INTRODUCTION

On 22 January 2008, the Australian Minister for Innovation, Science and Research announced a review of the ‘National Innovation System’ which intends to analyse the Australian innovation system and to ‘build innovation capacity by bringing sectors, institutions and individuals together’. To achieve innovation through this style of collaboration, the different actors will inevitably need to engage with technologically enhanced research methods and practices known broadly as e-Research. The rapidly emerging e-Research landscape promises to accelerate the discovery of knowledge, to increase the access and dissemination of data and to provide the opportunity for the international and serendipitous exchange of knowledge. The law will play a central role in this
environment. It acts like an infrastructure to shape the flow of knowledge. In many collaborative projects, the negotiation and completion of agreements which outline the project are not only critical, but also represent one of the biggest barriers to effective collaboration. The purpose of this chapter is to consider how the negotiation and contractual frameworks for research can be streamlined to accommodate the coming era of collaborative e-Research.

STREAMLINING THE PROCESS

In a collaborative project, the law should be an enabler to innovation, not an inhibitor:

> It is important that institutional arrangements are made so as to minimize the extent to which the law becomes an impediment to cooperation among researchers, whether directly or indirectly by undermining informal mechanisms of trust and dispute resolution.\(^5\)

For the law to be an enabler, it must be supported by policies, principles and frameworks:

> Perhaps the biggest problem facing e-Research is the lack of understanding and agreement as to what is required in terms of local and national information infrastructure to support e-Research activities. Without this common framework of understanding it is actually very difficult to come to legal agreement as to collaborative arrangements, sharing, and interaction beyond a narrow set of participants. This then actually inhibits the establishment of an open e-Research environment that starts to utilise the potential offered by digital technologies.\(^6\)

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and assisted by Dr Amanda McBratney, Scott Kiel Chisholm, Professor Brian Fitzgerald, Professor Anne Fitzgerald and Dr. John Abbot, 72. A copy of this report can be sourced at: <http://eprints.qut.edu.au/archive/00009112/01/9112.pdf>.
The key question that arises is how to design and streamline the legal agreement process so that collaborative e-Research projects can be established and can commence without unnecessary delay?

To answer this question, four issues need to be considered:

- **Institutional Frameworks and Policies.** The establishment of institutional frameworks (potentially within existing government agencies) which should have input from industry, individuals and other organisations. This framework should facilitate the creation of national, state and localised policies that will promote the flow of knowledge that is necessary for collaboration to occur;

- **Relational Frameworks.** The creation of frameworks which clarify purposes and expectations between parties about collaborative projects and which engender trust and formulate relationships that are effective for collaboration to succeed;

- **Tools.** The design and employment of practical tools which have the effect of shortening the timeframe for the negotiation and drafting of formal collaboration agreements;

- **Application.** The implementation of institutional frameworks which provide training and education in these policies, relational frameworks and tools and that manages their adoption and utilisation by universities, industry and research.

This chapter addresses these four issues by examining:

- The perceptions of stakeholders in relation to collaborative projects and the processes for formalising collaborative project agreements;

- National and international initiatives and studies on proposed policies, frameworks and tools for facilitating collaborative agreements;

- The discussions held at the recent Queensland University of Technology Legal Framework for e-Research Roundtable; and

- Proposals for the streamlining of legal agreements for collaborative projects through institutional and relational frameworks, polices and tools.
STAKEHOLDER PERCEPTIONS – THE LEGAL FRAMEWORK FOR e-RESEARCH SURVEY – 2007

In order to assess the effectiveness of collaborative agreements, frameworks, tools and polices, it is necessary to understand how these issues are perceived by those who work in the collaborative e-Research environment.

In 2007, the Legal Frameworks for e-Research Project conducted a survey entitled Legal and project agreement issues in collaboration and e-Research: Survey Results. The survey obtained evidence from Australian researchers, research managers and legal advisors from universities, industry and government about legal and other issues in collaboration and e-Research. The survey sought to:

... identify common legal and project agreement problems encountered in forming research collaborations in order to from strategies to facilitate and streamline the process of e-Research in the Australian context.

The survey concentrated on three specific themes:

Firstly, what are the legal procedures and norms for formalising collaborative e-Research agreements and how do these procedures and norms affect the parties and the success of collaborative innovation projects?

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7 See Legal and project agreement issues in collaboration and e-Research: Survey Results at <http://eprints.qut.edu.au/archive/00009112/01/9112.pdf>.

8 ‘e-Research’ has been defined as: “…research activities that use a spectrum of advanced ICT capabilities and embraces new methodologies emerging from increased access to; Broadband communications networks, research instruments and facilities, sensor networks and data repositories; Software and infrastructure services that enable secure connectivity and interoperability; and Application tools that encompass discipline-specific tolls and interaction tools...”. The e-Research Coordinating Committee, An Australian e-Research Strategy and Implementation Framework: Final report of the e-Research Coordinating Committee, April 2006. See: <http://www.dest.gov.au/NR/rdonlyres/3AC7BB72-3397–4269-A5FC-6758CDDFEF24/16579/eResearchFinalReportPublicVersionforweb.rtf>


Secondly, what are the problems encountered in negotiating issues of IP ownership, licensing, data access and what are other complications and delays that arise from formalising these agreements? How do negotiations, complications and delays subsequently undermine feelings of trust and endanger the willingness of parties to participate in collaborative innovation?

Thirdly, what are the participant’s views on practical tools, relational frameworks and other strategies for simplifying the agreement process for collaborative e-Research projects?

Survey participants were from research and management roles with most of them working in the university sector. A sizeable number of participants were involved in e-Research, stating that they are ‘often’ or ‘sometimes’ are involved with different parties in collaborative research.

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15 Of the 176 participants, 85 (or 48%) were in research roles, 66 (or 38%) were in research and/or organisational management and 25 (or 14%) were in legal or contracts roles. The majority of participants were from the University sector (64.8%), with 9.1% from Industry/Commercial and 9.1% from Government sectors, 10.8% from other Research Institutes and 6.3% from law firms. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 14.

16 Approximately one-third (34.3%) of participants stated that they are ‘extensively involved’ with e-Research (37.1% moderately involved; 18.3% ‘slightly involved’ and 10.3% ‘not at all involved’). Thirty-one percent of researchers, 41% of research/organisational managers, and 28% of the legal/contracts respondents stated that they are ‘extensively involved’ in e-Research. See Figure 3. Respondent’s Involvement in e-Research, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 15.

17 Universities 96%. Research institutions 85%. Industry participants 78%. See Figure 5. Relative Frequency of Involvement with Differing Parties, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 21.
Support for Collaboration

Overall, the survey participants supported the concept of collaboration and in particular identified the attainment and the sharing of knowledge as being a major benefit of collaborative research. Participants ranked the importance of collaborative outcomes in the following order; the co-authoring of publications, the inflow of knowledge, the sharing of knowledge by public disclosure or publications, the improvement of research practices, the production of IP such as patents and copyright and obtaining access to improved work practices and better equipment or facilities.\(^\text{18}\) Benefits such as royalties, revenue, return on investment, licenses and start-up companies were less relevant outcomes for the participants.\(^\text{19}\) These results may reflect the academic nature of many survey participants.

Formal and Informal Collaboration

Many survey participants provided evidence of a strong culture of informal collaborative agreements and informal collaborative networks.\(^\text{20}\) Less than half of the participants were involved in collaborations where formal collaborative agreements were entered into (such as master research agreements and licences).\(^\text{21}\)

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\(^{18}\) See Figure 8. Importance of Research Outcomes to Collaborative Projects, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 32.

\(^{19}\) See Figure 8. Importance of Research Outcomes to Collaborative Projects, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 32.

\(^{20}\) ‘Informal networks (including informal conversations, conference interactions), informal agreements leading to co-authored publications’ and ‘single research contracts’ were the most frequent arrangements cited. Approximately 70% of respondents stated that their collaborations often involve informal networks (including informal conversations, conference interactions). Only 7% of the sample stated that their collaborations often involve joint ventures, cross-licensing or and technical assistance agreements. See Figure 7, Relative Frequency of Various Types of Collaboration Agreements/Arrangements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 26.

