangements shall affect the ownership of the Background.
- 117 The parties in a Collaborative Research Programme shall at all times manage the introduction and use of Background in the Programme in accordance with the **National IP Management I Requirements** described in Section H and Appendix II. In particular, in order to introduce Background IP into a Collaborative Research Programme, the party introducing the Background IP shall complete a **Background IP Disclosure Form** (A model text for this Form can be made available from the cTTO).
- 118 Licences on the Background of the RPO shall only be available for an agreed period of time and shall only be for the purposes of, and to the extent required to, commercialise the IP arising from the Collaborative Research Programme into which the Background is introduced.
- 119 Before any Background is introduced to a Collaborative Research Programme, the introducing party shall state in writing any restrictions attaching to the use of that Background, including any restrictions on its use by a party after the end of the Programme. Where an RPO confirms at the time it introduces Background that the Background is available for use or commercialisation by a party after the end of the Programme, it will not, until the expiry of any licence options, enter into any contracts which would further limit the scope of these access rights which have been offered.

120 Where any Background is so confirmed as being available for use after the end of the Programme, then each partner shall have a right to negotiate a non-exclusive licence to this Background. This licence:

- Will only be for the purposes of, and to the extent required to, commercialise the IP arising from the Programme, and
- 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.

The industry party will have a right to negotiate an exclusive licence if the RPO agrees this at the time of the introduction of the Background.

E.2.5 Access rights retained by RPOs after licensing

Rights to use IP arising from a Collaborative Research Programme in teaching and research

- 121 RPOs shall retain the right to use IP arising from Collaborative Research Programmes and which are not subject to exclusive licences or assignment in further teaching and research, including in Collaborative Research Programmes with other RPOs and industrial organisations.
- 122 Where an RPO has granted an exclusive licence or has assigned IP to an industrial party, the RPO shall retain the right to use that IP in all fields or applications for internal research and teaching purposes only. Where the exclusive licence is 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 industrial organisations in all other fields or applications.
- 123 Table 1 sets out these access rights in more detail.

Table 1: Access rights retained by RPOs after licensing or assignment

	IP assigned to industry party	IP exclusively licensed to industry party	IP not licensed or licensed non-exclusively 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 RPO's and industrial organisations, and in programmes sponsored by industrial organisations	No (unless by prior agreement with industry party)	No, in the licensed field or application (unless by prior agreement with industry party) Yes, in all other fields or applications	Yes, for all fields or applications
General right to use and commercialise	No	Yes, other than for the licensed field or application	Yes, for all fields or applications
Right to sub-license IP (including transfer of tangible research materials) to third parties (industry or other RPOs) for research or commercial purposes.	No	Yes, other than for the licensed field or application	Yes, for all fields or applications

Rights to publish IP arising from a Collaborative Research Programme

- 124 The ability of RPOs to further their missions of teaching and research, and to maintain an open academic environment that fosters intellectual creativity, is important.
- 125 In principle, RPOs may publish the IP arising from Collaborative Research Programmes. However, premature publication may disclose confidential, proprietary and/or commercially sensitive information and prevent the further protection of any IP arising from the Programme.

- 126 To avoid this, each party intending to publish shall submit the proposed publication to the other party before submitting it for publication. The other partner shall have 30 calendar days in which to object in writing to publication and the right to withhold permission for up to 90 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, the other party shall be deemed to have given permission to publish.
- 127 RPOs shall have procedures in place to manage publication of IP, in line with the ***National IP Management Requirements*** described in Section H and Appendix II.

E.3 Guiding principles for multi-party collaborations

- 128 Ireland is keen to foster long-term multi-party collaborative partnerships between RPOs and industry to maximise the benefits to all parties and to encourage discovery and innovation. Such partnerships are an essential component of furthering Irish competitiveness, innovation and economic development.
- 129 Where relevant, collaborative partnerships should encourage and support open innovation, such as the open dissemination of new information and IP amongst all the collaborating parties or the use of ideas from other parties to stimulate each party to become more innovative.
- 130 Successful multi-party collaborations are those that benefit every collaborating partner and take due regard of each partner's contributions, objectives and desired outcomes. To achieve this, good governance is essential. Section F sets out principles for how industry, RPOs and the State research funding organisations can shape the direction of a productive and long term relationship.
- 131 The partners in a multi-party Collaborative Research Programme may have differing needs and expectations regarding the benefits to them of their participation. Depending on their individual needs, the partners may enjoy benefits such as:
- The entitlement to negotiate access to IP and BIP arising from the programme ahead of other organisations who may wish to access it;
 - A 'first look' at IP, for information purposes only;
 - Non-exclusive royalty free access to IP for use in research or in defined fields and territories;
 - Non-exclusive royalty bearing access to IP for use in defined fields and territories;
 - Co-exclusive access to IP (exclusive to the collaborators but non-exclusive amongst them) for use in defined fields and territories;
 - Exclusive access to IP for use in defined fields and territories.
- 132 Multi-party collaboration agreements must adequately and fairly address the interests and objectives of each collaborating partner, including access rights to and commercial exploitation of IP and know-how arising from the research. The wide variety of needs and expectations means that each Collaborative Research Programme requires an agreement on access to IP which clearly sets out the objectives of the partnership and is carefully tailored to the needs of all the partners. When negotiating to set up a new Collaborative Research Programme, the partners should make sure the proposed arrangements will benefit them all.
- 133 Multi-party collaboration agreements shall:

- Comply with the mandatory principles regarding professional IP management set out in Section H, including the requirements to meet the **National IP Management Requirements** in Appendix II, for example concerning the introduction of Background IP (BIP) into the Programme and the management of publications;
- Provide mechanisms for the identification and protection of IP developed during the Programme, including solely and jointly developed IP;
- Define the arrangements for access by the partners to IP developed during the Programme, either for research purposes or for future commercial exploitation. Access will usually be through non-exclusive, exclusive and/or co-exclusive licenses (royalty-free and or royalty bearing). Choosing the form of licence shall be based upon legitimate academic and business considerations, which should ideally be identified before the programme starts;
- Define the arrangements for termination of a licence (for example, in the case of a sustained breach of the licence terms by the licensee or the insolvency of the licensee) including for the protection of any sub-licensees and to enable the RPO owning the IP to seek further commercial opportunities for those IP.

134 The partners may agree that separate bilateral agreements may exist within the multiparty collaboration. These agreements, between two of the partners to the Programme, define specific pieces of research related to but distinct from the rest of the Programme. The agreements should include terms dealing with ownership and access to IP based on those in sub-sections E.1 (IP ownership) and E.2 (IP access arrangements) above and which give access to the IP arising from that specific piece of research only to the two partners involved.

135 To enable consistency amongst multi-party collaborations and expedite the process for setting them up, the terms of a multi-party agreement should, as far as possible and relevant, match the standard terms set out in sub-sections E.1 and E.2 for bilateral collaborations. This will help the partners to negotiate agreements quickly and easily, to ensure a timely start to the research and availability of the IP. Over time, the cTTO will develop standard terms for multi-party collaborations to further improve consistency.

136 To further expedite the process, the cTTO can advise the partners on possible forms of multi-party collaboration agreement to suit specific situations, particularly with regard to defining access rights for each partner. The cTTO will act as a repository of good practice, will share ideas, and will ultimately develop a range of model agreements, based on examples of successful collaborations in Ireland.

E.4 Exploitation of IP

137 Establishing an explicit exploitation plan as part of a bilateral or multi-party collaboration agreement encourages the partners to manage the IP related to the Programme and to exploit it in a purposeful way. Before the Programme starts, partners should discuss (in confidence) the different exploitation routes and

the associated issues of IP ownership, exploitation rights, risk and appropriate rewards. They should agree arrangements for IP access by each partner that are appropriate to the specific collaboration and that will allow full exploitation. Partners should review and, if necessary, refine this exploitation plan before seeking any form of IP protection. Appendix I provides a template Programme Plan, within which the exploitation plan can be captured.

Section F:

Principles for the governance of Collaborative Research Programmes

- 138 It is important to establish consistent governance arrangements that can oversee day-to-day activities in Collaborative Research Programmes, in particular multi-party Collaborative Research Programmes involving more than one industry party and/or more than one RPO. This Section sets out some arrangements to ensure that good governance is practised in any Collaborative Research Programme.
- 139 A clearly defined mechanism shall be identified to establish who is accountable for the overall relationship on both the RPO and industry sides of the relationships, and how these individuals will work together to resolve any unforeseen issues in a satisfactory manner.
- 140 In **bilateral** Collaborative Research Programmes involving one RPO and one industry party, each partner should appoint a single point of contact for the Programme to ensure day-to-day adherence to the direction and scope of the Programme, as set out in the funding contract, and simple communication between the partners. Clear lines of communication to the accountable individuals in both RPO and industry parties should be established to ensure any unforeseen issues are dealt with.
- 141 In a **multi-party** Collaborative Research Programme:
- The collaborating RPOs should appoint one of their number to be the Lead RPO with authority to negotiate the terms associated with the Collaborative Research Programme on their behalf, so that the industry parties only have to deal with one RPO;
 - The parties should agree a mechanism for resolving unsatisfactory issues.
- 142 The President of each RPO should develop appropriate delegations of authority, administrative guidelines and accountability measures to support their RPO's participation in Collaborative Research Programmes.
- 143 Especially in a multi-party collaboration, the partners may agree to set up a publications review committee to manage the process of giving permission to publish IP arising from the Collaborative Research Programme.