\(^{21}\) 44%. See Figure 7, Relative Frequency of Various Types of Collaboration Agreements/Arrangements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 26.
This preference for informal collaborative arrangements may stem from evidence that formal collaborative research agreements can take anything from three months for a simple two-party agreement to eight months for large, complex or multi-party agreements to be finalised.\textsuperscript{22}

Participants made particular comment about this issue:

“Legal agreements represent the largest impediment to timely research …”\textsuperscript{23}

“… Unfortunately the formal agreements we use are becoming increasingly impractical due to the time and costs of developing the agreements …”\textsuperscript{24}

“We had a 12-month ARC grant for which it took 15 months to get an MOU signed”\textsuperscript{25}

“Legal advice often tends to make the collaboration so formal /complicated that it endangers the willingness of collaborators to participate. Sometimes legal advice is too oriented towards protecting the interests of my organisation, so that it does not see that formal agreements need to be balanced win-win arrangements”\textsuperscript{26}

Survey participants also stated that given the timeframes of the parties, collaborative projects often commence before a formal collaborative agreement has been finalised:\textsuperscript{27}


\textsuperscript{27} Commencing collaborative research projects prior to the signing of agreements is a relatively common practice; with 26% stating that they ‘often’ and 54.2% stating that they ‘sometimes’ commence projects before agreements are signed (only 6.8% stated that they never start projects prior to sign-off). The Legal Framework for e-Research Project’s Report, \textit{Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results}, 40.
“… you’ve got a short-ish timeline, and you can’t afford to wait months for the haggling to stop. If you don’t start before the contract is signed, you’ll won’t finish on time and end up in violation of the terms of agreement” 28

“The legal and contractual processes can often be much slower than the time it actually takes to complete the research!”29

Many participants felt that there were certain issues that caused problems in the negotiation and the performance of formal collaborative research agreements which included: intellectual property-ownership; data ownership and access; intellectual property-licensing and the over-valuing of intellectual property.30 These negotiation difficulties are perceived as eroding the feelings of trust between the participants: 31

It is the mutual rapport and trust between parties that is vitally important. If there is no trust then even a perfectly good legal document may be misused … 32

Tellingly, a majority of participants stated that the negotiation of a formal agreement ‘became too complex’33 because of ‘differing expectations’34 between the project parties and believed that negotiating with university technology transfer offices, industry and government

30 See Figure 11. Specific Problems in Negotiating Formal Agreements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 47.
31 Over one-third of the sample (36%) stated that sometimes negotiation difficulties prevented the project from proceeding and that trust had been eroded. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 43.
33 See Figure 10. General Problems in Negotiating Formal Agreements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 43.
34 See Figure 10. General Problems in Negotiating Formal Agreements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 43.
agencies carry with them their own particular difficulties when entering into formal agreements.\(^{35}\)

Despite the existence of a culture of informal collaboration, a sizeable number of survey participants indicated that they still want formal agreements for collaborative projects.\(^{36}\) Interestingly, many participants stated that their collaborations never involve the need for patent protection or licensing arrangements.\(^{37}\)

Participants stated that for collaborative projects to succeed they needed shared goals, good relationships and communication with their project partners.\(^{38}\) Most importantly, they wanted formal agreements that were easy to enter into,\(^{39}\) particularly agreements which specifically addressed intellectual property, data ownership or data access and which exhibited a degree of flexibility in their application to collaborative projects.\(^{40}\)

\(^{35}\) See Figure 10. General Problems in Negotiating Formal Agreements, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 43.

\(^{36}\) Almost one-third of the sample believe that formal agreements are always necessary (31.1%), with approximately two-thirds stating that formal agreements are sometimes necessary (68.0%). Over half of the sample (56.5%) also stated that they never conclude formal agreements without consultation or assistance. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 39.

\(^{37}\) Approximately one-in-three participants stated that their collaborations never involve patents, software, know-how or other intellectual property licences or Cooperative Research Centres. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 25.

\(^{38}\) Approximately half (49.0%) of comments made predominantly reflect the importance of research synergies and shared goals and resources, with approximately 40% of comments referring to the importance of good relationships and communication. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 37.

\(^{39}\) 92% of participants believed that formal agreements which were easy to enter into was ‘somewhat’ to ‘very important’ in order to increase collaborative e-Research. See Figure 14. Future Importance of Various Contracting Issues, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 62.

\(^{40}\) Intellectual property (53% stating that it will be ‘very important’ and 38% stating that it will be ‘somewhat important’), ‘Data ownership or access’ (51% stating that it will be ‘very important’ and 42% stating that it will be ‘somewhat important’) and ‘Flexibility of formal agreements’ (43% stating that it will be ‘very important’ and 48% stating that it will be ‘somewhat important’). See Figure 14. Future Importance of Various Contracting Issues, The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 62.
NATIONAL AND INTERNATIONAL INITIATIVES – PREVIOUS STUDIES

The issues raised by the survey report are reflective of concepts that have also been examined by significant Australian and overseas studies in the area of collaborative research. These studies themselves have many themes in common with each other, such as:

Links or partnerships between industry, universities and research institutions are necessary for increasing collaborative research,\(^{41}\) however issues regarding IP ownership and access are often viewed as impediments to collaboration;

There is a need for uniform and national approaches to IP ownership and licensing and establishing a set of best practice principles for industry and university collaboration with publicly funded research agencies;\(^{42}\) and

The final value of an output should be shared equitably, based on the direct proportional value of the inputs to a project.\(^{43}\)

Some of the recommendations, documents, guidelines or interactive tools which these studies have proposed are examined below. These proposals fall within four broad categories being;

- Technology enabled collaborative research agreements;
- Template collaborative research agreements;

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\(^{41}\) The Prime Ministers Science, Engineering and Innovation Council (PMSEIC) Report *Australia’s Science and Technology Priorities for Global Engagement*, December 2006, 61.


Guidelines which advise parties on how to construct and draft collaborative research agreements for university - industry collaborations or to meet funding requirements;\(^{44}\) and

The creation of institutional frameworks which co-ordinate and facilitate the streamlining of legal processes for formal collaborative agreements.\(^{45}\)

TECHNOLOGY ENABLED COLLABORATIVE RESEARCH AGREEMENTS

The UIDP TurboNegotiator Project – 2006

A current project which is attracting much interest is the TurboNegotiator ("TN"), established by the University-Industry Demonstration Partnership ("UIDP")\(^ {46}\). The TN Project started in July 2006 and seeks to create an online methodology for constructing effective and equitable university-industry collaborative research agreements from clauses selected by the TN program in accordance with its *Guiding Principles for University-Industry Endeavours*.\(^ {47}\) These principles


\(^{45}\) This is exampled by Professor Paul A. David, and Dr. Michael Spence, *Towards institutional infrastructures for e-Science: the scope of the challenge*. See <http://www.oii.ox.ac.uk/research/publications.cfm>.

\(^{46}\) The UIDP was established on 1 August 2006 has participating members from both industry and universities and is convened by The National Academies, Washington. UIDP developed out of the University-Industry Partnership Project (Established in 2003 and funded by the US National Council of University Research Administrators) Mayo, Merrilea J., *Current Status of University-Industry Relationships in the U.S. Innovation System*. See <http://www.uidp.org/UIDP_Intro.pdf>, 2–3.

state that universities, research organisations and industry must understand:

- The various levels of their respective contributions to collaborative projects;\(^48\)
- Each other’s objectives or ‘missions’, such as university interest in knowledge sharing and education and industry’s interest in profitability;\(^49\)
- Their respective constraints in a collaborative project, particularly the need of industry partners for timely agreements which ensure appropriate commercial returns;\(^50\) and
- The need to develop long-term relationships in collaborative research.\(^51\)

TN was commenced following evidence showing that the negotiation of university-industry research agreements in the US is a barrier to research collaboration.\(^52\)

The TN online program is designed to balance each party’s interests, contributions and constraints regarding a collaborative project. Agreements are formed which are tailored to the parties’ interests, instead of them having to conform their interests to the parameters of an established template agreement.

Importantly, TN contains a ‘project space’ in which university and industry parties can obtain general consensus about each others perceptions and ideas for a collaborative project, before they select appropriate clauses for the research agreement. The project space includes ‘consensus statements’ which guide parties in dealing with contentious issues. Each statement comments on the issue at hand, explains the reasoning behind the statement, sets out ‘principles’ which


\(^{52}\) Evidence presented at the University-Industry Congress Summit, Washington, 25 April 2006.
the parties must adhere to and lists other factors or comments that should be considered.53

The TN software interview tool asks a series of questions of each party to the project. The questions are organised into specific sections relating to budgetary and investment considerations, the nature of the research, background IP, the probability of inventions resulting from the project, disclosure requirements, export controls, indemnification and potential conflicts of interest.54 The answer provided to each question then determines the suggested agreement clauses. This tool will provide more than one alternative clause for the parties to choose from.55

Clauses which are suggested then hyperlink to further information about their suitability in relation to each party’s interests and their overall effect on the agreement and the project. Examples of such questions include: What is the nature of the project?; What are the disciplinary areas which the project encompasses?; What is the nature and extent of each parties contributions to the project?; What is the likelihood of a patentable result arising out of the project?; What are the costs to each party of participating and each party’s market presence?; Who developed the research project concept and who made creative contributions to that concept?; Why do the parties want to work together?; Who owns background IP that could have impact on the project?; Who is funding the project?; What are the financial and non-financial contributions from the parties?; What are the types of labour and non-labour contributions

53 There are draft consensus statements for how to produce a ‘statement of work’ of aims and activities for the project, how to determine issues of indemnification in the project, how to balance issues regarding the publication of project IP, dealing with copyrightable and other research results and dealing with background IP. See the drafts from the UIDP meeting April 9 to 10, 2008 at <http://www.osp.gatech.edu/TN/documents/ConsensusStmt04_09_08.doc> and see presentation by Julia Garton, TurboNegotiator, Milestones and Pathways, 23 July 2007, Third Meeting of the University-Industry (Demonstration) Partnership, July 23–24, 2007. The National Academies Washington. See <http://www.uidp.org/UIDP_ARCHIVED_MEETINGS.html>.