Section G:

Obligations in Collaborative Research Programmes

144 This Section summarises the obligations of the various parties involved in Collaborative Research Programmes.

145 R POs, industry parties and State research funding organisations shall meet their obligations in Collaborative Research Programmes to ensure the effective and timely commercialisation of IP.

G.1 Obligations of the RPO(s) and the industry parties(s)

146 The RPO(s) and the industry party(ies) shall agree the following two documents describing their proposed Collaborative Research Programme and shall provide a copy of both documents to the State research funding organisation which will fund the Programme for approval, before the date on which the first part of the funding awarded by that funding organisation is drawn down:

- **Term Sheet** (based on the model **National Bilateral Collaboration Term Sheet** at Appendix I) which defines the arrangements for ownership of and access to IP and any other core terms relating to the Programme or any subsequent licence;

- **Programme Plan**, which includes all the technical aspects of the programme and the deliverables required.

147 The RPO(s) and industry party(ies) should aim to convert all terms agreed between them into a fully executed binding contract 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.

148 Irish law should govern all contracts relating to the Programme and its IP, including any licences.

149 The State research funding organisation shall not make changes to the Programme Plan without the prior consultation with the partners engaged in the Programme.

150 If the partners 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 thirty days of request and not unreasonably withheld to ensure the direction of research and allocation of resources remains relevant.

151 The partners 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 contract under which the State research funding organisation is financially supporting the Programme.

152 The partners should be aware that the State research funding organisation may terminate the funding for a Collaborative Research Programme or terminate a partner's involvement in the Programme in the event of:

- A failure to meet Programme milestones;
- Any other material breach of the contract under which the funding organisation is providing funding for the Programme, which cannot be remedied within forty working days of the funding organisation notifying the RPO of the breach;
- Any material breach of any other contract signed by the partners in respect of the Programme.

G.2 Obligations of each RPO

153 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, while providing for appropriate recognition, incentives and reward for those involved.

154 Each RPO participating in a Collaborative Research Programme shall:

- Provide the resources which the Programme Plan says it will introduce into the Programme;
- Carry out that part of the Programme allocated to it in the Programme Plan;
- Comply fully with its IP management system (Section H and Appendix II) 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 of the contract relating to the Programme.

155 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.

156 If the industry parties, or any other organisation, take a licence on the IP of the Programme, the researchers should be required to give such assistance to the RPO's TTO and to the licensees as is reasonably necessary to enable the licensee properly to use and commercialise the IP, in accordance with the terms agreed in the licence.

157 Where more than one RPO is collaborating on the Programme, all collaborating RPOs should appoint one of their number to negotiate on their behalf, as set out in Section F, so that the industry parties only have to deal with one RPO.

158 RPOs shall have clear policies and procedures in place for managing potential or actual conflicts of interest and should ensure that all their employees and non-employees (such as consultants, contractors and students) are aware of and follow these policies and procedures.

159 As part of these policies and procedures, RPOs should:

- Define reportable financial or personal interests;
- Describe when and how employees and non-employees are responsible to report such interests;
- Help all employees and non-employees to identify, report and manage competing interests;
- Assure confidentiality of all individual reports related to potential conflicts of interests;
- Describe options for resolving or managing potential or apparent conflicts;
- Designate an office responsible for implementing the RPO's procedures for managing conflicts;
- Establish reasonable internal audit and records retention schedules for its management of conflicts;
- In any case affecting a partially or wholly State funded research programme, promptly report to the State research funding organisation concerned any unresolved conflict and agree with that funding organisation appropriate steps to deal with the conflict.

160 The cTTO, in consultation with the State research funding organisations and with the RPOs, will develop and maintain guidelines to assist RPOs to manage conflicts of interest.

G.3 Obligations of the industry party(ies)

161 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 contract;
- Not use any funding from other sources in the Programme which may have any terms attached which conflict with the terms (particularly IP terms) agreed with the RPO(s).

Section H:

IP management

- 162 Best practice IP management practices give confidence to industry and to research funding agencies that Ireland's RPOs manage IP in a fully professional manner. This is key to Ireland's reputation as an attractive place for industry to engage with RPOs.
- 163 The *national policy* in Part 2 requires RPOs to have appropriate procedures in place for the proper identification, protection and management of IP arising from their research to ensure optimal exploitation of the research and to maximise their commercial value.
- 164 Ireland is establishing a set of **National IP Management Requirements**. These specify the standard "best in class" procedures for IP management which all RPOs are expected to follow.
- 165 Appendix II describes the National Requirements as at the date of this document. The cTTO will review and update the National Requirements from time to time, in consultation with RPOs and industry to ensure that all aspects of RPO IP management are carried out in as professional a manner as possible. The most up to date version of the National Requirements will be available on the cTTO website.
- 166 It is particularly important to ensure that the researchers within the RPO, as well as the RPO itself, comply with the RPO's IP management system. Such compliance will create and foster a professional research environment with which industry will be confident to engage. RPOs should as far as possible help their staff, students, contractors and consultants to meet these responsibilities.
- 167 Each RPO shall be able, by a date agreed with the cTTO, to demonstrate to the State research funding organisations or to an independent auditor appointed by the cTTO that it has in place an internal IP management system that meets or exceeds the National Requirements and that all research is carried out in full compliance with this system. Any material non-compliance will be deemed to be a breach of State funding terms.
- 168 A n RPO which does not have an IP management system which meets the National Requirements, or which is not able to demonstrate full compliance with its IP management system, should agree with the cTTO a plan for the progressive development of its system and of its compliance with that system. This should specify the order in which the various National Requirements will be addressed and, for each Requirement, a timetable for reaching a fully mature system in stages. In any event, the Requirements for researcher and lead principal investigator undertakings, as defined in Sub-section H.2 below, should be met by all RPOs by the end of 2013.

H.1 IP identification

- 169 Early identification of new ideas and discoveries is important for IP protection and increases their value to all partners. When discoveries arise, researchers shall promptly disclose them. There shall be a formal procedure for early and confidential disclosure of new ideas or discoveries by researchers to all partners in a contract research or Collaborative Research Programme.
- 170 R POs should work together to identify pieces of IP created by different RPOs which, when brought together into a single package, may have commercial value.

H.2 IP protection

- 171 RPOs shall make clear to their staff, contractors and consultants their responsibilities in relation to IP protection including the maintenance of research laboratory records and the prevention of premature public disclosure of IP. The cTTO can make available models of two undertakings to be given by researchers to ensure that they are aware of their responsibilities:

- In the first instance, the **Researcher Undertaking** shall be completed prior to commencing any State-supported research. This ensures that all researchers are aware of their responsibilities around ownership and assignment of IP, confidentiality and publication, record-keeping compliance with the RPO's IP management system;
- The **Lead PI Undertaking** shall be completed prior to a researcher submitting a proposal to act as Lead PI for a Collaborative Research Programme. This document sets out further provisions around ownership of IP, disclosure, record-keeping, confidentiality, project management and introduction of BIP to Collaborative Research Programmes.

H.3 IP exploitation

- 172 To ensure consistency of approach between RPOs and to give industry parties confidence that the IP generated by research within RPOs has been managed in a professional manner, a sample **IP Due Diligence Process** and **Checklist**, which can be made available from the cTTO, shall be completed before any RPO IP is licensed or transferred to an industry party.
- 173 To enable transparent and consistent IP exploitation, a model for a **Background IP Disclosure Form**, which can also be made available from the cTTO, shall be used prior to the introduction of any BIP to a contract or Collaborative Research Programme, to indicate whether the BIP is confidential and whether it is available for licensing for commercialisation with the IP arising from the Collaborative Research Programme.