54 See the trial TurbNegotiator software (Limited to questions on IP issues) at: <http://www.osp.gatech.edu/TN/index.html>.

from the parties?; How important are they?; and Is there a need for confidentiality about the project?\footnote{56}

TN will also measure how much time an agreement will take to finalise using the TN program. This data will be used to compare against how much time it takes to finalise non-TN facilitated agreements. It is still in the process of being developed and the UIDP has gone through several stages of development to date, incorporating member surveys, consultations and clinical software trials of the questionnaire program. The UIDP also hopes to develop a negotiation guide and/or a manual which will train negotiators in accordance with the program methodology and eventually, a national database of TN sourced data which can analyse negotiation trends and factors that impede negotiations. A working prototype of TN is expected to be available for internal UIDP trialling by December 2008.\footnote{57}

### TEMPLATE COLLABORATIVE RESEARCH AGREEMENTS

**B-HERT – 1996**

In contrast to the approach taken by UIDP, there have been a number of studies that advocate the use of template agreements for collaborative research projects.

In 1996, B-HERT\footnote{58} published a report, *Partners in Intellectual Property*,\footnote{59} which comparatively analysed the IP policies of certain higher education and research institutes. The report found that the interests of industry and the interests of universities and research differ in the development and commercialisation of IP. The objectives of universities and research


\footnote{57} See the UIDP website at <http://www.uidp.org/UIDP_PROJECT_STATUS.html>.

\footnote{58} B-HERT is an association of Australian universities, corporations, professional associations and major public research organisations that seeks to “…pursue initiatives that will advance the goals and improve the performance of both business and higher education for the benefit of Australian society” by “…[influencing] public opinion and government policy on selected issues of importance”. See <http://www.bhert.com/aboutBHERT_Mission.htm>.

are largely identified as the advancement of knowledge as a contribution to society, whereas the objectives of industry are commercial and based upon achieving specific returns on investments.

The report also identified ‘friction points’ between universities, research and industry during negotiations about IP, including:

- Users’ rights and the reservation of rights to use the IP,\(^{60}\) IP ownership issues regarding the ineffectiveness of joint ownership,\(^{61}\) royalty payments for improvements\(^{62}\) and competing interests between the use of exclusive licensing and assignments;\(^{63}\)

- Management issues such as profit sharing,\(^{64}\) maintenance of communication\(^{65}\) and relationships,\(^{66}\) the rights of students to royalty income,\(^{67}\) the status of project workers as inventors,\(^{68}\) the publication of commercially sensitive work\(^{69}\) and expectations for performance timeframes which are held by both parties;\(^{70}\)

- Cultural differences between industry and universities or research such as differences in negotiating and management styles,\(^{71}\) over reliance on legal expertise\(^{72}\) and the lack of experienced joint project supervisors;\(^{73}\) and

- Unsuitable and inflexible contracts such as the over use of standard form contracts by industry or government

\(^{60}\) Partners in Intellectual Property, 4.

\(^{61}\) Partners in Intellectual Property, 5.

\(^{62}\) Partners in Intellectual Property, 5.

\(^{63}\) Partners in Intellectual Property, 6.

\(^{64}\) Partners in Intellectual Property, 6.

\(^{65}\) Partners in Intellectual Property, 6.

\(^{66}\) Partners in Intellectual Property, 7.

\(^{67}\) Partners in Intellectual Property, 7.

\(^{68}\) Partners in Intellectual Property, 7.

\(^{69}\) Partners in Intellectual Property, 7.

\(^{70}\) Partners in Intellectual Property, 9.

\(^{71}\) Partners in Intellectual Property, 10.

\(^{72}\) Partners in Intellectual Property, 10.

\(^{73}\) Partners in Intellectual Property, 10.
organisations in their dealings with universities and research institutions.\textsuperscript{74}

Importantly, the report proposes that collaboration parties enter into a ‘Partnering Concept’\textsuperscript{75} for the development and commercialisation of IP as a starting point for negotiations. The Partnering Concept discusses issues such as users’ rights, IP ownership, maintaining communication and relationships and timing expectations.\textsuperscript{76} It envisages three types of collaboration agreement scenarios:

- Universities or research organisations are the source of the background IP that is brought to the project;
- Industry is the source of the background IP that is brought to the project; and
- Where the background IP is still in the conceptual phase.\textsuperscript{77}

The report provides a contractual template for either the assignment or the licensing of IP rights called the ‘Grant of Intellectual Property Rights’. It contains clauses that address IP licensing and assignment, consideration and warranties,\textsuperscript{78} but it does not address the publication of IP results, management issues and contractual flexibility.

The Lambert Review - 2003

The use of template agreements for collaborative research projects was taken to a greater level of practical application by the U.K. Lambert Review in 2003.

In 2002, the United Kingdom Department for Education and Skills and the Department for Trade and Industry commissioned Richard Lambert to undertake a nationwide review of university and industry collaboration in the United Kingdom. The U.K. government was concerned that domestic business funded research was falling behind

\textsuperscript{74} Partners in Intellectual Property, 11.

\textsuperscript{75} Partners in Intellectual Property, 26.

\textsuperscript{76} See clauses 3, 4, 7 and 8 and Annexure C to Partners in Intellectual Property.

\textsuperscript{77} Partners in Intellectual Property, 27. It is unclear whether the Partnering Concept is intended to be a voluntary protocol or a binding agreement. Further, the report does not address issues of cultural differences or contractual flexibility.

\textsuperscript{78} Partners in Intellectual Property, 40–48.
that of other major economies.\textsuperscript{79} Consequentially, they wanted strategies to increase domestic and international business demand for British research and development and in particular, to improve the level of collaboration between industry and U.K. universities.\textsuperscript{80}

After its establishment in 2002, the Lambert Review of Business-University Collaboration went on to examine various barriers to increased industry and university collaboration, how they could be removed and how opportunities for collaboration could be increased. It identified case studies for industry-university collaborative ventures and analysed numerous stakeholder submissions on issues of collaborative research and government policy.

The Review issued \textit{The Lambert Review of Business-University Collaboration - Final Report} in 2003. It contains thirty-three recommendations covering a broad range of policy strategies for facilitating knowledge transfer, third stream funding, university codes of governance and formal and informal networks between business people and academics. The Report specifically examined the role of collaborative research in promoting the transfer of knowledge between universities, industry and the wider community\textsuperscript{81} and in doing so identified:

\begin{quote}
\ldots that collaborative research is one of the most effective forms of knowledge transfer.\textsuperscript{82}
\end{quote}

It concluded that disagreements often arise in negotiations between industry and universities over the ownership of IP and exploitation rights, which were identified as time-consuming and expensive.\textsuperscript{83} Failure to agree on IP ownership often deterred both industry and universities from research collaboration.\textsuperscript{84} This is compounded where the parties fail to understand each other’s intentions for the resulting IP, particularly where there is:

\begin{itemize}
\item \textit{The Lambert Review of Business-University Collaboration – Final Report}, Chapter 3.
\end{itemize}
... no clear framework ... to help the two sides balance their competing interests.\textsuperscript{85}

The report firstly recommended that a set of model collaborative research agreements be created and used on a voluntary basis in order to speed up negotiations in university-industry collaborative projects.\textsuperscript{86}

Secondly, an ‘IP protocol’ should be established between industry and universities as a starting point for negotiation. Under the protocol, universities would automatically own the IP arising from collaborative research and industry would be able to negotiate the licensing of this IP. Industry could still own this IP whenever it makes significant contributions to the collaborative project.\textsuperscript{87} Regardless of how IP ownership is determined, the protocol requires that universities must not be restricted in their future research capabilities, business must develop IP applications in a timely manner and the substantive results of the research must be published within an agreed period.\textsuperscript{88}

In 2004, the Lambert Working Group was established. It was chaired by Richard Lambert and included stakeholders from industry and university bodies. The Lambert Working Group developed five model research collaboration agreements (and supporting materials) known as ‘Model Agreements’.\textsuperscript{89}

Model Agreements One, Two and Three are designed to start negotiations between university and industry from the position that:

- The university owns the IP that results from the project.\textsuperscript{90} The university is free to publish about the IP or have its staff and students discuss the project in tutorials or lectures\textsuperscript{91} (unless business or industry has issued a ‘confidentiality notice’ to


\textsuperscript{86} The Lambert Review of Business-University Collaboration – Final Report, 3.37.

\textsuperscript{87} The Lambert Review of Business-University Collaboration – Final Report, 4.19 - 4.27.


\textsuperscript{89} See the Lambert Model Agreements at<http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=2&lvl2=0&lvl3=0&lvl4=0>.

\textsuperscript{90} For example, clause 4.3. Model Collaborative Research Agreement No1.

\textsuperscript{91} For example, clause 5.1. Model Collaborative Research Agreement No1.
prevent publication and discussion until patent or other protection for the IP has first been obtained);\(^{92}\)

- Each party retains ownership in their own IP which they bring to the project,\(^ {93}\) but grants to each other a royalty-free, non-exclusive licence to use this ‘background’ IP only for the purposes of the project;\(^ {94}\)

- The university grants a non-exclusive licence to industry to use the IP resulting from the project for any purpose within an agreed ‘field’\(^ {95}\) or territory (indefinite, fully paid-up and royalty free);\(^ {96}\)

- The non-exclusive licence allows industry to sub-license the IP, provided it is to employees or agents and it is for the purposes of the project;\(^ {97}\)

- The information, techniques or know-how which each party brings to the project cannot be disclosed to third parties;\(^ {98}\)

- A university will not be in breach of confidence by publishing or permitting discussion of IP, provided that they have not first received a ‘confidentiality notice’ from industry.\(^ {99}\) This notice is designed to protect confidential information regarding business and industry and to minimise any risk to the possibility of obtaining a patent or other protection for the IP results.\(^ {100}\)

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\(^{92}\) For example, clause 5.2. Model Collaborative Research Agreement No1.

\(^{93}\) For example, clause 4.1. Model Collaborative Research Agreement No1.

\(^{94}\) For example, clause 4.2. Model Collaborative Research Agreement No1.

\(^{95}\) Meaning a specific business or technological area. See the definition of ‘The Field and the Territory’ in the Lambert Agreements Guidance Notes at <http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=3&lvl2=0&lvl3=0&lvl4=0#note9>.

\(^{96}\) For example, clause 4.5. Model Collaborative Research Agreement No1.

\(^{97}\) For example, clause 4.5. Model Collaborative Research Agreement No1.

\(^{98}\) For example, clause 6. Model Collaborative Research Agreement No1.

\(^{99}\) For example, clause 6.3. Model Collaborative Research Agreement No1.

\(^{100}\) See the sample confidentiality notice at <http://www.innovation.gov.uk/lambertagreements/files/Sample_Confidentiality_Notice.DOC>.
Model Agreement One is the basic non-exclusive licence model. Models Two and Three repeat the provisions of Model Agreement One and only differ from it in further providing: an option for industry to negotiate an exclusive license rights for IP or an option for industry to take an assignment of IP. In both Model Agreements Two and Three, the university still retains the right to use the IP for academic teaching and research.

Model Agreements 4 and 5 are designed to start negotiations between university and industry from the position that:

- Industry owns the IP resulting from the project. The university or any student or contractor must assign any rights they have in the resulting IP to industry;
- Each party retains ownership in their own IP which they bring to the project, but grants to each other a royalty-free, non-exclusive licence to use each others ‘background’ IP only for the purposes of the project;
- Unlike Model Agreements 1 to 3, industry does not grant universities a non-exclusive licence to use the resulting IP outside of the actual project.

101 For example, clause 4.6. Model Collaborative Research Agreement No.2.

102 For example, clause 4.6. Model Collaborative Research Agreement No.3.

103 For example, clause 4.7. Model Collaborative Research Agreements No.2 and No.3.

104 For example, clause 4.3. Model Collaborative Research Agreements No.4 and 5.

105 For example, clauses 4.3 and 4.4. Model Collaborative Research Agreements No.4 and 5.

106 For example, clause 4.1. Model Collaborative Research Agreements No.4 and 5.

107 For example, clause 4.2. Model Collaborative Research Agreements No.4 and 5.

108 For example, clause 4.6. Model Collaborative Research Agreements No.4 and 5.
Model Agreement 4 provides the ability for universities to still publish and disseminate the IP for the ‘advancement of education through teaching and research’\(^\text{109}\) (subject to the terms of any ‘confidentiality notice’ issued by industry).\(^\text{110}\)

Under Model Agreement 5, the university has no publication or dissemination rights as in Model Agreement 4\(^\text{111}\) and can only use resulting IP for the purposes of the project itself.\(^\text{112}\)

The Lambert Working Group has also supplied an ‘Outline’, consisting of questions designed to prompt the parties to think about and to discuss with each-other certain issues about the project before they select one of the model agreements, being; financial contributions, background IP, the project results, confidentiality and publication, liability and termination.\(^\text{113}\)

A ‘Decision Guide’\(^\text{114}\) is also available for use in connection with the agreements. The guide provides a series of questions designed to determine which of the five agreements is best suited for the project at hand, based on each party’s answers to those questions. The questions focus on issues such as; reliance on background IP by the parties and the need for access to background IP;\(^\text{115}\) the need for universities to publish results and the need of sponsors to countenance publication;\(^\text{116}\) which

\(^{109}\) For example, clause 5.1. Model Collaborative Research Agreements No.4.

\(^{110}\) For example, clause 5.2. Model Collaborative Research Agreements No.4.

\(^{111}\) See the Outline of the Lambert Agreements at <http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=4&lvl2=0&lvl3=0&lvl4=0>.

\(^{112}\) For example, clause 4.6. Model Collaborative Research Agreement 5.

\(^{113}\) See the Outline of the Lambert Agreements at <http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=4&lvl2=0&lvl3=0&lvl4=0>.

\(^{114}\) See the Outline of the Lambert Agreements at <http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=2&lvl2=1&lvl3=0&lvl4=0>.

\(^{115}\) Sections 1, 2 and 4. The Lambert Agreements Decision Guide.

\(^{116}\) See <http://www.innovation.gov.uk/lambertagreements/index.asp?lvl1=2&lvl2=1&lvl3=0&lvl4=0>.
parties have lead the projects, the relevancy of results to each party; the likelihood of patentable results and the likelihood of results that industry may not be interested in;\textsuperscript{117} the need for exclusive licences; funding and budget considerations;\textsuperscript{118} who was the catalyst for the project; what the parties’ interest in the project is and what are the parties financial and non-financial contributions to the project.\textsuperscript{119}

‘Guidance Notes’ are also available which provide plain English definitions of the defined terms used in the agreements and explanations about the effect and intention of certain clauses.\textsuperscript{120}

CRC INC - 2006

The concept of template collaborative research agreements was also considered by the Australian Institute for Commercialisation (\textit{“AIC”}\textsuperscript{121}) and the Cooperative Research Centres Association (\textit{“CRCA”}\textsuperscript{122}) who in 2006 produced a ‘Model Constitution Document’ and a ‘Model Participants Agreement’ for use where a CRC is being formed as a joint venture company limited by guarantee.

The AIC and the CRCA recommend that:

… the template documentation should be treated as a starting point and each CRC and its participants must seek their own professional legal, accounting and taxation advice to determine whether they appropriately address the objectives and risks applicable to their own CRC.\textsuperscript{123}

\textsuperscript{117} Section 3. The Lambert Agreements Decision Guide.

\textsuperscript{118} Section 4. The Lambert Agreements Decision Guide.

\textsuperscript{119} Additional Questions. The Lambert Agreements Decision Guide.

\textsuperscript{120} The Lambert Agreements Decision Guide.

\textsuperscript{121} The AIC is a private organisation that provides consultancy services in the technology transfer facilitation and brokerage of intellectual property. See the AIC website at <http://www.ausicom.com/01_cms/details.asp?ID=19>.

\textsuperscript{122} The Cooperative Research Centres Association is the umbrella organisation for the 56 Cooperative Research Centres (\textit{“CRGs”}) that operate in Australia in six industry areas. The stated aim of the CRC Programme (administered by DEEWR) is to “…enhance Australia’s industrial, commercial and economic growth through the development of sustained, user-driven, cooperative public-private research centres that achieve high levels of outcomes in adoption and commercialisation”. See <http://www.crca.asn.au/about_crcs/default.htm>.

The ‘Constitution Document’ is a company constitution document and details standard procedures for the CRC company’s organisation, including membership, general meetings, voting, the appointment and removal of directors and the powers and remuneration of directors.