H.4 IP Management

- 174 The independently audited IP management system to be operated by each RPO will provide confidence to industrial and other research partners that the RPO manages IP in a professional and trustworthy manner.
- 175 However, in view of the open nature of RPOs and the many research activities that they carry out, 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 assume liabilities concerning IP management.
- 176 RPOs recognise that the proper management of IP arising as a result of State-funded research is key to its value and to Ireland's reputation as an attractive place for industry to engage with RPOs. To give industry confidence that there is a reliable and consistent process for managing IP within all RPOs, every RPO undertakes to have and to comply with an IP management system meeting the **National IP Management Requirements**, as described above. Once an RPO has established an internal IP management system that meets or exceeds the National Requirements, the RPO should confirm this certification to a licensee of IP from the RPO. The cTTO will review any changes to this approach in due course.
- 177 As part of their IP management systems, RPOs take reasonable steps to ensure that:
- All staff, students and other researchers working on any research programme for or on behalf of the RPO assign all their rights in the IP to the RPO;
 - The introduction by the RPO of any BIP is carried out in a controlled and legally appropriate manner, such that any rights of access to that BIP by the other partner(s) are clearly defined;
 - It is not precluded from licensing IP arising from its research, for example by agreements with third parties;
 - It keeps a record of any written notice or claim received by the RPO's TTO that the use of the technology in question is infringing, or could infringe, any third party intellectual property rights, and
 - It complies with all contracts it has signed in respect of its research and technology transfer activities.
- 178 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.

Section I:

Supporting institutions

- 179 The State supports a network of TTOs in most of the RPOs. 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, in particular. While returns to the RPO itself are also desirable, these are secondary. The TTOs therefore do not operate primarily as profit centres.
- 180 The TTO or other designated officer of the RPO shall be responsible for negotiating licensing and other IP access agreements between industry and that RPO, for the benefit of Ireland. Within any limits set by its parent RPO, the TTO shall have authority to negotiate and sign IP access arrangements with industry.
- 181 The State also will also support a central technology transfer office, the 'cTTO'. When established, the cTTO will provide a single point of entry into the Irish technology transfer system, helping industry to navigate across the entire RPO sector and to identify complementary and synergistic skill-sets and research capabilities in the RPOs.
- 182 The cTTO will also provide support for the negotiation and operation of commercialisation agreements between industry and the RPOs. This support includes access to a network of specialist external services such as legal firms and patent agents; keeping this *Framework* and its tools up to date; ensuring that the tools are deployed consistently across the RPOs and facilitating dispute resolution. Support may be especially appropriate in the case of complex multi-party arrangements, where the specialist skills of the cTTO and its ability to bring together contributions from a network of TTOs can be valuable.
- 183 In addition to the above support and advisory functions, the cTTO will be responsible for monitoring and reporting the performance of the national technology transfer system using appropriate key performance indicators; and ensuring the continuous improvement of the contents of this document.
- 184 The cTTO's website will contain a national register of available Intellectual Property and provides links to all RPOs and other parties in the national technology transfer system.
- 185 Any industry party that already has a point of contact in one of the State funding agencies can also ask that point of contact to connect them to the RPO which is most appropriate to meet their needs.
- 186 Appendix III describes the national technology transfer system and the roles and functions of the cTTO and the TTOs.

Appendix I:
National Bilateral Collaboration
Term Sheet, Programme Plan
and License Template

Introduction

The National Bilateral Collaboration Term Sheet (hereinafter referred to as “the Term Sheet”), Programme Plan and License Template are for use when negotiating the contract between an industry party and a Research Performing Organisation (RPO) for a proposed bilateral research collaboration. They are designed to expedite negotiations.

The central Technology Transfer Office (cTTO) will develop a separate Term Sheet for multiparty collaborations involving more than one industrial party and/or more than one RPO.

The **Term Sheet** records agreements between the industry party and the RPO to accept the principles set out in *Putting public* research to work for Ireland or to introduce variations on those principles. Lawyers or others tasked with drawing up the contract will use this information to help them to prepare the contract. Notwithstanding any other provisions of this Term Sheet, this Term Sheet is to inform discussion only and does not constitute a contractual or binding offer or commitment to collaborate.

The Bilateral Collaborative Research **Programme Plan** template also aims to assist both parties in gathering the necessary information prior to agreeing the contract so it can be quickly progressed once negotiations begin. Where indicated, some elements of this information will move forward into a binding contract. The Programme Plan should be submitted to the State research funding organisation for approval before the date at which funding awarded by the funding organisation is first drawn down.

The bilateral collaboration License Template sets out the information typically needed when licensing a piece of IP or Research Result arising from a Collaborative Research Programme. This may be completed either during the programme, or up to six months after the programme has been completed.

These are sample documents, illustrating how the national standard documents may appear. They are not final, though they may, if the parties wish, be used as the basis for preparing similar documents for a specific research programme. They will remain in custody of the central Technology Transfer Office (cTTO) which will work with the RPOs, the State research funding organisations and industry parties to further develop and then maintain national standard texts based on these samples. These national standard texts will then be used consistently across all RPOs. The latest versions will be made available online at the website of the cTTO. The cTTO will issue e-bulletins to interested parties whenever these documents are updated.

The remainder of this document contains the following sections:

Section A: Term Sheet: Acceptance or variations on the principles for bilateral collaborative research agreements, in terms of:

- A1: General principles
- A2: Rights and obligations of the Industry party
- A3: Rights and obligations of the RPO

Section B: The Programme Plan template: Standard template for capturing the key elements of a Collaborative Research Programme, to be submitted to the state research funding organisation before funds are drawn down.

Section C: The licensing template: Guidance document for capturing the key information needed in licensing IP arising from a collaborative research agreement from the RPO to the collaborating industry party.

Section A: The Term Sheet – Sample

A.1 General principles

The table below lists the general principles which both the Industry party and the RPO are normally expected to accept in a bilateral collaborative research agreement.

Topic	Statement of Principles	Agreement between the parties (tick one box)
Ownership of results from the programme	Part 3 Section E.1 (RPO ownership)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Access to IP	Part 3 Section E.2	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Access through a NERF licence	Part 3 Section E.2.1	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Access to IP through exclusive or royalty-bearing non-exclusive licence	Part 3 Section E.2.2	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Access to knowhow, tools and enabling technologies	Part 3 Section E.2.3	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Access to Background IP	Part 3 Section E.2.4	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Publication	Part 3 Section E.2.5 Publication Process (available from cTTO)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Patent strategy	Part 3 Section E.2.1 (for a NERF) and E.2.2 (for a royalty bearing license)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
IP identification	Part 3 Section H.1	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Background IP disclosure	Part 3 Section H.3	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Responsibility for patent prosecution [including jointly owned IP]	Part 3 Section E.2.1 (for a NERF) and E.2.2 (for a royalty bearing license)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Payment of patent costs	Part 3 Section E.2.1 (for a NERF) and E.2.2 (for a royalty bearing license)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Control over Actions against Alleged Third Party Infringers of the Results [or RPO BIP] which is being licensed:	Part 3 Section E.2.1 (for a NERF) and E.2.2 (for a royalty bearing license)	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Obligations	Part 3 Section G.1	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:

A.2 Rights and obligations of the industry party

The table below sets out the rights and obligations of the Industry party in a bilateral collaborative research agreement, in addition to those in Section A.1 above.

Topic	Statement of Principles	Agreement between the parties (tick one box)
Access to RPO BIP for Programme Duration	Part 3 Section E2.4	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
IP management	Part 2 Section 4.1.5; Part 3 Section H.4 Appendix II Section 4	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Obligations	Part 3 Section G.1	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:

A.3 Rights and obligations of the RPO

The table below sets out the rights and obligations of the RPO in a bilateral collaborative research agreement, in addition to those in Section A.1 above.

Topic	Statement of Principles	Agreement between the parties (tick one box)
RPO rights to use IP for teaching and research	Part 3 Section E.2.5	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:
Obligations	Part 3 Section G.2	<input type="checkbox"/> accepted OR <input type="checkbox"/> varied as follows:

Section B:

Bilateral Collaborative Research

Programme Plan template:

The purpose of the Programme Plan is to assist both parties in gathering the necessary information prior to agreeing the contract so it can be quickly progressed once negotiations begin. This should be completed by a representative from both parties. Where indicated by an asterisk (*), some elements of this information will move forwards into a binding contract. The Plan should be signed by both the Industry party and the RPO and then shared with the State research funding organisation before said organisation will allow funding to be drawn down for work to commence.

Programme plan template (* means that this information will form the basis for a binding contract)	
Date of form completion	
Completion date for final contractual agreement	
Completed by (name)	
Part 1: Details of the Industry party	
*Name of the collaborating Industry party	
*Name of single point of contact within the collaborating Industry party	
Contact details	<i>Address, telephone, email of the single point of contact</i>
Part 2: The Research Performing Organisation (RPO)	
*Name of the RPO	
*Single point of contact within the RPO	
Contact details	<i>Address, telephone, email of the single point of contact</i>
Contact within the TTO responsible for handling IP issues (if appropriate)	
Contact details	<i>Address, telephone, email of the single point of contact</i>
Part 3: Programme resourcing	
Collaborative Research Programme title	
Lead Principal Investigator at the RPO	
Start date	
End date	
Person days	

Other key personnel included in programme resourcing:				
Industry party	Name	Time allocated	Job title and expertise	
RPO	Name	Time allocated	Job title and expertise	
Affiliated personnel (e.g. visiting scholars, PhD students, other students, consultants or sub-contractors)	Name	Time allocated	Employer	Job title and expertise
			<i>E.g. Industry party, RPO, other</i>	
Are suitable contractual arrangements in place with affiliated personnel?	Yes/No			
Programme reporting arrangements	<i>To specify. This may include for example: monthly programme update; quarterly & annual programme report; quarterly & annual budget update & review</i>			
Location(s) where the work will be carried out				
Equipment to be allocated to the programme by the RPO				



Part 4. Programmes outputs and outcomes

*Programme Deliverables	Deliverable	Due date	Responsible
			<i>E.g. RPO/Industry party/Both</i>
Programme tasks	Task	Due date	Responsible
Expected Programme results	Result		Ownership of Result
	<i>i.e. all IP and Materials created in the course of the Programme, whether by RPO or by Industry party and whether on their own or in collaboration with any other party</i>		
Other core activities of the collaborators to achieve the goals of the programme	<i>E.g. Industry party to take students/RPO researchers as interns into Industry party; Industry party mentoring of RPO researchers; outreach by Industry party; secondment of Industry party staff to the RPO, etc.</i>		
Planned exploitation mechanism for the above results	<i>Key principles to be agreed between the parties.</i>		



***Part 5. Programme costs**

*Programme cost (€)	Total			
	State cash contribution			
	Valuation of total Industry party contribution			
*State contribution	*State research funding organisation involved			
	*State research funding organisation cash contribution to programme cost			
	Funding programme	<i>If applicable</i>		
	Purpose for State funding			
*Industry party contribution	Cash			
	In kind	<i>E.g. industry personnel/secondment, proprietary reagents/materials/consumables, instrumentation, software, etc.</i>		
	In kind	<i>E.g. unique databases/database access, analytical and other services, BIP, know-how, IP maintenance, programme management, etc.</i>		
	In kind	<i>E.g. technical network, market access, IP advisors</i>		
*Payment milestones for Industry party contributions	Milestone	Due date	Payment (State research funding organisation) €	Payment (Industry party) €
	<i>May be the same as Deliverables</i>			

***Part 6. Background IP (BIP) introduced to the programme**

BIP introduced by the Industry party	Description of IP/material	Is this considered "significant background"?	Timeframes for introduction
Background IP introduced by the RPO			

Section C: License template

This template sets out the key information needed in licensing IP arising from a collaborative research agreement from an RPO to the collaborating Industry party. Note that it may be appropriate to complete this section at any time during the Collaborative Research Programme, or up to six months after programme completion.

License template: for use under a bilateral collaborative research agreement. Part 1: Definitions

Specific Definitions - RPO and Industry party to agree for each specific licence:	“Licensed Technology”:	<i>Insert a clear description of those part of the Programme results that are to be the subject of the licence, or state “all Programme results”</i>
	“Field”	<i>Where needed, insert the field of use for which the licence is to be granted</i>
	“Purpose”	<i>Insert the purpose for which the licence is to be granted</i>
	“RPOs Qualifying Background”	<i>Insert description of “Qualifying Background” as defined in the standard definitions (Appendix IV)</i>

Part 2. Scope of license being granted to Industry party of RPO results

	For internal research purposes	For research other than internal	For commercialisation purposes
Description of the relevant part of the technology			
The Purpose/Field for which the licence is being granted:			
Exclusive or non-exclusive royalty free (NERF) licence			
Territory for which the licence is being granted			
Access to Qualifying BIP	<i>Select from:</i> <ul style="list-style-type: none"> ● Access to RPOs qualifying BIP, or ● Access to improvements to qualifying BIP produced as part of the Research Results <i>Include details on timeframes for access to BIP</i> <i>Refer to relevant BIP disclosure forms as appropriate (see Appendix II: IP Management)</i>		
License duration	<i>E.g. indefinite, fixed term or terminable on a given period of notice by either party</i>		
Additional terms	<i>E.g. those applicable to clinical trials or software research</i>		

Part 3: Provisions for IP management

Control over Patenting	
Handling third party infringement	
Diligence Obligations	<i>E.g. milestones for exploitation</i>

Part 4: Terms of Payment

Payment Terms	<i>Refer to the agreements captured in Section A of this term sheet (above) on the terms to apply for access to IP and for payments for that access</i>
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Appendix II: IP Management

1 This Appendix sets out provisions for the IP management system to be operated by RPOs which will provide confidence to industry that intellectual property (IP) arising from research taking place in Ireland's Research Performing Organisations (RPOs) is managed in a professional way. It comprises a set of seven **National IP Management Requirements** which each RPO must meet in designing and operating its own internal IP management system. The Requirements are defined, and from time to time updated, by the central Technology Transfer Office (cTTO) which works with the TTOs to help implement them.

2 The Requirements are currently as follows:

- **Requirement 1:** Ensure early awareness amongst programme leaders of the importance of IP management
- **Requirement 2:** Set obligations on individual researchers to ensure IP is managed in a professional way
- **Requirement 3:** Protect IP arising from research programmes
- **Requirement 4:** Introduce existing background IP into a research programme diligently
- **Requirement 5:** Maintain records of IP and licences
- **Requirement 6:** Maintain confidentiality
- **Requirement 7:** Conduct appropriate due diligence before licensing IP created using State funding

3 The State requires that each RPO designs, implements and complies with an internal IP management system that meets these National Requirements, in particular before the start of any research programme which is wholly or partially funded by the State.

4 The independently audited IP management system to be operated by each RPO will provide confidence to industrial and other research partners that the RPO manages IP in a professional and trustworthy manner.

5 However, in view of the open nature of RPOs and the many research activities that they carry out, RPOs are not in a position to give the same assurances in respect of IP management as a commercial organisation could give. RPOs therefore do not offer warranties or assume liabilities concerning IP management .

6 This Appendix sets further information on the Requirements as follows:

- **Section 1:** The aims of IP management
- **Section 2:** How the requirements will be used and implemented
- **Section 3:** The current National IP Management Requirements

● **Section 4: IP Management Position statement**

- 7 The cTTO can make available sample model texts for some **accompanying national standard documents** for use by each RPO in its internal management system. When complete, the standard documents will help ensure consistency around IP management arrangements across Ireland’s RPOs.
- 8 Figure 1 below shows how the model texts apply to the seven requirements. The model texts can be made available from the cTTO. They are not final, though they may, if the parties wish, be used as the basis for preparing similar documents for a specific research programme. They will remain in custody of the central Technology Transfer Office (cTTO) which will work with the RPOs, the State research funding organisations and industry parties to further develop and then maintain national standard texts based on these samples. These national standard texts will then be used consistently across all RPOs. The cTTO will issue e-bulletins to interested parties whenever these documents are updated.

Figure 1: Overview of the National IP Integrity Assurance Requirements

Stage	Principle	Standard documents
Proposal	1. Ensure early awareness of the importance of IP management amongst project leaders (Section 3.1)	IP confirmation. The RPO and its Lead PI confirm that they understand that they will be required to sign the Researcher Undertaking and agree to certain terms provided by the RPO
		IP integrity terms: State funding agency includes these in every contract with RPOs
Contract	2. Set obligations of individual researchers. (Section 3.2)	Lead PI undertaking: Lead PI confirms that - as accountable project leaders - they're aware of their responsibilities before funds are drawn down. Signed between the lead PI and funding agency
		Researcher undertaking. All researchers involved in the programme (both RPO and industry party) sign the undertaking to confirm that they understand their responsibilities with no regard to IP Signed between the researcher and the RPO that employs them
Execution	2. Protect IP arising from research projects. (Section 3.3)	
	4. Introduce existing and background IP into a project directly. (Section 3.4)	Background IP disclosure form. Industry and/ or RPO researchers fill in this form when they disclose BIP
	5. Maintain records of IP and licences. (Section 3.5)	
	6. Maintain confidentiality before publication / data provided by others. (Section 3.6)	Publication process: Steps taken before the results of research fully or partially funded by industry are provided
Licensing	7. Conduct appropriate due diligence when licencing IP created using state funding. (Section 3.7)	IP due diligence checklist: TTO and Lead IP complete this together before doing deal. the form is presented to the licensee

1 The aims of IP Management

9 The IP Management Requirements aim to give confidence to industry and to State research funding organisations that Ireland's Research Performing Organisations (RPOs) manage research, their related contracts and intellectual property (IP) in a fully professional manner. They also aim to ensure that consistency across the RPOs is achieved.

10 This is key to Ireland's reputation as an attractive place for industry to engage with RPOs.

2 Using and implementing the IP Management Requirements

11 The State's central Technology Transfer Office (cTTO) will define and from time to time update the National Requirements and is able to provide assistance to RPOs in designing and implementing their IP management systems by sharing good practices between RPOs. Section 3 below provides the National Requirements as at the date of this document; the cTTO website will provide the latest version.