The ‘Participants Agreement’ is a template contractual agreement between the ‘Participants’ and the CRC company. The intellectual property clauses set out rights and obligations about the use of background IP, the ownership of CRC IP and its commercialisation. All background IP is licensed by participants to each other and to the CRC company and depends on whether it will be used for either the project, for commercialisation or for general use. IP generated by a CRC project can be owned in accordance with the following options:

- The CRC company owns the project IP; or
- The Participants and the CRC company will own the beneficial interest in the project IP as tenants in common in accordance with the ‘Project Shares’ or in equal shares if no ‘Project Shares’ are specified; or
- The CRC company owns the interest of the Participants in the project IP on trust.

This agreement is primarily designed for the commercialisation of resulting project IP by the CRC company because it has an exclusive right to commercialise the project IP and grant licences. Non-company Participants must obtain a licence to use project IP, unless otherwise authorised. They must provide information about project IP to the company when requested and must not deal with CRC IP in any way unless authorised. Non-company Participants must grant the company a perpetual, irrevocable, royalty-free, non-exclusive licence for

\[124\] Participants are those persons or bodies (other than the Company) who sign the Participants Agreement. See the definition of “Participants”. Clause 1.1 of the Participants Agreement.

\[125\] Clause 22.1 of the Participants Agreement.

\[126\] Being the proportional entitlement of Participants and the CRC company as set out in the agreement. See the definition of “Project Shares” Clause 1.1 of the Participants Agreement.

\[127\] Clauses 23.1 and 23.2. Participants Agreement.

\[128\] Ibid, Clause 22.6. Participants Agreement.

\[129\] Ibid, Clause 22.15. Participants Agreement.

\[130\] Ibid, Clause 22.13. Participants Agreement.
any improvements which non-company Participants make to the project IP.\textsuperscript{131}

This agreement also requires that a ‘Commercialisation Plan’ must be circulated to all participants before the project IP is exploited.\textsuperscript{132} Non-company Participants cannot commercialise project IP and can only use it for teaching purposes or for internal research, provided that this use does not impede upon designated confidential information or the ability to protect and commercialise resulting IP.\textsuperscript{133}

GUIDELINES

CREST - 2006

In addition to the issue of how collaborative research agreements are to be created, a number of studies have developed guidelines or toolkits which will assist parties in choosing and constructing these agreements. This issue was examined by the CREST OMC 2\textsuperscript{nd} Cycle Expert Group on Intellectual Property \textsuperscript{134} in 2006 when it published their report Cross-Border Collaboration between Publicly Funded Research Organisations and Industry and Technology Transfer Training.\textsuperscript{135} CREST sought to produce guidelines which improve the ‘coherence and effectiveness’ of IP ownership rights that are ‘applicable in publicly funded research’\textsuperscript{136} and to develop

\textsuperscript{131} Ibid, Clause 22.16. Participants Agreement.

\textsuperscript{132} Ibid, Clause 23.4. Participants Agreement.

\textsuperscript{133} Ibid, Clause 22.15. Participants Agreement.

\textsuperscript{134} This group was established in 2005 and is one of the five expert groups created by CREST, the European Union’s Scientific and Technical Research Committee. This group consists of members from various European government departments, patent offices and the European Commission.


methodologies for improving and facilitating cross-border collaborative projects.\(^{137}\) The report proposed that a toolkit be adopted to enable a collaborating party to identify how IP issues are handled in another European Union member state. The toolkit is designed to assist parties to make a decision about the best strategy for determining ownership of and access to the IP resulting from a project. It does this by providing explanation and commentary on ownership and rights to use IP, financial contributions made by industry, the university’s use of results of academic purposes and cross-border differences and legal requirements for other project partner’s jurisdictions.

The CREST toolkit is currently active,\(^{138}\) although it is still under development and is subject to a review at the end of 2008. It consists of a ‘First Step’ which is an interactive checklist of questions that users answer. The questions relate to deciding a suitable position for ownership of the IP rights and provide answers based on a proportion of ‘Yes’ responses on a scale of one to ten. The questions look at issues such as; the importance of results for future activity; exploitation of the results; who conceived the project?, what is the purpose of the project? and why the respective industry and university parties want to fund or carry out the project?\(^{139}\) It also provides a ‘Second Step’ for guidance on cross-border issues regarding IP rights and ownership, negotiations, funding, confidentiality, publication and the protection and enforcement of IP rights.\(^{140}\) This ‘Second Step’ is meant to be used in conjunction with ‘Fact Sheets’ in relation to each member state. The ‘Fact Sheets’ explain:

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- Types of IP rights which can be obtained from universities/research institutes\textsuperscript{141} in another member state\textsuperscript{142} and their particular rules or requirements regarding confidentiality or publication;
- Who owns the IP rights at these universities/research institutes, the legal situation regarding IP rights derived from public funding and differences between the member states that impact on the ownership of IP rights;
- Who is entitled to negotiate IP contracts at universities/research institutes, what are the terms on which IP rights can be obtained and at what price;
- How funding affects IP ownership and exploitation and any relevant tax effects that impact on funding;
- Specific requirements regarding IP rights, who will pay for the costs of obtaining them, who will enforce them and links to further information about IP rights.\textsuperscript{143}

The toolkit contains a ‘Decision Guide’ which proposes five ownership positions that the project parties could adopt, being:

- The university owns the IP and grants a non-exclusive licence to industry to use the IP in a specific field or geographical area;
- As above, with industry having a right to negotiate to acquire an exclusive licence to certain IP;
- As above, with industry having a right to negotiate to take ownership of the IP through an assignment;
- Industry owns the IP with university reserving a right to use IP for teaching, research and publication, subject to confidentiality conditions; or
- As above, but the university has no right to publish the IP.\textsuperscript{144}


\textsuperscript{142} Such as patents copyrights, trademarks or designs.

Interestingly, these ownership positions have degrees of similarity to the ownership positions under the Lambert Model Agreements.

The toolkit also includes the ‘Intellectual Property Right Interactive Visualisation Tool’. This software tool enables users to select two member state countries and then obtain; a comparison of legislative and legal positions between the two countries in relation to the types of IP rights available in each country; each states position on the ownership of IP rights and the negotiation of IP rights contracts; the effect of funding on IP rights contracts; confidentiality and publication; and the protection and enforcement of IP rights. This particular tool also links to country specific websites about government activities and national laws which are relevant to these issues.\(^{145}\)

**Commission of the European Communities Voluntary Guidelines – 2007**

Collaborative guidelines were also set down by the Commission of the European Communities who in 2007 produced a Commission Staff Working Document as a response to a survey into cooperation and knowledge transfer between universities, research institutes and industry.\(^{146}\)

The Commission recommended guidelines for developing a standard approach for the management and transfer of knowledge and intellectual property regarding publicly funded collaboration projects.\(^{147}\) These guidelines have established ‘good practices’ for publicly funded


collaborative research contracts in Europe. Some of the practices emphasise personal relationships, openness and compatibility with the universities goals or ‘mission’ and recommends use of the CREST decision guide. They also focus on: communication in negotiations to avoid misunderstandings; a clear delineation of rights between the parties; the ownership of IP and access rights and determining the likely commercial applications of the project from the outset; identification of financial and non-financial input to a project by the respective parties; clear discussion regarding the nature and scope of a project, the protection for IP rights; the impact on each others future research; the usage of model contracts and whether model contracts will permit negotiation on background IP, ownership, confidentiality issues and access rights.\(^{148}\)

The guidelines also contain general advice on non-exclusive licensing or assignments and advocates that universities and research institutions should reserve the right to publish IP results in collaborative agreements. It advises that they should only keep IP results confidential, subject to ‘detailed assessment and justification’.\(^{149}\)

FP7 – 2007:

The European Commission Seventh Framework Programme (“FP7”) is an interesting example of a study which at first tried to create uniform agreements solely from guidelines, without providing a draft agreement for reference purposes. However, a group of FP7 stakeholders later created a draft template agreement to assist parties to comply with those guidelines.

FP7 commenced in 2007\(^{150}\) and sought to make the European Union a dynamic competitive knowledge-based economy\(^{151}\) through a combination of ‘research, education and innovation’.\(^{152}\) FP7 provides

\(^{148}\) Commission of the European Communities, Commission Staff Working Document Voluntary Guidelines for Universities and Other Research Institutions to Improve their Links with Industry Across Europe, 10–12.

\(^{149}\) Commission of the European Communities, Commission Staff Working Document Voluntary Guidelines for Universities and Other Research Institutions to Improve their Links with Industry Across Europe, 14–15.

\(^{150}\) The European Union implements numerous ‘framework programmes’ to support research activities in the European Union of which FP7 is the latest such programme.

\(^{151}\) See the FP7 website at <http://ec.europa.eu/research/leaflets/fp7/page_03_en.html>.