12 The cTTO, together with the State research funding organisations, arranges and records the results of periodic audits within each RPO. The purpose of these audits is to help RPOs to develop their IP management systems and to achieve the desired standards; and to certify that an appropriate IP management system is in place and is being complied with. RPOs will undertake self-certification audits, with advice from and against criteria provided by the cTTO. This will be complemented by periodic independent audits, conducted by an external audit body. After a period of time, to be agreed, an RPO which has passed this independent audit is entitled, until the next independent audit, to advertise itself as meeting the Irish National IP Management Requirements for good IP management. Such audits should be subject to any third party confidentiality obligations.

13 An RPO whose internal IP management system is not yet sufficiently mature to achieve full certification should discuss and agree with the cTTO a plan for the progressive development of its system, taking into account the availability of the required resources. This plan should specify the order in which the various National Requirements will be addressed and, for each Requirement, a timetable for reaching a fully mature system in stages. In any event, the first Requirements to be met shall be those set out in sections 3.1 and 3.2 below.

3 The National IP Management Requirements

14 Every Irish RPO shall have an IP management system in place that meets the National IP Management Requirements. This involves designing, implementing and continuously improving each RPOs internal processes for assuring that IP is managed in a professional way; appointing appropriate members of staff to lead and to be responsible for process design, implementation, operation and continuous improvement; providing necessary resources; and ensuring compliance with these internal processes. The seven requirements are as follows:

3.1 Requirement 1: Ensure early awareness amongst programme leaders of the importance of IP management

15 It is important to ensure that IP management is considered before funding is awarded to the RPO by the State research funding organisation for a research programme. In particular, before any funding can be drawn down, the RPO and the Lead Principal Investigator (PI) applying for the funding need to sign and return an **IP Confirmation** (sample form can be made available from cTTO) to the State research funding organisation to confirm that they are aware of and understand the provisions set out in:

- The **IP Management Terms** which will appear in the contract between the RPO and the State research funding organisation. The State research funding organisations will include terms in their research funding contracts with each RPO which require that RPO to have an internal IP management system that meets the National Requirements and to comply with it for the programmes which the State funds. Sample terms can be made available from the cTTO.
- The **Lead PI undertaking** (sample form can be made available from the cTTO) described in Section 3.2 below

3.2 Requirement 2: Set obligations on individual researchers

16 The effectiveness of an RPO's internal IP management system depends on the individual researchers being aware of and complying with the system. The following arrangements will be implemented in each RPO following consultation and agreement on specific requirements between the cTTO and RPOs. To evidence their awareness of the IP management system, all the researchers on each programme are required to sign a Researcher Undertaking for that programme, with their RPO. A sample text of a **Researcher Undertaking**, to be developed by the cTTO in consultation with RPOs and State research funding organisations, will be available from the cTTO.

17 In addition, the Lead PI on each programme carries a particular responsibility for compliance with the RPO's IP management system throughout the programme. To acknowledge this responsibility, the Lead PI on every research programme funded by the State must give a **Lead PI Undertaking**, when the funding is awarded, that:

- They are aware of their RPO's IP management system as it exists at that time;
- They will fully comply with that system throughout the programme;
- They are aware that, after the programme has been completed, they must confirm to the funding organisation that they have fully complied with the system;

18 This undertaking must be given by the Lead PI directly to the relevant State research funding organisation, for each programme which the State funds. A sample text of a **Lead PI Undertaking**, to be developed by the cTTO in consultation with RPOs and State research funding organisations, will be available from the cTTO.

19 Every RPO shall have adequate arrangements in place to ensure that each researcher involved in every research programme undertakes to comply with the RPO's internal IP management system, prior to commencing work on a programme. In particular, this should be with regard to disclosure of new results from the programme within 30 days of their creation, ownership of all rights to those results by the RPO, confidentiality and publication.

3.3 Requirement 3: Protect IP arising from research programmes

20 Every RPO shall have adequate arrangements in place to:

- Document all programme results in such a way that priority dates can be established in the event that results lead to patent applications (e.g. through the use of properly structured laboratory notebooks, dated and written in ink, or other suitable forms of electronic data capture, recording the results of research).
- Promptly and carefully review all programme results to identify IP, whether patentable or not, that may have potential commercial value.
- Promptly notify the RPO's Technology Transfer Office whenever IP with potential commercial value is identified.
- Evaluate IP that may have potential commercial value to establish, as far as possible, what the commercial value might be and how that value might be realised.
- Decide what form of protection is appropriate for each new item of IP and, in the event that a form of protection requiring application, such as a patent, is selected, to make the necessary applications.
- Identify, for each item of IP for which patent protection is sought, the individual(s), within the RPO or elsewhere, to be named as Inventor(s).

21 The Requirement concerning Confidentiality, at Section 3.6 below, is especially important while these steps are in progress.

3.4 **Requirement 4: Introduce existing background IP into a research programme diligently**

22 Every RPO shall have adequate arrangements in place to:

- Review any pre-existing IP before it is introduced into a research programme to ensure that it has no contractual or other restrictions that would prevent it being used in the programme.

- Examine the potential impact of introducing pre-existing IP into a research programme on the potential commercial value of any IP created during the programme, in order to identify any possible negative consequences (e.g. caused by the introduction of open source software).

- Ensure that it and all its other RPO and industry collaborators on any research programme which is wholly or partly funded by the State complete a **Background**

IP Disclosure Form before they introduce any existing IP or materials into the programme, either at the start or during the programme. A sample text of a *Background IP Disclosure Form* can be made available from the cTTO.

3.5 **Requirement 5: Maintain records of IP and licences**

23 Every RPO shall have adequate arrangements in place to:

- Maintain records of all pre-existing IP used in each research programme, identifying for each item of IP its source, owner, date of introduction and any conditions attached to its use.

- Maintain records of all IP created during a research programme, whether patentable or not, identifying for each item of IP any applications for protection; the progress of any such applications; any licences, licence options or assignments granted or contracts signed; and the terms and recipients of any such licences, options, assignments or contracts.

- Keep an inventory of all results created in each research programme, showing in each case the date of creation, the individual(s) responsible for its creation and any decision to seek protection for any resulting IP. This inventory shall allow the work of one researcher on multiple programmes, and the results obtained on multiple programmes, to be clearly identified with the programmes concerned.

24 Doing so will help to ensure that:

- The same item of IP is not licensed multiple times on conflicting terms.
- Agreed arrangements for IP licensing or assignment can be promptly and fully executed.

3.6 Requirement 6: Maintain confidentiality

3.6.1 Confidentiality of programme results before publication

25 Every RPO shall have adequate arrangements in place to ensure that:

- Requirements to maintain the confidentiality of programme results, including scope and duration, are discussed and agreed with all programme partners, including any industry parties, before programme work starts. Additional requirements may be agreed at any time after work starts.
- Requirements and procedures to maintain the confidentiality of programme results are communicated to and understood by all those working on the programme.
- Appropriate facilities, such as secure storage, are available as required.
- Arrangements are in place and understood by all those working on the programme for seeking and granting approval to publish programme results, such as theses. This includes the definition of who has authority to grant permission to publish, any agreements for programme partners to review and approve material prior to publication and any agreement with programme partners to place embargoes on publication. A sample text of a *Publication Process*, which describes the minimum set of steps which should be followed when managing the publication of results arising from research, which is at least partly funded by or is carried out in partnership with industry, can be made available from the cTTO.

3.6.2 Confidentiality of IP and information provided by other parties

26 Every RPO shall have adequate arrangements in place to ensure that:

- Confidential information received from a company or from any other third party is understood by all staff to be confidential and is appropriately protected.

- Confidential information and IP received from a company or other third party in connection with a research programme are used solely for that programme and are not used for any other programme without the prior written permission of the source.

3.7 Requirement 7: Conduct appropriate due diligence before licensing IP created using State funding

27 Every RPO shall have adequate arrangements in place to ensure that an **IP Due Diligence Assessment** is completed before any IP created using State funding is licensed to any third party. This Assessment must include the following steps:

- The RPO shall complete a Due Diligence Checklist before any IP created using State funding is licensed to any third party. A member of the RPO's TTO, or separate due diligence team if the RPO has chosen to have such a team, should complete this Checklist, supported by the programme's Lead Principal Investigator. Any discrepancies or missing information revealed by completing the Checklist should as far as possible be corrected before starting negotiations with any potential licensee. A sample text of the Checklist can be made available from the cTTO;
- The RPO shall sign the completed Due Diligence Checklist, to confirm that the information in the Checklist is true to the best of their knowledge and belief;
- The RPO's TTO or other appropriate due diligence team shall review the information given in the completed and signed Checklist and in the documents specified in the Checklist, to identify any issues which could affect the introduction of the IP into the programme. If the due diligence team carries out this review, they shall provide the completed and signed Checklist and details of any issues identified to the TTO;
- The RPO's TTO shall, on reasonable request, make available for inspection by industry, without any representations or liabilities attached, an **IP briefing pack** comprising the documents listed in the Due Diligence Checklist as being available, other than any documents whose disclosure is prohibited by any obligations of confidentiality on the RPO.

3.8 Ensuring compliance with the above Requirements

28 Every RPO shall have adequate arrangements in place to:

- Inform itself of the **National IP Management Requirements**, as updated by the cTTO from time to time and posted on the cTTO website.
- Ensure that its internal IP management system is fully compliant with the latest version of the National Requirements.
- Monitor its compliance with its internal IP management system, including compliance by individual researchers with the terms of any specific undertakings or agreements signed by those researchers such as the Researcher Undertaking mentioned in Section 3.1 above.
- Invite and assist external independent auditors, nominated by the cTTO, to assess the compliance of its internal IP management system with the National Requirements and its compliance with its internal system.
- Take prompt and effective corrective action following any compliance failure identified by its own compliance monitoring or by any external audit.

4 IP Management Position Statement

29 The IP management system to be operated by each RPO and independently audited will provide confidence to industrial and other research partners that the RPO manages IP in a professional and trustworthy manner.

30 However, RPOs are not, by their nature, in a position to give any warranties concerning IP or to accept any liabilities relating to that IP. A Position Statement, which sets out the present position can be made available from the cTTO. The cTTO will periodically review this Position Statement, in consultation with RPOs and industry, and update it to include the most recent agreements on IP management processes and IP terms, to be provided by RPOs.

Appendix III: Technology Transfer Structures

- 1 Ireland will benefit from a technology transfer (TT) system which supports and stimulates industry-RPO engagement – and does so in a way that differentiates us internationally and reinforces Ireland’s reputation as a great place for industry to do business.
- 2 This Appendix sets out a vision for a dynamic and consistent TT system, responsive to industry, open to collaboration and flexible and speedy in deal making. It describes a cohesive support network of Technology Transfer Offices (TTOs), consisting of a new central TTO (the “cTTO”) and several local TTOs. It provides clarity for all stakeholders (including domestic and international industry, the RPOs, the State research funding organisations and researchers) on the functions, responsibilities and accountability of this system.
- 3 The Appendix sets out:
 - **Section 1:** A vision for a competitive technology transfer system
 - **Section 2:** An overview of the governance and reporting arrangements within this technology transfer system
 - **Section 3 and Section 4:** Further detail of the roles and responsibilities of the TTOs and the cTTO which together make up the technology transfer system
 - **Section 5:** A summary of the functions of the cTTO and TTOs
 - **Section 6:** Implications for other stakeholders
- 4 More detailed functions and responsibilities for the cTTO and the TTOs can be made available from the cTTO.

1 A vision for a competitive technology transfer system

- 5 Ireland’s vision is to develop a global reputation for efficient commercialisation of ideas, know-how and intellectual property (IP) arising from State funded and industry co-funded research in the country’s RPOs.
- 6 Maximising the collaboration of major RPOs with innovative enterprises is a global opportunity. Countries and key academic centres worldwide are revisiting their strategies to link industry and enterprise. Ireland needs to be competitive.
- 7 This vision is an evolution of the current set of RPO TTOs into a new networked national system. When established, this national system will provide a consistent and predictable approach to industry-RPO relationships. It will include mechanisms for continuous improvement and refinement, including on how the structure and governance of the system itself should develop over time to best meet the needs of industry and other stakeholders.

8 This national system will offer many attractive features:

- Accessibility for industry and entrepreneurs:
 - A simple to use and nationally comprehensive ‘one-stop-shop’ approach for anyone wishing to know what IP is available and how to gain access to it.
 - An ‘open door’ culture for entrepreneurs and industry wishing to engage with the research system through either IP acquisition, research collaboration or access to expertise, specialist equipment or facilities.

- Flexibility and responsiveness:
 - A national system that appreciates industry’s need for flexibility and works hard to respond in a consistent and timely way.

- Effective interface between industry and the research community:
 - Knowledgeable and trusted people to deal with industry oriented academic researchers.
 - Professional and prompt level of service to researcher community.
 - Regular and relevant communications and training for the research community.
 - Easy to operate professional processes and systems consistent across all RPOs.
 - TTO industry/sector expertise that complements the research community.

- High standards and performance:
 - A more predictable and consistent approach across the board with regard to funding terms, licensing terms and the application of national policies on a range of IP related issues and the way in which IP arising from RPOs is managed.
 - National understanding of the various ways to create value for the Irish economy which are reflected in TT deals.
 - A broad and comprehensive set of metrics to drive TT for the benefit of Ireland.
 - An open and transparent system of measuring and reporting Key Performance Indicators (KPIs) and metrics in order to continuously develop and improve the system.

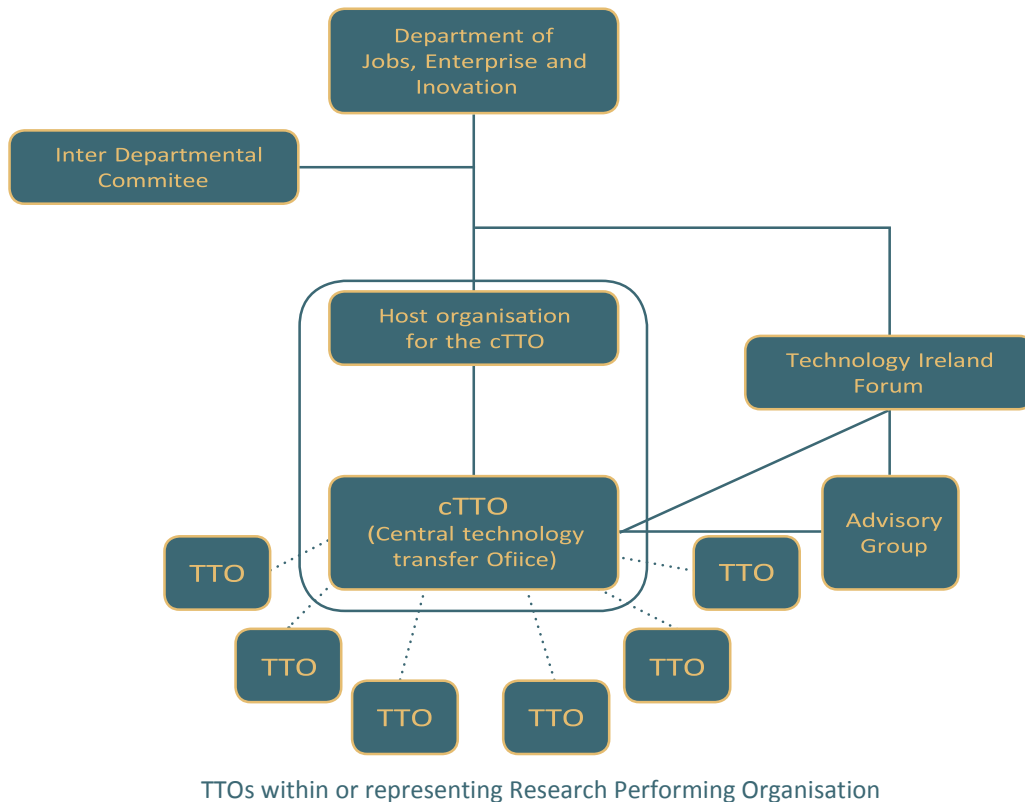
- Sound governance and interaction with stakeholders:
 - Clearly understood governance arrangements which apply throughout the TT system while accommodating the wide variety of organisations involved, such as policy makers, State research funding organisations, RPOs and industry.

- Mechanisms for continuous improvement and to capture viewpoints from suppliers (researchers, RPOs) and users (industry, entrepreneurs) to help refine and improve the TT system.
- Clear decision making and dispute resolution.

2 Governance and reporting arrangements within the national technology transfer system

9 The following Figure outlines the national TT system now being put in place.

Figure 1: Overview of the National Technology Transfer System



Legend: Solid line: Management or reporting arrangement. Dotted line: Advisory or supporting arrangement TTO: Technology Transfer Office.

10 A **TTO's** primary role is to maximise the interaction between industry and the RPO(s) which it serves. Each TTO is located in an RPO and is part of the management structure of that RPO. It serves the RPO to which it belongs or, in some cases, a cluster of RPOs including the RPO to which it belongs and local hospitals and other research institutions. It operates as part of a network with the other TTOs and with the cTTO. Section 3 further describes the TTO.

11 The **cTTO's** overall purpose is to deliver an efficient and productive TT system for the benefit of Ireland, the country's RPOs and of the companies who choose to work here. It supports the commercialisation of IP created in the RPOs, a role which complements the wider commercialisation role of existing organisations such as Enterprise Ireland. It is hosted by the Host Organisation. It provides an annual operating plan to

Technology Ireland Forum, including activities to support the development of the whole technology transfer system, and executes the plan under the day-to-day supervision of the Host Organisation. Section 4 further describes the cTTO.