\(^{152}\) See the FP7 website at <http://ec.europa.eu/research/leaflets/fp7/page_03_en.html>.
funding grants, in accordance with established regulations, to collaborative projects involving researchers, research centres, universities and other entities.\textsuperscript{153} The regulations are mandatory upon parties who wish to obtain FP7 funding and it provides guidelines to drafting a collaborative research agreement.\textsuperscript{154} The guidelines and regulations include the following:

- Resulting IP is owned by those participants who generated it. Where respective shares are unable to be ascertained, the parties shall have joint ownership,\textsuperscript{155} unless they agree on a different solution. Resulting IP must be protected by the owner\textsuperscript{156} or else the European Commission may take ownership.\textsuperscript{157} Resulting IP can be transferred,\textsuperscript{158} however the Commission can prevent transfer if it is not in accordance with developing the competitiveness of the European economy.\textsuperscript{159} Commercial use will only be undertaken for valid commercial reasons;\textsuperscript{160}

- FP7 funding recipients must use and disseminate the resulting IP,\textsuperscript{161} providing that the parties have made a decision about possible IP protection\textsuperscript{162} and confidentiality.\textsuperscript{163} Interestingly, there is no express prohibition in the regulations or the guidelines against publication of the resulting IP;


Exclusive licences can be granted for both resulting and background IP\textsuperscript{164} and the parties must have access to any parties background IP if that is necessary for them to enjoy use of the resulting IP;\textsuperscript{165} and

Licences and third party user rights can be granted if they are necessary for the project\textsuperscript{166} and can be granted on a royalty free basis.\textsuperscript{167} However, the Commission can reverse licences to third parties if they are deemed detrimental to European competitive advantage.\textsuperscript{168}

In order to obtain the benefit of FP7 funding for a collaborative project,\textsuperscript{169} most participants must enter into and adhere to a ‘FP7 Model Grant Agreement’\textsuperscript{170} and a ‘FP7 Model Consortium Agreement’.\textsuperscript{171} The ‘Model Grant Agreement’ sets out the terms of funding.\textsuperscript{172} The ‘Negotiation Guidance Notes’ explains how participants should apply for and negotiate with the Commission for a ‘Grant Agreement’.\textsuperscript{173} Responsibility for drafting the ‘Consortium Agreement’ lies with the project parties and they must do so in accordance with the parameters of the regulations and the requirements for FP7 funding under the ‘Checklist for a Consortium Agreement for FP7 Projects’\textsuperscript{174} and the ‘Guide to Intellectual Property Rules for FP7 Projects’.\textsuperscript{175}

\begin{itemize}
\item\textsuperscript{166} Guide to Intellectual Property Rules for FP7 Projects Version 28/06/2007, 14.
\item\textsuperscript{167} Guide to Intellectual Property Rules for FP7 Projects Version 28/06/2007, 49.
\item\textsuperscript{168} Guide to Intellectual Property Rules for FP7 Projects Version 28/06/2007, 22.
\item\textsuperscript{172} See the Model Grant Agreement at <http://cordis.europa.eu/fp7/calls-grant-agreement_en.html#standard_ga>.
\end{itemize}
However, despite the availability of guidelines, the DESCA group (which was initiated by FP7 stakeholders[^176]) has subsequently produced a simplified consortium agreement which is intended to balance all interests of all partners in an FP7 project.[^177] It is supplied as a draft template only and DESCA emphasises that the FP7 regulations still need to be taken into account by project parties. The template is set out in a comparative table format with the suggested clause in the left hand column and in the right hand column, an explanation of definitions and the effect of the clause. It often provides optional clauses for parties to choose with explanations as to the effect of each option[^178]. The options reflect the preferences of stakeholder research organisations and universities; however the template warns that mixing the options can cause inconsistencies in the agreement.[^179]

DESCA further provides four illustrative examples of the template for use in situations concerning; a small project on fair and reasonable conditions;[^180] a small project based on royalty free access;[^181] a large project based on fair and reasonable conditions;[^182] and a large project based on royalty free access.[^183]


[^180]: See “small project” : “fair and reasonable conditions” at <http://www.desca-fp7.eu/fileadmin/content/Documents/DESCA__version_2_SP_O1.doc>.


CREATION OF INSTITUTIONAL FRAMEWORKS
McGauchie – 2004

Finally, certain studies have examined the need for over-arching institutional frameworks which co-ordinate and facilitate the utilisation of agreements, guidelines and tools and which also develop national policies on collaborative endeavours.

In March 2004, the Australian Federal Government Department of Education, Science and Training (DEST, now DEEWR) published a report entitled *Review of Closer Collaboration between Universities and Major Publicly Funded Research Agencies* ("The McGauchie Review"). The report contained the findings of a review committee (chaired by Donald McGauchie) who convened to examine the potential to exploit collaboration between Publicly Funded Research Agencies ("PFRAs") and universities and possible models for closer collaboration.

The report’s review committee defined collaboration as a ‘partnership, alliance or network aimed at a mutually beneficial clearly defined outcome’ and it describes various benefits and barriers to collaboration, its drivers and models and how collaboration could be enhanced through co-location, networking and clustering. The committee identified what they believed were key barriers to collaboration between business and universities or PFRAs bodies, including:

- Cultural differences between PFRAs and universities – with a respective ‘industry-pull’ and ‘research-push’;


Limited access to finance, the level of entrepreneurial management skills available, the predominance of a risk adverse culture and the availability of business and finance expertise;

A lack of significant tax incentives for businesses who invest in university research and the need for specific funding if commercialisation is a requirement; and

IP issues including IP ownership, contractual disputes, overvaluation of IP, the need for a clear set of principles or policies for IP management and the cost of IP protection.

The committee concluded that some institutions spend ‘significant energy on detailed up-front negotiation of [the] IP issue’. Protracted negotiations over IP ownership and exploitation were unnecessary at the outset of a collaborative programme and the committee found that it is only in a small number of instances that research output reaches the stage for commercialisation.

The report suggests that parties should defer detailed negotiations on IP exploitation issues until specific milestones in the research have been reached, commercialisation prospects improve or the collaboration has matured so the contributions of each party can be more accurately determined.

In order to resolve protracted negotiations over IP ownership, the report states that the IP resulting from a collaborative project will need to be shared between the parties based on their proportional contribution to the project:

“Intellectual property, generated as a result of collaborative research, should be divided according to the relative inputs of the various collaborators. The inputs must be measured by their demonstrable relevance to the generated property.

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195 See also the UIDP’s comments on triaging “agreements into high/low probability of generating valuable IP”: Living Studies in University-Industry Negotiations, April 2006, 16.
Consideration should be given to better utilisation of existing commercial arbitration and mediation mechanisms to handle and resulting disputes.\textsuperscript{200} Importantly, the report also recommended that the Federal Government establish a ‘Strategic Research Council’ to provide them with policy advice about collaboration and which will implement a set of ‘National Research Priorities’;\textsuperscript{201} a ‘Framework’ to measure the performance of publicly funded research agencies and universities in order to encourage collaboration;\textsuperscript{202} a ‘Collaboration Fund’ to finance collaborative projects between business and industry and universities and research institutions;\textsuperscript{203} and a clear set of national principles or policy for IP management.\textsuperscript{204}

\textit{BIHECC – 2005}

The McGauchie Review was followed on by a BIHECC\textsuperscript{205} commissioned report in 2005 to investigate ‘knowledge exchange networks’, described as:

\ldots structured intermediary mechanisms for users to locate, exchange and acquire knowledge in a systematic way, with a view to development of new products, processes and services.\textsuperscript{206}

\begin{thebibliography}{9}
\item Review of Closer Collaboration Between Universities and Major Publicly Funded Research Agencies, 37.
\item Review of Closer Collaboration Between Universities and Major Publicly Funded Research Agencies, 15.
\item Review of Closer Collaboration Between Universities and Major Publicly Funded Research Agencies, 23.
\item Review of Closer Collaboration Between Universities and Major Publicly Funded Research Agencies, 26.
\item Which they believed were not being met by the 2001 \textit{National Principles of IP Property Management for Publicly Funded Research}. Review of Closer Collaboration Between Universities and Major Publicly Funded Research Agencies, page xi.
\item The Business, Industry and Higher Education Collaboration Council (BIHECC) was established in 2004 and provides advice to the Australian Federal Government Minister for Education, Employment and Workplace Relations on ways to increase collaboration between the higher education sector and other public and private business, industry, community and educational organisations.
\end{thebibliography}

See the Australian Federal Government’s Productivity Commission’s Review of Public Support for Science and Innovation at
The report describes the various communication channels that exist between researchers, developers and industry and made thirteen recommendations to the Australian Federal Government’s Productivity Commission’s Review of Public Support for Science and Innovation, which included:

- Establishing a separate source of public funding to support knowledge transfer and pre-commercialisation activities of universities;
- Better incentives for pre-commercialisation collaboration, the early stages of commercialisation and for exploiting publicly funded research and development in order to increase collaboration and knowledge transfer;
- Supporting knowledge brokering infrastructure to link up institutions and industry and supporting knowledge exchange networks between industry, universities and research; and
- Publicly funding science and innovation to provide longer term funding for research and knowledge transfer.

The report did not call for an institutional framework to implement these recommendations, but some of the recommendations are ones which may need to be created and administered by such a framework, such as; uniform national approaches to IP ownership and licensing; public policies which balance IP protection for publicly funded research outcomes; and establishing a set of best practice principles for collaboration between industry, universities and PFRAs.
David and Spence – 2003

In what has become a landmark report in the area of e-Research, *Towards institutional infrastructures for e-Science: the scope of the challenge* advocates the creation of institutional frameworks for streamlining the agreement process in collaborative projects. This report released in 2003 examined the legal issues and processes associated with collaborative projects in the U.K. It identified that collaborative projects are often organised on an informal basis, rather than being defined by a written signed agreement and that as a consequence may not be enforceable at law. Furthermore, the report goes on to state that standard form contracts are not effective in providing what the parties want in a collaborative project or in making allowances for actual research practices or in establishing a degree of trust between project parties.

The report suggests that standard form contracts exacerbate the problems raised by informal collaborations, because such contracts rarely re-set the terms of the agreement each time the project circumstances change and cannot include subsequent parties to the contract without having to re-make the entire agreement. Other problems associated with standard form contracts include:

- An increased legal risk for the parties because standard form contracts are often used without forethought as to their appropriateness to the project at hand or without reference to appropriate legal advice;
- Standard form contracts may impede the commencement of projects because the parties are unable to choose between each others standard form contracts;

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216 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 38.
217 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 38.
219 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 38.
220 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 38.
221 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 55.
222 *Towards institutional infrastructures for e-Science: the scope of the challenge*, 55.
Allowing industry parties to exercise unequal bargaining power or pressure over and against the interests of university or research parties.223 Furthermore, standard form contracts set the parameters of a collaborative project before the project commences, which acts against establishing relationships of trust between the parties224 and may have the effect of stifling project research practices.225 Whilst legal advisors may have the ability to draft contracts on the behalf of parties, they are not in a position to comprehend all of the issues for all parties (only for the party which they represent) and cannot objectively balance and reconcile the contending interests and risks for both universities and industry.226

This report recommends that a public agency be established which will co-ordinate and facilitate solutions227 and whose main task will be to provide a menu of ready made agreement clauses. These clauses can be selected by parties to the project to resolve specific problems in their collaboration project agreement.228 Because parties select their own clauses, the agreement is built ‘from the ground up’, with clauses reflecting each parties true project intentions and avoids problems caused by standard template contracts.

The report proposes that a public agency (known as the ‘Advisory Board on Collaboration Agreements’) be established which will produce, evaluate and update standard contractual clauses. The clauses are intended to apply to various types of problems or situations that arise in collaborative research projects229 and will be able to be assembled into a

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223 Towards institutional infrastructures for e-Science: the scope of the challenge, 55.
224 Towards institutional infrastructures for e-Science: the scope of the challenge, 10.
225 Towards institutional infrastructures for e-Science: the scope of the challenge, 54.
226 Towards institutional infrastructures for e-Science: the scope of the challenge, 30.
227 Towards institutional infrastructures for e-Science: the scope of the challenge, 52.
228 Towards institutional infrastructures for e-Science: the scope of the challenge, 28. Survey participants showed some agreement for the creation of a government agency to develop and maintain a master database of standard clauses for research contracts, issue guidelines and oversee licensing practices, oversee licensing practices. See Figure 12. Ways to Improve the Negotiation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 56.
229 Towards institutional infrastructures for e-Science: the scope of the challenge, 51.
variety of alternating collaboration agreements.\(^{230}\) The advisory board will also determine and draft a set of underlying principles for their functionality and applicability.\(^{231}\)

**European Research Area Expert Group Knowledge Sharing Recommendations - 2008**

The European Research Area Expert Group recently issued a report\(^ {232}\) which merges the concepts of policies, guidelines and model agreements in order to produce a European wide approach for a knowledge sharing system between publicly funded research organisations (“PROs”) and industry.\(^ {233}\)

The report recommends that the Commission of the European Communities\(^ {234}\) issues a Recommendation to European Union member states to implement certain strategies in order to facilitate the sharing of knowledge generated by public funding and to ensure that industry and PRO collaboration agreements are ‘put into place more quickly and smoothly and to reduce transaction cost’.\(^ {235}\) Whilst supportive of the Commission’s voluntary guidelines for PROs to improve their links with industry,\(^ {236}\) the report recommends the creation of guidelines that are

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\(^{230}\) Towards institutional infrastructures for e-Science: the scope of the challenge, 53.

\(^{231}\) Towards institutional infrastructures for e-Science: the scope of the challenge, 41 and 53. To date, the U.K. government has not established such an agency.


\(^{234}\) See also The Commission of the European Communities, Commission Staff Working Document Voluntary Guidelines for Universities and Other Research Institutions to Improve their Links with Industry Across Europe.


\(^{236}\) See also The Commission of the European Communities, Commission Staff Working Document Voluntary Guidelines for Universities and Other Research Institutions to Improve their Links with Industry Across Europe.
aimed at and adhered to by both PROs and industry\textsuperscript{237} combined with relational frameworks where each party focuses on ‘realistic expectations of what might be achieved’\textsuperscript{238} in a collaboration. Other relevant strategies include:

- A voluntary ‘Knowledge Sharing Code of Practice’ and a model form of IP Policy,\textsuperscript{239} which will operate as a ‘reference point for those collaborating or intending to collaborate with European PROs and for European PROs collaborating or hoping to collaborate with industry’.\textsuperscript{240} This code and policy will ‘raise the awareness of European PROs of the need for them to engage in knowledge sharing and to manage knowledge effectively, to set out a set of minimum standards which European PROs may adopt on a voluntary basis and, by doing so, to facilitate interaction between European PROs and industry’\textsuperscript{241}

\textsuperscript{237} “…the guidelines are targeted at PROs, but it takes two or more to form a contract. In the context of practices relating to the ownership of, and access to, intellectual property rights financial, human and intellectual input, the exploitation of intellectual property rights, confidentiality, the enforcement of intellectual property rights and relationship management it is essential that all parties (be they PROs or industry) abide by the same practices; PROs cannot implement these guidelines unless industry is also willing to implement them”. \textit{Report of the European Research Area Expert Group: Knowledge Sharing in the European Research Area}, 13.

\textsuperscript{238} “Engaging in knowledge sharing is a contact sport and should not be a war. PROs need to appreciate that industry may have to put a lot of effort in before the results of the research are ready to be exploited and the intellectual property created by PROs may not have the immediate value the PRO supposes. Neither PROs nor industry should indulge in negotiations for the sake of winning every point, no matter how unimportant; both should have realistic expectations of what might be achieved”. \textit{Report of the European Research Area Expert Group: Knowledge Sharing in the European Research Area}, 13.


\textsuperscript{241} The proposed code must at least address the following issues: “A defined position of responsibility for overseeing knowledge sharing activities within the PRO; A clear position on the ownership of intellectual property rights created by PRO staff; Procedures for identifying and notifying intellectual property rights capable of commercial application; A mechanism for assessing the potential interest in intellectual property rights capable of commercial application, taking account of social, economic and enforcement conditions that prevail in the relevant territory and sector; The systematic use of records of the creation of intellectual property rights, such as laboratory notebooks; Mechanisms to deal with actual and potential conflicts of interest; A policy regarding publication of the results of research, taking into account situations when publication must be or should be delayed or withheld, and for how long, and, if
The training of professional staff in technology transfer to ensure that collaborations happen within a shorter timeframe; 242

The harmonisation of funding conditions in relation to ownership and exploitation of intellectual property, so that PROs can negotiate appropriate terms for assignment or licensing of IP with industry; 243 and

The widespread adoption of model agreements and guidelines by PRO’s and industry as exampled by the Lambert Review agreements and toolkits.

LEGAL FRAMEWORK FOR e-RESEARCH ROUNDTABLE 12–13 JUNE 2008

As demonstrated from our examination of the survey and various Australian and overseas studies, many policies, frameworks and practical tools have been proposed to streamline the agreement process.