12 An **Advisory Group** will provide input to the cTTO. The Advisory Group will ensure that there is continuous evolution of the protocols, frameworks, policies and implementation tools around IP and that the activities of the RPOs and State research funding organisations are consistent with the vision and goals of the national TT system. The Advisory Group is required to provide **Technology Ireland Forum** with an **annual report on progress**. The Group will be composed primarily of practitioners from within the TT system and from industry who have a significant track record in innovation management. The cTTO will provide the necessary support and secretariat. The Group will have the following roles:

- Monitor consistency within the system through comparative data analysis.
- Provide a forum to identify further inefficiencies and suggest solutions.
- Propose further improvements to processes, templates or requirements within the system.
- Seek regular industry and other feedback and recommend actions based on such feedback.
- Advise on mechanisms for dispute mediation or resolution.

13 The **Host Organisation** is a Government agency, to be defined, which provides overall responsibility and accountability for the day-to-day operation of the cTTO. The cTTO will reside, physically and operationally, within this organisation.

14 **Technology Ireland Forum** includes representatives from Ireland's main State research funding organisations, including Science Foundation Ireland, Enterprise Ireland, the Industrial Development Agency and the Higher Education Authority, as well as Forfas. It acts as the problem-solving and decision-making body where input is required from across the State research funding organisations, beyond that of the Host Organisation. The cTTO may also provide reports directly to the Forum. The head of the cTTO shall attend Forum meetings when issues surrounding technology transfer and commercialisation are discussed and may ask to have items relating to these topics added to the agenda for discussion at Forum meetings.

15 The **Inter Departmental Committee** includes representation from a wide range of Government departments and agencies and handles many topics, including the scope of TT and commercialisation. Where appropriate, DJEI or Technology Ireland Forum will refer issues relating to the national TT system to the Committee where these may impact on or require whole-of-Government consideration.

3 The Technology Transfer Office

- 16 A TTO's primary role is to maximise the interaction between industry and the RPO(s) which it serves. Each TTO is located in an RPO and is part of the management structure of that RPO. It serves the RPO to which it belongs or, in some cases, a cluster of RPOs including the RPO to which it belongs and local hospitals and other research institutions.
- 17 TTOs work with the cTTO and with each other to implement common practices and templates to drive the 'one stop shop' for entrepreneurs and industry. TTO directors have already made welcome progress in setting common policy across the TTOs.
- 18 TTOs must also work with the cTTO on effective use of resources in the entire system. It is essential to avoid unnecessary duplication of functions in each TTO. Technical specialists (IP, legal, marketing and sector specialists in, for example, medical devices, ICT, gaming, pharma, food, cleantech), wherever they are, should be able to assist other TTOs. Ideally, the cTTO can facilitate this on a shared service basis as in professional services firms. In this way, TTO staff can be viewed as a national resource.
- 19 TTOs need very clear financial and management support from their parent RPOs. This will enable them to continue the development which began with Ireland's Technology Transfer Strengthening Initiative 2007-2011 (the "TTSI").

4 The central Technology Transfer Office

- 20 The cTTO's primary role, when established, is to be the identifiable access route to the wealth of technology opportunities and academic talent that exist in the RPOs. The cTTO will interface directly with local TTOs, providing a 'one stop shop' for entrepreneurs and industry and signposting them to the relevant sources of knowledge and capability within Ireland's RPOs. Once established, the opportunity will exist for the cTTO to expand its business industry outreach role.
- 21 A key role of the cTTO is to **raise awareness of and to promote the successes** arising from co-developed ideas and the opportunities available for co-development, in order to attract new industries to engage in collaboration with RPOs.
- 22 The cTTO will **help companies who are new to industry-RPO collaboration**. Working with the State research funding organisations, it develops pre-collaboration tools (such as questionnaires, success mapping and scenario planning) to help to determine upfront if a given commercial partner and academic can work together, have a mutually trusting relationship and have common expectations for the programme deliverables and each other's needs. This should be done before drafting any contracts or legal documents.
- 23 The cTTO will also **maintain the attractiveness and performance of the national TT system**, by setting high standards, developing common commercial approaches and work practices, and supporting compliance with these standards and practices throughout the system. The cTTO will manage the budget for the TTSI.

- 24 The cTTO will be responsible for the **consistent implementation of policy** and will help all parties to follow a **consistent interpretation of policy, processes and definitions of terms**. It maintains and develops key national tools for use by all TTOs, such as model term sheets to facilitate initial discussions; model contracts, and standard definitions. It will develop and improve standard documents to fulfil requirements set out in the National IP Management Requirements (Appendix II). Through consultation with other organisations via the Advisory Group (and especially Ireland’s TTOs) it will develop the tools and materials set out in Appendix II and release regular bulletins to indicate that these tools are available. The cTTO will provide support to TTOs in developing and implementing IP management processes and act as a conduit for sharing good practice between the TTOs to ensure a consistent and networked national ecosystem. It does not have authority to overrule a TTO but may advise the State research funding organisations of any breach by a TTO of this Framework’s mandatory requirements.
- 25 The cTTO can **facilitate dispute resolution**, should the need arise, and use the lessons from this activity to inform the on-going refinement of comment terms and good practices for the TTO system. The cTTO can commission independent external reviews on specific issues, following a standard protocol.
- 26 The cTTO itself needs a clear identity as the ‘one stop shop’, with an active and open dialogue with industry groups on a regular basis. It needs inspiring leadership and the best talent available with expertise and track record in IP commercialisation, licensing and marketing. It may complement its own resources by using service providers such as law firms, patent agents and commercial opportunity assessors, where this is good for quality and value for money.

5 Summary of functions

The following Table summarises the functions and responsibilities of the cTTO and the RPO TTOs. A more detailed description can be made available from the cTTO.

• cTTO	• TTO
<ul style="list-style-type: none"> • Reports to the Host organisation and to Technology Ireland Forum. 	<ul style="list-style-type: none"> • Reports to the RPO in which it is located.
<ul style="list-style-type: none"> • Located in the state agency system and implements state policy in technology transfer, IP and licensing matters. 	<ul style="list-style-type: none"> • Holds a senior position in the RPO in which it is located and represents that RPO (or a cluster of RPOs) in technology transfer, IP and licensing matters.
<ul style="list-style-type: none"> • Maintains the national IP commercialisation policy and the licensing framework. • Drives implementation of the framework 	<ul style="list-style-type: none"> • Drives the commercialisation of RPO IP following the national policy and licensing framework. • Identifies and protects RPO IP • Negotiates licenses within the framework parameters.
<ul style="list-style-type: none"> • Maintains standard documents, definitions, criteria, terms and templates; 	<ul style="list-style-type: none"> • Works with the cTTO to develop documents and design and implement

<p>in particular those associated with further developing the National IP Management Requirements and standard terms associated with multi-party collaborations.</p> <ul style="list-style-type: none"> • Defines certification criteria against which RPO compliance with requirements are independently assessed. • Supports the TTOs in implementing changes, sharing good practise and ensuring consistency between those TTOs which are further ahead in implementing the requirements and others. • Releases bulletins when new standard documents and templates are ready for release or have been update 	<p>processes to ensure IP is managed in a professional way.</p> <ul style="list-style-type: none"> • Performs regular self-assessment of how the requirements have been implemented within the RPO.
<ul style="list-style-type: none"> • Set performance measures and metrics. • Agrees targets. 	<ul style="list-style-type: none"> • Sets targets • Delivers performance against agreed targets
<ul style="list-style-type: none"> • Markets Ireland's RPO's as a resource for industry • Provides PR and communications support • Maintains broad liaison with industry 	<ul style="list-style-type: none"> • Markets IP and commercial opportunities from the RPO. • Provides PR and communications • Maintains targeted liaison with industry
<ul style="list-style-type: none"> • Provides a central point of contact for companies looking for opportunities 	<ul style="list-style-type: none"> • Manages new contacts with companies, whether received directly or via the cTTO.
<ul style="list-style-type: none"> • Maintains a central database of commercial opportunities 	<ul style="list-style-type: none"> • Generates material on commercial opportunities. • Shares information about identified early stage opportunities with the cTTO
<ul style="list-style-type: none"> • Facilitates the setting up of multi-party collaborations involving multiple RPO's and/or multiple companies. • Facilitates, if requested, the setting up of relationships involving one RPO and one company • Facilitates dispute resolution 	<ul style="list-style-type: none"> • Negotiates the setting up of relationships between its RPO and one company, asking for support from the cTTO if it judges this to be helpful. • Manages relationships with companies; may choose to ask the cTTO to help resolve disputes.
<ul style="list-style-type: none"> • Provides continued Professional Development and training for TT managers and executives 	<ul style="list-style-type: none"> • Manages relationships with researchers. • Provides awareness and training for researchers.
<ul style="list-style-type: none"> • Advises on best practise and maintains a best practise repository 	<ul style="list-style-type: none"> • Develops and shares best practise