Despite some differences of approach, these proposals have a common goal; to produce a high degree of clarity between parties as to their respective contributions, duties and entitlements in a collaborative project. 244 This common goal and the views, issues, frameworks, polices applicable, clear delineation between the intellectual property rights owned by staff and those owned retained by the PRO; Clear lines of responsibility for procedure and policy management; Appropriate and clear timescales in respect of knowledge sharing and knowledge management procedures; A clear description of the rights and responsibilities of staff in relation to third party intellectual property rights; A clear description of the rights and responsibilities of students in relation to intellectual property rights created by students, and of staff in relation to those intellectual property rights; and a requirement to identify the PRO’s contribution to knowledge wherever possible, for example within academic publications, and as the address for service for inventors employed by the PRO in any patent applications”. Report of the European Research Area Expert Group: Knowledge Sharing in the European Research Area, 42 to 44.


244 As certain survey participants commented “Problems often arise because the parties do not properly communicate and therefore they are not aware that they may have different expectations” and “Clarity between partners at the outset reduces the potential for later disagreement. The agreement need not be complex. Undue complexity is the major disincentive to developing formal agreements”. The Legal Framework for e-Research Project’s Report,
and tools raised and suggested by the survey report and the studies discussed previously were recently examined in a Roundtable held by the Queensland University of Technology Faculty of Law.245

Prior to the Roundtable, the Review of the National Innovation System received over 600 submissions from stakeholders regarding the future of innovation in Australia. Three of those submissions from the Legal Framework for e-Research Project,246 the Group of Eight Universities247 and the CSIRO248 addressed issues regarding the streamlining of collaborative research agreements. The Group of Eight submission specifically examined:

- Disputes over intellectual property ownership and licensing and rights in relation to background IP;
- The seeking of unreasonable warranties and indemnities;
- The right to disseminate research results in a timely manner;
- “No conflict of interest” clauses;
- The scope of suspension and termination rights;
- Respect for moral rights.

These issues were further discussed by the Roundtable.

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The proposals from the Roundtable suggested:

- A set of national policies on collaboration and knowledge sharing which underpins e-Research;
- A clear set of national principles or policies regarding IP ownership and licensing for collaborative projects;\textsuperscript{249}
- Funding policies and conditions need a degree of uniformity across all funding agencies for collaborative projects, which would then create a national system of funding agreements.\textsuperscript{250} Uniform polices would also ensure that parties in negotiations with funding agencies will provide collaboration agreements that are in line with funding conditions;\textsuperscript{251}
- Parties to collaborative projects need to undertake realistic assessments of risk when negotiating collaboration agreements. Many collaboration agreements are often delayed because of protracted negotiations about issues that could otherwise be assumed as a reasonable risk, about issues such as background IP and warranties and indemnities;\textsuperscript{252}
- Commensurate with the realistic assumption of risk, parties must be able to distinguish between vital objectives (whether the project will generate valuable IP or not) and irrelevancies\textsuperscript{253} and to devote time to complex collaborations instead of every several single transaction using up the resources of the


\textsuperscript{250} As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.

\textsuperscript{251} As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.

\textsuperscript{252} As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.

\textsuperscript{253} As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.
parties. \footnote{As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.} This approach was supported by survey participants who advocated the ‘triaging’ of collaborative agreements for negotiation into those agreements that need significant negotiation and those which do not. \footnote{Figure 12. Ways to Improve the Negotiation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 56.} Practically speaking, agreements of low risk and value to parties could be reduced to one to two page templates, instead of being made subject to detailed negotiation and review; \footnote{An example of this is the CSIRO’s FastTrack contracting system (<http://www.csiro.au/org/ps9l.html>) which focuses on simple non-disclosure agreements, testing agreements or postgraduate scholarships agreements. See the CSIRO example postgraduate scholarship agreement at <http://www.csiro.au/files/files/p2za.pdf>.}

- The need for a statement of national principles and guidelines to assist the implementation of a database of clauses and/or template agreements which will lead to the creation of a single national best practice resource;

- The utilisation of a ‘terms sheets’ for the agreement of key principles between the parties for specific types of transactions, \footnote{As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.} which provide a plain English understanding of each party’s respective ideas, objectives, roles, commitments and expectations regarding a collaborative project, before the parties begin negotiations for an agreement;

- Trust must be established between parties through a ‘pre-agreement space’, where the parties are required to meet several times to discuss a potential collaboration, before they even begin to negotiate agreement terms; \footnote{As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.}
Standard template agreements for use in collaborative projects that are intended to shorten negotiation timeframes and to remove delays caused by each party dissecting each other’s standard agreements. This can be best exemplified by the Lambert Agreements or standard agreements which can be customised to the intentions and purposes of the collaborative parties. However, it is important to remember that it is likely that there will never be a template agreement that will be designed to suit every collaborative situation. Template agreements can only be utilised as a starting point that saves a certain amount of negotiation time, not as the reduction of the agreement process to a software tool, and must be accompanied by guidance notes, decision guides or other similar material which forces the parties to address all issues required for a collaboration agreement;

The assembly and formation of agreements from a database of standard clauses. This was proposed by the UIDP TurboNegotiator project and was also viewed by survey participants as a practical tool for streamlining. If this idea was encapsulated in the form of a national database of standard

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260 Also known as the ‘battle of the forms’. As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.

261 This was an option favoured by survey participants: 89% of participants ‘agreeing’ or ‘strongly agreeing’. See Figure 6. Ways to Streamline the Documentation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 59–61. Survey participants also showed a preference for: template agreements which allowed the details on collaborative projects to simply be added on (87% of participants ‘agreeing’ or ‘strongly agreeing’); licensing agreements based on the free open source software model (75% of participants ‘agreeing’ or ‘strongly agreeing’) and simple confidentiality agreements (86% of participants ‘agreeing’ or ‘strongly agreeing’).

262 As exampled by the Lambert Agreements and as discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.

263 76% of participants ‘agreeing’ or ‘strongly agreeing’. See Figure 6. Ways to Streamline the Documentation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 59–61.
 clauses, it may help to create an organic system of uniform agreements in the Australian collaboration environment;

- Practical tools and polices will be of limited use if researchers, research managers and other parties do not receive education and training about these tools, polices and the basics of IP and contractual law. The majority of survey participants were in favour of an increase in educational materials, guidelines and skills training for knowledge engagement practitioners. Commentators have advocated the creation of a specific tertiary level course in technology transfer, which would instruct how agreements for collaborative projects can be streamlined. Education and training in itself may also help to engender feelings of participation and vested interests in these tools and polices from industry, universities and research;

- Collaborations are often frustrated because there is confusion within parties about their project objectives or because they do not identify who is authorised to negotiate with other interests. It is important that parties have established frameworks for their own internal communication and decision processes, have resolved any internal issues regarding IP

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265 71% of participants ‘agreeing’ or ‘strongly agreeing’. See Figure 12. Ways to Improve the Negotiation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 56.

266 As discussed at The Legal Framework for e-Research Roundtable Workshop: Streamlining Collaboration in an e-Research World, held at the Queensland University of Technology 12–13 June 2008.


ownership and have a clear intellectual property policy that balances issues of IP ownership, access, cost recovery and return on investment before they enter into a collaborative agreement. The survey participants advocated a working rule that intellectual property generated in collaborative research should be divided according to relative inputs of the parties, measured by demonstrable relevance to the generated property;

- The re-invigoration of existing institutional frameworks to train negotiators to balance and resolve issues from the position of a neutral adjudicator in proposed collaborative agreements. Such frameworks would co-ordinate the use of practical tools, polices and supporting materials at either a state or federal level or both. This would be supported by a national cross-sectoral legal advisory group that designs legal and policy frameworks and aligns appropriate methodologies for the streamlining of collaborative research agreements.

CONCLUSION

The survey results, the studies and the roundtable raise many questions and issues for consideration. As we have seen from the survey report, it can take up to 8 months to conclude a formal agreement because legal procedures and norms for formalising such agreements can delay and even stifle collaborative projects. The prolonged negotiation of agreement issues, such as the ownership and access rights for resulting intellectual property, reach through rights into each party’s background IP and the extent of indemnities and warranties often leads to delays.


271 Figure 12. Ways to Improve the Negotiation Process. The Legal Framework for e-Research Project’s Report, Legal and Project Agreement Issues in Collaboration and e-Research: Survey Results, 56.


and complications that undermine trust and the willingness of parties to collaborate.

It is hoped that the issues discussed in this chapter may be considered by the Australian Government as part of the Review of the National Innovation System and that they can add to the valuable work being done by technology transfer officers, research managers, researchers and legal advisors to streamline agreement processes for collaborative projects.

Universities, industry and researchers need to be able to shorten the timeframe for formalising collaborative research agreements. Parties want to collaborate on innovative projects at the time when their interest, motivation and utilisation of resources will be at its height.

Whilst e-Research is an excellent technology for collaborative projects, the technology alone will not enable collaboration to occur. If collaborative innovation is to prosper, then what is required in Australia is the synchronised and institutional development of policies, relational frameworks and practical tools for streamlining collaborative e-Research project agreements.274

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