<ul style="list-style-type: none"> • Procures shared services 	<ul style="list-style-type: none"> • Shares own and RPO expertise.
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6 Implications for other stakeholders

- 27 While the national TT system has a direct impact on industry, the RPOs and their TTOs, the State research funding organisations and the cTTO, it also has implications for other stakeholders. These other stakeholders must step up to the challenge and make changes too, to benefit from the system and to help to ensure its success.
- 28 RPOs need to combine their existing teaching and academic priorities with their growing role within Ireland’s innovation ecosystem. Ireland does not have a large public research system in addition to its RPOs, so the RPOs have a major part to play in the innovation ecosystem as providers of research and IP. Researchers are key players in supporting this innovation ecosystem, by showing leadership to their colleagues in a changing academic cultural environment.
- 29 Senior management in RPOs need to reflect the importance of the TTO in the RPO organisational structure and be very clear to all parties where decision-making authority rests for commercial decisions on patenting strategy, licensing strategy and collaboration objectives.
- 30 While many industrial partners also publish in academic journals, industry must recognise that publication is a very significant indicator of quality in an RPO and therefore accept that this is an essential part of an industry-RPO partnership. Proper arrangements for managing publication, which protect the legitimate commercial interests of the company while respecting the RPO’s need to publish, should be clarified at the start of a new collaboration. Industry should also recognise that many RPO researchers engage in research, analysis, and teaching that lead to ideas and concepts which are of excellent quality but which have no real or immediate commercial value. Even so, this is valuable to Ireland and is a legitimate part of the academic mandate.

Appendix IV: Meaning of terms

In this document, the following terms have the meaning given.

Background	Any Intellectual Property or Material (regardless of the form or medium in which they are disclosed or stored) controlled or owned by any party prior to the beginning of any research programme or generated 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 during the Programme.
Bilateral Collaboration	A collaboration between one industry party and one RPO party.
Collaborative research programme	A research programme in which there is active participation by researchers employed by or working on behalf of one or more RPOs and one or more industry parties.
Central Technology Transfer Office (cTTO)	centralised function which provides a single point of entry into the Irish technology transfer system; support for the negotiation and operation of commercialisation agreements between industry and the RPOs (including dispute resolution); monitoring and reporting the performance of the national technology transfer system using appropriate key performance indicators; and ensuring compliance with the Government policy on research commercialisation.
Commercialisation	Using IP to create or develop a commercial activity. This may involve exclusive or non-exclusive licensing or assignment of the IP and may lead to new company formation or the introduction of new or improved products or services by existing organisations. In the higher education sector, commercialisation is a part of the “third mission” within the institutions’ functions of teaching, research and contribution to industry.
Confidential Information	All Intellectual Property, Materials or other information provided by one party to another party of the Collaboration, or to which a party of the Collaboration has access to during the course of the Programme (in whatever form communicated or recorded) and which has been identified in writing by one party of the Collaboration to another party of the Collaboration as being confidential.
Enterprise	A commercial or not-for-profit organisation, including but not limited to start-ups, spin-outs from a RPO, small and medium enterprises, large national corporations and multi-national corporations headquartered inside or outside Ireland.
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	Collective term for enterprises
Industry party	An enterprise engaging with an RPO in a Collaborative Research Programme.
Intellectual Property (IP)	Patents, trademarks, service marks, registered designs, drawings, utility Property (IP) 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
Lead principal investigator or lead PI	The lead researcher of the RPO who will be leading the programme on behalf of the RPO, as identified in the programme description/programme workplan (as the case may be).

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).
Multi-party collaboration	Any collaboration involving industry and RPO(s) other than a Bilateral Collaboration.
National IP Management Requirements	The national requirements issued by the central Technology Transfer Office (cTTO) from time to time in order to ensure all aspects of research programmes are carried out in as professional a manner as possible, especially as regards the management of IP, and any variations to same which may be made from time to time. Copies of the current National IP Management Requirements can be made available from the cTTO, including the Researcher Undertaking and the IP Due Diligence Process.
National IP policy	Set of objectives, agreed by Government, governing the management of and access to IP undertaken in the Irish public research system.
Non-exclusive royalty-free (NERF) licence	A licence to use IP under which the licensee is not required to pay any initial or recurring royalties or milestone payments. 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 will only constitute a “Non-Severable Improvement” where, at a minimum, the IP in question: <ul style="list-style-type: none"> ● Was created using Significant Background introduced to the CRP, and ● Cannot be used or commercialised without infringing on the Significant Background. In general, none of the following will constitute a “Non-Severable Improvement”: Data, know-how, research tools or other broadly enabling technologies.
Project or Programme	A set of research activities.
Publication	The publication of IP or of any part of such IP in any public format including without limitation journals, conference proceedings, conference abstracts, conference presentations, Ph.D./M.Sc./B.Sc. thesis, website.
Research Performing Organisation (RPO)	Any organisation that performs research funded at least in part by the State. 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 the [Programme Plan/programme description, as approved by the relevant State research funding organisation and any industry collaborators], and such other employees (part time or full time), Post Doctoral fellows, visiting scholars, PhD 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).
Significant Background*	Background introduced to a CRP will only constitute “Significant Background” where: <ul style="list-style-type: none"> ● It is the subject of a granted patent, and/or ● The CRP substantially relies on this Background and without it the CRP would be difficult or impossible to carry out. For the avoidance of doubt, the following will not constitute “Significant Background”: Data, know-how.
State-supported research	Research, performed by a RPO, whose direct or indirect costs are partly or wholly paid by the State.
State research funding organisations	Organisations which distribute funding provided by the State, including but not limited to Enterprise Ireland, Health Research Board, Higher Education Authority, Industrial Development Agency, Irish Research Council for Science Engineering and Technology, and Science Foundation Ireland and Government departments.
Technology Transfer Office (TTO)	A team within an RPO which leads work to identify and commercialise IP arising from research by that RPO. Is empowered, within limits of authority set by the RPO and subject to supervision by the cTTO as to its compliance with the requirements of this document, to select the optimum commercialisation strategy in each case, conduct negotiations with external organisations and conclude agreements with those organisations.
Unrestricted Availability	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”).

* Definitions to be developed further by the cTTO.

Appendix V: Membership of IP Working Groups

IP Implementation Group

Chair: Dr Jim Mountjoy, Founder of Euristix, Member of Science Foundation Ireland Board

Dr Jeanne Bolger, Vice-President of Alliance Management and General Manager, Janssen AI, a Johnson & Johnson company

Damien Callaghan, Member of Innovation Taskforce, Investment Director, Intel Capital

Brendan Cremen, Director of Enterprise and Commercialisation, NOVA UCD

Karl Flannery, MD, Storm Technology Limited

Paul Kavanagh, Investor/ Entrepreneur

Barry Kennedy, Research Program Manager, Intel

Tara Mac Mahon, Intel Ireland Ltd

Dr Daniel O'Mahony, Partner, Seroba Kernel Life Sciences

Dr Ena Prosser, Partner, Fountain Healthcare Partners

John Scanlan, Director, Technology Transfer Office, NUI Maynooth

Professor Terry Smith, Vice-President for Research, NUI Galway **Richard Stokes**, CEO, Invent (Technology Transfer Office, DCU)

Secretariat to IP Implementation Group:

Cepta Duffy, Enterprise Ireland

Tara Mac Mahon was seconded to IPIG on a full-time basis from August 2010 to August 2011, when she stepped down to join Intel Ireland Limited. While on secondment, her main role involved researching international trends and preparing reference documents for IPIG's consideration.

Forfás, supported by Arthur D Little, were appointed as facilitators to the process in August 2011, to produce this single document which reflects the deliberations of both IPIG and IPPG. Legal advice on this document was obtained from independent lawyers.

External Legal Advisor

Martin Kelleher, Partner, Mason Hayes & Curran, provided legal advice to the IP Groups.

IP Policy Group

Chair: Martin Shanagher, Assistant Secretary, DJEI, Chair of Interdepartmental Committee on Science, Technology and Innovation

Dr Pamela Byrne, Research, Food & Codex Division, Department of Agriculture, Food and the Marine **Ned Costello**, Chief Executive, Irish Universities Association

Dr Lucy Cusack, Forfas

Dr Paul Dodd, Director, Industry Collaborative Programmes, Science Foundation Ireland

Dr Ruth Freeman, Director, Enterprise & International Affairs, Science Foundation Ireland

Dr Barry Heavey, Vice President, Technology Marketing, Lifesciences, IDA Ireland

Dave Hanley, Principal, Communications (Development) Division, Department of Communications, Energy and Natural Resources

Dr Maura Hiney, Head of Policy, Evaluation and External relations Unit, Health Research Board

Karen Hynes, Manager, Innovation Policy Department, Forfas

Dr Eucharía Meehan, Head of Research Programmes and Capital Programmes, Higher Education Authority

Feargal O'Morain, Director of Research, Innovation and Commercialisation, Enterprise Ireland (to March 2012).





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